DEFENSE
INFRASTRUCTURE

DOD Needs to Provide Updated Labor Requirements to Help Guam Adequately Develop Its Labor Force for the Military Buildup
Defense Infrastructure. DOD Needs to Provide Updated Labor Requirements to Help Guam Adequately Develop Its Labor Force for the Military Buildup
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Why GAO Did This Study
The Department of Defense (DOD) plans to increase its military presence on Guam from about 15,000 in 2009 to more than 39,000 by 2020 at a cost of more than $13 billion. The growth will create temporary construction jobs and permanent civilian jobs with the military, with contractors, and in the Guam community. GAO was asked to examine the extent to which DOD and the government of Guam have (1) planned for temporary construction labor requirements and the means to meet the requirements for building military infrastructure to support the force in Guam and (2) identified permanent federal and non-federal civilian jobs and shared this information so that Guam can develop its workforce to better compete for job opportunities. To address these objectives, GAO obtained documents and interviewed officials from DOD, the Services, government of Guam offices, and the Guam higher educational community.

What GAO Found
DOD and the government of Guam have both started planning for temporary defense construction labor requirements; however, these plans are still preliminary until DOD’s Master Plan has been finalized. The Master Plan is to incorporate the results of the environmental impact statement containing an analysis of various socioeconomic impacts of the realignment related to specific proposed actions and is targeted to be finalized with a record of decision in January 2010. DOD officials expect that this socioeconomic analysis will estimate the impact of the expanded military presence on Guam’s employment. Nonetheless, DOD and the government of Guam have done some preliminary labor planning. For example, the Navy determined the range of the number of workers needed based on infrastructure costs, using a standard planning factor to estimate the size of the temporary construction workforce. Specifically, the Navy estimated that annual construction spending of $1 billion would require about 5,000 to 10,000 workers and that at its maximum the workforce could consist of 20,000 construction workers. However, since the Navy expects its contractors to be responsible for hiring and maintaining their labor force to construct the DOD facilities, the actual temporary construction workforce will not be known until contracts are awarded and the contractors begin to hire local residents and transfer other workers to Guam from other locales. The government of Guam is also trying to prepare island residents to be part of the temporary construction work force. The government plans to train island residents with the construction and related skills needed to effectively compete for temporary construction employment and also plans to focus on training residents to compete for more permanent jobs after the construction phase is over.

DOD has started identifying permanent federal and non-federal civilian positions that will accompany the Marines moving to Guam. Although DOD has estimated more than 1,600 civilian jobs will be needed, DOD has shared its preliminary estimates with only two organizations within the government of Guam and not with Guam’s educational community. Without this information, the Guam educational community would find it difficult to know the extent to which it should provide higher education and training for their students to better compete for these potential civilian positions. While efforts have been made to develop degreed programs of study, University of Guam officials estimated that it can take up to 3 years to develop new degree programs and recruit the faculty and then another 4 to 6 years to have students complete the undergraduate or graduate courses of study. DOD Directive 5410.12 requires the military departments to provide maximum advanced information and support to local governments impacted by DOD basing and personnel actions to allow planning for necessary adjustments in workforce training programs. Without DOD’s clarification of the types and numbers of needed positions, Guam university officials say they are at risk of developing programs that might not be large enough or focused on the right courses of study to effectively produce graduates in the fields that DOD and other potential employers would require.

What GAO Recommends
GAO recommends that DOD develop a process for projecting and sharing federal civilian and DOD contractor support positions likely to be available—by specialties when feasible—and to routinely update this information until the buildup is complete.

In commenting on a draft of this report, DOD partially concurred stating that it intends to provide the maximum advance information to Guam and to meet with officials at least on a semi-annual basis.

View GAO-10-72 or key components. For more information, contact Brian J. Lepore at (202) 512-4523 or leporeb@gao.gov.
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October 14, 2009

The Honorable Madeleine Z. Bordallo
Chairwoman
Subcommittee on Insular Affairs, Oceans and Wildlife
Committee on Natural Resources
House of Representatives

Dear Madam Chairwoman:

The Department of Defense plans to transfer Marine Corps troops from Japan to Guam and to increase the other military services’ presence there as well, which will increase the overall military and dependent population from about 15,000 in 2009 to more than 39,000 by 2020. The largest portion of the military buildup is related to the relocation of about 8,000 Marines and their 9,000 dependents from Okinawa, Japan, to Guam as part of an agreement between the United States and the government of Japan to reduce forces in Japan while maintaining a continuing presence of U.S. forces in the region. DOD estimates that the total military buildup on Guam will cost more than $13 billion—$10 billion for the Marine Corps move alone—excluding any federal assistance that may be provided to the government of Guam to assist with the non-defense infrastructure that may be needed.

The Navy is responsible for preparing for DOD’s increased military presence on Guam and is developing a master plan to address all aspects of the buildup. DOD has tasked the Joint Guam Program Office, which reports to the Assistant Secretary of the Navy (Installations and Environment), with the primary responsibility for developing and implementing the military buildup plans, and the Naval Facilities Engineering Command for contracting for the construction of the infrastructure for the buildup. The master plan will incorporate the results of an environmental impact statement, which will contain an analysis of various socioeconomic impacts of the realignment related to specific proposed actions, as appropriate, and DOD officials also indicated that a technical study of the socioeconomic impact of the realignment will be included as an appendix to the environmental impact statement. Office of the Secretary of Defense (OSD) officials expect that these socioeconomic analyses will estimate the impact of the expanded military presence on Guam’s employment in major industry sectors and on the ability of labor supply sources to fill available positions. According to Service officials, the actual construction of the military facilities needed to support the
force and its dependents is likely to lead to significant temporary employment opportunities in the construction and related trades and additional significant permanent federal civilian, contractor support, and other public sector employment once the force has arrived.

This is one in a series of GAO reports on DOD’s plans for increasing its presence on Guam. In response to your request regarding temporary defense construction and permanent federal civilian and Guam community labor requirements, this report examines the extent to which DOD and the government of Guam have (1) planned for temporary defense construction labor requirements and the means to meet the requirements for building military infrastructure to support the force in Guam and (2) identified permanent federal and non-federal civilian workforce requirements and communicated this information so that the government of Guam can develop its civilian workforce to better compete for potential employment opportunities.

To determine the extent that DOD and the government of Guam have planned temporary defense construction labor requirements and the means to meet these requirements, we obtained documents and interviewed officials from DOD’s Office of Economic Adjustment, the Navy’s Joint Guam Program Office, Pacific Command, Naval Facilities Engineering Command-Pacific, Naval Facilities Engineering Command-Marianas, Marine Forces Pacific, the Department of Labor’s Education and Training Administration, the Department of the Interior’s Office of Insular Affairs, the government of Guam’s Guam Buildup Office, and Guam’s Departments of Labor and Public Works. We also obtained documents and met with the Guam Contractors Association. We obtained and reviewed studies and assessments, briefings, annual reports, congressional testimony, and other pertinent documentation prepared by DOD,

government of Guam, and certain U.S. federal departments and agencies such as the Department of Labor and the Congressional Budget office. To determine the extent that permanent non-defense civilian employment requirements have been identified and the means taken by the government of Guam to develop its civilian workforce to better qualify for potential job opportunities, we obtained documents from and met with officials from Marine Forces Pacific, the University of Guam, and the Guam Community College. We also analyzed the government of Guam’s Civilian-Military Task Force fiscal year 2010 budget request that specifically addressed labor needs related to the buildup and spoke with members of the Task Force’s Labor and Infrastructure subcommittees. In addition, we also discussed key requirements and challenges associated with Guam’s civilian workforce with those organizations identified as contacted for the construction labor requirements objective above including DOD’s Office of Economic Adjustment; the Navy’s Joint Guam Program Office, Pacific Command; Naval Facilities Engineering Command-Pacific; Naval Facilities Engineering Command-Marianas; the Department of Labor’s Education and Training Administration; the Department of the Interior’s Office of Insular Affairs; the government of Guam’s Guam Buildup Office; and Guam’s Departments of Labor and Public Works. We did not review the potential for temporary construction labor to construct any needed government of Guam-owned non-defense infrastructure such as off-installation roads or utilities systems because such an assessment was outside of the scope of our review, although such construction and associated construction employment could be necessary at the same time that DOD is constructing its facilities.

We conducted this performance audit from March 2009 through October 2009 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. See appendix I for more information on our scope and methodology.

**Results in Brief**

DOD and the government of Guam have both started planning for temporary defense construction labor requirements; however, these plans are still preliminary until DOD’s facilities master plan has been finalized. The master plan is to incorporate the results of the environmental impact statement and its analysis of various socioeconomic impacts of the realignment related to specific proposed actions. The environmental...
impact statement is targeted to be finalized with a record of decision in January 2010. In the meantime, DOD and the government of Guam have done some preliminary planning that focuses on labor issues in support of the military buildup. For example, the Navy determined the range of workers needed temporarily by using a standard planning factor to estimate the size of the construction labor force. Specifically, the Navy’s Joint Guam Program Office estimated that annual construction spending of $1 billion would require about 5,000 to 10,000 workers and that at the maximum the workforce would consist of about 20,000 workers. As the construction work progresses, the number of construction workers needed will likely increase or decrease commensurate with the level of annual construction funding. The Navy expects the winning contractors to secure and maintain their own labor force to construct the DOD facilities. Therefore, the actual number of temporary construction workers needed to construct the DOD facilities will become clear as the contracts are awarded and the contractors begin to hire local residents and transfer workers to Guam from other locales. The government of Guam is also trying to prepare island residents to be part of the temporary construction workforce. The government plans to train island residents with the construction and related skills needed to effectively compete for temporary construction employment and also to focus on training these workers to compete for more permanent jobs after the construction phase is over.

DOD has started identifying permanent federal and non-federal civilian positions that will be associated with the realignment of Marines Corps forces from Okinawa to Guam, but has only shared some of this information with certain organizations within the government of Guam. The latter needs more such information to prepare its civilian workforce to compete for these positions. The Marine Corps estimates that it will need to fill more than 1,450 civilian positions. The Joint Guam Program Office also said that this number could increase to a total of more than 1,600 jobs in order to meet the needs of the other services. However, according to DOD officials, they have only shared some jobs information with Guam waterworks and power authority officials, but not with the Guam Buildup Office, which has overall responsibility for the buildup within the government of Guam. Moreover, DOD officials have not shared jobs information, including the type and number of jobs, with the educational community on Guam. DOD officials said the reason is that such information is preliminary, incomplete, and subject to change. Without even such preliminary information as that which DOD officials told us they shared with the Guam water and power authorities, the University of Guam does not know the extent to which it should provide
additional higher education and training for its students to better compete for these potential civilian positions. In addition, DOD is unlikely to identify all the positions that will be required to support the realignment of Marine Corps forces until the environmental impact statement, with its analysis of various socioeconomic impacts of the realignment related to specific proposed actions, is completed in January 2010. However, DOD’s Office of Economic Adjustment is working with the government of Guam so that Guam can respond to buildup requirements, including those contained in the draft environmental impact statement, as they are released. While the government of Guam does not have DOD’s estimation of the number or types of positions, the Guam government attempted to identify potential federal-civilian, DOD support-contractor, and public-sector and other civilian labor needs in order to support development of educational programs that will prepare residents for these positions. For example, the University of Guam is considering developing degreed courses of study in engineering. At the time of our review, the University of Guam only had a 2-year pre-engineering program that requires students to finish their final 2 years of study elsewhere to obtain an engineering degree. University of Guam officials estimated that it can take up to 3 years to develop new degree programs and recruit the faculty and then another 4 to 6 years to have students complete the undergraduate or graduate courses of study. DOD Directive 5410.12 requires the military departments to provide maximum advance information and support to local governments impacted by certain DOD basing and personnel actions to allow planning for necessary adjustments in workforce training programs. University officials said that they are at risk of developing programs that might not be large enough or focused on the right courses of study to effectively produce graduates in the fields that DOD and other potential employers would require if the university officials proceed to develop courses of study without current projected employment information. Furthermore, a mismatch may develop between the number of qualified applicants and the positions available. Without DOD’s clarification of the types and numbers of needed positions, University officials and Guam Community College officials said it will be difficult to develop programs that will prepare Guam’s residents for civilian employment opportunities. We are therefore recommending that DOD provide Guam with routinely updated federal civilian and support contractor employment information, including the latest projected numbers of positions needed in key specialties, and to routinely update this information until the buildup is complete.

Initially, our draft report recommended quarterly updating. In commenting on a this draft, DOD partially concurred with our initial recommendation.
that DOD provide updates quarterly because DOD officials believe that updating the jobs information quarterly is too frequent and suggested semi-annual updates. We believe that semi-annual updating meets the intent of our recommendation, so we have modified our recommendation to delete the reference to quarterly updates. In its response, DOD officials said they intend to provide the maximum advanced information to the government of Guam as soon as possible. They also said they shared some of their federal civilian and support contractor jobs information with officials from the Guam waterworks and power authorities. While this may be the case, they did not share the jobs information with the Guam Buildup Office, which has primary responsibility for the buildup within the government of Guam, nor did they share any information with the University of Guam and the Guam Community College, which will be the source of trained individuals who may qualify for many of the federal civilian and support contractor positions needed to support the military buildup on Guam.

Background

Because of Guam’s unique strategic location, the United States has long maintained a significant military presence on the island to support and defend U.S. interests in the western Pacific Ocean region. The small remote U.S. territory is located about 1,600 miles east of Manila in the Philippines, 1,560 miles south of Tokyo, Japan, and 3,810 miles west of Honolulu, Hawaii (see fig. 1). Guam’s July 2009 population is estimated at 178,430. DOD currently controls about 29 percent of the land, which is about 62 square miles of the island’s total 212 square miles. The U.S. military presently operates two major installations on Guam: the U.S. Naval Base-Guam, located on the southwestern side of the island at Apra Harbor, and Andersen Air Force Base in the north.
Figure 1: Map of the Territory of Guam and Location of Current and Projected U.S. Military Installations


Note: The location of the Army’s air and missile defense task force on Guam has not yet been determined.
To reduce the burden of the U.S. military presence on Japanese communities while maintaining a continuing presence of U.S. forces in the region, the U.S.-Japan Defense Policy Review Initiative\(^2\) established a framework for the future of U.S. force structure in Japan, including the relocation of American military units in Japan to other areas, including Guam. As a part of this initiative, DOD plans to move 8,000 Marines and their estimated 9,000 dependents from Okinawa, Japan, to Guam. Separate from the initiative, the United States also plans to expand the capabilities and presence of the military services on Guam over the next several years. For example, the Navy plans to enhance its infrastructure, logistic capabilities, and waterfront facilities, including capabilities to support a transient nuclear aircraft carrier; the Air Force plans to develop a global intelligence, surveillance, and reconnaissance strike hub at Andersen Air Force Base; and the Army plans to place an Army air and missile defense task force on Guam. As a result of this planned realignment of U.S. forces, the military population on Guam is expected to grow by over 160 percent, from its current island population of 15,000 to over 39,000 by 2020. Most of the extensive population growth and development resulting from the buildup will occur in the northern half of the island, primarily in the northwestern portion where DOD currently plans to construct a new Marine Corps base at Finegayan. Joint Guam Program Office officials, however, told us that the currently projected schedules and levels of population growth and force structure could change as buildup plans are further refined and approved.

The Navy is responsible for overseeing the military buildup on Guam and is developing a master plan to address all aspects of the buildup. DOD has tasked the Joint Guam Program Office, which reports to the Assistant Secretary of the Navy (Installations and Environment), with primary responsibility for developing and implementing the military buildup plans and the Naval Facilities Engineering Command for contracting for the construction of the infrastructure for the buildup. The master plan will form the baseline for military construction budget planning and facility

\(^2\) DOD officials refer to the process through which the United States and Japan negotiated the initiatives that realign U.S. forces in Japan as the Defense Policy Review Initiative. The realignment initiatives were the result of Security Consultative Committee meetings in 2005 and 2006 between U.S. and Japan officials. The Security Consultative Committee is made up of the U.S. Secretaries of State and Defense and Japan’s Minister of Foreign Affairs and Minister of State for Defense. The committee sets overall bilateral policy regarding the security relationship between the United States and Japan. The results of these meetings established a framework for the future U.S. force structure in Japan, including the Marine Corps move from Okinawa, Japan, to Guam.
and utility designs and provide a top-level view of the size and type of facility requirements, candidate and preferred land sites, and proposed use of the land to meet the requirements for new personnel and forces planned for Guam. The master plan is expected to be completed shortly after the environmental impact statement and its associated Record of Decision are issued. These documents are currently targeted to be completed and submitted to the Congress in January 2010.

In accordance with the National Environmental Policy Act of 1969, which establishes environmental policies and procedures that are followed by federal agencies to the fullest extent possible, DOD is preparing an environmental impact statement, the results of which will be included in its master plan. In addition, according to National Environmental Policy Act and the corresponding regulations established by the Council on Environmental Quality, when an environmental impact statement is prepared and economic or social and natural or physical environmental effects are interrelated, then the environmental impact statement will discuss all of these effects on the human environment. Therefore, the environmental impact statement will include an analysis of various socioeconomic impacts of the realignment related to specific proposed actions, as appropriate. Further, OSD officials also indicated that a technical study of the socioeconomic impact of the realignment will be included as an appendix to the EIS. The environmental impact statement is targeted to be finalized in January 2010.

DOD Directive 5410.12 Economic Adjustment Assistance to Defense Related Communities, July 5, 2006, establishes policies and guidance of an Economic Adjustment Program to minimize economic impacts on communities resulting from changes in defense programs, such as base closures, realignments, consolidations, transfer of functions, and/or reductions in force. According to the directive, it is DOD policy that every practical consideration shall be given to implementing DOD actions that seriously affect the economy of a community in a manner that minimizes local economic impact and that DOD shall take the leadership role in assisting substantially and seriously affected communities. Specifically, the secretaries of the military departments will, among other

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requirements, provide maximum advance information and support to local governments to allow planning for necessary adjustments in local facilities and public services, workforce training programs, and local economic development activities.

The Office of Economic Adjustment is a DOD field activity that reports to the Deputy Under Secretary of Defense (Installations and Environment), under the Under Secretary of Defense (Acquisition, Technology, and Logistics). The office is responsible for providing technical and financial assistance to state and local governments, and the Territory of Guam when affected by significant DOD actions. The assistance enables the affected jurisdictions to respond to the impacts of DOD’s actions. The Office of Economic Adjustment’s financial assistance is in the form of grants and enables local jurisdictions to staff a local adjustment effort and undertake assessments, studies, and/or initial planning, while the technical assistance is focused on facilitating contact with the appropriate federal agencies and departments for a coordinated and responsive federal program of assistance.

DOD and the government of Guam have both started planning for temporary defense construction labor requirements; however, these requirements are still preliminary until DOD's facilities master plan has been finalized. The master plan is to include the results of the environmental impact statement, which will contain an analysis of various socioeconomic impacts of the realignment related to specific proposed actions and an appendix with a technical study of the socioeconomic impact of the realignment. The environmental impact statement is targeted to be finalized with a record of decision in January 2010. In the meantime, DOD and the government of Guam have done some preliminary planning that focuses on labor issues in support of the military buildup.

DOD’s Efforts in Planning for Defense Construction Labor Requirements

Following the record of decision on the environmental impact statement—currently targeted to be finalized in January 2010—DOD is expected to complete a Guam Joint Military Master Plan, which will provide requirements, including the number, location and size of facilities as well as the time frame for when these facilities are to be completed. The information contained in the master plan should provide a better estimate of overall labor requirements than what currently exists. At the time of our review, the Naval Facilities Engineering Command, which has responsibility over all of the military buildup construction on the island, does not have definitive estimates of the number of construction workers
needed to complete buildup-related infrastructure construction. Thus, to compensate for now, the Navy is using a simple planning factor that determines the range of the number of workers needed based on the amount of annual funding for infrastructure. Specifically, the Navy estimates that for every $1 billion spent annually on construction, it will likely require between 5,000 and 10,000 workers. As construction work progresses, the number of construction workers needed will likely increase or decrease commensurate with the level of annual construction funding. For instance, if the Navy estimates that $2.5 billion will be spent in a given year on buildup construction, then between 12,500 and 25,000 workers would be required. The Navy’s planning data currently show that the construction labor force will likely peak in fiscal year 2013 at about 20,000 construction workers, and then drop to about 7,500 workers by 2016.

Because Guam cannot provide all of the labor required, the Navy also has developed estimates on where it will draw its construction workforce. Navy estimates show that Guam currently has about 5,600 construction workers on island, which is comprised of about 4,200 citizens of Guam and about 1,400 workers in the Foreign Alien Labor Program who are on Guam temporarily on H-2B work visas. The Navy also estimates that Guam will eventually be capable of providing approximately 7,000 workers in addition to potentially 6,000 workers from the Hawaiian Islands. The Navy estimates that the remaining construction workforce could consist of as many as 8,000 H-2B visa workers. Federal law provides no more than 66,000 H-2B visas may be issued to qualified foreign workers each fiscal year. However, under the Consolidated Natural Resources Act of 2008, during an initial period that ends December 31, 2014, qualified nonimmigrant workers may be admitted to Guam or the Commonwealth of the Northern Mariana Islands under the H-2B visa process established in accordance with the Immigration and Nationality Act without counting against the 66,000 numerical limitations referenced above.

\[4\] The H2B visas category applies to residents of foreign countries who are coming to the United States (the term “United States” includes Guam in this context) temporarily to perform nonagricultural temporary labor or service if unemployed persons capable of performing such labor or service are unable to be found in the United States (8 U.S.C. § 1101(a)(15)(H)(ii)(B)). For additional regulations pertinent to the issuance of H-2B visas, see also 8 C.F.R. § 214(h).


\[6\] 8 U.S.C. § 1101 et seq.

period ends on December 31, 2014, this temporary exemption from the overall numerical limitation expires. Additionally, the conference report on H.R. 2647, the National Defense Authorization Act for Fiscal Year 2010, contained several provisions that, if enacted, may impact workforce issues related to the realignment. According to government of Guam officials, Guam’s government agencies have partnered with their federal counterparts such as Immigration and Customs Enforcement and the Department of Homeland Security, to address compliance and enforcement of alien labor laws and regulations.

The Naval Facilities Engineering Command, which has responsibility for contracting for infrastructure construction, has proposed contract selection criteria that it believes will reduce the socioeconomic impact on Guam. For example, contractors will be required to hire some foreign construction laborers and also to provide logistical support for the workforce, such as housing, feeding, and transport, and to provide safety, security, and medical care. Additionally, the proposed criteria will require contractors to certify the workers’ medical condition based on government of Guam requirements prior to bringing them to the island, and contractors must provide medical care for the duration of their workers’ stay on Guam. For example, under this proposed criteria, all prospective employees are to be given pre-employment physical exams that meet Guam Department of Public Health medical requirements. Because the existing medical capacity on Guam cannot accommodate the expected construction workforce increase, contractors will be responsible for the following types of medical care: first aid, primary, trauma, medical evacuation, and rehabilitation. The Naval Facilities Engineering Command will also have overall responsibility for ensuring compliance and conformance with contract requirements. According to Navy officials, the Naval Facilities Engineering Command will encourage contractors to act together to develop solutions to any logistical issues presented by the

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9 H.R. Conf. Rep. No. 111-288, at 485-488 and 889-890 (2009). For example, one section specifies a number of measures aimed at ensuring the maximum number of U.S. workers are solicited before H2B visa waivers are issued, and would further require the Secretary of Labor to approve a recruitment plan. Another section would require that military construction projects carried out on Guam and related to the realignment comply with the requirements of subchapter IV of chapter 31 of title 40, U.S. Code, and would require that the Secretary of Labor issue wage rate determinations annually until 90% of the funds for the project are expended.
buildup. For example, DOD has held three industry forums, for potential contractors, to discuss and share information on the Marine Corps' relocation-and-associated business opportunities with the government of Guam to ensure that the contractors are prepared to meet all life and safety requirements.

The Government of Guam’s Steps in Preparing to Meet Workforce Labor Requirements Resulting from the Military Buildup

In an effort to meet the needs of the military buildup, the government of Guam has taken some steps in preparing to meet potential workforce labor requirements before DOD has issued its master plan. Once DOD has issued the master plan, the government of Guam will be able to make more refined workforce decisions. In the meantime, according to government officials, they are focusing on building workforce skill sets that will likely sustain Guam’s workforce through the different phases of the buildup. Although the initial phase would involve training residents to qualify for jobs in the construction trades, the government of Guam recognizes that the majority of these jobs are temporary and so its efforts are also focusing on jobs that will likely be needed after the construction phase ends. For example, the Guam Department of Labor has established an apprenticeship program, with support from the U.S. Department of Labor’s Employment and Training Administration in the form of Workforce Investment Act funding, for Guam workers to apprentice with the Guam Power Authority and the Guam Shipyard. The Guam Department of Labor has also expanded the apprenticeship programs through partnerships with the Guam Hotel and Restaurant Association and the Guam Contractors Association. According to the Department of Labor’s Employment and Training Administration, nearly $1.4 million in Workforce Investment Act funding has been invested in participant salaries, benefits, and educational assistance on Guam to support registered apprenticeship. In 2006, the Guam Department of Labor established the Guam Registered Apprentice Program to contract with businesses to accept apprentices and to provide these businesses with incentives to help develop a skilled workforce. Since it was established, the participating businesses have requested $2.1 million in tax credits from the government of Guam. In addition, in the fiscal year 2010 budget request that the government of Guam submitted to the Office of Management and Budget in July 2008, the Guam Department of Labor requested nearly $23 million for additional apprenticeship and talent-development training programs in anticipation of workforce needs of the buildup. This request however was not ultimately provided to the

U.S. Department of Labor and therefore was not included in Labor’s budget request for fiscal year 2010. Labor officials also acknowledged that they lacked the necessary information to effectively provide assistance. For example, according to Labor officials, DOD has not provided the department with buildup data or guidance related to the role of federal agencies in providing buildup assistance to Guam.

U.S. Department of Labor and the Guam Department of Labor have also partnered in other workforce areas. For example in February 2009, U.S. Department of Labor and Guam Department of Labor representatives worked together to re-design services and training strategies, and devised new ways to address skill needs in preparation for the buildup. The representatives developed a plan to identify occupational competencies and gaps in Guam’s workforce associated with these competencies. Moreover, the Guam Department of Labor, in partnership with the Guam Public Schools System, has developed a program to expose high school students to both public sector and private sector businesses in construction, information technology, health, education, and other fields. From the summer of 2005 to the winter of 2008, 1,813 students have participated in the program. When the students return to school, after working in area businesses, they are encouraged to continue their vocational education career path.

Guam Community College is also involved in developing workforce skills of the local residents for the buildup. In partnership with the U.S. Department of Labor, the college has secured grant funding of $383,000 in order to train 100 post secondary individuals for skilled construction, advanced electrical, and information technology jobs. According to officials with the community college, the college has also received an additional $470,000 in grant funding for secondary career and technical training. The officials also told us that they requested but did not receive information from DOD on the number and type of permanent federal civilian jobs the military services would need when they begin to move their forces there. The Community College entered into a memorandum of understanding in November 2008 with the Guam Contractors Association and the Guam Contractors Association Trade Academy to cooperate to attain their common goal to prepare local residents for permanent employment in construction and related fields to replace tradesmen who are leaving employment by attrition, to improve the quality of skills and knowledge within the existing workforce, and to increase the number of qualified skilled workers for an expanding workforce while reducing the need for nonimmigrant alien workers. In addition, the Guam Contractors Association—which represents more than 440 firms in the engineering,
construction, and supporting industries—has backed the need for workers for the buildup by establishing the Guam Contractors Association Trades Academy. The academy conducted its first classes in October 2006 and, according to the academy’s officials, more than 400 students have participated in its programs. At the time of our review, more than 160 students on Guam, with another 100 students on Saipan and 60 on Pohnpei, both islands in the region, were participating in the program. Association officials said they believe that qualified individuals from these islands as well as other islands in the area will likely seek construction jobs on Guam during the construction phase of the buildup.

DOD Has Shared Only Some Limited Preliminary Civilian Employment Estimates within the Government of Guam, a Factor That Limits Guam’s Ability to Develop Its Civilian Workforce

DOD has developed some limited preliminary information about the number of permanent civilian jobs that will likely be available when the military has started to arrive on the island, but only some of this information has been shared with certain elements of the government of Guam, but not at all with Guam’s higher education community. DOD Directive 5410.12 requires the military departments to provide maximum advance information and support to local governments impacted by certain DOD actions to allow planning for necessary adjustments in workforce training programs. Without this information, the government of Guam may be challenged to plan for potential jobs that support the buildup, including the ability to train and prepare individuals so they qualify for these jobs.

DOD Has Started to Identify Civilian Job Opportunities with the Military

DOD has started to identify permanent federal civilian positions that will accompany the 8,000 Marines moving to Guam. According to the Marine Corps, its estimates, at the time of this review, identify more than 1,450 civilian positions that will need to be filled after it moves to Guam. Marine Corps officials expect that most of these jobs will need to be filled by residents of Guam because the officials do not think that many current employees will move from Okinawa. The other services have also begun to identify their permanent federal civilian positions as well. Table 1 below shows the total number of civilian jobs estimated by the services as of September 3, 2009.
Table 1: Total Number of Civilian Jobs Currently Being Estimated by the Services as of September 3, 2009

<table>
<thead>
<tr>
<th>Service</th>
<th>Estimated number of civilian jobs</th>
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<tbody>
<tr>
<td>Marine Corps</td>
<td>1,467</td>
</tr>
<tr>
<td>Air Force</td>
<td>125</td>
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<tr>
<td>Navy</td>
<td>9</td>
</tr>
<tr>
<td>Army</td>
<td>TBD</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,601</strong></td>
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Source: Joint Guam Program Office.

According to DOD officials, they have only shared some jobs information with Guam waterworks and power authority officials and not with the Guam Buildup Office, which has overall responsibility for the buildup within the government of Guam. Moreover, DOD has not shared this information, including the type and number of potential jobs with the educational community on Guam because DOD officials have noted that such information is preliminary, incomplete, and subject to change. Furthermore, DOD is likely to refine these estimates when the environmental impact statement, which will include an analysis of various socioeconomic impacts of the realignment related to specific proposed actions, is finalized in January 2010. OSD officials expect that these socioeconomic analyses will include information on Guam’s labor force including expected employment by industry, civilian labor force demand, and the federal government’s share of employment. According to Office of Economic Adjustment officials, they will continue to assist the government of Guam to respond to impacts from DOD actions, as information is released and requirements are identified, including those contained in the draft environmental impact statement. The Office of Economic Adjustment awarded an initial $2.5 million grant to the government of Guam to hire an advisory consultant team, which possesses expertise in planning, environmental, and fiscal/financial services. As specific labor information is released and requirements are identified, the government of Guam may utilize the consultant team or other resources to further frame its workforce adjustment efforts.

Guam Has Attempted to Develop Workers for Civilian Jobs but Needs Updated DOD Information As It Becomes Available

The government of Guam has attempted to identify potential federal civilian, DOD support-contractor, and public-sector and other civilian labor needs created by the increased military presence in order to support development of educational programs that will prepare residents for these civilian jobs. For example, officials at the University of Guam have already begun to develop courses of study leading to appropriate professional
degrees that would help qualify its graduates to compete for permanent civilian positions with the military. For example, university officials said that they are aware that the military will need qualified engineers to help staff its organizations once they have moved to Guam. However, the officials do not know how many engineers will be needed or which engineering fields officials should put their educational emphasis upon.

For now, University officials are considering setting up a new engineering degree program because currently they only offer a 2-year pre-engineering program that requires students to finish their final 2 years of study at the University of Iowa to obtain the engineering degree. The university had six students enrolled in the pre-engineering course in the fall of 2007 and, according to university officials, they now have 24 students enrolled in the program. University of Guam officials estimated that the university can take up to 3 years to develop new degree programs and recruit the faculty and then another 4 to 6 years to have students complete the undergraduate or graduate courses of study. At the time of our review, the Marine Corps move to Guam was planned to be completed in 2014.

University officials said they have requested information regarding the number and types of positions that DOD plans to move to Guam and are aware of the preliminary nature of the information. However, they said that they are at risk of developing programs that might not be large enough or focused on the right courses of study to effectively produce graduates in the fields that DOD and other potential employers would require, because DOD has not communicated to the government of Guam (other than the power and water authorities) or the university any details about DOD’s preliminary estimates regarding the information. Nonetheless, DOD is required to assist communities seriously impacted by major defense closures and realignments. Specifically, DOD Directive 5410.12 requires the military departments to provide maximum advance information and support to local governments impacted by certain DOD basing and personnel actions to allow planning for necessary adjustments in workforce training programs. However, without DOD’s clarification of the types and numbers of needed positions, university officials said it is difficult to develop a university degree program that would effectively prepare its labor force. As a result, university officials said a mismatch may develop between the number of qualified applicants and the positions

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11 Students may attend other engineering schools, but the University of Guam has an agreement with the University of Iowa whereby the latter will honor the students’ credits earned at the University of Guam.
available since the university needs to know what disciplines its graduates need skills in to compete for available jobs and enough time to develop appropriate programs. Likewise, Guam Community College officials also said they need additional information about civilian employment opportunities to develop their programs, although its courses of study generally take less time to complete than a 4-year university’s courses of study.

<table>
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<th>Conclusions</th>
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<td>In anticipation of the DOD buildup, Guam is positioning its citizens to compete for employment during the temporary defense construction phase and for permanent civilian jobs with the military and those in the community. However, the government of Guam and the educational community on Guam do not have the latest and most accurate and detailed information from DOD on what jobs Guam will need to fill and approximately when these jobs will be available. While these estimates are subject to change, DOD does possess preliminary employment estimates based on existing positions with the Marines in Okinawa. Without this information, the government of Guam may be challenged to effectively plan for potential jobs that support the buildup and future continuing military presence, including the ability to train and prepare individuals so they qualify for these jobs. Finally, DOD may have difficulty filling critical civilian positions if qualified applicants are unavailable on Guam when needed.</td>
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<th>Recommendation for Executive Action</th>
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<td>To assist the government of Guam to properly train and prepare its future workforce to effectively compete for permanent federal civilian and DOD contractor support positions that will be available once the force has arrived in Guam, we recommend that the Secretary of Defense direct the Under Secretary of Defense (Acquisition, Technology, and Logistics) to develop a process for projecting and sharing updated information describing federal civilian and DOD contractor support positions likely to be available—by specialties when feasible—and to routinely update this information until the buildup is complete.</td>
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<th>Agency Comments and Our Evaluation</th>
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<td>Initially, our draft report recommended quarterly updating. In commenting on a this draft, DOD partially concurred with our recommendation to provide updates on a quarterly basis because DOD officials believe that updating the jobs information quarterly is too frequent and suggested semi-annual updates. We believe that semi-annual updating meets the intent of our recommendation, so we modified our recommendation to delete the reference to quarterly updates. In DOD’s response, its officials</td>
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said they intend to provide the maximum advanced information to the government of Guam as soon as possible. They also said they shared some of their federal civilian and support contractor jobs information with officials from the Guam waterworks and power authorities. While this may be the case, DOD did not explain how those organizations will prepare Guam’s civilian workforce to compete for civilian positions with DOD. Moreover, DOD did not share the jobs information with the Guam Buildup Office, which has primary responsibility for the buildup within the government of Guam, nor did DOD share any information with the University of Guam and the Guam Community College, which will be the source of trained individuals who may qualify for many of the federal civilian and support contractor positions needed to support the military buildup on Guam.

We are sending copies of this report to interested congressional committees, the Secretary of Defense, the Secretary of the Navy, and the Governor of Guam. In addition, the report will be available at no charge on GAO’s Web site at http://www.gao.gov.

If you or your staff have any questions about this report, please call me at (202) 512-4523 or leporeb@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. Other major contributors to this report are listed in appendix III.

Sincerely yours,

Brian J. Lepore, Director
Defense Capabilities and Management
Appendix I: Scope and Methodology

To determine the extent that DOD and the government of Guam have planned temporary defense construction labor requirements and the means to meet these requirements, we obtained and reviewed studies and assessments, briefings, annual reports, congressional testimony, and other pertinent documentation prepared by DOD, government of Guam, and certain U.S. federal departments and agencies such as the Department of the Interior and the Congressional Budget Office. We obtained and analyzed construction labor projections and preliminary construction schedules provided by the Navy’s Joint Guam Program Office. We also obtained and reviewed the Joint Guam Program Office’s draft master plan, which provides general information on preliminary buildup requirements including potential facility requirements and candidate sites for the location of these facilities. We discussed currently estimated construction requirements and DOD plans to address these requirements with officials from DOD’s Office of Economic Adjustment, the Navy’s Joint Guam Program Office, Pacific Command, Naval Facilities Engineering Command-Pacific, Naval Facilities Engineering Command-Marianas, and Marine Forces Pacific. We also interviewed officials from the Department of the Interior’s Office of Insular Affairs, the government of Guam’s Guam Buildup Office, and Guam’s Departments of Labor and Public Works. We obtained documents from the Guam Community College and the Guam Contractor’s Association regarding training opportunities in construction trades. We also interviewed officials from these organizations to determine how they are planning for Guam’s workforce to develop sustainable employment skills following the construction phase of the buildup. In addition, we obtained documentation and met with officials from the U.S. Department of Labor’s Office of Education and Training Administration to determine what activities the office has been involved in to support Guam with the military buildup. We did not review the potential for temporary construction labor to construct any needed government of Guam-owned non-defense infrastructure such as off-installation roads or utilities systems because it was outside of the scope of our review, although such construction and associated labor could be necessary at the same time that DOD is constructing its facilities.

To determine the extent that permanent non-defense civilian employment requirements have been identified and the means taken by the government of Guam to develop its civilian workforce to better qualify for potential job opportunities, we obtained and reviewed studies and assessments provided by DOD, government of Guam, and certain U.S. federal departments and agencies such as Marine Forces Pacific and the Department of Labor. We obtained and reviewed documentation of financial and technical assistance, including grant amounts, provided to...
Appendix I: Scope and Methodology

Guam by DOD’s Office of Economic Adjustment. We obtained and reviewed documents from the University of Guam and Guam Community College including the types and numbers of degree programs and graduates as well as studies on Guam’s educational effectiveness and income distribution. We also obtained and analyzed the government of Guam’s Civilian-Military Task Force fiscal year 2010 budget request that specifically addressed labor needs related to the buildup and spoke with members of the Task Force’s Labor and Infrastructure committees. In addition we met with and interviewed officials from DOD’s Office of Economic Adjustment, the Navy’s Joint Guam Program Office, Pacific Command, Naval Facilities Engineering Command-Pacific, Naval Facilities Engineering Command-Marianas, Marine Forces Pacific, the Department of Labor’s Education and Training Administration, the Department of the Interior’s Office of Insular Affairs, the government of Guam’s Guam Buildup Office, and Guam’s Departments of Labor and Public Works.
Appendix II: Comments from the Department of Defense

Armed Forces Reserve Office of the Under Secretary of Defense
3000 Defense Pentagon
Washington, D.C. 20301-3000

OCT 13 2009

Mr. Brian J. Lepore
Director, Defense Capabilities and Management
U.S. Government Accountability Office
441 G Street, N.W.
Washington, DC 20548

Dear Mr. Lepore:


The Department appreciates the opportunity to comment on this draft report and partially concurs with the GAO’s recommendations that directs the Department to develop a process for projecting and sharing updated information describing federal civilian and DoD contractor support positions likely to be available by specialties when feasible and to routinely update this information, such as quarterly, until the buildup is complete.

In accordance with DoD Directive 5410.12: Economic Adjustment Assistance to Defense-Impacted Communities, dated July 5, 2006, it is the Department’s intent to provide the maximum advance information to the Government of Guam as possible. The DoD will identify federal civilian and contractor support positions as they become known to assist the Government of Guam in the planning for the necessary adjustments in local facilities and public services, workforce training programs, and local economic development activities. The Department recommends meeting with the appropriate stakeholders, including representatives from the Government of Guam, semi-annually or vice quarterly, to coordinate this issue as the current analysis indicates that the data will not have any appreciable changes within a quarterly timeframe.

The Department appreciates the work performed by the GAO in this regard and the opportunity to comment on the draft report.

Sincerely,

[Signature]

Dorothy Robin
Deputy Under Secretary of Defense
(Installations and Environment)

Enclosure:
As stated
GAO DRAFT REPORT – DATED SEPTEMBER 9, 2009
GAO CODE 351319/GAO-10-72

"Defense Infrastructure: DOD Needs to Provide Updated Labor Requirements to Help Guam Adequately Develop Its Labor Force for the Military Buildup"

DEPARTMENT OF DEFENSE COMMENTS TO THE RECOMMENDATION

RECOMMENDATION 1: The GAO recommends that in order to assist the Government of Guam to properly train and prepare its future workforce to effectively compete for permanent federal civilian and DoD contractor support positions that will be available once the force has arrived in Guam, the Secretary of Defense direct the Under Secretary of Defense (Acquisition, Technology, and Logistics) to develop a process for projecting and sharing updated information describing federal civilian and DoD contractor support positions likely to be available by specialties when feasible and to routinely update this information, such as quarterly, until the build up is complete.

DOD RESPONSE: DoD partially concurs with the GAO recommendation. In accordance with Department of Defense Directive 5410.12: Economic Adjustment Assistance to Defense-Impacted Communities, dated July 5, 2006, it is DoD’s intent to provide the maximum advance information to the Government of Guam as soon as possible. DoD will identify federal civilian and DoD contractor support positions as they become known to assist the Government of Guam in the planning for the necessary adjustments in local facilities and public services, workforce training programs, and local economic development activities. To date, preliminary estimates have been provided to the Guam Waterworks Authority and Guam Power Authority. However, the planning associated with the integration of civilian personnel requirements in support of the relocating Marine Corps units with the newly established Joint Region Marianas is still in progress, so the exact number and type of positions have not yet been determined. The Department’s Civilian Personnel Policy/Civilian Personnel Management Services will work with the cognizant Service components to ensure they keep the Government of Guam apprised of the anticipated career fields, associated skill sets, and potential range of employment opportunities to assist in workforce adjustment efforts. DoD will continue to partner with, and provide information to the Government of Guam, including the University of Guam, on the types of career fields and civil service positions as new information is developed. DoD recommends meeting with the appropriate stakeholders, including representatives from the Government of Guam, semi-annually, to coordinate this issue as the current analysis indicates that the data will not have any appreciable changes within a quarterly timeframe.
Appendix III: GAO Contact and Staff

Acknowledgments

In addition to the contact named above, Harold Reich, Assistant Director; Josh Margraf; Richard Meeks; Amy Frazier; Grace A. Coleman; Renee Brown; Richard Powelson; and Katherine S. Lenane made major contributions to this report.
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