CONGRESSIONAL BUDGET OFFICE
U.S. Congress
Washington, DC 20515

Peter R. Orszag, Director

September 20, 2007

Honorable Kent Conrad
Chairman
Committee on the Budget
United States Senate
Washington, DC 20510

Dear Mr. Chairman:

In response to your request, the Congressional Budget Office has prepared the enclosed estimates of the possible costs to the United States of maintaining a long-term military presence in Iraq similar to that of U.S. forces in the Republic of Korea and the Northeast Asia region.

If you wish further details, we will be pleased to provide them. The CBO staff contacts are Jason Wheelock and Adam Talaber.

Sincerely,

Peter R. Orszag

Enclosure

cc: Honorable Judd Gregg
Ranking Member

The Possible Costs to the United States of Maintaining a Long-Term Military Presence in Iraq

September 2007

The Congress of the United States ■ Congressional Budget Office

Introduction and Summary

At the request of Senator Kent Conrad, Chairman of the Senate Committee on the Budget, the Congressional Budget Office (CBO) has estimated the possible costs to the United States of maintaining a long-term military presence in Iraq similar to the U.S. forces in the Republic of Korea and the Northeast Asia region. The nature and pace of operations of such a presence, if any, in Iraq for one or more decades into the future are uncertain. To accommodate a range of possibilities, CBO has projected costs under two scenarios: a "combat" scenario, which would involve rotating military units into and out of Iraq to sustain U.S. operations in a combat environment (as is now being done); and a "noncombat" scenario, which would involve stationing specific military units indefinitely at established bases in the region in a less hostile environment.

If U.S. military operations in Iraq were to develop into a long-term presence, such forces could differ substantially from those assumed in either of the scenarios used in this analysis. Moreover, the two scenarios are not mutually exclusive over time: The more intensive pace of combat operations could give way to the slower pace of noncombat operations over some number of years. In any event, the ultimate costs of any long-term U.S. military presence in Iraq would depend heavily on the scale and pace of future operations.

Under the combat scenario that CBO considered, the United States would maintain a long-term presence of approximately 55,000 military personnel in Iraq, deploying military units and their associated personnel there for specific periods and then returning them to their permanent bases either in the United States or overseas. The scenario also incorporates the assumption that units deployed to Iraq would operate at the same pace and conduct the same types of missions as the forces currently deployed there. In CBO's estimation, this scenario could have one-time costs of $4 billion to $8 billion and annual costs of approximately $25 billion. (All costs in this analysis are expressed as 2008 dollars; see Table 1.)

Under the noncombat scenario that CBO analyzed, the United States would maintain a long-term presence of approximately 55,000 military personnel in Iraq by indefinitely stationing specific units at established bases there in a manner similar to the current practice of assigning personnel to units based in Korea or Germany. The scenario incorporates the assumption of much less intense military operations than those under the combat scenario. Under this noncombat alternative, units stationed in Iraq would rarely, if ever, be engaged in combat operations. Up-front costs (mainly for construction) under the noncombat scenario would be approximately $8 billion, with annual costs of $10 billion or less, CBO estimates.

Table 1.
ESTIMATED COSTS OF A LONG-TERM U.S. MILITARY PRESENCE IN IRAQ (Billions of 2008 dollars)

	Assuming Combat Operations[a]	Assuming Noncombat Operations[b]
One-Time Costs[c]	4 to 8[d]	8
Total Continuing Annual Costs	25	10[e]

Source: Congressional Budget Office.

a. For this scenario, CBO assumed that the United States would maintain approximately 55,000 military personnel in Iraq, which would operate at a pace and conduct missions similar to those of units currently deployed there.

b. For this scenario, CBO assumed that the United States would maintain approximately 55,000 military personnel in Iraq whose operations would be consistent with those undertaken in a noncombat environment.

c. These costs would probably be incurred over a period of several years.

d. The long-term deployment of four heavy brigade combat teams (HBCTs) in Iraq might require the purchase of additional HBCT equipment sets. However, given the Army's current inventories of combat vehicles, purchasing four full sets of HBCT equipment might not be necessary. Therefore, CBO included a range of one-time procurement costs for this scenario. The high end of the range, $8 billion, represents the cost of four full HBCT sets, and $4 billion represents the cost of buying roughly half that amount of equipment.

e. CBO's estimate assumes that U.S. forces stationed in Iraq would not be able to rely heavily on Iraq's civilian economy and infrastructure for support for the foreseeable future. Estimated costs could decline if Iraq's economy and infrastructure were to develop significantly over time. For instance, the current incremental cost of stationing U.S. forces in South Korea is less than $1 billion annually.

Two Possible Scenarios for a Long-Term U.S. Presence in Iraq

Senator Conrad requested that CBO estimate the costs of a long-term U.S. military presence in Iraq, similar to the presence maintained by the United States in and around the Republic of Korea since the 1950s. Those forces, which are spread throughout the Northeast Asia region, include Army ground combat units stationed in Korea itself and Marine Corps ground combat units stationed in Okinawa, Japan. Similarly, the Air Force maintains units in both Korea and Japan, and the Marine Corps has aviation equipment and personnel in Okinawa. In particular, from 1991 to 2004 (until a recent Army reorganization), the United States had maintained the current equivalent of four brigade combat teams, divisional and higher-level Army and Marine headquarters and support units, six land-based tactical fighter squadrons, and an aircraft carrier battle group in the Northeast Asia region—a total force comprising about 80,000 personnel.

Similarly, the two illustrative scenarios that CBO developed each include the equivalent of four heavy brigade combat teams (HBCTs), a division headquarters, six tactical fighter squadrons, 10,000 trainers (to support the continued development of the Iraqi army and police forces), and associated support units—for a total of about 55,000 personnel. For both scenarios, CBO excluded the higher-level ground combat headquarters and selected supporting units that are part of the U.S. presence in Korea. (Those units are present primarily to command and support the large number of additional ground forces that the United States would send to the region in the event of an attack launched by North Korea; CBO assumes that there will be no corresponding need for similar, higher-level headquarters in Iraq.) CBO also excludes from its Iraq scenarios the costs of maintaining a carrier battle group in the Persian Gulf region—given that the Navy has for many years maintained such a force there and is expected to continue to maintain it irrespective of any long-term U.S. presence in Iraq.

CBO's two scenarios reflect different assumptions about how U.S. forces would be deployed to Iraq but do not assume that the total size of the U.S. military would be affected as a result of that deployment. Most U.S. military personnel based outside of the United States are assigned for tours of duty to units that are indefinitely stationed in foreign countries. CBO incorporated that method of supporting units overseas into the noncombat scenario in this analysis. The United States generally uses a different method when it deploys forces for contingency operations (such as those in Bosnia and Kosovo previously and in Afghanistan and Iraq today).[1] In contingency operations, the United States generally does not station a specific unit in the area of operations for an extended period but instead rotates entire units (along with their accompanying personnel and equipment) from their home stations to the combat zone for a limited time. CBO incorporated that procedure into the combat scenario in this analysis.

The cost of rotating units through a combat zone differs from the cost of stationing units indefinitely in a low-intensity, noncombat environment. For example, the higher usage rates of equipment in combat zones increase the costs for maintenance, fuel, and other consumable materials, whereas equipment usage by units indefinitely stationed overseas in a noncombat environment is closer to normal peacetime levels. Personnel costs for combat operations are higher because they reflect the expense involved in mobilizing reservists—outlays that are unnecessary in a noncombat environment. In addition, the transportation costs incurred for units deploying temporarily to a combat zone—and generally bringing much of their equipment with them—are larger than those for units that remain at an overseas base.[2]

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1. A "contingency operation" means a military operation in which members of the armed forces are or may become involved in military actions, operations, or hostilities against an enemy of the United States. It can also mean an operation in which reserve-component members (including National Guard units) are called to active status or any other national emergency declared by the President or the Congress.

2. In some cases, sets of equipment are kept at the overseas location of the deployment for use by the forces rotating from the United States. See Congressional Budget Office, *Options for Changing the Army's Overseas Basing* (May 2004), available at www.cbo.gov.

CBO's combat scenario might also be viewed as a transition phase between current operations and the noncombat scenario. Although CBO cannot predict the length of any such transition, the combat phase could precede the noncombat scenario for a significant period of time.

Unlike some of CBO's previous estimates regarding spending for the war on terrorism, this analysis focuses solely on military operations in and around Iraq and includes only the incremental costs of activities tied directly to the number of personnel involved and the pace of operations. The analysis addresses the potential costs of a U.S. presence that might last for several decades (as it has in Korea) and would not necessarily apply to operations over the next several years. The estimate does not include funding for indigenous security forces, diplomatic operations, and foreign aid, amounts that were included in estimates provided to the House Committee on the Budget and in CBO's August 2007 *Budget and Economic Outlook: An Update*.[3] In addition, unlike the alternative scenario contained in the latter report, this analysis does not include costs for expanding the size of the armed forces.

To estimate the costs of the scenarios provided here, CBO adjusted current spending levels to account for the scenarios' smaller number of personnel and, in the noncombat scenario, to reflect a lower intensity of operations. However, because current procurement funding includes a number of one-time expenses as well as items not tied specifically to the pace of operations, CBO anticipates that the current magnitude of such funding will not be required indefinitely. Therefore, CBO used a different methodology (discussed below) to estimate procurement costs.

The Combat Scenario

Under the combat scenario, the United States would maintain approximately 55,000 personnel in Iraq, rotating units in and out and conducting operations at a pace similar to that of the current situation. Army units would serve 12-month tours in Iraq, and Air Force units would serve 4-month tours. The units would use temporary facilities similar to the contractor-constructed facilities in Bosnia.

The combat scenario envisions a pace of operations and level of conflict similar to those that U.S. forces are currently experiencing in Iraq. With the exception of procurement, CBO used current funding levels for military operations in Iraq and Afghanistan to estimate the potential costs associated with this scenario and assumed that the pace and types of operations would be similar to but on a smaller scale than those that U.S. forces are now conducting.[4] The annual cost of the combat scenario, in CBO's estimation, would

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3. For the estimates that CBO provided to the budget committee, see the statement of Robert A. Sunshine, Assistant Director for Budget Analysis, Congressional Budget Office, *Estimated Costs of U.S. Operations in Iraq and Afghanistan and of Other Activities Related to the War on Terrorism,* before the House Committee on the Budget, July 31, 2007, available at www.cbo.gov.

4. CBO used the same methodology for the estimates it provided to the House Committee on the Budget on July 31, 2007.

include approximately $21 billion for operations and maintenance, $3 billion for military personnel, and $300 million for military construction.

Replacing the equipment of the forces in CBO's combat scenario—four HBCTs, trainers organized in two infantry brigade combat teams and a special forces group, and support personnel—would cost a total of approximately $14 billion, in CBO's estimation. The average service life of such equipment is approximately 20 years in a peacetime environment. If the equipment were operated at more than double its usual peacetime tempo, the additional annual costs to replace worn and damaged equipment would be about $1 billion, CBO estimates. Thus, the total annual costs associated with this scenario would be about $25 billion. If, however, procurement funding were to remain comparable (at least initially) to the amounts provided in 2007 and other recent years, the annual costs for the combat scenario could exceed $30 billion.

A further issue is the potential costs resulting from shipping heavy equipment between the United States and Iraq, which can render that equipment unavailable for several months. To avoid that problem, the Army could purchase up to four sets of new equipment for the HBCTs at about $2 billion a set, for a total cost of about $8 billion. However, the service's recent reorganization into modular units and a robust program of remanufacturing its armored vehicles in recent years may have provided the Army with enough tracked combat vehicles to station HBCT equipment sets in Iraq without requiring the purchase of complete new sets. The use of those existing vehicles could reduce the cost of obtaining new equipment sets by as much as 50 percent. Therefore, if the Army stationed four additional HBCT equipment sets in Iraq, start-up procurement costs under the combat scenario would total $4 billion to $8 billion, CBO estimates.

The Noncombat Scenario

Under the noncombat scenario, specific units would be stationed indefinitely in Iraq, and the intensity of operations and conflict in Iraq would decline to a level similar to that in countries (such as Germany, Japan, or the Republic of Korea) in which the United States has permanently stationed forces—that is, to a zero or near-zero level of combat. Under the noncombat scenario, the United States would base ground and air units at facilities in Iraq or in neighboring countries, such as Kuwait. Air Force tactical fighter squadrons would be stationed at air bases in Iraq and in the Persian Gulf region. The ground force would include 10,000 personnel for training Iraqi military and police units. Although some units would use existing infrastructure, most would be based at newly constructed facilities. Personnel assigned to the units would serve one-year unaccompanied tours, as is currently the case for forces in Korea. (That is, they would leave their family members and most of their personal possessions in the United States.)

Maintaining such a long-term presence in Iraq under noncombat conditions would require approximately $8 billion in one-time construction costs to establish new bases, CBO estimates, and up to $10 billion on an annual basis.[5]

As was true under the combat scenario, the largest category of costs under this scenario would be operations and maintenance, which CBO estimates could total up to $9 billion annually. To estimate those costs, CBO relied primarily on the Department of Defense's (DoD's) cost-of-war execution reports for current operations, but it adjusted those figures to reflect a much lower rate of operations and correspondingly lower costs for such items as equipment maintenance, fuel, and consumable materials. In its estimate, CBO assumed that under this scenario, U.S. forces stationed in Iraq would have to be largely self-sustaining for the foreseeable future and would not be able to rely heavily on Iraq's economy and infrastructure for support. (That is, U.S. forces would need to import most of their food and other supplies and to provide their own utilities, including such everyday necessities as water, electric power, telecommunications, and sewage treatment.) In addition, the United States would probably continue to maintain some off-base infrastructure, such as roads and airports.

Costs could fall over time if Iraq's economy and infrastructure were to undergo significant development, making it easier and less costly to obtain the goods and services necessary to support the U.S. forces. For instance, the current incremental cost of stationing U.S. forces in South Korea—a highly developed modern economy—is less than $1 billion annually.

Personnel costs would also be much smaller under this scenario than under the combat scenario, primarily because of CBO's assumptions about the use of reserve-component forces. CBO assumed that under the combat scenario, reserve-component forces would make up a significant portion of the deployed units, as is currently the case with U.S. forces in Iraq, and the incremental costs for deploying reserve-component forces are significantly higher than the incremental costs for regular active-duty personnel, who receive full-time pay regardless of their deployment status. The noncombat scenario incorporates the assumption that no reserve-component personnel will be used. (The estimates for each scenario include other personnel costs as well, including a variety of special payments and allowances—such as the family separation allowance, hardship-duty pay, and overseas cost-of-living allowance—and the costs of subsistence.) In total, CBO anticipates, the noncombat scenario would require approximately $1 billion in annual military personnel funding.

In CBO's estimation, this scenario would also result in additional costs for military construction and facilities maintenance. Although some units could use existing infrastructure in the region, most would require more-durable facilities than those

5. The military's training resources might not be large enough to allow for the long-term stationing of 10,000 trainers in Iraq. If they were not, a 10,000-person increase in the Army's end strength would result in additional one-time military construction and procurement costs of approximately $2 billion as well as annual funding of approximately $800 million for military personnel and $350 million for operations and maintenance.

currently in place. Construction and facilities maintenance would result in one-time costs of $8 billion, CBO estimates, and annually recurring costs of approximately $200 million.

Because this scenario incorporates the assumption of a noncombat environment, CBO anticipates that equipment stationed in Iraq would wear out at rates similar to those experienced by equipment at bases in the United States. As a result, little or no additional funding would be needed to replace and repair worn equipment.