Military Construction: Process, Outcomes, and Frequently Asked Questions

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Summary

Congress appropriates several billion dollars annually to support and sustain a broad footprint of military bases, reflecting both a federal investment in local communities and a local investment in national defense. Specific military construction project authorizations—provided through the annual National Defense Authorization Act—enable the Secretary of Defense and the Secretaries of the Army, Air Force, and Navy to plan, program, design, and build the runways, piers, warehouses, barracks, schools, hospitals, child development centers, and other facilities needed to support U.S. military forces at home and overseas. This report describes and explains the end-to-end military construction process by which DOD and Congress act together to build that footprint, beginning with the requirement for a facility and ending with the opening of its doors for occupancy. The process encompasses several steps:

- determination of need by the local installation commander and engineering office,
- vetting and prioritization of construction projects within the military chain of command and the military department,
- consolidation and budgeting within the Office of the Secretary of Defense to create the infrastructure construction portion of the Future Years Defense Program (FYDP),
- inclusion of the final budget year list of projects in the annual President’s Budget Request to Congress,
- review and adjustment of the list by the congressional defense committees,
- consideration and passage of the necessary authorization and appropriation bills and their enactment by the President, and
- execution of the approved construction program by the military services’ executive agents—Naval Facilities Engineering Command (NAVFAC) and Army Corps of Engineers (ACE).
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Introduction

The military missions of Department of Defense (DOD) units and organizations drive the need for facilities and the supporting infrastructure on any given military installation. Therefore, as the missions assigned to those organizations change, as organizations move to or away from an installation, or as buildings age or become obsolete, facilities and supporting infrastructure may need to be replaced or reconfigured.

While each of the military departments has its own unique processes for vetting and setting military construction (MILCON) priorities, the MILCON process is formally structured to comply with the Planning, Programming, Budgeting and Execution (PPBE) process of the DOD.\(^1\) Moving from the realization of need (requirements determination) through the planning, programming, and budgeting process could take three or more years for a MILCON project. When adding the time required for congressional authorization and appropriations, implementation of the federal contracting process, and the physical construction of the project, the end-to-end military construction process—beginning with the realization of the need for a facility to the opening of its doors for occupancy—may span seven years or more.

The Legal and Budgetary Framework

Chapter 169 of Title 10, United States Code, contains most of the laws governing military construction matters. Section 2801 provides definitions of certain terms used in the chapter and elsewhere in law. It defines the term military construction as “any construction, development, conversion, or extension of any kind carried out with respect to a military installation, whether to satisfy temporary or permanent requirements, or any acquisition of land or construction of a defense access road.”\(^2\) It also specifies that a military construction project includes “all military construction work ... necessary to produce a complete and usable facility or a complete and usable improvement to an existing facility (or to produce such portion of a complete and usable facility or improvement as is specifically authorized by law).”

Requirement for Project Authorization

Section 2802 specifies that the Secretary of Defense and the Secretaries of the military departments may carry out such military construction projects, land acquisitions, and defense access road projects “as are authorized by law.”\(^3\) It covers the following activities:

- surveys and site preparation;
- acquisition, conversion, rehabilitation, and installation of facilities;
- acquisition and installation of equipment and appurtenances integral to the project;
- acquisition and installation of supporting facilities (including utilities) and appurtenances incident to the project; and
- planning, supervision, administration, and overhead incident to the project.

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\(^1\) See CRS In Focus IF10429, *Defense Primer: Planning, Programming, Budgeting and Execution Process (PPBE)*, by Lynn M. Williams.

\(^2\) 10 U.S.C. §2801.

\(^3\) 10 U.S.C. §2821 holds a similar requirement for the construction and acquisition of military family housing.
The MILCON-unique requirements specified in 10 U.S.C. §2802 are in addition to 10 U.S.C. Section 114, which states that, for specified DOD programs including military construction, “no funds may be appropriated for any fiscal year ... unless funds therefor have been specifically authorized in law” In the practical application of these statutes, Congress has required project-by-project authorization and appropriation for military construction projects.4

Activities Funded Through Military Construction Appropriations

The annual Military Construction, Veterans Affairs, and Related Agencies appropriation bill provides funding for DOD construction activities. Often referred to as the MILCON/VA appropriations bill, the legislation appropriates project-specific amounts for major MILCON projects, and also funds a variety of construction and construction-related activities, including the following:

- **Unspecified Minor Construction.** Construction projects estimated to cost no more than $6 million under authority provided in 10 U.S.C §2805. Unlike major MILCON projects, unspecified minor construction projects are not subject to specific congressional authorization; therefore, the amounts are appropriated as unspecified minor construction.

- **Planning and Design.** Congress requires planning and design work on projected construction projects to be far enough along to provide confidence in the accuracy of the projected budget request. Accordingly, most of the construction projects included in the President’s annual budget request are based on planning and design work that was funded by this nonspecific appropriation.5

- **Family Housing New Construction.** Replacement, acquisition, expansion, addition, extension, and alteration of government-owned military family housing.6

- **Family Housing Operation and Maintenance.** Debt payment, leasing, minor construction, principal and interest charges, and insurance premiums, as well as the provision of routine maintenance, utilities, and management of government-owned housing for families of servicemembers.

- **DOD Housing Funds.** Appropriations for the Family Housing Improvement Fund and the Military Unaccompanied Housing Improvement Fund to assure direct and guaranteed loans, utilize limited partnerships, and suggest DOD-owned property to encourage the private sector to increase available, affordable, and quality housing for military personnel.7

- **Base Realignment and Closure (BRAC).** Functions associated with the implementation of BRAC recommendations.8

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5 10 U.S.C. §2807.

6 While government-owned housing for servicemembers not residing with families (often referred to as barracks, dormitories, or bachelor officer quarters) is funded as major construction, military family housing funds are separated under the general category of “Family Housing.”

7 Treasury funds established under 10 U.S.C. §2883.

8 Congress is still providing funding for implementation of FY2005 BRAC decisions. FY2018 appropriations totaled $310 million. For more information on BRAC implementation see Government Accountability Office (GAO), Key (continued...)
• **North Atlantic Treaty Organization (NATO) Security Investment Program.** U.S. contributions to the acquisition and construction of military facilities and installations and for related expenses for the collective defense of the North Atlantic Treaty Area.9

• **Chemical Demilitarization Construction.** Military construction necessary to support the destruction of the U.S. stockpile of lethal chemical agents and munitions.10

### Selected MILCON Authorities

In addition to containing the statutes that define and underpin the congressional process related to MILCON activities, Chapter 169 of Title 10 establishes several monetary thresholds that set the framework for the MILCON budget process and the congressional oversight of facilities-related activities of the DOD.

In prescribing the various authorities and responsibilities, Chapter 169 often uses the term *Secretary concerned*, referring to the Secretaries of the military departments, or the Secretary of Defense in the case of a defense agency. In the case of MILCON thresholds, authorities, and limitations, it is important to note whether the authority applies to the Secretary of Defense or to each *Secretary concerned* individually. Appendix B provides a reference table for selected thresholds and associated requirements.

### Unspecified Minor Construction (10 U.S.C. §2805)

In general, 10 U.S.C §2805 authorizes the Secretary concerned to use an expedited process for the authorization of *unspecified minor construction* projects—currently defined as a MILCON project costing $6 million or less (adjusted annually to reflect the area construction cost index).11

Under this authority, any project costing more than $750,000 requires advance approval by the Secretary concerned.

Section 2805 requires the Secretary concerned to fund unspecified minor construction projects only with minor military construction appropriations except in cases where the estimated total cost is $2 million or less. In this case the funds may be drawn from Operation and Maintenance (O&M) appropriations.12 In practice, these O&M-funded projects are referred to as *minor construction* projects.

For UMMC projects exceeding $2 million (and therefore subject to MILCON appropriations), 10 U.S.C §2805 requires the Secretary concerned to submit a notification to the *appropriate*
The notification is to include a justification for the project and estimated cost. Following a 14-day waiting period, appropriations may then be drawn from an account set up by Congress in the MILCON appropriation for that purpose.

In addition, 10 U.S.C. §2805 provides temporary authority (through September 30, 2025) for the use of O&M, as well as certain Research, Development, Test and Evaluation (RDT&E) appropriations, to fund certain UMMC projects intended to enhance DOD laboratories. Section 2802 of the FY2018 National Defense Authorization Act (NDAA/P.L. 115-91) requires the Secretary concerned to adjust the dollar limitations specified in 10 U.S.C. §2805 for unspecified minor military construction projects inside the United States to reflect the area construction cost index for military construction projects (not to exceed $10 million). This requirement is in effect through fiscal year 2022.


Section 2811 allows the Secretary concerned to carry out certain repair projects using O&M appropriations. The statute defines a “repair project” as a project “(1) to restore a real property facility, system, or component to such a condition that it may effectively be used for its designated functional purpose; or (2) to convert a real property facility, system, or component to a new functional purpose without increasing its external dimensions.” There are no budgetary limitations or caps on the authority, but projects costing more than $7.5 million must be approved in advance by the Secretary concerned, and Congress must be notified of the decision to carry out the project. The notification must include a cost estimate and a justification for the project. If the cost estimate exceeds 75% of the estimated cost of a MILCON project to replace the facility, 10 U.S.C. §2811 also requires the congressional notification to include an explanation of the reasons why replacement of the facility is not in the best interest of the government.

**Architectural, Engineering, and Design Services (10 U.S.C. §2807)**

Section 2806 allows the Secretary concerned to obtain architectural and engineering services, and to initiate construction design, in connection with MILCON and family housing projects. If the required services are estimated to exceed $1 million, congressional notification is required and the Secretary concerned must wait 14 days before obligating funding for such purposes. The services may be paid for using MILCON or Family Housing planning and design appropriations.

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13 10 U.S.C. §2801 defines the term appropriate committees of Congress as the “congressional defense committees and, with respect to any project to be carried out by, or for the use of, an intelligence component of the Department of Defense, the Permanent Select Committee on Intelligence of the House of Representatives and the Select Committee on Intelligence of the Senate.” 10 U.S.C. §101 defines the term congressional defense committees as “the Committee on Armed Services and the Committee on Appropriations of the Senate; and the Committee on Armed Services and the Committee on Appropriations of the House of Representatives.”

14 10 U.S.C. §2805 defines the term laboratory to include “a research, engineering, and development center” and “a test and evaluation activity.”

15 O&M appropriations are provided through the annual defense appropriations bill, rather than the MILCON/VA appropriations bill.
Contingency Construction (10 U.S.C. §2804)\textsuperscript{16}

Section 2804 permits the Secretary of Defense to use or authorize the military secretaries to use appropriated military construction funds to carry out any project without prior congressional authorization if the Secretary determines that waiting to include it in the next military construction authorization would be “inconsistent with national security or national interest.” The section requires the Secretary to report the project in writing to the appropriate congressional committees justifying the project and the invocation of this authority and estimating its cost.

Emergency Construction (10 U.S.C. §2803)

A Secretary of a military department may initiate a construction project if he or she determines that (1) it is vital to national security or to the protection of health, safety, or the quality of the environment and (2), the project is of such urgency that it cannot wait for statutory authorization. When the Secretary concerned initiates such a project, Section 2803 requires that he report it in writing to the appropriate congressional committees (armed services and appropriations), including the justification for and estimated cost of the project, the reason why Section 2803 is being invoked, and the source of the funds being used. There is a cap of $50 million on the amount of funding that can be obligated under this authority during any given fiscal year. The project must be funded within the total amount of military construction appropriations that have not been obligated.\textsuperscript{17} There is also a mandatory waiting period before the emergency construction project may begin.

Construction Authority in the Event of a Declaration of War or National Emergency (10 U.S.C. §2808)

In the event of a declaration of war or national emergency requiring the use of the Armed Forces, Section 2808 permits the Secretary of Defense to initiate or to authorize the military secretaries to carry out military construction projects not yet authorized by statute. Any unobligated military construction or family housing appropriations may be used for construction projects that are “necessary to support such use of the armed forces.” The Secretary of Defense must report his decision to use Section 2808 authority to Congress, along with the projects’ estimated costs, including any associated real estate transactions. The authority terminates at the end of the war or national emergency.

Planning, Programming, and Budgeting

The need for a particular construction project may be part of a top-down initiative, such as the creation of new missions for a given installation or the movement of units or offices between

\textsuperscript{16} Section 2808 of the FY2004 National Defense Authorization Act (P.L. 113-66) temporarily authorized the Secretary of Defense as much as $200 million in O&M funding “carry out a construction project outside the United States necessary to meet “urgent military requirements of a temporary nature in support of a declaration of war, a declaration by the President of a national emergency ... or a contingency operation.” This provision, often referred to as “Section 2808 authority” (not to be confused with the permanent 10 U.S.C. §2808 - Construction Authority in the Event of a Declaration of War or National Emergency) has been renewed for each subsequent year, though the cap on available funds and the areas to which it may be applied have frequently been amended. Section 2804 of the FY2018 NDAA (P.L. 115-91) extended the authority through December 31, 2019.

\textsuperscript{17} Written into military construction appropriations acts is language allowing for the obligation (spending) of the funds over a number of years. Any funding left over in the various military construction accounts at the end of a fiscal year is carried over and can be obligated in subsequent years.
installations, or it may be the result of needed modernization or replacement of existing buildings. In either case, the process begins with a facility requirements evaluation by the installation’s engineering staff.

Installation engineers evaluate the future need for facilities such as training classrooms, firing ranges, barracks, and family housing, and compare them to the facilities that already exist.18 If they discover or anticipate a shortfall, the engineers will weigh the costs and time required to rehabilitate or alter structures on site against the cost and time required to replace them. As discussed, funding for additions or alterations to existing buildings and the construction of new buildings where costs exceed $2 million is provided through annual military construction appropriations. Facility repair at a military base is generally supported through the O&M accounts in the annual defense appropriation bill.19

After engineers determine that a specific military construction project is needed, the prioritization of prospective military construction generally begins at a conference of the installation’s engineers and representatives of all major resident organizations and other installation tenants. This group is commonly referred to as a Facilities Utilization Board. The result of these conferences—a prioritized list of construction needs—is presented to the installation’s senior military commander, who then accepts or adjusts the priorities to create a final list of proposed projects for submission up the chain of command.

The substance of that submission can be seen in a Department of Defense Form 1391 (DD 1391), Military Construction Project Data Sheet (see an example DD 1391 at Appendix C), created for each proposed project by the installation engineers. The DD 1391 includes a cost estimate, a description of the proposed construction, the specific requirement for the project (e.g., a change in mission or deterioration of facilities already in use), the current facility situation at the installation, the impact on installation mission if the project is not approved, and any other needed justification information. The DD 1391 form will accompany the construction request throughout the executive and legislative process.

The highest-priority projects that will fit within the budgetary guidance provided by the Office of Management and Budget (OMB) will be included in the President's request. The approved projects assigned a lower priority are slated for funding in future years and are typically included in the Future Years Defense Program (FYDP), which is a catalogue that summarizes the forces, resources, and programs associated with DOD operations over a five-year period.20 Therefore, some construction projects may survive the screening process only to be placed in the budgeting

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18 Installation engineers are the principal officers responsible for providing authoritative analysis and strategic program recommendations for military construction needs and priorities. Installation engineers may be referred to in various titles according to each military service: the Post Engineer in the Army, Base Civil Engineer (BCE) in the Air Force and Air National Guard, the Resident/Regional Officer in Charge of Construction (ROICC) in the Navy and Marine Corps, and the Construction and Facilities Management Officer (CFMO) in the Army National Guard.

19 The O&M sub-accounts associated with this type of maintenance work are generally referred to as Facilities Sustainment, Restoration, and Modernization, or FSRM.

20 10 U.S.C. §221 requires that the Secretary of Defense submit, at about the same time as the President’s annual budget request, a “future-years defense program … reflecting the estimated expenditures and proposed appropriations included in that budget. Any such future-years defense program shall cover the fiscal year with respect to which the budget is submitted and at least the four succeeding fiscal years.” DOD develops its FYDP according to policies and procedures outlined in Office of the Under Secretary of Defense (Comptroller), Department of Defense Directive 7045.14, The Planning, Programming, Budgeting, and Execution Process (PPBE) Process, January 25, 2013. See CRS In Focus IF10429, Defense Primer: Planning, Programming, Budgeting and Execution Process (PPBE), by Lynn M. Williams.
queue for a future year’s submission. Even then, because budget levels fluctuate and the entire construction list is reviewed annually, a given project’s priority may change.

Vetting and Prioritization Within the Military Services

Once they leave the installation commanders’ offices, these prioritized lists follow different paths, depending on the military component responsible for managing any given installation. These paths are graphically depicted in Figure 1.

Department of the Army

The Secretary of the Army reorganized Army property management in 2002 by creating the Installation Management Agency (IMA) and transferring to it the responsibility for maintaining the physical infrastructure of all Army posts and depots. This change was followed by a further reorganization in 2006 when the IMA was folded into a new Installation Management Command (IMCOM), whose commanding general reports directly to the Army Chief of Staff.

Prior to November 2016, IMCOM was divided into four regional directorates—Central, Atlantic, Pacific, and Europe. Construction projects from Army posts were forwarded to the appropriate IMCOM region, where the submissions from all the garrison commanders at installations within its jurisdiction were reviewed and prioritized into a single consolidated list for the region. On November 1, 2016, the Department of the Army realigned IMCOM’s domestic regions, Atlantic and Central, from a regional to a mission-oriented organization. These two regions were replaced by three functionally aligned directorates which were colocated with Forces Command (IMCOM Readiness), Training and Doctrine Command (IMCOM Training), and Army Material Command (IMCOM Sustainment). The two overseas directorates (IMCOM Europe and IMCOM Pacific) remained.

The prioritized lists developed by the five IMCOM directorates are submitted to Headquarters, IMCOM, located at Ft. Sam Houston in San Antonio, Texas. The headquarters consolidates, considers, and reprioritizes the project lists. It then submits a consolidated list for further review by the Army’s Assistant Chief of Staff for Installation Management (ACSIM), the service’s senior officer responsible for setting installations-related policy. The Deputy Chief of Staff, G-8, assesses and integrates the installations-related resourcing requirements into the overall budget of the Army.

At this point, responsibility for managing the Army’s construction requests shift to the civilian Army Secretariat, the staff supporting the Secretary of the Army and his assistants. In the case of military construction, responsibility for further review and consideration falls to the Assistant Secretary of the Army for Installations, Energy, and Environment. Once approved by the Assistant Secretary, the Army’s proposed construction projects are ready to be sent to the Office of the Secretary of Defense (OSD) for consolidation with those of the other services and defense agencies into a prioritized DOD master list.

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Figure 1. Military Construction Process

Office of the Secretary of Defense/Military Service
Issue construction project guidance

Installation Engineers
• Identify Facility Requirement
• Choose appropriate solution (repair, replace, reallocate)

0&M, Privatization, etc.

START TIMELINE
Installation
• Generate DD Form 1391s
• Create prioritized project list

1 YEAR – 1 YEAR, 6 MONTHS
2 YEARS, 3 MONTHS
Office of the Secretary of Defense
• Review, prioritize, and consolidate projects from all services
• Incorporate consolidated projects into defense portion of President’s Budget

2 YEARS, 8 MONTHS
Office of Management and Budget & President
• Make final revisions to President’s Budget
• Submit President’s Budget to Congress

3 YEARS, 3 MONTHS
Congress
• Review President’s Budget request
• Authorize and appropriate funds

3 YEARS, 6 MONTHS
Office of the Secretary of Defense
• Allocate funds to military services
  Execution by USACE or NAVFAC

5+ YEARS
Facility Complete

Source: DOD information, CRS graphic.
**Department of the Air Force**

The Air Force Installation and Mission Support Center (AFIMSC) is that department’s near-equivalent to the Army’s IMCOM. The AFIMSC was established in August 2014 to standardize construction and civil engineering support across all Air Force installations. The center provides program management, resourcing, and support activities previously supplied by each of the 10 major commands, two direct reporting units, and multiple field operating agencies. In practice, the Air Force’s major operational commands, such as Air Combat Command or Air Mobility Command, conduct day-to-day management of Air Force installations.

After AFIMSC receives the prioritized project lists from installation commanders, AFIMSC validates and consolidates all projects across the Air Force into a single priority list before submitting them to the Air Force Corporate Structure, a deliberative body which evaluates and makes recommendations on resourcing and investment to the Secretary of the Air Force. Once approved by the Secretary of the Air Force, the Assistant Secretary of the Air Force for Financial Management and Comptroller (ASA (FM&C)) compiles and submits the approved list of construction projects to OSD.

**Department of the Navy**

Like the Army, the Navy centrally manages its facilities. The Naval Facilities Engineering Command (NAVFAC) plans, builds, and maintains facilities, and delivers environmental, utilities, and other base services. There are nine Facilities Engineering Commands reporting through one of two NAVFAC regional commands—NAVFAC Atlantic in Norfolk, VA, and NAVFAC Pacific in Pearl Harbor, HI. Each Navy shore installation assigned to one of the Facilities Engineering Commands is provided a Resident Officer in Charge of Construction (ROICC). This ROICC is responsible for developing the necessary DD 1391s.

The NAVFAC headquarters staff reviews and prioritizes the submitted construction projects, forwarding the resulting list to Navy Installations Command, located at the Washington Navy Yard in the District of Columbia. Navy Installations Command consolidates, reviews, and reprioritizes the projects before submitting them to the Chief of Naval Operations (CNO) through the Deputy Chief of Naval Operations (Fleet Readiness & Logistics). Upon evaluation and approval, the CNO’s staff passes the list to the Assistant Secretary of the Navy for Energy, Installations and Environment for submission to OSD.

**Marine Corps**

The Marine Corps has no installation engineering staff; it relies on the Navy’s ROICCs to plan and administer construction on its installations. Nevertheless, the Marines do channel their

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22 This section contributed by Jason Purdy, U.S. Air Force Fellow.


24 For a list of engineering commands by region see https://www.navfac.navy.mil/about_us.html.

25 The Commander, Navy Installations Command (CNIC) provides oversight on all shore installation management, exercises authority as the Budget Submitting Office for installation support, and acts as the Navy point of contact for program execution oversight and installation policy.
construction requests through their own chain of command for requirements screening and prioritization.

After installation construction requirements are determined and the requisite DD 1391s are created and prioritized, they are forwarded to the appropriate Marine Corps Installations Command headquarters for screening and consolidation.26 There, the proposed military construction projects are reviewed, reprioritized, and forwarded to their respective Fleet Marine Force (FMF) headquarters.27 After the FMF headquarters review, military construction projects are submitted to Headquarters, Marine Corps, in Washington, DC, where a final prioritized list is compiled and submitted to the Assistant Secretary of the Navy for Energy, Installations and Environment for presentation to OSD.

National Guard

The National Guard (Army and Air) is a state-based reserve component of the Armed Forces.28 Unless the Guard is federalized, each state’s National Guard is its own distinct military organization, with the governor as its commander in chief and the Adjutant General (TAG) as its senior military officer.29 Each National Guard is a joint organization under the TAG, but its Army and Air National Guard construction requirements are handled somewhat differently.

Army National Guard

Within the state’s Army National Guard (ARNG) organization, Construction and Facilities Management Officers (CFMOs) develop the Master Planning—Long Range Construction Plan (LRCP), a project priority list of the state’s requirements for military construction. The CFMOs are the installation engineers of the ARNG, who act as the principal advisors to the Adjutants General on all Army Guard military construction projects. CFMOs operate under general guidance issued by the TAG to assess need and program military construction projects, submitting them to the TAG for prioritization and approval. Upon review completion, the TAG sends the project list to the National Guard Bureau (NGB), an agency that acts as the liaison between the state National Guards and DOD.

The Department of the Army limits the number of construction projects a state may submit each year. Therefore, the TAG must carefully consider the state’s priorities before forwarding projects to the NGB. The NGB Army staff, in turn, reviews the ARNG projects from all jurisdictions and incorporates those with the highest priority into an Infrastructure Requirements Plan (IRP). The IRP serves as the prioritized list of Guard military construction candidates for federal funding.

The Director of the ARNG provides the prioritized ARNG project list to the Army Staff in the Pentagon, where it is reviewed by the Assistant Chief of Staff for Installation Management (ACSIM). From this point, the ARNG project list follows the same review and approval process as the Army list.

26 There are four Marine Corps Installation (MCI) Commands: the National Capital Region (MCINCR), Pacific (MCIPAC), East (MCIEAST) and West (MCIWEST), each responsible for the major Marine bases and air stations within their respective geographic areas.
27 There are two FMFs, Atlantic (FMFLANT) and Pacific (FMFPAC), commanding the deploying Marine Expeditionary Forces. FMFLANT is headquartered at Naval Station Norfolk, Virginia, while FMFPAC is headquartered at Camp H.M. Smith, Hawaii.
28 For background information see CRS In Focus IF10540, Defense Primer: Reserve Forces, by Lawrence Kapp.
29 With the exception of the District of Columbia, territories (including Guam, U.S. Virgin Islands, and Puerto Rico) also have elected governors.
Air National Guard

The Base Civil Engineers (BCEs) for each state’s Air National Guard (ANG) installations initiate military construction projects in a process resembling that of their ARNG colleagues. The state’s Air Staff compiles and prioritizes the projects according to the TAG’s general guidance. After TAG approval, the state’s ANG highest-priority projects are sent to the Air Staff within the NGB for consolidation and reprioritization. The NGB Air Staff combines and refines the list, and the Director of the ANG provides highest-priority projects to the Headquarters Air Force staff in the Pentagon. From that point, it follows the same review and approval process as the Air Force list. The Chief of the National Guard Bureau works with OSD throughout the programming phase to ensure NGB priorities are given full consideration.

Appropriations, Authorizations, and Enactment

Legislation to appropriate funding for military construction originates as a bill in the Military Construction, Veterans Affairs, and Related Agencies subcommittees within the Committees on Appropriations for both the House and the Senate. As is the case with the annual National Defense Authorization Act (NDAA), which authorizes these appropriations, the committee reports accompanying the appropriations bills may provide useful information in addition to that found in the bills themselves. See Figure 2.

While the committees and subcommittees exercise jurisdiction over the legislation required to set policy, authorize actions, and provide the budget authority DOD needs, they also usually provide opportunities for individual Members of Congress not assigned to the committees of jurisdiction to provide input regarding specific construction projects. During the period when legislation is being drafted, the committees may also issue guidance to Members wishing to submit input to the committee in considering military construction matters. The guidance might suggest additional documentation that could prove helpful to the committee in its deliberations and may also set a deadline for submission of such information. Often that deadline is set for late March, when the subcommittee staffs begin to prepare for markup of the necessary legislation.

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Execution: From Paper to Bricks and Mortar

With congressional authorization and an appropriation, the responsibility for managing military construction projects typically falls to either Naval Facilities Engineering Command (NAVFAC) for Navy and Marine Corps projects, or the Army Corps of Engineers (ACE) for Army and Air Force projects. 31 Army and Air National Guard headquarters bureaus manage their respective projects.

Construction encompasses several phases, including the planning and design of the project, the solicitation of bids from prospective general contractors, and the construction itself. Normally, one of two general approaches, design-bid-build or design-build, will be used by the contracting officer in executing the project.

Solicitation of Bids

Portions of Title 40 of the United States Code (§1101 et seq.) require that federal building projects go through a three-step process, referred to as design-bid-build, with an initial design phase, a bid for construction competition, and the actual construction. In the design-bid-build process, each phase is executed under a specific contract. Under design-bid-build, a specialized architectural or engineering firm is awarded a contract for planning and designing the project. Once completed, a new contract for construction is advertised for bidding by general contractors.

31 While this division of responsibility usually holds for construction within the United States, overseas construction responsibility is typically governed by the project’s location. For example, in areas where an Army or Air Force presence predominates, construction administration often lies with USACE, regardless of whether the project is Navy or Marine Corps funded. The reverse is also true for NAVFAC where Navy and Marine Corps presence predominates.
These general contractors, in turn, often solicit second- and third-tier subcontractor quotes for specialty items, such as concrete work, plumbing, and electrical work, before tendering their bids for the overall construction contract. When the resulting bids are reviewed and the construction contract is awarded, the general contractor and subcontractors work together as the construction phase begins.

**Design-Build Authority**

Section 2305a of Title 10 permits a DOD contracting officer to use a shorter two-step process, called design-build, for design and construction. All planning, design, and construction is conducted under a single contract. This requires the firms bidding on the project to have access to all of the skills necessary to plan, design, and construct the project. This master builder concept offers two advantages over design-bid-build: it places full responsibility for the project on a single firm, and it offers the possibility of a reduced schedule by overlapping the project’s design and construction phases. On the other hand, the comprehensive nature of design-build contracts may limit the number of firms able to compete in the bidding.

Section 2305a authorizes a contracting officer to use the design-build process if he or she determines that

1. three or more offers are anticipated for such contract;
2. design work must be performed before an offeror can develop a proposal; and
3. the offeror will incur a substantial amount of expense in preparing the offer.

In opting to use the design-build process—rather than the design-bid-build process—Section 2305a requires the contracting officer to consider relevant information, including the extent to which the project requirements have been adequately defined, the time constraints for delivery of the project, and the capability and experience of potential contractors.

**From Contract Award to Completion**

USACE, NAVFAC, Army National Guard, and Air National Guard headquarters bureaus solicit the bids, award the contracts, and provide government oversight and assistance through the project’s design, contract award, construction, completion, and financial closeout. Early on, facility engineers work with a design firm to create a plan that fits within the scope of the project’s DD 1391. These facility engineers are not permitted to enter into a contract or obligate any funds for the actual construction of the project until associated funding is authorized and appropriated. Once project authorization and appropriations are enacted, they may then solicit bids, award the contract, and begin construction of the facility. These government engineers will continue to manage the project and monitor construction throughout the process.

Funds to pay for the project flow along a fairly lengthy path of allocation and reallocation that may be illustrated, here using a Navy construction project as an example. Using the budget authority provided for the project by Congress, OMB draws the necessary funds from the Military Construction, Navy, account at the Treasury. OMB then allocates the appropriate amount to OSD. OSD then reallocates the appropriate amount to the Assistant Secretary of the Navy (Financial Management and Comptroller), who passes the funding to NAVFAC (Atlantic or Pacific). NAVFAC continues the process by reallocating the funds to its regional divisions, called

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32 This initial planning can begin before the project itself is authorized by making use of funds already appropriated to undifferentiated “planning and design” accounts.
Facilities Engineering Commands (FECs). The FEC administers the construction contracts and pays the contractors.

While a number of factors affect the amount of time required to complete the construction of a facility, many projects span five years or more from the time the DD 1391 is approved to the date the project is completed.
Appendix A. Frequently Asked Questions (FAQs)

1. Where are the specific military construction projects listed?

Projects requested by the President are listed in the detailed budget justification documentation posted on the Under Secretary of Defense (Comptroller) website under the “Budget Materials” section.

Projects recommended for approval by the House and Senate are listed in tables included in the reports submitted by the appropriations and armed services committees accompanying their annual bills (Military Construction, Veterans Affairs, and Related Agencies Appropriations, and National Defense Authorization, respectively). The final, consolidated list of projects for which appropriations and authorizations are enacted can be found in the conference reports submitted by the relevant conference committees.

2. What is a Department of Defense Form 1391 (DD 1391)?

Department of Defense Form 1391 (also known as DD 1391) is a form that originates at the installation level and is used by DOD as a programming document to request construction funding from Congress. The form is used to explain each proposed construction project individually and includes a cost estimate, description of proposed construction, requirement, current situation, impact on operations if the project is not approved, and any useful supplemental data. Appendix C presents an example of a completed DD 1391.

3. What is “planning and design” funding?

The execution of any authorized construction project proceeds through several steps. These are intended to identify any issues and provide conceptual design including cost estimates for construction (e.g., site preparation, facility and supporting structure design, and sequencing of construction) and designing the anticipated facility and each of the roads, ramps, utilities, and the like needed for its operation. These activities may be broken out by function, with planning handled primarily by civil engineers and design handled primarily by architects. By funding planning and design through a separate, nonspecific appropriation, the scope and costs of projects may be accurately estimated before funds for individual construction projects are requested.

4. How long are funds available for projects?

Prior to FY2018, Congress would provide the authorization of appropriation of military construction and allow for the obligation of such funding for up to three years. However, appropriations provided for military construction are typically available for obligation for up to five years. The FY2018 National Defense Authorization Act (P.L. 115-91) moved to align the period of authorization with the period of appropriations, providing authorization of FY2018 projects and appropriations through 2022, and extending authorizations provided in FY2016 and FY2017 accordingly.

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34 Expiration of authorization is typically provided in section 2002 of the annual NDAA.
5. Why does a military construction project need an authorization and a separate appropriation for each construction project?

Section 114, of Title 10, United States Code, specifies, in part, that “No funds may be appropriated for any fiscal year to or for the use of any armed force or obligated or expended for ... military construction ... unless funds therefore have been specifically authorized by law.” The section goes on to define military construction as “... any construction, development, conversion, or extension of any kind which is carried out with respect to any military facility or installation ....” Additionally, 10 U.S.C. §2802 specifies that the Secretary of Defense and the Secretaries of the military departments may carry out such military construction projects, land acquisitions, and defense access road projects “as are authorized by law.”

In practical application of these statutes, Congress has required project-by-project authorization and appropriation for military construction projects.  

6. When the committee supports a requested military construction project, why is the amount of the project that is disclosed in the new budget authority sometimes greater than the actual project cost?

New budget authority requested before construction begins is an estimate of project cost while the actual cost calculated at completion represents the actual expenditure. In March 2018, the Government Accountability Office (GAO) raised concerns that DOD guidance describing the process of developing construction cost estimates does not fully incorporate all the steps needed to develop high-quality, reliable cost estimates. DOD partially concurred with the GAO recommendation, agreeing that DOD cost estimating guidance “lacks specificity” in several areas. As a result, DOD intends to revise its cost estimating guidance in FY2019.

After Congress authorizes and appropriates for the project, the budget authority may only be used for specific facilities listed on the associated DD 1391. In cases where the budget authority exceeds the actual cost of the project, the congressional appropriators may rescind the remaining budget authority, or approve the reprogramming of remaining unobligated budget authority to be applied to other military construction projects if requested. Should actual costs exceed the project’s allocated budget authority, additional costs may be covered through reprogramming or additional appropriations.

7. What are the “McCain Rules”?

The McCain Rules are criteria that were incorporated into the National Defense Authorization Act for FY1995 (P.L. 103-337, Section 2856) as a sense of the Senate:

- Appropriations for any military construction project not included in the DOD annual budget request should be considered for authorization only if the project is—
  1. essential to the DOD’s national security mission,
  2. not inconsistent with past actions with the Base Realignment and Closure Act (BRAC),


3. in the services’ Future Years Defense Program,
4. executable in the year they are authorized and appropriated, and
5. offset by reductions in other defense accounts, through advice from the Secretary of Defense.

The McCain Rules were used as guidance for congressional consideration of Member requests (i.e., earmarks) for military construction projects. While they have had little practical effect on congressional actions since Congress suspended the practice of funding such Member requests, DOD applies the McCain Rules in the formulation of the annual report to Congress on unfunded priorities required by 10 U.S.C. §222a.

8. What is the Future Years Defense Program (FYDP)?

The *Future Years Defense Program* (FYDP) is an annually compiled catalogue that summarizes the forces, resources, and programs associated with DOD operations. Formally approved by the Secretary of Defense, the FYDP projects DOD funding, manpower, and force structure needs over a five-year period. The FYDP is typically completed during the *programming* phase of the Planning, Programing, Budgeting, and Execution (PPBE) process, and is generally updated during the *budgeting* phase to reflect DOD's final funding decisions presented in the annual President's budget request.

During the programming and budgeting phase, the highest-priority construction projects that will fit within the budgetary guidance provided by the Office of Management and Budget (OMB) will be included in the President's request. The approved projects assigned a lower priority are slated for funding in future years and are generally included in the FYDP. The FYDP is generally submitted to the congressional committees with jurisdiction over defense matters. Note that while the data structure of the FYDP is unclassified, the actual FYDP data are classified.37

9. Why does a military construction project, listed in the FYDP, never seem to move to the front of the line and be included in the President’s budget request?

Individual projects are prioritized by their relevance to military operations, training, quality of life, environmental requirements, etc. A newly identified requirement may be assessed as having a higher priority than projects already in the planning process. Therefore, some construction, while worthy, may be deferred to later years.

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37 For additional information see *Defense Primer: Planning, Programming, Budgeting and Execution Process (PPBE)*, by Lynn M. Williams and CRS In Focus IF10831, *Defense Primer: Future Years Defense Program (FYDP)*, by Lynn M. Williams and Heidi M. Peters.
Appendix B. Selected Statutes Governing Military Construction and Repair Authorities

Table B-1. Summary of Selected Military Construction and Repair Authorities

<table>
<thead>
<tr>
<th>AUTHORITIES</th>
<th>CRITERIA</th>
<th>LIMITATIONS</th>
<th>REPORTING REQUIREMENT</th>
<th>WAITING PERIOD</th>
<th>SOURCE OF FUNDING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unspecified Minor Constructiona</td>
<td>MILCON project &lt;= $6M (not to be used for new construction of family housing units)</td>
<td>Total may not exceed 125% of amounts authorized for unspecified minor military constructionb</td>
<td>If project costs &gt; $2M, congressional notification is required</td>
<td>14 days from notification</td>
<td>Unspecified minor military construction appropriations</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If project costs &gt; $750K, advance approval by Secretary concerned is required</td>
<td></td>
<td></td>
<td>If project costs &lt;= $2M, O&amp;M appropriations may be used</td>
</tr>
<tr>
<td>Laboratory Revitalizationc</td>
<td>MILCON project for the purpose of revitalization and recapitalization of DOD “test and evaluation activities” and “research, engineering and development centers” &lt;= $6M</td>
<td>As per 10 U.S.C. §2805(b), if project costs &gt; $750K, advance approval by Secretary concerned is required</td>
<td>Upon determination of use</td>
<td>14 days from notification</td>
<td>Unspecified minor MILCON appropriations, O&amp;M appropriations, or amounts appropriated under 10 U.S.C. §2363a</td>
</tr>
<tr>
<td></td>
<td></td>
<td>As per 10 U.S.C. §2805(a), may not exceed 125% of amounts authorized for unspecified minor military construction.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AUTHORITIES</td>
<td>CRITERIA</td>
<td>LIMITATIONS</td>
<td>REPORTING REQUIREMENT</td>
<td>WAITING PERIOD</td>
<td>SOURCE OF FUNDING</td>
</tr>
<tr>
<td>-------------------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------</td>
<td>----------------</td>
<td>-----------------------------------------</td>
</tr>
<tr>
<td><strong>Repair of Facilities</strong>&lt;br&gt;(10 U.S.C. §2811)</td>
<td>Restoration of a real property facility, system, or component so it may effectively be used for its designated functional purpose; or Conversion of a real property facility, system, or component to a new functional purpose without increasing its external dimensions</td>
<td>Construction of new facilities or additions to existing facilities prohibited. If project costs &gt; $7.5M, advance approval by Secretary concerned is required</td>
<td>If project costs &gt; $7.5M, congressional notification required:&lt;br&gt;(1) Justification and total cost of all phases; (2) Explanation if cost is &gt;75% of MILCON cost to replace the facility; and (3) Description of any MILCON elements to be incorporated into project</td>
<td>None</td>
<td>O&amp;M appropriations</td>
</tr>
<tr>
<td><strong>Architectural and Engineering Services and Construction Design</strong>&lt;br&gt;(10 U.S.C. §2807)</td>
<td>Architectural and engineering services, as well as construction design performed in connection with MILCON and family housing projects</td>
<td>None (subject to appropriations)</td>
<td>If services cost &gt; $1M, congressional notification required</td>
<td>14 days from notification</td>
<td>MILCON and Family Housing appropriations</td>
</tr>
<tr>
<td><strong>Contingency Construction</strong>&lt;br&gt;(10 U.S.C. §2804)</td>
<td>Deferral of the project for inclusion in the next MILCON authorization act would be inconsistent with national security or national interest</td>
<td>None (subject to appropriations)</td>
<td>Upon determination of use</td>
<td>7 days from notification</td>
<td>Contingency construction appropriations</td>
</tr>
<tr>
<td><strong>Emergency Construction</strong>&lt;br&gt;(10 U.S.C. §2803)</td>
<td>Vital to the national security or to the protection of health, safety, or the quality of the environment; and So urgent that deferral of the project for inclusion in the next MILCON authorization act would be inconsistent with national security or the protection of health, safety, or environmental quality</td>
<td>Total may not exceed $50M per fiscal year (for each Secretary concerned)</td>
<td>Upon determination of use</td>
<td>5 days from notification</td>
<td>Unobligated MILCON appropriations available to the Secretary concerned</td>
</tr>
<tr>
<td>AUTHORITIES</td>
<td>CRITERIA</td>
<td>LIMITATIONS</td>
<td>REPORTING REQUIREMENT</td>
<td>WAITING PERIOD</td>
<td>SOURCE OF FUNDING</td>
</tr>
<tr>
<td>-------------</td>
<td>----------</td>
<td>-------------</td>
<td>-----------------------</td>
<td>----------------</td>
<td>------------------</td>
</tr>
<tr>
<td>Construction if War is Declared (10 U.S.C. §2808)</td>
<td>Declaration of war, or declaration in accordance with the National Emergencies Act (50 U.S.C. 1601 et. seq.) requiring use of the Armed Forces</td>
<td>None</td>
<td>Upon determination of use</td>
<td>None</td>
<td>Available (unobligated) MILCON funding</td>
</tr>
</tbody>
</table>

- Project "necessary to support the use of such armed forces."
- Authority terminates "at the end of the war or national emergency."

a. Through FY2022, the Secretary concerned is required to adjust the dollar limitations specified in 10 U.S.C. §2805 (Unspecified minor construction) for unspecified minor military construction projects inside the United States to reflect the area construction cost index for military construction projects (not to exceed $10M).
b. Includes projects undertaken in connection with the authority provided under 10 U.S.C. §2854 (Restoration or replacement of damaged or destroyed facilities).
c. Authority under this subsection expires Sept 30, 2025.
d. Includes amounts obligated for laboratory revitalization under 10 U.S.C. §2805(d).
e. 10 U.S.C. §2363 provides authority for the director of a defense laboratory to use not less than 2% and not more than 4% of all funds available to the laboratory for specified purposes, including repair or minor military construction of the laboratory infrastructure and equipment.
Appendix C. Case Study: Joint Base Myer Henderson Hall, Fort McNair Physical Fitness Center, DD 1391

On April 4, 2008, the Joint Base Myer Henderson Hall, Fort McNair Physical Fitness Center in Washington, DC, opened its doors for the first time. The center was created through the military construction process.

The Physical Fitness Center is a 35,000-square-feet facility that includes locker rooms, showers, gymnasium, six handball/racquetball courts, exercise and weight room, indoor running track, mechanical room, vending area, administrative areas, supply and issue room, storage, laundry, toilets, a mezzanine, and saunas. Additional facilities also include paving, walks, curbs and gutters, electric service, exterior lighting, utilities, storm drainage, masonry security wall/masonry/piers, site improvements, parking for 70 patrons, and wrought iron fencing. Force Protection/Anti-terrorism measures are also included within the facility through traffic control barriers and laminated glass.

The facility serves military and civilian personnel assigned to Fort McNair and their families.

Included below on Figure C-1 and Figure C-2 is the DD 1391 for the Fort McNair Physical Fitness Center.
### Figure C-1. Fort McNair Physical Fitness Center DD Form 1391
(Pages 75-76)

<table>
<thead>
<tr>
<th>Item</th>
<th>Type</th>
<th>Description</th>
<th>Quantity</th>
<th>Unit Cost</th>
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<td>Phys. Fitness Center</td>
<td>M3</td>
<td>-</td>
<td>0.144</td>
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<td>Antiterrorism Forces Protection</td>
<td>L2</td>
<td>-</td>
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<tr>
<td>Spec. Foundations</td>
<td>L6</td>
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<td>-</td>
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<td>-</td>
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<tr>
<td>12' Brick Particular Wall</td>
<td>M1</td>
<td>-</td>
<td>107</td>
<td>324,734</td>
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<td>22' Brick &amp; 6' Ft Per. Wall</td>
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<td>-</td>
<td>3</td>
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<td>Building Information Systems</td>
<td>L4</td>
<td>-</td>
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<td>SUPPLEMENTAL FACILITIES</td>
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<td>Water, Sewer, Gas</td>
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<tr>
<td>HVAC, Water, Chems &amp; HVAC'S</td>
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<td>-</td>
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<td>Site Imp. (55%)</td>
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</tbody>
</table>

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Source: Department of the Army, FY 2002 Amended Budget Submission.
Figure C-2. Fort McNair Physical Fitness Center DD Form 1391

Source: Department of the Army, FY 2002 Amended Budget Submission.
Author Contact Information

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lmwilliams@crs.loc.gov, 7-0569