

## Optimizing Total Force Management

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## Abstract

Manpower management (MM) is the term for the set of processes by which the services and other DOD components define and fund—for each operational unit, command staff, and shore/support organization—the numbers and types of job positions that these activities need to perform their missions. Execution of these MM processes across DOD is governed by a combination of the Office of Secretary of Defense (OSD) and service-specific instructions, directives, and policies. In addition to providing methods and policy for determining the number and types of position, they provide guidance for determining the most appropriate labor source (active military, reserve military, civilians, or contracted services) to fill each position. This study examines the MM processes currently used within each DOD component to determine how they integrate DOD's workforce mix policy and guidance and to identify impediments that prevent or supersede adherence to this guidance.

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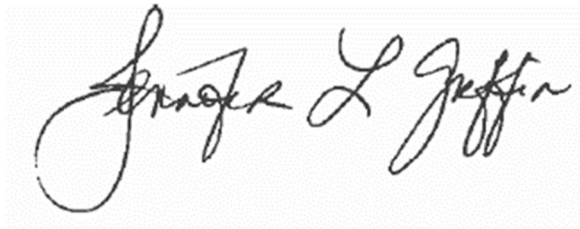
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**July 2021**

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Jennifer Griffin, Director  
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# Executive Summary

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## Background and issues

The Department of Defense's (DOD's) total force (TF) consists of military (active, reserve, and National Guard), government civilians, and contracted services. Each type's share of the TF has fluctuated over time, driven by changes in national security concerns and shifting views on what constitutes the most effective and efficient workforce.

Manpower management (MM) is the umbrella term for the set of processes by which DOD agencies and the services define and fund—for each operational unit, command staff, and shore/support organization—the numbers and types of job positions that these activities need to perform their missions. The key MM processes are manpower requirements determination (MRD) and manpower programming and budgeting. Embedded in these processes is the determination of the most appropriate labor type (military, government civilian, or contracted services) to perform the job, referred to in the remainder of this report as the workforce mix or manpower mix determination process.<sup>1</sup>

In 2019, when members of the House Armed Services Committee (HASC) reviewed DOD's workforce projections for FY 2020 and found larger increases in military requirements compared with civilian requirements, some questioned whether the TF decision-making processes within the services (and to a lesser extent, the Fourth Estate<sup>2</sup>) followed DOD's policy and guidance when assigning a labor source to each job. This prompted the HASC to call for a review of the processes used by the services and DOD agencies to determine the department's TF. In response, the Total Force Manpower and Analysis Directorate (TFM&RS) in the Office of the Assistant Secretary of Defense for Manpower & Reserve Affairs asked CNA to (1) investigate how DOD's policy and guidance are integrated into the MM processes that are currently used to determine the size and composition of the department's workforce and (2)

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<sup>1</sup> The language used can be misleading. DODI 1100.22 is titled *Policy and Procedures for Determining Workforce Mix*, and the term workforce mix or manpower mix is used to refer to the Total Force, when the policy more directly addresses how to identify the appropriate labor source, rather than the mix itself.

<sup>2</sup> "Fourth Estate" is a term generally used to refer to the Defense Components outside the Military Services, such as OSD and the Defense Agencies and Field Activities.

assess whether this guidance is being used to determine the most appropriate labor source for each position throughout the department.

To address the HASC's concerns, CNA investigated the MM processes in each of the DOD components to understand how they are conducted, paying particular attention to workforce mix decisions.<sup>3</sup> We supplemented that effort by analyzing manpower data across the services looking for indications that one type of manpower may be favored over another—particularly in organizations with a mix of military and civilian personnel. Finally, we identified factors external to the MM process that significantly influence workforce mix decisions and the composition of the total force over time.

Our investigation uncovered four key findings, which we summarize below.

## Findings

### External factors affect ability to follow workforce mix guidance

Although many manpower subject matter experts (SMEs) with whom we spoke reported that they follow DODI 1100.22, *Policy and Procedures for Determining Workforce Mix* [1], some stated that the primary objective in determining whether a billet should be filled by military, DOD civilian, or contractor is to ensure that the command or organization can perform the work required to conduct the mission. In some cases, this means selecting the manpower type that provides the surest way to secure the skills and knowledge (within the required timeframe) to minimize risks in performing the mission. For example, even though the guidance may indicate that government civilians are the most appropriate labor source for a function, the speed with which the component needs to staff the function may dictate that it be sourced using contracted labor.

SMEs also expressed that external constraints mandated by Congress and DOD leadership can prevent the component from moving forward with the labor source dictated by workforce mix guidance. Endstrength limits, civilian full-time equivalent (FTE) caps, funding realities, and other external constraints may prevent the sourcing choice dictated by the guidance from being implemented. Instead, the components often have to move forward with the sourcing reality—that sourcing option that is implementable.

Additional federal government decisions have also affected workforce mix decisions and the flexibility allowed to the components in making these decisions. For example, some SMEs

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<sup>3</sup> The United States Space Force (USSF) became the sixth branch of the Armed Forces on December 20, 2019. At the time of this report, however, these units were still part of the Air Force as USSF had not been formally activated.

noted that the services no longer have A-76 public/private competitions as a manpower management tool and have lost an objective mechanism for assessing workforce mix and comparing labor costs to inform decision-making. Without A-76 as a decision-making tool, there is less analysis to indicate which labor source is more efficient.

## Impediments to implementing workforce mix guidance

In our discussions with SMEs, we also found that the implementation and application of DODI 1100.22 across components is inconsistent. Some SMEs indicated that they consistently use this instruction to make workforce mix/labor source decisions while others do not. SMEs also indicated that those applying the workforce mix guidance often interpret it differently because of unclear or imprecise definitions, noting that the services have different interpretations of military essentiality, for example.

Another barrier to implementing the guidance is the lack of training for those who are using it. SMEs noted that it is not enough to put out an instruction and expect people to understand and follow it. Individual components, such as the Army, have developed additional guidance (e.g., the Request for Services Contract Approval (RSCA) form) to aid those who are charged with applying workforce mix policy and make it easier to follow. The RSCA form, however, is generally used by acquisition/contracting officials after a decision to contract has already been made and is not necessarily used during the initial manpower mix decision-making process.

## Few consequences to not following DODI 1100.22

SMEs also noted that there are few consequences to not “following the rules” set forth in DODI 1100.22. They noted that, other than a possible union complaint, there is little oversight and no punishment for not following the rules. Because of this, commands often take the path of least resistance and choose the labor source that is easiest to obtain or pay for.

## Underlying incentives encourage the use of one labor type over another

SMEs noted the long and cumbersome DOD civilian hiring process incentivizes the use of military personnel and contracted services over civilians. In addition, organizations tend to view the contracting option more favorably for two reasons: contractors can be hired quickly, and they do not require the management oversight that DOD civilians do. Taken together, the barriers to hiring, lack of flexibility, and personnel management issues create a disincentive to selecting civilians.

In addition, different funding structures have the unintended effect of incentivizing some labor sources while deterring others. For example, SMEs noted that military labor is often perceived

as “free” because it isn’t paid for by the command the way civilians are. This can incentivize the use of military personnel rather than civilian personnel for non-military-essential functions.

## Manpower management community is under-resourced

Several manpower SMEs indicated that the MM community is inadequately resourced. For example, the Joint Staff lacks the in-house personnel and resources to conduct manpower studies and reviews and depends on the services’ manpower agencies or contractors to conduct manpower studies. Resourcing is also required to standardize MM in the Fourth Estate, which currently lacks the resources to develop a comprehensive manpower management document for the DAFAs to follow.

## No use of modeling or holistic workforce analysis

The HASC language also called for an investigation of whether the military departments use modeling to determine workforce mix as well as an identification of constraints that impede holistic analysis of the total force. Per our SME discussions, none of the services use modeling to determine the appropriate workforce mix. Although modeling is used extensively to determine workload and requirements, these models are agnostic regarding workforce mix. Further, according to SME discussions, there is little holistic analysis done on aggregate military and civilian requirements or on total force composition. Although the services review aggregate military requirements to ensure that they are within endstrength controls, their paygrade structure is executable, and they support force rotation policies, this review is not done in conjunction with civilian requirements.

Service SMEs also indicated that, although they previously submitted an annual Inherently Governmental and Commercial Activities (IGCA) Inventory, they no longer do so because the A-76 program, the original impetus for the IGCA Inventory, is no longer active. Before the suspension of the A-76 program, IGCA Inventories were subjected to a quality control process, reviewed extensively for errors, and used to conduct workforce analysis across DOD.

## Lack of complete contractor data impedes TF analysis

Another impediment to holistic total force analysis is the lack of complete contractor data and the inability to link contractor data with military and civilian manpower data. The lack of complete and current contractor data in DOD’s authoritative manpower databases, as well as the inability to link military and civilian manpower data in authoritative manpower databases with the databases that house contractor data, creates a large gap in the assessment of DOD’s total force. Although the services are required to submit an Inventory of Contract Services, a major impediment to using the inventory is that the data in the inventory are often outdated.

Without an accurate picture of contracted services, it is very difficult to conduct true TF analysis or to understand trends in workforce composition over time.

## **Aggregate manpower totals are misleading in assessing TF composition**

Finally, we find that the overall mix of military and civilian positions largely depends on the number and size of combat units and combat support units (i.e., units with all or mostly military positions) and the number and size of organizations with all or mostly civilian positions (e.g., depot maintenance facilities, research centers, and engineering facilities). The predominant labor source for these types of units and organizations (military or civilian) has been determined and is unlikely to change going forward. Organizations with a true mix of military and civilian labor account for only about a third of DOD's active military and civilian positions. The mix of military and civilian positions at organizations with a true workforce mix is almost evenly split (i.e., ratio of civilian to military positions is about 1 to 1). This split is much higher than the ratio based on total positions.

Based on the findings above, we offer the following recommendations:

## **Recommendations**

### **1. Inform Congress and DOD senior leaders that personnel caps and hiring freezes impede policy-driven MM**

Some of the most influential factors affecting total force composition fall outside the components' control. Congressional and DOD senior leaders continue to attempt to address perceived inefficiencies in workforce mix through constraints such as personnel caps and hiring freezes. These top-down approaches create impediments to sound workforce management practices, however, and cause deviations from the guidance. While the components cannot prevent Congress and DOD leadership from imposing these constraints, they can inform them that these types of constraints interfere with policy-driven workforce management.

### **2. Address the underlying incentives that encourage the use of one labor type over another**

DOD must also address the long and cumbersome DOD civilian hiring process that incentivizes the use of military personnel and contracted services over civilians. Organizations tend to view the contracting option more favorably because contractors can be hired quickly and do not

require the management oversight that DOD civilians do. Taken together, these issues create a disincentive to selecting civilians.

### 3. Better resource MM community

Several manpower SMEs indicated that the MM community is inadequately resourced. The Joint Staff lacks the in-house personnel and resources to conduct manpower studies and reviews and depends on the services' manpower agencies or contractors to conduct manpower studies. This reliance on the services' manpower agencies puts additional burdens on these workforces. We recommend that Joint Staff conduct a cost-benefit analysis to determine if standing up an in-house manpower study capability would be beneficial.

Resourcing is also required to standardize MM in the Fourth Estate, which currently lacks the resources to develop a comprehensive manpower management document for the DAFAs to follow.

### 4. Develop training for those applying workforce mix guidance

Manpower SMEs across DOD indicated that training is needed for those that apply workforce mix guidance. SMEs noted that it is not enough to put out an instruction and expect that people will be able to follow it; training is necessary. The Total Force Manpower and Analysis Directorate (TFM&RS) in the Office of the Assistant Secretary of Defense for Manpower & Reserve Affairs has convened a working group of manpower experts to update and improve DODI 1100.22 with the goal of making the guidance clearer. We recommend that, once DODI 1100.22 is updated, OSD develop training for those responsible for applying the revised guidance.

### 5. Design a DOD-wide manpower data collection

OSD should design an annual manpower data collection from all of the components and provide oversight of these data. A renewed manpower data collection effort and oversight of these data will help with decision-making and the ability to conduct total force analysis. This effort would include focusing on collecting up-to-date contractor data in a format that can be assessed and compared with military and civilian data.

The lack of complete and current contractor data in DOD's authoritative manpower databases, as well as the inability to link military and civilian manpower data in authoritative manpower databases with the databases that house contractor data, creates a large gap in the assessment of DOD's total force. This annual data collection of military, civilian, and contracted positions would allow for analysis both within and between components across DOD.



## 6. Reconvene manpower issue teams

Finally, SMEs noted that, at one time, OSD and the services used to convene manpower issue teams at the OSD level. The teams identified pertinent manpower issues across the services that would give them a sense of issues that might arise during the POM process. OSD has not convened these teams in recent years, but SMEs thought it would be beneficial to resume them.

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# Introduction

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## Background

The Department of Defense's (DOD's) total force (TF) consists of military (active, reserve, and National Guard), government civilians, and contracted services. The size of each manpower type relative to the total has fluctuated over time, driven by changes in national security concerns and shifting views on what constitutes an effective and efficient workforce.

Manpower management (MM) is the umbrella term for the set of processes by which the services and other DOD components define and fund—for each operational unit, command staff, and shore/support organization—the numbers and types of job positions that these activities need to perform their missions. The key MM processes are manpower requirements determination (MRD) and manpower programming and budgeting. Execution of these MM processes across DOD is governed by a combination of Office of the Secretary of Defense (OSD) and service-specific instructions, directives, and policies. In addition to providing methods and policy for determining the numbers and types of positions, they provide guidance for determining the most appropriate labor source (active military, reserve military, civilians, or contracted services) to fill each position.

## HASC TF concerns

In 2019, when members of the House Armed Services Committee (HASC) reviewed DOD's workforce projections for FY 2020, they learned that the civilian workforce would increase by 0.7 percent while active component (AC) and reserve component (RC) military endstrength would increase by 6.2 and 1.5 percent, respectively. Although the budget request stated "that the size and composition of its civilian workforce reflect changes commensurate with the Department's military force structure and that its civilian workforce is key to warfighter readiness," some in Congress questioned whether these differential growth rates were appropriate and, to a broader extent, whether the TF decision-making processes within the services (and, to a lesser extent, the DOD agencies) truly followed the intent of DOD's policy and guidance when assigning a labor source to each job. To address these concerns, the HASC called for a review of the processes used by the services and DOD agencies to determine the department's TF.

## Study tasking

In response to Congress's request, the Total Force Manpower and Analysis Directorate in the Office of the Assistant Secretary of Defense for Manpower & Reserve Affairs asked CNA to (1) investigate how DOD's policy and guidance are integrated into the MM processes that are currently used to determine the size and composition of the department's workforce and (2) assess whether this guidance is being used to determine the most appropriate labor source for all positions throughout the department.

In support of this objective, this study also addresses the following related issues raised by the HASC:

- What impediments prevent (or hinder) the components from (1) following DOD's policy and guidance and (2) using the most appropriate labor source for each position?
- What role does modeling play in determining the composition of DOD's workforce?
- What external factors (outside of the MM process) affect the TF workforce mix?

## Analytic approach

To address the HASC's concerns, we structured our investigation along three lines of effort. Our main focus entailed investigating the MM process within each service, the Joint Staff, and the Fourth Estate<sup>4</sup> to understand how it is conducted, paying particular attention to the workforce-mix decision-making process.<sup>5</sup> We supplemented that effort by analyzing manpower data across the services, looking for indications that one type of manpower may be favored over another—particularly in organizations with a mix of military and civilian personnel. Finally, we explored factors external to the MM process that influence workforce mix decisions and the composition of the total force over time.

Examining the MM processes across all DOD components is a large undertaking. To manage this effort within the resource limits of this study while addressing the key questions, our investigation focused on decisions and processes that directly affect the mix of active duty military and government civilians. We did not review the process for determining mobilization

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<sup>4</sup> Fourth Estate is a term generally used to refer to the Defense Components outside the Military Services, such as OSD and the Defense Agencies and Field Activities.

<sup>5</sup> The United States Space Force (USSF) became the sixth branch of the Armed Forces on December 20, 2019. At the time of this report, however, these units were still part of the Air Force as USSF had not been formally activated



requirements—a process that affects the size and composition of reserve and National Guard forces.

## Organization of report

The report has four sections. The first reviews DOD's manpower management functions and the policy framework for determining workforce mix. The next section contains the key takeaways on workforce mix decisions from our SME discussions with each of the four services, the Joint Staff, and the Fourth Estate. It also provides an example of how factors external to the MM process affect the composition of the TF. The third section presents our findings from analyzing manpower data. We conclude with our findings and recommendations. Appendices A through E describe the MM processes in each of the services, the Joint Staff, and the Fourth Estate.

# Manpower Management

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In this section of the report, the following introduction and the subsections on the purpose and core functions of MM are taken directly from the 2020 CNA Report, *Improving the DOD Manpower Management Workforce* [2].<sup>6</sup>

DOD Directive (DODD) 1100.4 [3], *Guidance for Manpower Management*, provides direction to the DOD components. Each military service issues its own implementation guidance based on its force structure and associated organizational structure. The relevant documents for the four military services follow:

- Army Regulation (AR) 570-4, *Manpower Management* [4]
- Chief of Naval Operations Instruction (OPNAVINST) 1000.16L, *Navy Total Force Manpower Policies and Procedures* [5]
- Marine Corps Order (MCO) 5311.1E, *Total Force Structure Process* [6]
- Air Force Instruction (AFI) 38-101, *Manpower and Organization* [7]

We found formal documents providing implementation guidance for some of the other DOD components,<sup>7</sup> but only that for the Chairman of the Joint Chiefs of Staff (CJCS) Instruction 1001.01B (*Joint Manpower and Personnel Program* [10]) was as detailed as the service documents.

In the subsection that follows, we use these and other documents to define MM in terms of its purpose and functions. Although it causes some loss of specificity, summarizing across documents allows us to create common terminology and definitions that apply across DOD.<sup>8</sup>

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<sup>6</sup> The 2020 report was sufficiently recent to serve as an up-to-date summary of MM processes across DOD.

<sup>7</sup> See, for example, Defense Contract Management Agency (DCMA) Manual 4301-09, *Manpower and Mission Analysis* [8], and Defense Information Agency (DISA) Instruction 640-45-32, *Organization: Manpower Management* [9]. One of our SME discussions revealed that the Office of the Chief Management Officer was in the process of developing manpower management guidance for Fourth Estate organizations, but that effort was not complete at the time of this writing.

<sup>8</sup> Service-specific policies will be discussed in more detail in the appendices.

## Purpose of MM

We begin the discussion of the purpose of DOD MM with the following description of the purpose of DOD itself:

Although DOD has many responsibilities and functions, at the most basic level it is the organization responsible for manning, equipping, and training U.S. military forces. The vast majority of DOD's funding and personnel are assigned to tasks that contribute in some way to producing military forces that are prepared for combat. As such, DOD can be viewed as an organization that converts "inputs" of funding and personnel into "outputs" of combat capability, which are then available to be used as the nation sees fit. That combat capability is best described in terms of the number and types of combat units that DOD can generate and sustain—that is, in terms of force structure. [11], p. 8]

To ensure that all units can provide the required capabilities, they must be staffed by sufficient numbers of personnel with the necessary skills and experience. MM is the process by which DOD and the services define and fund the types and numbers of jobs, positions, and billets that must be filled to achieve the desired level of capability at both the organization and unit levels. In short, MM generates the signal of labor demand for each DOD component based on its own unique force structure.

## Define manpower demand based on force structure

Using definitions from reference [11], DOD force structures are built from the following three types of foundational units:

- **Major Combat Units.** The most visible and, in general, the most important combat units in DOD's inventory, such as Army brigade combat teams, Navy warships, and Air Force tactical fighter squadrons.
- **Support Units.** Units that are employed alongside major combat units to support their activities in many different ways, including being responsible for engineering, intelligence, civil affairs, ordnance, maintenance, and transport.
- **Infrastructure/Administrative Organizations.** Non-deployable units that perform key functions, such as recruiting, training, acquisition, maintenance, and medical care that are necessary for manning, equipping, and training combat and support units. Some of these organizations exist within each military service and some are defense-wide organizations that perform these functions for the entire department.

All the military services have unique versions of each type of unit, but there is also some overlap, especially among administrative units.

## Generate common manpower outputs

The differences in force structure matter for MM not only because they generate different numbers and types of required positions, but also because they can generate differences in the processes that underlie MM functions. Regardless of all these differences, however, MM generates the same two primary outputs for all DOD components.<sup>9</sup> They are:

- **Unit-specific manpower *requirements*.** Manpower requirements are the minimum human resources required for a unit to achieve its mission. They are driven by workload and defined in terms of the functions, skills, and grade levels required to perform specific tasks and duties. Each manpower requirement is specified as a full-time equivalent (FTE) and each equates to a specific civilian position or military billet. Unit-specific requirements are determined without regard to budget constraints and are aggregated to the organization level to create an unconstrained estimate of the total required manpower. Because some requirements are not ultimately funded, manpower requirements do not send an actionable demand signal to the personnel management system.
- **Unit-specific manpower *authorizations*.** Manpower authorizations, also called manpower spaces, are approved military or civilian positions to which personnel may be assigned for the purpose of performing position-specific tasks. Like manpower requirements, they are defined in terms of the functions, skills, and grade levels required to perform the tasks. Unlike requirements, authorizations are always funded, and, while total authorizations may not exceed total requirements because of budget constraints, total authorizations may be less than total requirements. Manpower authorizations provide the official demand signal to the personnel management system.

Thus, returning to the purpose of MM, reference [10] defines it as the “means of manpower control to ensure the most efficient and economical use of available manpower.” This appealingly succinct definition combines the technical efficiency feature of manpower requirements with the financially constrained feature of manpower authorizations.

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<sup>9</sup> These definitions are an amalgamation of the definitions from the DOD and service-specific manpower management guidance (i.e., DODD 1100.4 [4], AR 570-4 [5], MCO 5311.1E [7], OPNAVINST 1000.16L [6], AFI 38-101 [8], and CJCSI 1001.01b [11]).

## Core MM functions

In this subsection, we describe the main MM functions that create manpower requirements and manpower authorizations. Specifically, we call out three core functions: manpower requirements determination (MRD); manpower programming and budgeting as part of the DOD Planning, Programming, Budgeting, and Execution (PPBE) process; and the allocation of total manpower authorizations to commands and subcommands.

Unless otherwise noted, the descriptions and definitions in this subsection are an amalgamation of those provided in the DOD-level and service-specific MM policies documents identified earlier.

### Manpower requirements determination

MRD is the set of processes that creates unit-specific manpower requirements. MRD processes are generally industrial or business engineering processes that translate desired unit capabilities into work that will be performed by personnel filling specific numbers and types of billets or positions. Although MRD does not take budget constraints into account, a prime objective is the efficient use of manpower resources. Key features of MRD processes—inputs, methods, and timing/frequency—vary by the type of manpower requirement being determined.

#### Types of manpower requirements

The different types of manpower requirements are defined along two main dimensions. The first dimension is force structure, as described previously. MRD processes for operational units, comprising combat units and support units, are generally separate from MRD processes for force generating units, which include administrative and overhead units.<sup>10</sup> The second dimension is personnel type. For each unit, the MRD process must specify the appropriate workforce mix of active and reserve billets and civilian and contractor positions. We will discuss the workforce mix decision-making process in more detail in the next section.

The military services and the Joint Staff also have other kinds of requirements. First, most service and Joint Staff units have both peacetime and wartime (also known as mobilization) requirements. Additional types of manpower requirements for the services include external or outside requirements for military manpower (e.g., Joint Staff and Fourth Estate requirements),

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<sup>10</sup> Each service uses different words to describe these kinds of units in their MM guidance: (1) Army: operating and generating units; (2) Navy: fleet and shore requirements; (3) Marine Corps: operating forces or fleet Marine forces and headquarters and support activities; and (4) Air Force: operations, maintenance, and combat support functional areas.

manpower requirements associated with major new acquisitions, and requirements for the individuals account (IA) (e.g., students and trainees and personnel in transient, patient, prisoner, and holdee (TPPH) status).

### MRD variables

The first of the three general categories of variables associated with MRD processes is broad policy guidance. DOD policy stipulates that “manpower requirements are driven by workload and shall be established at the minimum levels necessary to accomplish mission and performance objectives” [3]. Following from this overarching policy directive, additional DOD policies,<sup>11</sup> and related component-specific policies, provide guidelines and parameters within which to determine minimum peacetime and mobilization requirements, and how to determine workforce mix based on definitions of work that is military essential or inherently governmental. In the next section, we will talk about the policies that govern workforce-mix decision-making, specifically DOD Instruction (DODI) 1100.22, in detail.

The second category includes variables that are used to translate unit-specific missions into the types of billets or positions that must be filled in order for specific functions and tasks to be performed and desired operational capabilities and services to be delivered. For operational units, these variables are determined by established military doctrine and concepts of operation and the expected risk or threat level. For force-generating units, these inputs are defined in terms of efficient business processes and organizational structures. For both types of units, they are determined by the relevant underlying technologies.

The final category of MRD variables is technical factors that calculate the amount of work associated with each task and the amount of manpower needed to do it. The components’ MM documents define the amount of work in terms of approved or directed “workloads” needed to accomplish a given unit’s mission under specified conditions. They then describe a variety of variables used to determine the number of billets or positions required to perform the workload. These include various availability factors, staffing standards, crew ratios, and workload allowances.<sup>12</sup>

### MRD studies and methods

MRD studies can be about updating unit requirements based on new values for the relevant variables, or they can be about updating the variable values themselves. Depending on the situation, they usually include some or all the following basic steps:

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<sup>11</sup> See DODI 1100.22, *Policy and Procedures for Determining Workforce Mix* [1].

<sup>12</sup> An additional reference for this discussion is Army Regulation 71-32, *Force Management: Force Development and Documentation Consolidated Policies* [12].

1. Create a baseline based on current manpower requirements.
2. Validate the unit's mission.
3. Evaluate the functions and tasks associated with the mission.
4. Validate manpower utilization.
5. Define, validate, and project workload.
6. Develop or apply a workload-manpower relationship.
7. Compute new estimate of manpower demand.
8. Determine manpower mix.
9. Consider potential new organizational structures.
10. Document results.<sup>13</sup>

Various methods and tools underlie these steps. Some are essentially descriptive and entail only basic counting, while others entail the application of sophisticated mathematical models and statistical techniques.

For example, part of step 5 is work measurement, or the collection of data on work-hours and production by a given work unit. A frequently used work measurement tool is work sampling, which involves the application of statistical sampling theory and techniques to the study of work systems. Specifically, the characteristics of the sampled, or observed, work done are used to produce estimates of the total amounts of work and types of activities done. In other cases, it is possible to do work measurement by observing all the work done by a unit, so that no statistical techniques are required. Similarly, step 6 generally entails developing manpower models, which are mathematical equations that describe the relationship between workload variable(s) and manpower requirements. In many cases, the type of method to use depends on whether the study is for one unit or for multiple similar units. It also depends on the nature of the output. The output of some types of units is more difficult to quantify than that of other units.

The Army's distinction between staffing standards and staffing guides helps to illustrate the nature of these methodological differences. According to [4], AR 570-4 staffing standards are used to develop manpower requirements through work measurement, normally at more than one location, using regression analysis and other statistically valid procedures. Staffing guides,

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<sup>13</sup> These steps are summarized from the Army's guiding MM document [5], but each appears in different ways in other services' guiding documents and MRD manuals. See, for example, NAVMAC's *Navy Total Force Manpower Requirements Handbook* [27] and USFF CMAT's *Shore Manpower Requirements Determination Program Handbook* [14].

however, provide manpower “yardsticks” that indicate numerical manpower requirements based on workload indicators, and usually provide the information in a tabular format.

### Timing and frequency

DOD policy does not dictate a specific schedule for component-level MRD. Instead it directs that “changes in manpower shall be preceded by changes to the programs, missions, and functions that require manpower resources” [3].

Consistent with this broad DOD guidance, the DOD components provide implementation guidance indicating that manpower requirements should be redetermined if there is a change to any of the key MRD inputs. These component-specific policies get implemented as regular or cyclical reviews of missions, operational concepts, organizational structures, specific functions, and relevant technologies to ensure that any changes to these variables are translated to changes in manpower requirements. These review cycles are usually one to three years long. MRD studies must also be done when new organizations are established or when major new weapon systems are acquired.

Each of the service’s manpower analysis agencies is also directed to review/refresh manpower requirements periodically, typically every three to five years. However, because of limited resources, these reviews are often delayed. For example, according to Navy policy, each command’s manpower requirements should be reviewed every three years. Because of the limited number of review teams, the work involved in conducting a review, and the number of shore commands, however, a review typically occurs every five to six years.

### Manpower programming and budgeting

The manpower programming and budgeting function is the first step in turning unit-specific requirements into unit-specific authorizations. Specifically, DOD Directive 1100.4 stipulates that DOD military and civilian manpower resources “shall be programmed in accordance with validated manpower requirements, and within fiscal limits and acceptable levels of risk identified in Defense planning and programming guidance” [4]. This MM function is embedded in the more comprehensive PPBE process. PPBE is the process used to create the DOD’s portion of the President’s annual budget request to Congress.

The Congressional Research Service (CRS) describes it as follows:

Planning, Programming, Budgeting, and Execution (PPBE) is an annual Department of Defense (DOD) process for allocating resources. It serves as the framework for DOD civilian and military leaders to decide which programs and force structure requirements to fund based on strategic objectives. [13]



DOD Directive 7045.14 states that the objective of PPBE “is to provide the DOD with the most effective mix of forces, equipment, manpower, and support attainable within fiscal constraints.” [14] Thus, manpower programming and budgeting are the processes that inform the manpower portion of each DOD component’s budget and, in aggregate, of the overall DOD budget. These MM processes are analogous to the processes for procuring the weapon systems used by combat units and the office and other equipment used by DOD agencies and field activities.

## Authorization and allocation

Authorization and allocation is the next, and final, step in turning manpower requirements into manpower authorizations. It is the top-down process by which programmed military endstrength and total civilian FTE work-years are allocated from the component level to the command level and, ultimately, to the unit level.

Because budget constraints typically mean that requirements are not fully funded, allocations are made based on component-level priorities set by DOD and component leadership. They are also guided by DOD and component-specific policies that define the relationship between requirements and authorizations. In particular, authorizations must be based on validated, approved requirements and must match in terms of functions, skills, and grade levels. In addition, authorizations cannot exceed requirements at specific levels of aggregation, such as the unit, the program element, and the manpower type.

This step also includes in-year modifications or reallocations of manpower resources. These changes are considered “zero-balance” changes because they realign existing manpower authorizations to meet changing conditions or mission needs, but do not affect the total number of positions.

Although authorization and allocation comprise the last step in turning manpower requirements into manpower authorizations, it is important to note that results of this step in one year feed back into the programming and budgeting function of the next year as part of the execution review. This feature captures the continuous nature of the overall MM process.

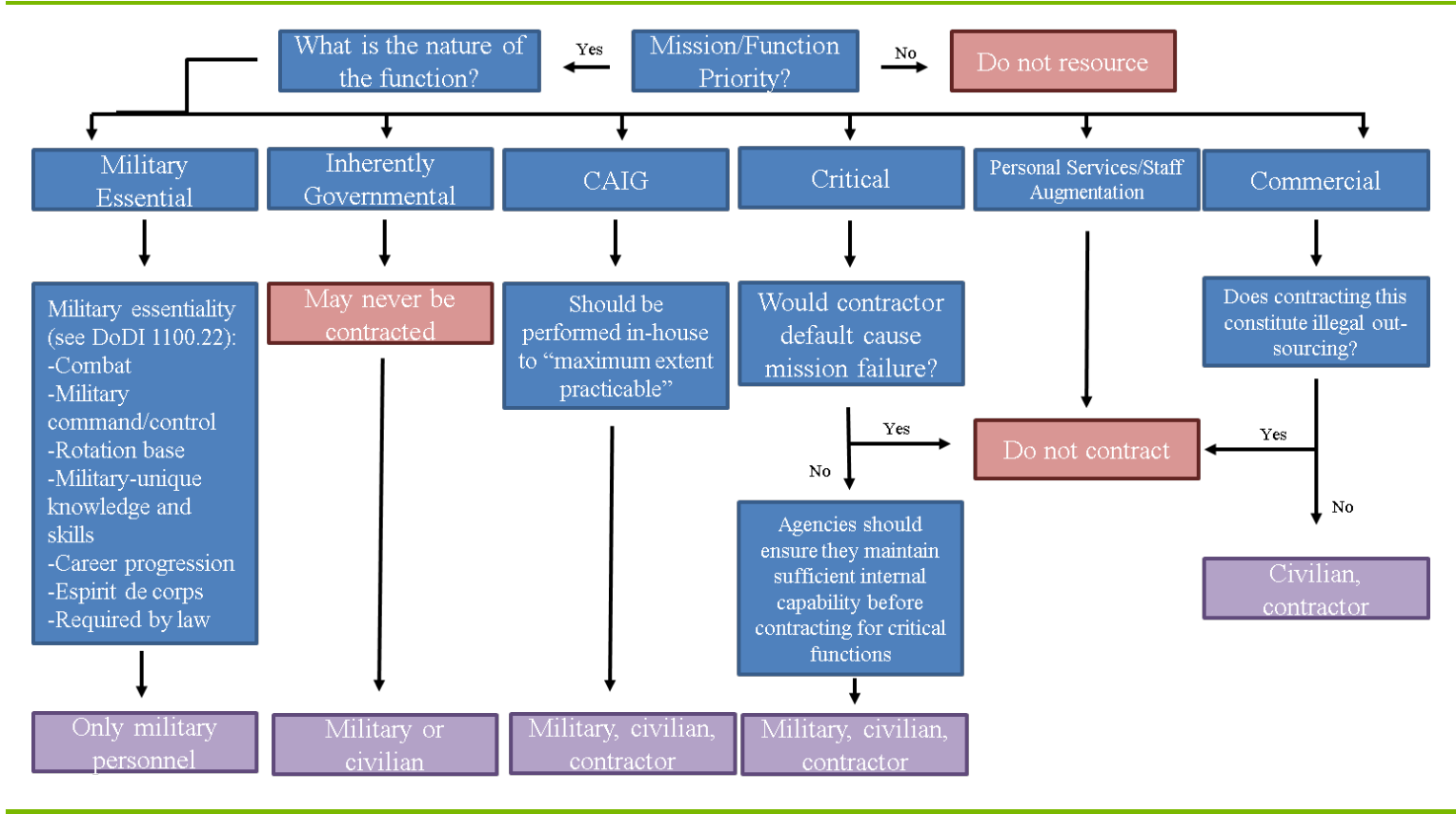
## Workforce mix policies

The workforce mix (or manpower mix) decisions that are the focus of this study are embedded at multiple points in the broader MM process and are made by different actors at different points. During the MRD phase—whether generating new requirements or reviewing and validating existing requirements—workforce mix recommendations are made by manpower analysts at local levels based on mission and work requirements, as well as specific guidance

regarding what types of manpower should be used for different types of work. During the programming and budgeting phase, higher level decision-makers impose funding and other constraints, which may make the workforce mix recommended by a local command unachievable. As a result, the workforce mix that is ultimately authorized may be quite different from that which was recommended.

Here, we identify and summarize the three main policy documents that guide workforce mix decisions, or more specifically the decision of whether a function should be performed by military, government civilian, or contract labor. Guidance for applying these policies is synthesized in the workforce mix decision tree shown in Figure 1, which was developed by OSD P&R/M&RA Total Force Manpower and Resources Directorate.

Figure 1. Workforce Mix Decision Tree



Source: Source: OSD P&R/M&RA Total Force Manpower and Resources Directorate.

## DOD Directive 1100.4, Guidance for Manpower Management

DODD 1100.4 provides guiding principles for all MM processes. The overarching principle is that: “National military objectives shall be accomplished with a minimum of manpower that is organized and employed to provide maximum effectiveness and combat power. [15]”

DODD 1100.4 also provides specific guidance for workforce mix decisions during all three phases of MM. For the purposes of this study, the guidance for the MRD phase is most relevant. First, it stipulates that missions should be accomplished using the least costly mix of personnel, consistent with military requirements and other needs of DOD. In addition, it requires that manpower be designated as civilian except when military incumbency is required for reasons of law, command and control of crisis situations, combat readiness, or esprit de corps; unusual working conditions are not conducive to civilian employment; or military-unique knowledge and skills are required for successful performance of the duties. Finally, it also allows for personnel management considerations, such as creating enough military and civilian positions to provide a rotation base for those assigned outside the United States; management and other career advancement opportunities; and opportunities to develop job-related skills and competencies that are not taught in, or cannot be recruited directly from, the private sector.

## DOD Instruction 1100.22, Policies and Procedures for Determining Workforce Mix

DODI 1100.22 implements DODD 1100.4 and establishes DOD policy on the categorization of functions as inherently governmental (IG), commercial (CA), and commercial but exempt from private-sector performance (exempt). These categorizations of the nature of the work determine whether a function can be performed by private-sector labor or must be performed in-house by a military member or government civilian. The Instruction directs manpower analysts to distinguish between functions that are IG and commercial and to identify which IG and commercial functions will be performed by military personnel and which will be performed by DOD civilian personnel.<sup>14</sup>

Per the Instruction, inherently governmental activities are “activities that require the exercise of discretion when applying Federal Government authority or value judgments when making decisions for the Federal Government.” In addition, the instruction provides a detailed list of criteria for determining whether a task or function is inherently governmental. In general,

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<sup>14</sup> DODI 1100.22 is based on categories first defined in the FAIR Act of 1998 (and subsequently in OMB Circular A-76). It was last issued 10 years ago and has not yet been updated to incorporate newly defined categories such as critical functions.

these are tasks and activities that might give rise to conflict of interest if performed by a contractor or that are performed in a combat setting or require the command and control of military.

If a determination is made that the function is inherently governmental but not military essential, the cheaper of military or civilian labor should be selected. Otherwise, the function is considered commercial, and components should use civilian or contractor labor, except where exempted from commercial performance for specific reasons delineated in the Instruction.

In addition to determining if a function is inherently governmental or commercial, DODI 1100.22 also discusses functions that are considered closely associated to IG (CAIG) or personal services. Functions that are CAIG must be performed in-house to the maximum extent practical. Personal services shall be performed by military or DOD civilian personnel and not contracted unless specifically authorized.

### **Federal Procurement Policy Letter 11-01**

Federal Procurement Policy Letter 11-01 requires agencies to identify and ensure that they retain control over critical functions that are core to the agency's mission but may be contracted out to the private sector. DOD's policies and procedures predate the publication of this requirement, however, and consequently contain no reference to it.

# Component Workforce Mix Decisions

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We held SME discussions with MM experts throughout the services as well as the Joint Staff to understand if and where workforce mix guidance is applied in their MM processes and to identify any impediments to following the guidance. We also asked SMEs about the use of models in determining workforce mix, potential barriers to the holistic analysis of military and civilian requirements, and about factors outside the MM process that affect workforce-mix decisions and total force composition.

In this section, we describe our main takeaways from these discussions. We start with takeaways unique to each DOD component, then present takeaways that span all components.<sup>15</sup> We conclude with an example that illustrates the effects that factors external to the MM process can play in shaping an organization's workforce.

## Takeaways for each DOD component

### Air Force

#### **Workforce mix determination**

Per Air Force SMEs, workforce mix and the determination of whether a function will be performed by military, civilian, or contract labor is considered at multiple levels within the Air Force. Manpower requirements are generated by the Air Force Manpower Analysis Agency (AFMAA), which takes an agnostic view on the workforce mix. Instead, it is the major commands (MAJCOMs) that typically determine desired manpower mix. Per SMEs, Air Force Program Development Division AF/A1MP administers top-line resourcing, which is distributed to the various MAJCOMs, where workforce mix decisions are ultimately made. Zero balance transfers of authorizations between and within MAJCOMs can occur.

Manpower allocations by A1MP to the MAJCOMs take into account the overall availability of military manpower across various paygrades, as well as the civilian labor market and the availability of civilian manpower to fill the authorized billets. If the local market is unable to support a civilian hire, military personnel will be used.

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<sup>15</sup> A more detailed description of the manpower management processes for each of the services and Joint Staff can be found in the appendices.

### **Impediments to following the workforce mix guidance**

Air Force SMEs noted that workforce mix decisions must also contend with leadership directives and external factors. For example, SMEs noted that civilian positions are often at risk of cuts due to top-down directives. They further noted that it can be difficult to convert civilian positions to military positions because of local political and union pressure. There are similar political pressures regarding the guard and reserves, because local congressional representatives may view those billets as sources of local employment and may be reluctant to make cuts.

Lastly, SMEs indicated that workforce mix is strongly dictated by historical precedent. Multiple SMEs remarked that, if there were a precedent (for example, standing up a unit similar to existing units), they would use the workforce mix of the existing unit to determine the mix of the new unit. SMEs noted that changes to manpower mix for existing requirements tend to be on the margin and gradual. However, when establishing a new requirement where no comparisons exist (standing up a new cyber function, for example), there is a more direct application of the guidance from DODI 1100.22.

## **Army**

### **Workforce mix determination**

The Army's Total Army Analysis (TAA) process is used to define its force structure in terms of workforce mix—military and civilians—within endstrength and other DOD constraints. The TAA model incorporates both qualitative and quantitative analyses and more specifically applies the guidance for determining its manpower mix as defined in DODI 1100.22, *Policy and Procedures for Determining Workforce Mix*.

Per SME discussions, the Army G3/5/7 office is responsible for reviewing all generating force (GF) requirements and integrating them in the Structure and Manpower Allocation System (SAMAS). Per SMEs, G3/5/7 is responsible for reviewing all Table of Distribution and Allowances (TDA).<sup>16</sup> SMEs described how commands make workforce mix recommendations for requirements, and G3/5/7 reviews those recommendations and evaluates if they are sound. If the workforce-mix recommendation is not in accordance with DODI 1100.22, G3/5/7 submits changes to the requesting command.

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<sup>16</sup> The Army has two kinds of requirements documents. The first is a table of organization and equipment (TOE) that enumerates the Army unconstrained manpower and equipment requirements for its operating forces. The second type of requirements document is the Army Table of Distribution and Allowances (TDA). The TDA provides the organizational structure, manpower, and equipment requirements and authorizations to perform missions in the Army's generating force (GF).

Army SMEs report that they follow DODI 1100.22 to make workforce mix decisions, specifically as part of the TAA. Army SMEs noted that they have also suggested to the DODI 1100.22 working group that the RSCA form<sup>17</sup> be included in the new version of the DODI, noting that it should help those tasked with determining workforce mix to understand what can and cannot be contracted. SMEs suggested that the instruction should also be amended to require that the checklist be filled out every time a contract option is extended in order to verify that the function can continue to be contracted.

### **Impediments to following the workforce mix guidance**

SMEs from ASA M&RA, the office responsible for writing Army workforce mix policy, noted that some of the MM and workforce mix guidance, including AR 570-4, is not clear. For example, SMEs noted that the Army previously had a policy in which military personnel could be reassigned anywhere, even to a non-military-essential function, for 90 days. At the time of this writing, AR 570-4 has been revised to clarify some workforce mix policies and is awaiting legal review.

Army SMEs also expressed that there are few consequences if commands do not follow the workforce mix guidance. They noted that, other than a possible union complaint, there is little oversight and no punishment for not following the rules. Because of this, commands often take the path of least resistance and choose the labor source that is easiest to obtain or pay for.

SMEs also pointed out that those applying the guidance are often not trained to do so. The personnel at the requiring activity are supposed to do the research, read the statement of work, and do the analysis necessary when determining what type of labor to use. SMEs noted, however, that these personnel need to be trained on how to analyze functions and apply the workforce mix policies; the Army should not simply expect people to understand and follow the guidance. SMEs indicated that, although the goal of revising AR 570-4 and developing the RSCA form is to make it easier to follow the laws, policies, and regulations governing workforce mix, there is currently no training for applying workforce mix policy and no money for training civilians. Army SMEs further noted that, although they used to have a more robust capability to review contracts, they no longer have the resources to do so because their staff has been significantly reduced.

In addition, Army SMEs noted that, although requiring activities should be following the guidance to determine if they should perform a function in-house or contract it, other factors often take precedence. For example, per Title 10, United States Code (U.S.C.), Section 129, the number of civilians is supposed to be determined by workload and available funds. In reality, however, the activities operate as if there is a civilian FTE cap. Furthermore, SMEs expressed

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<sup>17</sup> The RSCA form can be found in Appendix G.



that the civilian hiring process is lengthy and cumbersome. Consequently, organizations tend to view the contracting option more favorably because they can be hired quickly without dealing with personnel management issues. In addition, in certain instances where a capability may be relatively undefined (e.g., cyber operations), some may perceive an initial contractor option as providing an organization with more flexibility and latitude before defining and developing an enduring requirement. Taken together, these factors create a disincentive to selecting civilians.

SMEs also noted that, although contractors are supposed to be the flexible labor option for temporary assignments, civilians are often treated as the flexible labor option through attrition. According to SMEs, in times when they have been instructed to eliminate civilian authorizations, this forces the work to be given to military because they are not supposed to contract these positions per the A-76 moratorium. Conversely, SMEs went on to explain that, although commands are not supposed to outsource civilian positions per the moratorium, it is still happening. For example, civilian positions that were cut due to funding issues later became contracted positions, often at greater cost and in violation of the A-76 moratorium. This happens because there is no institutional knowledge that the position used to be civilian and that it cannot be contracted.

## Navy

### Workforce mix determination

Navy workforce mix decisions are addressed by the Shore Manpower Requirements Determination (SMRD) program, which is used to determine manpower requirements for activities whose mission does not require engaging in or maintaining readiness for military or military support operations under combat conditions. Manpower requirements for these organizations are based on approved mission, function, and task (MFT) statements. Budget Submitting Offices (BSOs) are responsible for determining manpower requirements (including the workforce mix) for these organizations, which are documented in Statements of Manpower Requirements (SMRs).

According to our discussions with SMEs, every BSO has its own process for determining shore manpower requirements. In fact, the two largest BSOs, US Fleet Forces Command (USFFC) and Commander, Pacific Fleet (COMPACFLT), indicated that they do not determine any manpower requirements. They use the Command Manpower Analysis Team (CMAT) to conduct manpower requirement reviews for the shore commands under their purview. According to policy, each command should be reviewed every three years. However, because of the limited number of review teams, the work involved in conducting a review, and the number of shore commands, a review typically occurs about every five to six years. In between, commands can make "unit validated" changes through billet change requests (BCRs). These requests go

through the BSOs, but approval is usually automatic unless the change requires funding. Requirements changes that require funding are submitted to the cognizant resource sponsor through POM issue papers. Resource sponsors are reluctant to fund requirements that are not validated through the SMRD.

The process that the CMAT uses to determine which manpower source is appropriate for the SMR is outlined in its *Shore Manpower Requirements Determination Program Handbook* [16].<sup>18</sup> For the most part, this process aligns with DOD guidance. There are two primary considerations for assigning/retaining a position as military: is the requirement military essential, and, if not, is the community (i.e., rating) that has the required skills for the position in need of shore-duty billets to support the Navy's force rotation policies? If the answer to either of these questions is yes, the requirement will remain military. If the answers are no, then civilian or contract support will be considered. The other steps guide decisions on whether to assign the position to a government civilian or contract support.

The Navy is transforming its SMRD program. Beginning in July of 2021, all shore manpower reviews will use the same process, and the management of the SMRD process will shift from the BSOs to NAVMAC.<sup>19</sup> Initially, shore manpower reviews will continue to follow existing SMRD study processes and will integrate greater analytical rigor and data-centric analytics as the future SMRD protocol matures.

From a manpower programming perspective, our discussions with the resource sponsors and budget offices indicated that manpower programming does not significantly affect workforce mix. Military and civilian manpower are programmed separately and funded from separate appropriation categories, so there are no direct trade-offs between manpower types that occur in the PPBES process.

### **Impediments to following the guidance**

SMEs noted that the decentralized SMRD process at Navy BSOs can lead to inconsistent application of the guidance. The more centralized SMRD process under NAVMAC should address this issue, however. In addition, SMEs noted that manpower reviews are not conducted frequently so initial manpower mix decisions tend to remain unchanged. Navy SMEs also pointed out that the OMB A-76 moratorium and the inability to outsource previously civilian positions as well as leadership direction to insource contracted positions, for example, can have impacts on the workforce mix.

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<sup>18</sup> We review this process in Appendix C.

<sup>19</sup> Because this paper was issued in July 2021, we do not capture the details of the SMRD process under NAVMAC which was still in transition at that time.

## Marine Corps

### Workforce mix determination

There is currently no Marine Corps-specific directive or policy on manpower mix; however, the Marine Corps Total Force Structure Process [6] references DODI 1100.22 for manpower mix decisions.<sup>20</sup> For new top-down manpower requirements (in which a new organization or a new mission/function is created where a previous one did not exist), the decision on labor source would typically be made at the service headquarters agency level. This decision is made in coordination with the Marine Air-Ground Task Force (MAGTF) advocates and proponents and the high-level operational headquarters, intermediate-level major subordinate command, or supporting establishment organization that will own the new unit.

Once billet requirements for the new organization are identified, based on the mission statement and mission-essential tasks (METs), manpower-mix decisions would follow based on MFT analyses. Based on DODI 1100.22, the Marine Corps should evaluate each billet to determine which personnel type is required. The level within the respective hierarchy of the new organization and other factors outlined in the DOD policy guide those decisions. For manpower requirements from the bottom up, workforce mix decisions are typically made by the unit commander who owns the billet in question or would own the new billet requested. The requesting commander is responsible for and expected to follow DOD policies and guidance in generating the request.

### Impediments to following the guidance

We were unable to reach Marine Corps manpower SMEs for input on this study. However, a 2011 CNA study titled *A Total Workforce Approach to Making Manpower Decisions* [17] found that the manpower mix guidance provided in DODI 1100.22 is not consistently applied during the manpower requirements decision-making process. Rather, manpower mix decisions are often made based on the availability of personnel and/or funding to fill the new billets or the urgency to fill the billet. In these instances, the manpower mix codes are populated in the Marine Corps' authoritative manpower system after the labor source decision has already been made in order to provide justification for the labor source. It is unclear if the Marine Corps has changed its processes since this 2011 study because we were unable to reach Marine Corps SMEs to update this information.

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<sup>20</sup> We were unable to reach Marine Corps SMEs for this study. This subsection is based on the Marine Corps Total Force Structure Document [6] and findings from a 2011 CNA study [15].

## Joint Staff

### Workforce mix determination

The Joint Staff's MM process and the ultimate decision on labor source for requirements requires the approval of a Joint Manpower Validation Board (JMVB). Per CJCSI 1001.1B, requests for new joint manpower for combatant commands and other joint activities must be submitted to the Joint Staff for validation. Joint Staff J-1 then convenes a Joint Mission and Manpower Assessment Team (JMMAT) to analyze the request and make recommendations to the Operations Deputies (OpsDepts) Tank. The OpsDepts Tank decides whether to endorse the mission brought forward by the combatant command for further resourcing consideration. If endorsed, the request moves to the JMVB for sizing (attributes such as grade, skill, quantity, etc.). JMVB-validated billets are initially documented as unfunded requirements. The PPBE process determines whether these requirements receive funding.

Per SME discussions, the JMVB validates the manpower mix. SMEs noted that the JMVB evaluates whether a requirement is military essential; if it is not military essential, it is considered civilian. Although SMEs indicated that they are required to use the process in DODI 1100.22, the determination of labor source often comes down to affordability, noting that military, civilian, and contracted services are not paid for from the same pot of money. SMEs noted that the combatant commands' (COCOMs') initial manpower preference is typically military, but that comes at the expense of the services' force structure, so they often have to use civilian manpower as an alternative. They further described how the Cost Assessment and Program Evaluation office (CAPE) and the comptroller play a role because the preference for military manpower can often not be supported, and CAPE is more easily able to allocate civilian dollars.

Joint Staff SMEs also explained that, if a command asks for growth, they use one of the service's manpower analysis agencies (Air Force Manpower Analysis Agency (AFMAA) or US Army Manpower Analysis Agency (USAMAA), for example) to do the analysis and determine new requirements. They noted that this is because they do not have the in-house resources or staff to do manpower studies. SMEs also noted that they do not perform a constant review or justification of the workforce mix; once the labor source has been determined, it typically remains the same.

### Impediments to following the guidance

Joint Staff SMEs noted that DODI 1100.22 has more applicability for the services because the Joint Staff and COCOMs do not typically have to consider such issues as force rotation, career development, or esprit de corps. They suggested that the DODI 1100.22 should recognize that the Joint Staff and Fourth Estate workforce mix decision processes differ from the services and

offer two separate processes. They further noted that training on how to apply the DODI is necessary and should be developed.

## Fourth Estate

There is no standardized MM process in the Fourth Estate. Among the 20 defense agencies and field activities (DAFAs), each has its own approach to MM. The fact that only a few of the defense agencies have issued MM guidance<sup>21</sup> indicates that, not only is there no standard MM process across the Fourth Estate, but there is also likely no formalized process within many of the agencies and activities. Although the Office of the Chief Management Officer (OCMO) is tasked with developing overarching MM policy guidance for the Fourth Estate, similar to the service's MM instructions, little progress had been made on this document at the time of this study.

Workforce mix determination is less of a consideration in the Fourth Estate since most of these positions are civilian. SMEs we spoke with in the OCMO indicated that the overarching policy guidance they intend to write for the Fourth Estate will provide guidance on what criteria must be met before a DAFA can request military manpower resources. As the SMEs note, only when they have determined that the billet cannot be filled by a civilian or be satisfied by a short-term contract can the DAFAs request military resources. SMEs also noted that the policy document would not include guidance on workforce mix but would reference DODI 1100.22.<sup>22</sup>

## Key takeaways across DOD

We discuss takeaways relevant to all DOD components in the subsections below.

### Application of the guidance

In our discussions with SMEs, we found that the implementation and application of DOD workforce mix policies across components are inconsistent. Some SMEs indicated that they consistently use DODI 1100.22 to make workforce-mix/labor source decisions while others indicated that they do not. SMEs also noted that the application of the policies varies across DOD because many components have their own definition for military-essential positions. Service SMEs with whom we spoke indicated that this was due to the imprecise definition of

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<sup>21</sup> See, for example, Defense Contract Management Agency Manual 4301-09, *Manpower and Mission Analysis* [8] and Defense Information Agency Instruction 640-45-32, *Organization: Manpower Management* [9].

<sup>22</sup> Our discussions with OCMO SMEs predated congressional action in the Fiscal Year 2021 National Defense Authorization Act to dis-establish OCMO. As of this writing, the future of the Fourth Estate Management Office and the associated responsibilities for developing overarching MM policy for the Fourth Estate are in flux.

military essentiality provided in DODI 1100.22. They noted that the definitions for some of the other criteria, including esprit de corps and military-unique knowledge, are also vague.

In addition, SMEs noted that DODI 1100.22 was written at a time when public-private competitions under OMB Circular A-76 were authorized, and the instruction helped to identify which functions were eligible for public-private competition. They noted that, since public-private competitions are currently suspended under the A-76 moratorium, some of the language in the instruction is not applicable at present. OSD TFM&RS recently convened a working group of manpower experts throughout DOD who are working on revising the instruction with an eye toward updating the language and making it more user friendly.

### No use of modeling and little holistic analysis of workforce composition

Per SME discussions, none of the services uses modeling to determine the appropriate workforce mix. While modeling is used extensively to determine workload and requirements, these models are agnostic regarding workforce mix and labor type. The recommendation on what type of labor to use is typically determined by the requiring activity or command and is either validated or changed if it cannot be supported at subsequent levels in the manpower management or budgeting and authorization process.

Further, per SME discussions, there is little holistic analysis done when determining military and civilian requirements and on total force composition. Although components used to submit an annual IGCA Inventory, these inventories are no longer collected, and there is no OSD or service level analysis conducted on these manpower data. Components do consider workforce composition at a more functional level, however. For example, Army G3/5/7 SMEs noted that they try to link requirements that are bought through the TAA process on the military side and consider whether or not a command bought additional manpower on the civilian side.

SMEs also stated that, if they were to conduct analysis of aggregate numbers of the total force, it would be limited because of the lack of complete contractor data and the inability to link contractor data with military and civilian data. Army SMEs indicated that, from FY 2008 to FY 2015, G3/5/7 captured enduring contracts, which gave them a good sense of their military, civilian, and contractor mix. They noted they no longer maintain this data, however, and are unable to do a total force review. SMEs noted that they do have visibility on insourcing decisions because they have visibility on requirements and authorizations.

## Constraints to ideal workforce mix decisions

The DOD policies we've described are intended to guide each component to the most appropriate and efficient source of labor for a function. However, as we heard in our SME discussions, external constraints can prevent a component from moving forward with a particular labor source. Endstrength limits, funding realities, and other external constraints may prevent the sourcing choice from being implemented. Instead, the components often have to move forward with the sourcing reality—that sourcing option that is implementable.

In addition, different funding structures have the unintended effect of incentivizing the use of some labor sources while deterring the use of others. Although DOD policies state that risk mitigation shall take precedence over cost savings when necessary to maintain core capabilities and readiness, the potential savings from using military personnel for non-military-essential functions continues to influence workforce-mix decisions, especially in times of declining budgets.

The long and cumbersome DOD civilian hiring process also incentivizes the use of military personnel and contracted services over civilians. SMEs noted that organizations tend to view the contracting option more favorably for two reasons: contractors can be hired quickly, and they do not require the management oversight that DOD civilians do. Taken together, the barriers to hiring, lack of flexibility, and personnel management issues create a disincentive to selecting civilians.

Another difficulty facing DOD components is that often federal government or service-level policies drive their workforce-mix decisions. SMEs described how MM is a constant optimization problem, and they are often dealing with competing demands or opposing forces—for example, internal pressure to replace military personnel with civilians, and external pressure to reduce civilian staff, particularly in times of declining budgets. SMEs also noted that, although there is not supposed to be a cap on civilian FTE, they are often operating under congressionally mandated civilian hiring freezes or being told not to exceed a certain level of civilian manpower by service leadership.

Other federal government decisions have also affected workforce mix decisions and the flexibility allowed to the components in making these decisions. For example, the federal government shifted from a focus on public-private competitions over a decade ago, and DOD components can no longer contract out any civilian position because of the OMB Circular A-76 moratorium. Some SMEs expressed concern that the services no longer have A-76 as a manpower management tool and have lost an objective mechanism for assessing workforce mix and comparing labor costs to inform decision-making. Without A-76 as a decision-making tool, there is less analysis to indicate which labor source is more efficient.

## An illustrative example

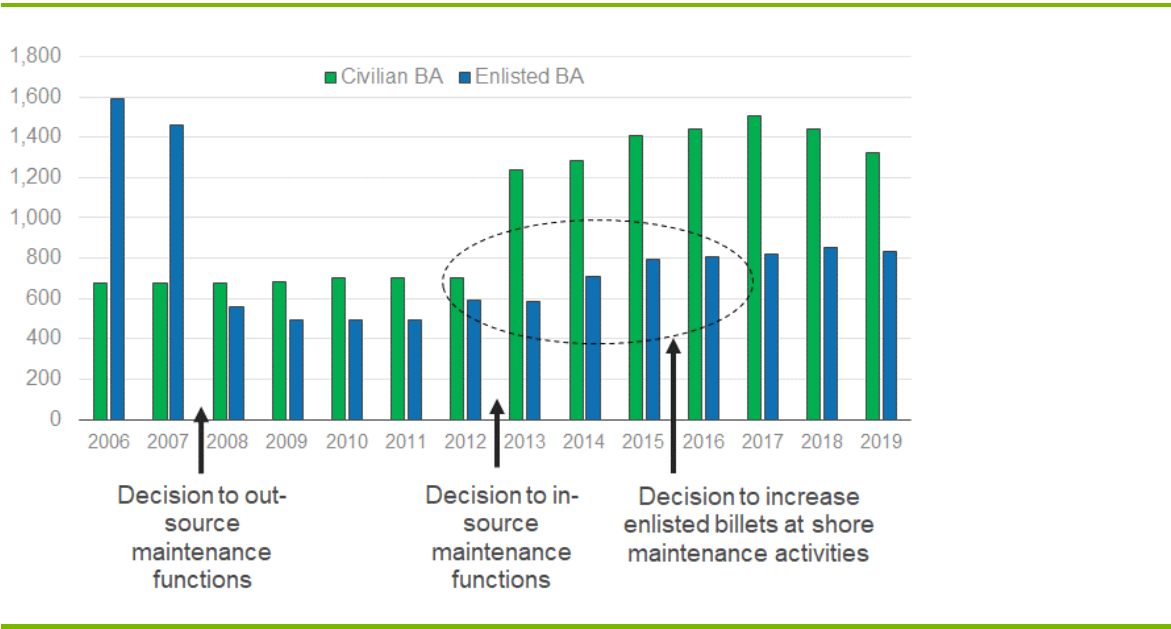
A good example to illustrate the impact of federal government and leadership decisions on what constitutes an “efficient and effective” force is to view the composition of the workforce at the regional ship maintenance organizations in San Diego, California from 2006 to 2019. Figure 2 shows the annual number of authorized government civilian positions and enlisted military billets at these facilities over that time period. The blue columns represent the enlisted billets and green columns represent the civilian positions. In 2006 and 2007, the ratio of enlisted military billets to civilian positions was over 2 to 1. In 2008, when A-76 was an active program, the Navy decided to outsource part of this maintenance. As a result, the Navy reduced the enlisted workforce by almost 1,000 positions, while the civilian positions remained constant.

In 2013, when the A-76 program was no longer active but components were instructed to insource, the Navy decided to insource these maintenance functions and nearly doubled the number of civilian positions, while enlisted position remained unchanged. From 2013 through 2017, the number of civilian and military positions increased. This may have been due to increases in maintenance workload or a further decrease in contractor support. The increase in enlisted billets was also due to a Navy decision to increase career development assignments ashore for maintenance technicians. This was directed to help improve the on-ship maintenance capabilities of surface ships by increasing shore assignments at I-level maintenance facilities.

This example illustrates two points. The first is the impact of federal government decisions and leadership views on workforce composition and related factors that affect it. Second, it shows the need to track the level of contractor support. Not doing so prevents a complete analysis that would show how much of the change in workforce was due to changes in leadership directives as opposed to changes in workload.



Figure 2. Workforce mix and regional ship maintenance facilities in San Diego, CA



Source: Total Force Manpower Management System (TFMMS).

# Manpower Data: Analysis and Findings

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Our third LOE examines the composition of DOD's workforce. Our analysis explored three areas: composition of the workforce by manpower type, primary reasons/justification for assigning job positions to active duty military personnel and government civilians, and relationships between manpower requirements and authorizations. In this section, we present these analyses and discuss the insights they provide in addressing the key study issues and in guiding our investigation of the MM processes.<sup>23</sup>

## Composition of DOD's TF

We examined the composition of DOD's TF from two perspectives. First, we reviewed the total number of positions for each manpower type. We then drilled deeper into the active duty military and government civilian components (because they are the focus of this study) to examine the distribution of these positions among three groups of units and organizations that we created based on their military/civilian workforce mix.

### Workforce by manpower type

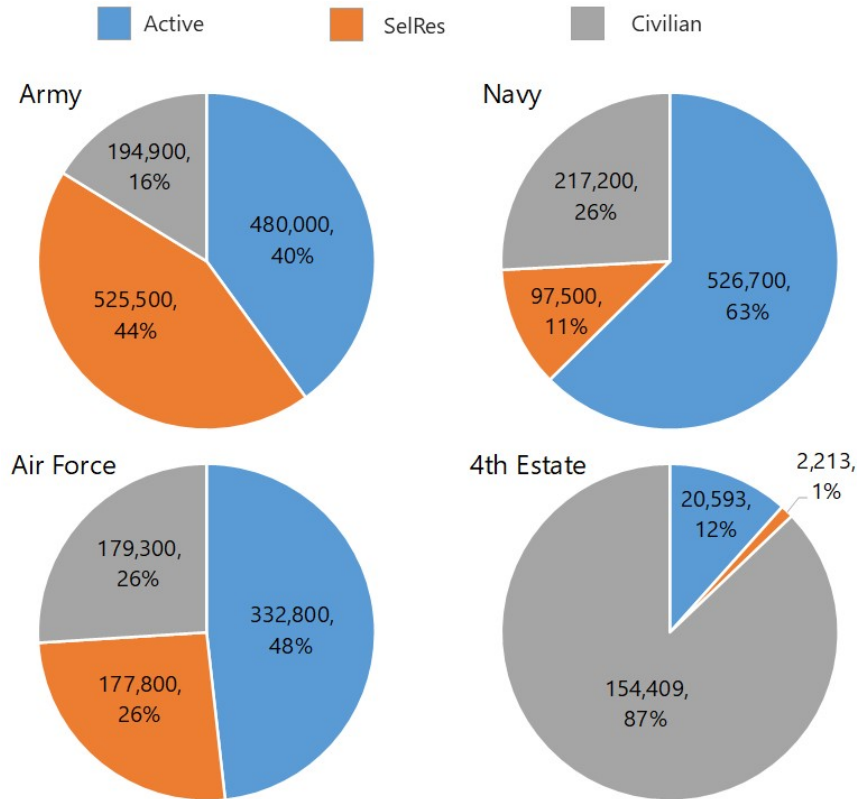
Most reviews of DOD's TF report total numbers of positions for each manpower type or the ratios of one type to another. Figure 3 shows the numbers and shares of active military, reserve military, and government civilian positions in 2020 for each military department and the Fourth Estate.<sup>24</sup> Among the services, there are variations both in the civilian share and in the active-reserve mix. The Army has a relatively small civilian share and a relatively large reserve share. The Navy and Air Force have similar civilian shares, but different active-reserve distributions. The Fourth Estate, not surprisingly, has a much larger civilian share than the military departments.

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<sup>23</sup> We were limited in the manpower data to which we had access. Our main data sources were 2016 IGCA data for all DOD, the 2020 DMMR report, and Navy manpower data from TFMMS. We were unable to obtain manpower data from the Air Force, Army, and Fourth Estate.

<sup>24</sup> Civilian totals represent appropriated fund positions.

Figure 2. FY20 workforce mix in the military departments and the Fourth Estate



Source: Tables 1-1 and 2-4 in reference [18].

Note: Military positions are double-counted, appearing in both the service and Fourth-Estate manpower totals. Civilian positions do not include contractors.

Table 1, from [19], shows the yearly civilian to military ratios from 2008 to 2018 for each military department and for DOD as a whole.<sup>25</sup> In 2018, the Air Force and the Department of the Navy (DON) had ratios of one civilian for every three military personnel. The Army’s ratio was just under one civilian for every four military personnel. These ratios have increased over the past decade, more so in the Navy and Air Force than in the Army. Across the DOD, the ratio increased by 17.2 percent over this period. The Navy experienced the largest increase at 24.7 percent, followed by the Air Force at 13.4 percent increase and the Army with an 8.5 percent increase. Changes in this ratio can be caused by changes in the number of civilians, changes in

<sup>25</sup> The military component includes active and reserve personnel.

the number of military, or changes in both. For the Navy, nearly all of its ratio increase was from increases in civilian levels. The same can be said for the Air Force. The increase in the Army's ratio of civilian to military personnel, however, was because of a reduction in military personnel [19].

**Table 1. Ratio of civilian to military personnel**

Service	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Air Force	0.29	0.30	0.32	0.33	0.32	0.32	0.32	0.33	0.33	0.32	0.33
Army	0.22	0.23	0.24	0.23	0.23	0.22	0.22	0.22	0.23	0.23	0.23
DON <sup>a</sup>	0.27	0.28	0.29	0.29	0.30	0.29	0.30	0.32	0.33	0.31	0.33
All DOD	0.28	0.29	0.31	0.31	0.31	0.30	0.31	0.32	0.32	0.32	0.33

Source: [19].

<sup>a</sup> DON includes Marine Corps personnel.

## Contractors

The above review does not include contracted services, primarily because data on contracted services is incomplete and not maintained in the same format or in the same authoritative manpower databases that house military and civilian billet data.<sup>26</sup> This lack of quality contractor data prevents a complete analysis of the total force.

Title 10, U.S.C., Section 2330a(c) requires the Secretary of Defense to “submit to Congress an annual inventory of activities performed during the preceding fiscal year pursuant to contracts for services.” As a result, DOD established the Inventory of Contracted Services (ICS), which contains information on the functions and missions performed by the contractor, the contracting organization, the funding source, and the number of contractor employees (as FTEs) for direct labor hours. Contracting officers were required to report contract transactions on the Federal Procurement Data System–Next Generation (FPDS-NG). Until FY 2020, contractors were required to report contractor labor hours in the Enterprise-wide Contractor Manpower Reporting Application (ECMRA). As of the start of FY 2020, contractors report in the System for Award Management (SAM), consistent with service contract reporting requirements that had applied to federal civilian agencies. The transition was expected to be completed by 2020, but we were unable to find any reports that contain recent contractor FTE levels.

The secretaries of the military departments and defense agency heads are responsible for reviewing the inventory, in order to identify activities closely associated with inherently

<sup>26</sup> The Navy's Total Force Manpower Management System (TFMMS) has limited contractor data.

governmental functions, to identify those that should be converted into performance by civilian employees, and to inform management decisions involving workforce planning, workforce mix, and budgeting. However, a 2018 GAO [20] report found that “the military departments generally have not developed plans to use the inventory to inform strategic workforce planning, workforce mix, and budget decisions.” Per the GAO report, service SMEs reported a major impediment to using the inventory is that the data are often outdated, whereas strategic decisions, typically made at the level of specific military installations, are based on real-time data. There were also concerns that some of the information important for making strategic planning decisions was not available in the inventory, such as planned contracts or the duration of existing contracts.

Another issue with capturing contractor data is the lack of a clear definition of contracted services from a TF perspective. There are two broad types of contracted services. One involves private companies that are contracted by DOD to provide goods and services. The *Defense Primer: Department of Defense Contractors* [21] provides some information on DOD expenditures to contractors as companies. It reports that, in FY 2018, DOD obligated about \$360 billion on federal contracts for this type of support. Providers of this type of support are not considered part of the DOD’s TF. For example, most depot-level maintenance for non-nuclear Navy vessels is performed by private shipyards, and workers at these shipyards are not considered part of the Navy’s TF.

The other type of contracted services, which is more germane to this study, involves individuals who are hired by DOD to perform specific tasks. These contractors fill various roles and functions mainly in logistics, transportation, intelligence analysis, and private security. The hiring of contractors can be beneficial when surge capabilities are needed on short notice. Because most contractors can be hired as needed and released when their services are no longer required, they can be a more cost-effective option to meet fluctuating requirements [21]. Because these contractors—at least in theory—are performing legitimate functions against validated manpower requirements within DOD organizations, they are considered part of DOD’s TF. For example, contractors working at the Navy’s intermediate level maintenance organizations are considered part of its TF.

Reference [21] provides data on contractors, defined as individuals who were part of the TF in FY 2017. It reports that, according to the FY 2017 ICS report, DOD contracted about 464,500 FTEs for direct labor. Table 2 shows the breakdown for the military departments and other DOD components.<sup>27</sup>

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<sup>27</sup> The ICS is not a complete accounting of contracted services in the Department. It does not capture contracted services under the dollar threshold or outside the portfolio groups required.

Table 2. Estimated FY 2017 contractor FTEs, by DOD component

DOD Component	Reported FTEs
Department of the Army	172,303
Department of the Air Force	131,132
Department of the Navy	102,181
Fourth Estate	45,112
All other reported FTEs	13,728

Source: DOD FY2017 Inventory of Contracted Services [21].

The lack of these data in DOD's authoritative manpower databases as well as the inability to link authoritative manpower systems that house military and civilian data with the databases that house contractor data creates a large gap in the assessment of DOD's TF.<sup>28</sup> To illustrate, adding these 2017 levels of contracted services to the 2020 workforce mix numbers in Figure 3 increases the civilian share of the workforce (i.e., government civilians plus contractors) by the following amounts:

- Air Force: 26 to 38 percent
- Army: 16 to 28 percent
- DON: 26 to 34 percent
- Fourth Estate: 87 to 90 percent

Furthermore, if both types of contracted services were taken into account, the military/civilian mix would be much more evenly split. For example, if the Navy conducted all its depot-level maintenance in public shipyards (instead of allocating a significant portion of this work to private shipyards), its civilian workforce would be significantly larger because these organizations, which employ thousands of personnel, are nearly all civilians.

## Workforce mix from a different perspective

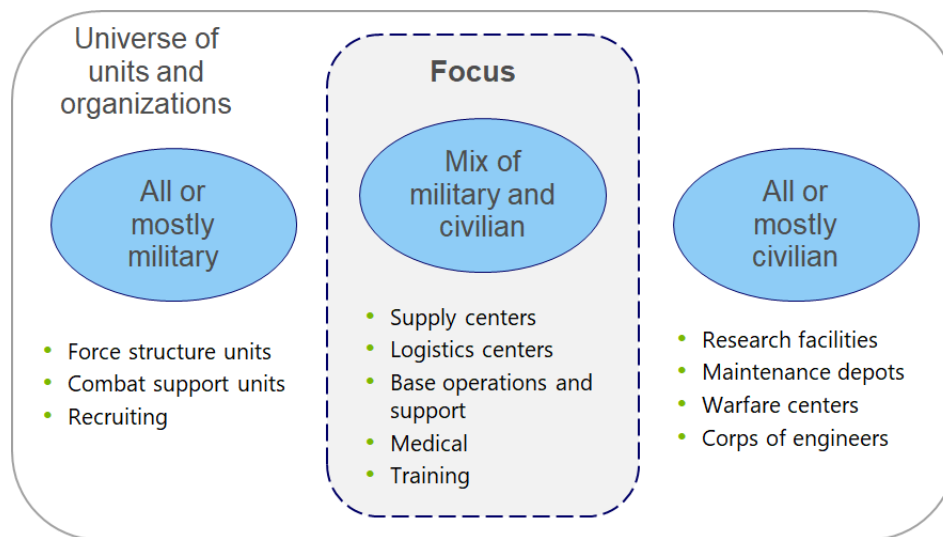
When assessing the composition of the total force, aggregate totals are difficult to interpret. For example, the size of the military component depends mostly on the size and makeup of the combat and combat support forces. In hopes of gaining more insights into the role that the MM processes play in shaping this workforce, we examined its composition from a different perspective. Instead of looking at aggregate numbers or a breakdown by functional areas, we

<sup>28</sup> These contractor numbers for the Navy are much larger (by nearly a factor of four) than those reported in its authoritative manpower database (TFMMS).

organized the units and organizations in each of the services and DOD components into the following three groups based on their military/civilian workforce mix (see Figure 4):

1. Units/organizations whose workforce is all or mostly military, which we defined as greater than 90 percent. These include nearly all combat units, most combat support units, and certain types of support activities.
2. Units/organizations whose workforce is all or mostly civilian (i.e., greater than 90 percent). These are mostly shore/support organizations, such as research facilities, depot-level maintenance facilities, warfare centers, and engineering facilities.
3. All remaining units/organizations whose workforce comprises significant shares of both military and civilian personnel (between 10 and 90 percent of each manpower type). These include supply and logistics centers, base operations and support units, medical facilities, and training activities.

Figure 3. Segregating DOD activities by TF composition



Source: CNA.

In compiling workforce totals for these groups, we considered only active military and government civilian positions, and we limited our look to units and organizations with more than 25 positions (i.e., military plus civilian). Table 3 shows the results for each of the four services.

Table 3. Service units/organizations

Service	Group	Units/ Organizations	AC Military		Civilian	
			BA	Share	BA	Share
Air Force	All/mostly military	932	147,411	60%	3,735	3%
	All/mostly civilian	685	1,139	0%	71,562	51%
	<b>Military/civilian mix</b>	<b>1,360</b>	<b>96,734</b>	<b>39%</b>	<b>65,053</b>	<b>46%</b>
	Total	2,977	245,284	100%	140,350	100%
Army	All/mostly military	766	328,621	82%	1,239	0%
	All/mostly civilian	379	2,523	1%	170,921	68%
	<b>Military/civilian mix</b>	<b>364</b>	<b>72,069</b>	<b>18%</b>	<b>77,538</b>	<b>31%</b>
	Total	1,509	403,213	100%	249,698	100%
Navy	All/mostly military	1,045	194,761	77%	1,103	1%
	All/mostly civilian	360	2,237	1%	142,335	71%
	<b>Military/civilian mix</b>	<b>610</b>	<b>56,688</b>	<b>22%</b>	<b>55,450</b>	<b>28%</b>
	Total	2,015	253,686	100%	198,888	100%
Marine Corps	All/mostly military	766	134,637	86%	566	3%
	All/mostly civilian	3	26	0%	1,749	8%
	<b>Military/civilian mix</b>	<b>101</b>	<b>21,988</b>	<b>14%</b>	<b>19,481</b>	<b>89%</b>
	Total	870	156,651	100%	21,796	100%

Source: 2016 IGCA Inventory.

Notes: Units and organizations defined by a unique identification code (UIC) in the 2016 IGCA Inventory. Limited to units and organizations with more than 25 military plus civilian positions.

In the Air Force, these 2,977 units and organizations account for 95 percent of all active military positions and 86 percent of all civilian positions. Sixty percent of active military positions are at units that are all or mostly military. About half of all civilian positions are at organizations that are all or mostly civilians. For units/organizations that employ a true military/civilian mix, the ratio of military to civilian is about 3 to 2.

In the Army, these 1,509 units and organizations account for 99 percent of all the Army's military and civilian billets. Over 80 percent of military positions are at units that are all or mostly military. Likewise, over two-thirds of civilian positions are at organizations that are all or mostly civilians. At organizations that employ a mix of military and civilians, the split is almost even (48 percent military/52 percent civilian).

In the Navy, these 2,015 units and organizations account for 96 percent of all active military billets and 98 percent of all civilian billets. Like the Army, almost 80 percent of military



positions are at units that are all or mostly military, and just over 70 percent of civilian positions are at organizations that are all or mostly civilians. In addition, the number of military and civilian positions at organizations that employ a true mix is nearly even.

In the Marine Corps, these 870 units and organizations account for 98 percent of active military positions and over 99 percent of civilian positions. The results for military billets are similar to the other services, with 86 percent at units that are all or mostly military. The results for civilian positions, however, differ in one respect—most civilian positions are at organizations that employ a mix of military and civilians. (Only three organizations are all or mostly civilians.) But, like the Army and the Navy, the split of billets is nearly even.

Table 4 shows the results for the other DOD components (i.e., DOD agencies, combatant commands, and Joint Staff units). DOD agencies, which have the largest workforce, is about 95 percent civilian. Not surprisingly, most civilian positions are at organizations that are all or mostly civilian. The combatant commands are unique in that most of their military and civilian positions are at organizations with a true workforce mix. The number of civilian to military positions is nearly even (53 percent military, 47 percent civilian). The Joint Staff units are the exact opposite. Nearly all the military positions are at units with all or mostly military and almost all civilians are at units that are all or mostly civilian.

Table 4. Other DOD organizations

DOD entity	Group	Units/ Organizations	AC Military		Civilian	
			BA	Share	BA	Share
DOD agencies	All/mostly military	3	913	20%	77	0%
	All/mostly civilian	423	1,424	31%	88,840	95%
	<b>Military/civilian mix</b>	<b>21</b>	<b>2,229</b>	<b>49%</b>	<b>4,592</b>	<b>5%</b>
	Total	447	4,566	100%	93,509	100%
Combatant commands	All/mostly military	3	1,200	20%	48	1%
	All/mostly civilian	11	47	1%	567	12%
	<b>Military/civilian mix</b>	<b>33</b>	<b>4,856</b>	<b>80%</b>	<b>4,303</b>	<b>87%</b>
	Total	47	6,103	100%	4,918	100%
Joint staff units	All/mostly military	28	1,980	96%	0	0%
	All/mostly civilian	9	12	1%	1,018	91%
	<b>Military/civilian mix</b>	<b>3</b>	<b>65</b>	<b>3%</b>	<b>95</b>	<b>9%</b>
	Total	40	2,057	100%	1,113	100%

Source: 2016 IGCA Inventory.

Notes: Units and organizations defined by a unique identification code (UIC) in the 2016 IGCA Inventory. Limited to units and organizations with more than 25 military plus civilian positions.

We find that the overall mix of military and civilian positions largely depends on the number and size of combat units and combat support units (i.e., units with all or mostly military positions) and the number and size of organizations with all or mostly civilian positions (e.g., depot maintenance facilities, research centers, and engineering facilities). The predominant labor source for these types of units and organizations (military or civilian) has been determined and is unlikely to change significantly going forward. Organizations with a mixed military/civilian workforce account for only about a third of DOD's active military and civilian positions. With respect to assessing the ratio of civilian positions to military positions, the workforce mix is almost evenly split at these organizations (i.e., ratio of civilian to military positions is about 1 to 1).

### Manpower justification at organizations with split workforces

We continue our investigation of the workforce mix in organizations with a true military/civilian workforce by examining the justification for assigning positions as military or civilian. The manpower mix criteria codes in the IGCA data provide the primary reason for assigning a position as military or civilian.<sup>29</sup> Table 5 shows the breakdown of authorized active military and civilian positions by manpower mix criteria in Navy organizations.

**Table 5. Positions at Navy organizations in the military/civilian group by manpower mix criteria**

Manpower-mix criteria	Active military		Civilian	
	Billets	Share	Billets	Share
B - Exemption of CS and CSS due to operational risk	3,239	5.7%	1,292	2.3%
D - Exemption for dual-tasked for wartime assignments	10,258	18.1%	32	0.1%
E - DOD civilian authority, direction, and control	0	0.0%	20,030	36.1%
F - Military-unique knowledge and skills	10,116	17.8%	0	0.0%
G - Exemption for esprit de corps	3,152	5.6%	19	0.0%
H - Exemption for continuity of infrastructure operations	1,156	2.0%	8,122	14.6%
J - Exemption for civilian/military rotation	8,218	14.5%	249	0.4%
K - Exemption for civilian/military career development	5,282	9.3%	6,915	12.5%
L - Exempted by law, Executive Order, treaty, or international agreement	9,440	16.7%	20	0.0%
P - Pending restructuring of commercial activities	0	0.0%	18,599	33.5%

<sup>29</sup> The IGCA Inventory data should be viewed with caution. Recent IGCA Inventories have not been cleaned and analyzed to ensure consistency and accuracy. Because of this, the data quality is questionable. For example, there should be no civilians coded with G, exemption for esprit de corps.

Manpower-mix criteria	Active military		Civilian	
	Billets	Share	Billets	Share
R - Subject to review for public-private competition	5,080	9.0%	0	0.0%
Total	56,682	-	55,280	-

Source: 2016 IGCA data.

Justification for most of the military positions are for one of the following five reasons:

- Exemption for dual-tasked for wartime assignments (18.1 percent)
- Military-unique knowledge and skills (17.8 percent)
- Exempted by law, Executive Order, treaty, or international agreement (16.7 percent)
- Exemption for civilian/military rotation (14.5 percent)
- Exemption for civilian/military career development (9.3 percent)

These data reveal some interesting insights about the workforce-mix determination process. The first two reasons stem directly from the nature of the work required of that position. Thus, on one hand, it seems logical that these determinations would be made at the organizational level by manpower analysts who understand the specific work requirements. On the other hand, labor source determinations based on the last two reasons (which represent almost a quarter of military positions) depend more on the needs of the service to support its personnel management policies (i.e., force rotation and career development) than the nature of the work. It seems that these determinations would be made at the service level based on an analysis of all shore positions. This gives rise to the question of how determinations made at different levels are integrated into the MRD process.

Likewise, justification for most of the civilian positions are for one of the following four reasons:

- DOD civilian authority, direction, and control (36.1 percent)
- Pending restructuring of commercial activities (33.5 percent)
- Exemption for continuity of infrastructure operations (14.6 percent)
- Exemption for civilian/military career development (12.5 percent)

For civilians, a much higher percentage of labor source determinations is based on the nature of the work.

Tables 6 and 7 show the breakdown of authorized active military and civilian positions by manpower mix criteria in Air Force and Army organizations, respectively. In the Air Force, most position assignments for military were due to operational risk, because the position is dual-tasked for wartime assignment, and the need for military-unique knowledge and skills.

Very few positions were assigned based on a requirement to support military rotation or career development. On the civilian side, most assignments were made due to a requirement for DOD civilian authority, direction, and control or for continuity of infrastructure operations.

**Table 6. Positions at Air Force organizations in the military/civilian group by manpower mix criteria**

Manpower-mix criteria	Active military		Civilian	
	Billets	Share	Billets	Share
A - Direction and Control of Combat & Crisis Situations	10,125	10.5%	1	0.0%
B - Exemption of CS & CSS due to Operational Risk	29,037	30.0%	3,469	5.3%
D - Exemption of Dual-Tasked for Wartime Assignment	27,422	28.3%	140	0.2%
E - DOD Civilian Authority, Direction & Control	1	0.0%	31,129	47.9%
F - Military Unique Knowledge & Skills	27,906	28.8%	5	0.0%
G - Exemption for Esprit de Corps	117	0.1%	46	0.1%
H - Exemption for Continuity of Infrastructure Operations	204	0.2%	22,085	33.9%
I - Military Augmentation of the Infrastructure During War	522	0.5%	0	0.0%
J - Exemption for Civilian & Military Rotation	819	0.8%	35	0.1%
K - Exemption for Civilian & Military Career Development	492	0.5%	389	0.6%
L - Exempt by Law, Executive Order, Treaty, or International Agreement	3	0.0%	3,135	4.8%
R - Subject to Review for Public-Private Competition	86	0.1%	4,619	7.1%
<b>Total</b>	<b>96,734</b>	<b>-</b>	<b>65,053</b>	<b>-</b>

Source: 2016 IGCA data.

In the Army, most position assignments for military were because the position is dual-tasked for wartime assignment or it required military unique knowledge and skills. Like the Air Force, only a small percentage of positions were assigned military based on a requirement to support force rotation or career development. On the civilian side, most assignments were made due to a requirement for continuity of infrastructure operations.

Table 7. Positions at Army organizations in the military/civilian group by manpower mix criteria

Manpower-mix criteria	Active military		Civilian	
B - Exemption of CS & CSS due to Operational Risk	1,482	2.1%	1,093	1.4%
D - Exemption of Dual-Tasked for Wartime Assignment	16,824		112	
		23.3%		0.1%
E - DOD Civilian Authority, Direction & Control	0	0.0%	7,120	9.2%
F - Military Unique Knowledge & Skills	33,981	47.2%	0	0.0%
G - Exemption for Esprit de Corps	728	1.0%	152	0.2%
H - Exemption for Continuity of Infrastructure Operations	9,042		60,493	
		12.5%		78.0%
K - Exemption for Civilian & Military Career Development	4,427		557	
		6.1%		0.7%
L - Exempt by Law, Executive Order, Treaty, or International Agreement	1,510		5,511	
		2.1%		7.1%
M - Exempted by Management Decision	4,064	5.6%	31	0.0%
P - Pending Restructuring of Commercial Activities	0	0.0%	667	0.9%
R - Subject to Review for Public-Private Competition	0	0.0%	1,802	2.3%
Other				
	11	0.0%		0.0%
<b>Total</b>	<b>72,069</b>	<b>-</b>	<b>77,538</b>	<b>-</b>

Source: 2016 IGCA data.

## Requirements versus authorization

The last issue that we investigated using manpower data was whether there are significant differences in the levels at which military and civilian requirements are funded. We had hoped to obtain data from all the services that would enable us to investigate this issue across DOD. Unfortunately, we were able to obtain data containing both manpower requirements and authorizations from the Navy only.

The Navy's authoritative manpower dataset, Total Force Manpower Management System (TFMMS), contains both manpower requirements and authorizations. We compared the percentage of active duty military and civilian manpower requirements that were funded in FY 2020. Table 8 shows the results for the primary manpower resource sponsors. Overall, civilian requirements are funded at a higher level than military requirements, even though some resource sponsors fund civilian requirements at a lower percentage. These results may imply that the likelihood of funding is a more significant factor in determining civilian requirements than military requirements or, perhaps, in determining requirements for shore commands versus combat units.

Table 8. Navy civilian and military requirements and authorizations by resource sponsor

Resource sponsor	Civilian			Military <sup>a</sup>		
	Req.	BA	Funded	Req.	BA	Funded
N1: DCNO MPT&E	31,814	27,969	87.9%	50,727	49,696	98.0%
N2/N6: Information Dominance	26,835	21,407	79.8%	24,139	20,084	83.2%
N4: Fleet Readiness & Logistics	58,024	55,855	96.3%	20,642	19,034	92.2%
N95: Expeditionary Warfare	4,873	4,133	84.8%	53,408	44,802	83.9%
N96: Surface Warfare	40,690	39,510	97.1%	53,080	46,735	88.0%
N97: Undersea Warfare	50,724	50,565	99.7%	33,697	26,833	79.6%
N98: Air Warfare	36,836	36,333	98.6%	100,327	89,817	89.5%
Others	8,929	8,297	92.9%	8,567	6,941	81.0%
<b>Total</b>	<b>258,725</b>	<b>244,069</b>	<b>94.3%</b>	<b>344,587</b>	<b>303,942</b>	<b>88.2%</b>

Source: TFMMS.

<sup>a</sup> Excludes billets in the student and transient, prisoners, patients and holdees (TPPH) categories.

## Conclusions and Recommendations

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In this section, we present our key findings as they relate to the main study questions and offer some recommendations to improve the workforce mix decision process and ability to conduct total force analysis across DOD.

### Conclusions

#### External factors take precedence over workforce mix guidance

Congressional and DOD directed endstrength limits, FTE caps, and funding constraints affect the total force composition. SMEs expressed that these external constraints mandated by Congress and DOD leadership can prevent the component from moving forward with the labor source dictated by workforce mix guidance. Instead, the components often have to move forward with the sourcing option that is implementable. In addition, federal government decisions, such as the suspension of the A-76 program, have affected total force composition and the flexibility allowed to the components in making workforce decisions.

#### Impediments to implementing workforce mix guidance

Some manpower SMEs indicated that they consistently use DODI 1100.22 to make workforce mix/labor source decisions, while others use it only after a sourcing decision has been made to apply manpower codes in authoritative manpower databases. SMEs also indicated that those applying the guidance often have different interpretations of military essentiality, because of unclear or imprecise definitions. The working group convened by OSD TFM&RS is working to revise DODI 1100.22 with the goal of making it clearer, easier to follow, and more relevant to current workforce mix management issues.

Another barrier to implementing the guidance is the lack of training for those who are using it. SMEs noted that it is not enough to put out a DOD Instruction and expect people to understand and follow it; training is required on how to analyze functions and apply the workforce mix policies and framework.

#### Few consequences to not following DODI 1100.22

SMEs also noted that there are few consequences to not “following the rules” set forth in DODI 1100.22. They noted that, other than a possible union complaint, there is little oversight and

no punishment for not following the workforce mix policy framework. Because of this, commands often take the path of least resistance and choose the labor source that is easiest to obtain or pay for.

## **Underlying incentives encourage the use of one labor type over another**

SMEs noted the long and cumbersome DOD civilian hiring process incentivizes the use of military personnel and contracted services over civilians. Organizations also tend to view the contracting option more favorably because contractors can be hired quickly and do not require the management oversight that DOD civilians do. Taken together, the barriers to hiring, lack of flexibility, and personnel management issues create a disincentive to selecting civilians.

In addition, different funding structures have the unintended effect of incentivizing some labor sources while deterring others. For example, SMEs noted that military labor is often perceived as “free” because it isn’t paid for by the command the way civilians are. This can incentivize the use of military personnel rather than civilian personnel for non-military-essential functions.

## **Manpower management community is inadequately resourced**

Several manpower SMEs indicated that the MM community is inadequately resourced. Manpower SMEs described personnel reductions within their organizations, leaving them shorthanded for implementing manpower management policy and conducting contract reviews, for example. In addition, the Joint Staff lacks the in-house personnel and resources to conduct manpower studies and reviews and depends on the services’ manpower agencies or contractors to conduct manpower studies. Resourcing is also required to standardize MM in the Fourth Estate, which currently lacks the resources to develop a comprehensive manpower management document for the DAFAs to follow.

## **No use of modeling and lack of holistic workforce analysis**

The HASC language called for an investigation of whether the military departments use modeling to determine workforce mix as well as an identification of constraints that impede holistic analysis of the total force. Per our SME discussions, none of the services uses modeling to determine the appropriate workforce mix. Although modeling is used extensively to determine workload and requirements, these models are agnostic regarding workforce mix/labor type.

Further, per SME discussions, there is little holistic analysis done on overall military and civilian requirements and on total force composition. Service SMEs indicated that, although



they previously submitted an annual Inherently Governmental and Commercial Activities (IGCA) Inventory, these inventories are no longer collected and there is no OSD-level analysis of these data because the A-76 program, the original intent for collecting this manpower data, is no longer active. Before the suspension of the A-76 program, IGCA Inventories were subjected to a quality control process, reviewed extensively for inconsistencies, and used to conduct workforce analysis across DOD. A redesigned manpower data collection with review and oversight by service leadership or at the OSD level would help improve the quality of manpower data and enable more holistic analysis of the total force.

### Lack of complete contractor data impedes TF analysis

Another impediment to holistic total force analysis is the lack of complete contractor data and the inability to link contractor data with military and civilian manpower data, which creates a large gap in the assessment of DOD's TF. Although the services are required to submit an Inventory of Contract Services, a major impediment to using the inventory is that the data in the inventory are often outdated, up to two years old. There are also concerns that some of the information important for making strategic planning decisions is not available in the inventory, such as planned contracts or the duration of existing contracts. Without an accurate picture of contracted services, it is difficult to conduct true total force analysis or to understand trends in workforce composition over time.

### Aggregate manpower totals are misleading in assessing TF composition

The overall mix of military and civilian positions largely depends on the number and size of combat units and combat support units (i.e., units with all or mostly military positions) and the number and size of organizations with all or mostly civilian positions (e.g., depot maintenance facilities, research centers, and engineering facilities). The predominant labor source for these types of units and organizations (military or civilian) has been determined and is unlikely to change going forward. Organizations with a true mix of military and civilian labor account for only about a third of the DOD's active military and civilian positions. The mix of military and civilian positions at organizations with a true workforce mix is almost evenly split (i.e., ratio of civilian to military positions is about 1 to 1).

## Recommendations

### 1. Inform Congress and DOD senior leaders that personnel caps and hiring freezes impede policy-driven MM

Some of the most influential factors affecting total force composition (and the ability of DOD components to strictly follow the department's workforce mix guidance) fall outside the components' control. Congressional and DOD senior leaders continue to attempt to address workforce mix through caps on personnel and hiring freezes. These top-down approaches create impediments to sound workforce management practices, however, and cause deviations from the guidance. While the components cannot prevent Congress and DOD leadership from imposing these constraints, they can inform them that these types of constraints interfere with policy-driven workforce management.

### 2. Address the underlying incentives that encourage the use of one labor type over another

There are also underlying incentive problems that lead to the preference of certain labor types over others. DOD must address the cumbersome DOD civilian hiring process that incentivizes the use of military personnel and contractors over civilians.

### 3. Better resource manpower management community

Manpower SMEs indicated that the MM community is inadequately resourced and lacks the personnel and leadership support to accomplish recommended improvements to manpower data and processes. We recommend that Joint Staff conduct a cost-benefit analysis to determine if standing up an in-house manpower study capability would be beneficial. Finally, resourcing is also required to standardize MM in the Fourth Estate, which currently lacks the resources to develop a comprehensive manpower management document for the DAFAs to follow.

### 4. Develop training for those applying workforce mix guidance

We recommend that, once DODI 1100.22 is updated, OSD develop training for those responsible for applying the guidance. Ideally, trained manpower analysts/specialists with knowledge of the requirements would be applying the workforce mix guidance and then reviewing and updating the labor source when necessary.

## 5. Design a DOD-wide manpower data collection

OSD should design an annual manpower data collection from all of the components and provide oversight of these data. A manpower data collection effort and oversight of the data will help with decision-making and the ability to conduct total force analysis. This effort would include focusing on collecting up-to-date contractor data in a format that can be assessed and compared with military and civilian data.

Renewed oversight and review of manpower data will lead to enhanced ability to conduct total force analysis across DOD. Oversight of the services' manpower data should identify inconsistencies and opportunities to realign military manpower to military-essential functions, for example, and to compare labor types and find efficiencies. Review and analysis of the data will facilitate better understanding and enable leaders and manpower specialists at all echelons to use manpower data as a management tool. SMEs also noted, however, that a redesigned and renewed manpower data collection effort requires resourcing and leadership support.

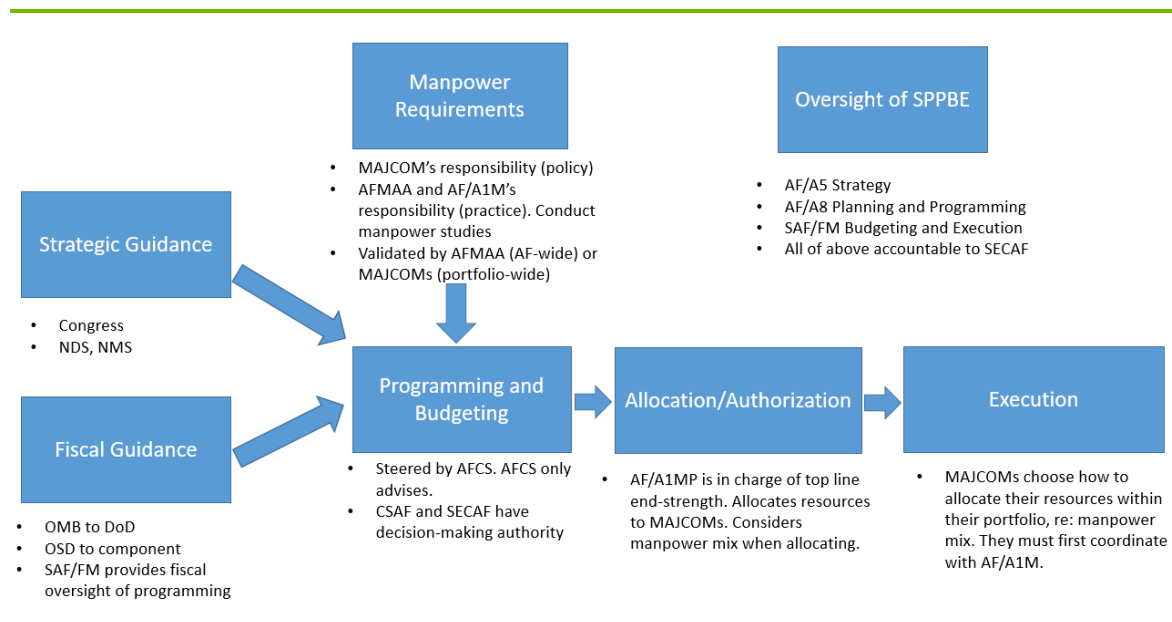
## 6. Reconvene manpower issue teams

Finally, SMEs noted that, at one time, OSD and the services used to convene manpower issue teams at the OSD level. The teams identified pertinent manpower issues across the services that would give them a sense of issues that might arise during the POM process. OSD has not convened these teams in recent years, but SMEs thought it would be beneficial to resume them.

## Appendix A: Air Force MM Process

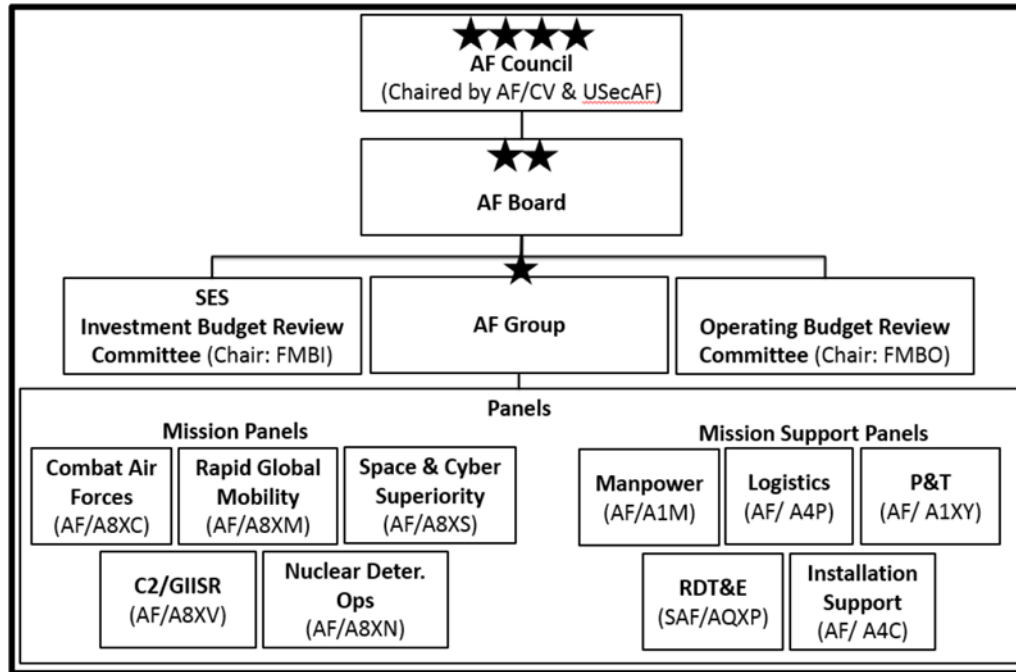
The manpower management process of the Air Force is outlined in Figure 5 as a subset of the broader Air Force Strategy, Programming, Planning, Budgeting, and Execution (SPPBE) Process. Broadly, the Air Force allows for flexibility at the major command (MAJCOM) level in terms of manpower management and workforce mix, subject to budget and labor availability constraints. Central guidance derives from the Air Force Corporate Structure (AFCS), which consists of various stakeholders throughout the service (see Figure 6 for an outline of the AFCS in 2016, taken from [22]).

Figure 4. Air Force Manpower Management Process Overview



Source: CNA generated.

Figure 5. Air Force Corporate Structure (2016)



Source: Headquarters USAF PPBE Reference Manual, Fig. 7-1.

## Manpower requirements determination

Air Force manpower requirements can be qualitatively or quantitatively derived. Qualitative methods for military personnel include the Air Force military classification system for military personnel (which functionally groups positions based on similarities in “knowledge, education, training, experience, ability, and other common criteria”) as well other qualification requirements (such as security access, degrees, or language requirements) [23]. Quantitative methods include manpower determinants (formerly known as manpower standards), crew ratios, the Logistics Composite Model (LCOM), technical estimates, and specific requirements for headquarters staffs (such as MAJCOM staffs) [23].

Reference [24] states the following:

Air Force manpower requirements are determined through processes that vary somewhat across functional areas and active/reserve components. For many functions, a first step is development of a model or standard to determine either the number of personnel or the man-hours of effort required for a type of work

center, usually as a function of one or more workload drivers. The model or standard is then applied to individual work centers to determine the manpower required in each. Factors are then applied to account for indirect work (work that must be done but does not directly relate to the work center producing an end product) and for accepted levels of overtime work. When the result is expressed in man-hours per month, a man-hour availability factor (MAF), indicating the average monthly hours a worker is available for primary duties, must be used to determine the number of personnel required. A manpower determinant typically includes a manpower table that prescribes the recommended grades and skills needed given the calculated number of workers required. The results are considered manpower requirements, which can be then depicted on Air Force Unit Manpower Documents as unfunded or funded manpower requirements; a funded manpower requirement is otherwise known as a manpower authorization. Requirements derived from manpower standards do not immediately or directly translate into demand for personnel resources. The programming and budgeting processes intervene. These processes are conducted through the Air Force's multilevel corporate structure.

According to SME discussions, the Air Force Manpower Analysis Agency (AFMAA) is primarily responsible for conducting manpower studies<sup>30</sup> and developing manpower determinants, while the Air Force Manpower, Organization and Resources Directorate (AF/A1M) takes an advisory role to the working groups that make manpower authorizations. While AF/A1M decides "top-line manpower," it is the MAJCOMs that make workforce mix decisions within their portfolios, although they are required to first coordinate with AF/A1M [7]. According to SMEs within HQ/A1MP, MAJCOMs propose a specific type of labor for a function to A1MP, and A1MP validates the requirements and may propose an alternative labor source depending on budgetary and resource factors, such as the cost of civilians versus military or the availability of military personnel at particular paygrades.

## Manpower and the SPPBE process

The Air Force uses the SPPBE process to translate strategic guidance from the following sources into execution: Congress, the National Defense Strategy, and the National Security Strategy, as well as fiscal guidance provided to DOD from the Office of Management and Budget. The Assistant Secretary of the Air Force for Manpower and Reserve Affairs (SAF/MR) serves as an agent of the Air Force and oversees the formulation and execution of policies, programs, and budgets addressing Air Force manpower [7]. The Deputy Chief of Staff for Manpower,

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<sup>30</sup> This role was formerly the responsibility of Manpower Requirements Squadrons (MRSs), until they were inactivated in 2019 and 2020; they now operate under the umbrella of the AFMAA.

Personnel, and Services (AF/A1) collaborates with the Chief of Air Force Reserve (AF/RE) and the Director of the Air National Guard (NGB/CF) to develop and execute total force manpower policies and guidance for defining, managing, programming, and budgeting Air Force manpower requirements and endstrength. AF/A1 also oversees manpower inputs into the SPPBE process and is also responsible for managing the Manpower Programming and Execution System (MPES), the Air Force authoritative database for human capital requirements and resources [7]. The programming process is steered by the AFCS and its primary output, the Program Objective Memorandum (POM) build. The POM process consists of two phases. In Phase I, MAJCOMs and Core Function Leads (CFLs) participate in the POM build, and it concludes with a review by the Under Secretary of the Air Force (USECAF) and Vice Chief of Staff of the Air Force (VCSAF), as well as Air Force 4-stars. In Phase II, the AFCS (which itself includes the MAJCOMs and CFLs) assumes process leadership. Following any final adjustments, funding requirements are determined, and final fiscal balance is achieved.

A1MP is responsible for administering top-line endstrength and has an advisory role to the working groups that make manpower authorization and budgetary decisions. A1MP conducts analysis to determine whether a valid requirement (proposed by a MAJCOM) exists as well as constraints generated by local labor market conditions (for civilians) and overall availability of military at various paygrades. However, when allocating resources to MAJCOMs for civilian and military billets, A1MP does so at the level of average cost per civilian, officer, or enlisted. MAJCOMs then administer their allocated resources, deciding manpower mix and filling out the Unit Manning Document (UMD).

In particular, regarding the civilian workforce, the Civilian Employment Plan is a joint document between A1, Manpower, and Financial Management that tracks and reports civilian employment and resources, using a balance between dollars and work-years. Target endstrength is programmed by AF/A1M (manpower), while work-years are calculated by AF/A1 and the Assistant Secretary of the Air Force for Financial Management and Comptroller (SAF/FM). MAJCOM FMA/A1K/A1M determines work-year distribution for its Centers/Wings [25].

## Appendix B: Army MM Process

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The Army's manpower management process is outlined in AR 570-4 [5]. The Deputy Chief of Staff (DCS) G-3/5/7 has oversight responsibility of the Army's requirements determination process and is ultimately responsible for moving final requirements up the chain of command to the Army Chief of Staff for final approval. The DCS G-3/5/7 also is responsible for promulgating the Army's force management policies that define and guide its requirements determination process. The Assistant Secretary of the Army for Manpower and Reserve Affairs (ASA M&RA) is responsible for overseeing and facilitating the drafting, final approval, and implementation of the Army's manpower management policies. The DCS G-1 is responsible for overseeing the manpower authorization and allocation process, and the ASA for Fiscal Management and Comptroller is the Army program and budgeting steward. The Secretary of the Army and the Army Chief of Staff are responsible for final approval of Army policies, requirements, programs, and budgets.

### Force development process<sup>31</sup>

In Figure 7, we show the Army's force development process, which includes five phases: determine capability requirements, design organizations, develop organizational models, determine organizational authorizations, and document authorizations. In phase one, the Army reviews the many security and defense guidance documents promulgated at the national, defense, joint, and service levels.<sup>32</sup> The Army uses this review to identify required capabilities, identify gaps, and prioritize them.

In phase two, the Army undertakes its force development process to design organizational solutions to address required capabilities. Force design updates (FDUs) document potential requirement solutions across the DOTMLPF-P domains, including cost-benefit analyses. The Army further evaluates proposed organizational changes by conducting a force integration functional area (FIFA) analysis to assess the potential impact of force structure decisions on the total Army. The FIFA determines affordability, supportability, and sustainability in terms

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<sup>31</sup> We derived this section from [4, 12, 26-27].

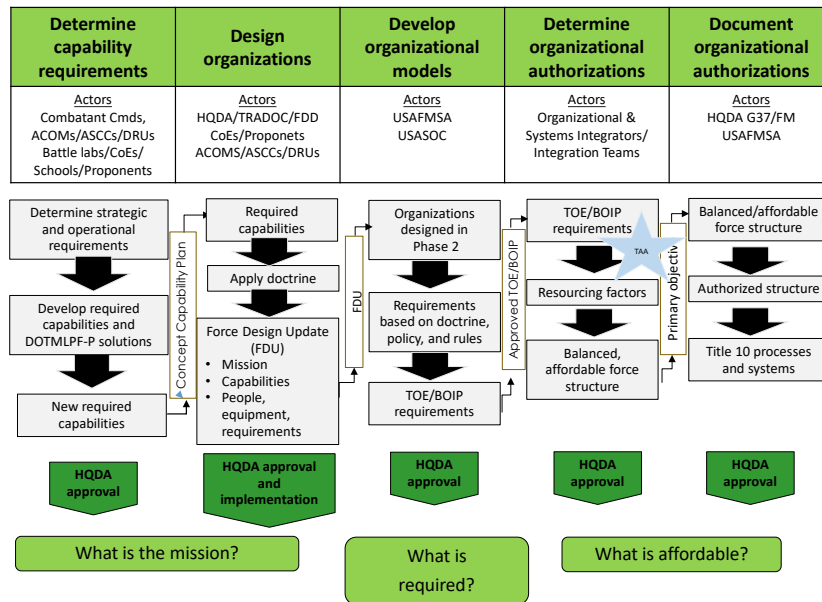
<sup>32</sup> This review includes strategic guidance, planning documents, and doctrine. This review includes but is not limited to the following: the National Security Strategy, the National Defense Strategy, the National Military, the Unified Command Plan, the Defense Planning Guidance, Guidance for Employment of the Forces, the Joint Strategic Capabilities Plan, the many inputs to and documents comprising the Army Plan, and Joint and Army doctrine.



of nine elements: structure, manning, equipping, training, sustaining, funding, deploying, stationing, and readiness. The FIFA analysis results in one of three recommendations: (1) implement the change and find resources, (2) return proposal to TRADOC for further analysis, or (3) prioritize the issue for action in the next annual total Army analysis (TAA).

During phase three, the Army produces its official requirements document, which serves as the end product of its capability development phase. The Army has two types of requirements documents. The first is a table of organization and equipment (TOE) that enumerates the Army unconstrained manpower and equipment requirements for its operating forces. The modified table of organization and equipment (M/TOE) enumerates what the Army can afford to buy based on congressionally appropriated and authorized funding levels. The Army manages its structure to its M/TOE. The second type of requirements document is the Army Table of Distribution and Allowances (TDA). The TDA provides the organizational structure, manpower, and equipment requirements and authorizations to perform missions in the Army's generating force (GF). The Army uses manpower requirements determination (MRD) studies and models to identify staffing requirements based on work function and skills involved.

Figure 6. Army five-phase force development process



Source: Army Regulation 71-32. Mar. 20, 2019. *Force Development and Documentation Consolidated Policies*. Department of the Army Pamphlet 71-32, Mar. 21, 2019. *Force Development and Documentation Consolidated Procedures*.

MRD studies and models are agnostic with regard to manpower type (active, reserve, or civilian). However, the Army tends to use AC and RC personnel to resource operational (combat) units and a mix of active, reserve, and civilian personnel to meet GF manpower needs.

During the fourth phase, the Army uses TAA to define its force structure in terms of workforce mix—military and civilians—within endstrength and other DOD constraints.

TAA serves as the basis for the Army’s POM development and establishing the POM force. The TAA model incorporates both qualitative and quantitative analyses and more specifically applies the guidance for determining its manpower mix, as defined in DOD-1100.22, *Policy and Procedures for Determining Workforce Mix*. Per [12], the Army’s TAA objectives are:

- a. Develop, analyze, determine, and justify a POM Force, aligned with OSD and/or JS Defense Planning Guidance and the Army Plan. The POM Force is the force projected to be raised, provisioned, sustained, and maintained within resources available during the FYDP.
- b. Provide analytical underpinning for the POM Force for use in dialog among Congress, OSD, JS, Combatant Commanders, and the Army.

- c. Assure continuity of force structure requirements within the PPBE processes.
- d. Provide program basis for structuring organization, materiel, and personnel requirements and projected authorizations in the structure and composition database.
- e. Conduct an annual analysis of force structure options for programming consideration that includes the mix of OF and GF capabilities between the active component, the Army National Guard, and the U.S. Army Reserve for the Secretary of the Army to consider and approve in support of the Army's future total force and SECDEF's planning objectives. [13]

In the fifth and final phase of the Army's force development process, the Army finalizes its organizational authorizations. M/TOE and TDA documents reflect Army leadership decisions regarding a specific organization's mission, organizational structure, and personnel and equipment requirements and authorizations for the current year, the budget year, and the first program year. The following are the Army's authorization documents:

- The M/TOE
- Exception M/TOE
- Equipment-only M/TOE
- TDA
- Augmentation TDA
- Mobilization TDA
- Joint table of allowances
- Common table of allowances
- Government-owned contractor-operated contracts

## PPBE process

Per [27], the Army PPBE process is an element of the DOD PPBE process. It interfaces with joint strategic and OSD planning, supports Army planning, programming, and budgeting at all levels of command, and provides inputs into the DOD process. Execution and program performance reviews provide feedback into ongoing planning, programming, and budgeting activities, as well as to the senior leadership.

The Army PPBE process, the Army acquisition process, and the Army requirements determination process are the Army decision support systems, mirroring the three DOD decision support systems. The principal products of the Army PPBE process are the Army Plan (TAP), the Army program, the Army budget, and execution and performance reports.[27]

According to [27] the TAP process helps the senior Army leadership determine force requirements and objectives and set priorities within OSD guidance. It provides the planning basis for Army program and budget development. The approved program and budget submitted to OSD form the Army portion of the FYDP that accompanies the President's Budget. The program lays out the resource cost to build and maintain the force and operate its sustaining base. The budget displays the program from an appropriation perspective.

The Army PPBE process ties together strategy, program, budget, and execution performance. It helps build a comprehensive plan in which budgets flow from programs, programs from requirements, requirements from missions, and missions from national security objectives. The patterned flow—from end purpose to resource cost—defines requirements in progressively greater detail. [27]

Per [27], within the Army, planning creates a vision of the Army 10 years into the future and beyond. Macro estimates yield a specified size, composition, and quality of divisional and support forces. Derived from joint strategic planning and intermediate objectives to achieve stated goals, this divisional and support force provides the planning foundation for program requirements. In the 2-to-10-year midterm, the integration of programming and budgeting translates planning decisions and OSD and congressional guidance into a comprehensive allocation of forces, manpower, and funds. The integrated process seeks to support priorities and policies of the senior Army leadership while achieving balance among Army organizations, systems, and functions. For the 1-year near term, the process converts program requirements into budget requests for manpower and dollars. The budget requests are integrated into the DOD budget that is included in the President's Budget submission to Congress.

Once Congress presents an appropriations act to the President for approval and the act is signed into law, budgeted resources become available to carry out Army programs. By formally adding execution to the traditional emphasis on planning, programming, and budgeting, the PPBE process underscores concern for how well financial execution and program performance apply allocated resources to meet approved program needs, accomplish the plan, and meet desired strategic outcomes. [27]

According to [27], the PPBE process is also guided by performance management planning and reporting requirements, such as performance budgeting, performance and accountability reporting, and program performance assessments.

The main objective of the Army PPBE process is to establish, justify, and acquire the fiscal and manpower resources needed to accomplish the Army's assigned missions. Phase-by-phase objectives follow:

1. Through planning, to size, structure, man, equip, train, and sustain the Army force to support the national military strategy
2. Through cost-benefit analyses, analyses of alternatives, economic analyses, and/or business case analyses, to enable the Army to assess the value proposition of each requirement through its life cycle (concept, testing, production, operations and support, and disposal) to fulfill the Army's strategic goals and support resource-informed decision-making processes
3. Through programming, to set Army priorities for requirements and resources and to distribute projected manpower, dollars, and materiel among competing requirements according to Army resource allocation policy and priorities, making sure that HQDA assigns resources to requirements at defensible, executable levels
4. Through budgeting, to convert resource allocation decisions into requests for congressional authorization and appropriations
5. Through execution, to manage and account for funds to carry out approved programs and, through reviews of program performance, to accomplish the following:
  - Measure effectiveness to make sure that program objectives were accomplished on time and within the allocated resources.
  - Measure efficiency to assess whether actual performance or outputs attained the levels expected from the resources invested.
  - Identify courses of action to adjust resources or to restructure programs to achieve desired performance goals. [27]

## Appendix C: Navy's MM Process

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In this appendix, we describe how the Navy conducts the MM processes to determine its TF authorizations. We examine each of the key processes (i.e., MRD and manpower programming) and identify the organizations that execute or support them. We also review policies and regulations that directly or indirectly influence the type of labor assigned to each position. This description is based on a review of the key references that provide guidance and instruction for conducting these processes and on discussions with SMEs in most of the organizations that play significant roles in the MM process.<sup>33</sup>

The Navy is transforming its shore MRD process. The new process and organizational roles and responsibilities are expected to be in place in FY 2022. At this time, the new organizational responsibilities have been identified, but most of the more detailed changes are still being worked. The discussion in this appendix focuses on the current process. At the end, we describe how this process will change from a roles and responsibilities perspective.

### Overview

OPNAV Instruction 1000.16L [5] specifies the policies and procedures for the Navy's MM process. The Deputy Chief of Naval Operations for Manpower, Personnel, Training, and Education (CNO (N1)) has overall responsibility to plan, program, manage, and execute active duty and reserve military requirements. In addition, CNO (N1) is responsible for MM policy on civil service and contractor manpower requirements.

Figure 8, from [28], illustrates the Navy's MM process. It consists of three main subprocesses:

- MRD: Determine, validate, and document manpower requirements.
- Manpower programming: Assess, prioritize, and fund manpower requirements.
- Translate authorized requirements into a demand signal for personnel.

The MRD process determines the type and level of personnel strength needed to perform the Navy's work and deliver its approved capabilities. It defines manpower requirements by the duties, tasks, and functions to be performed and by the skills required to perform the work. [5]

Validated manpower requirements become authorized billets if they are supported by resources (i.e., funded). This occurs in the Planning, Programming, Budgeting, and Execution

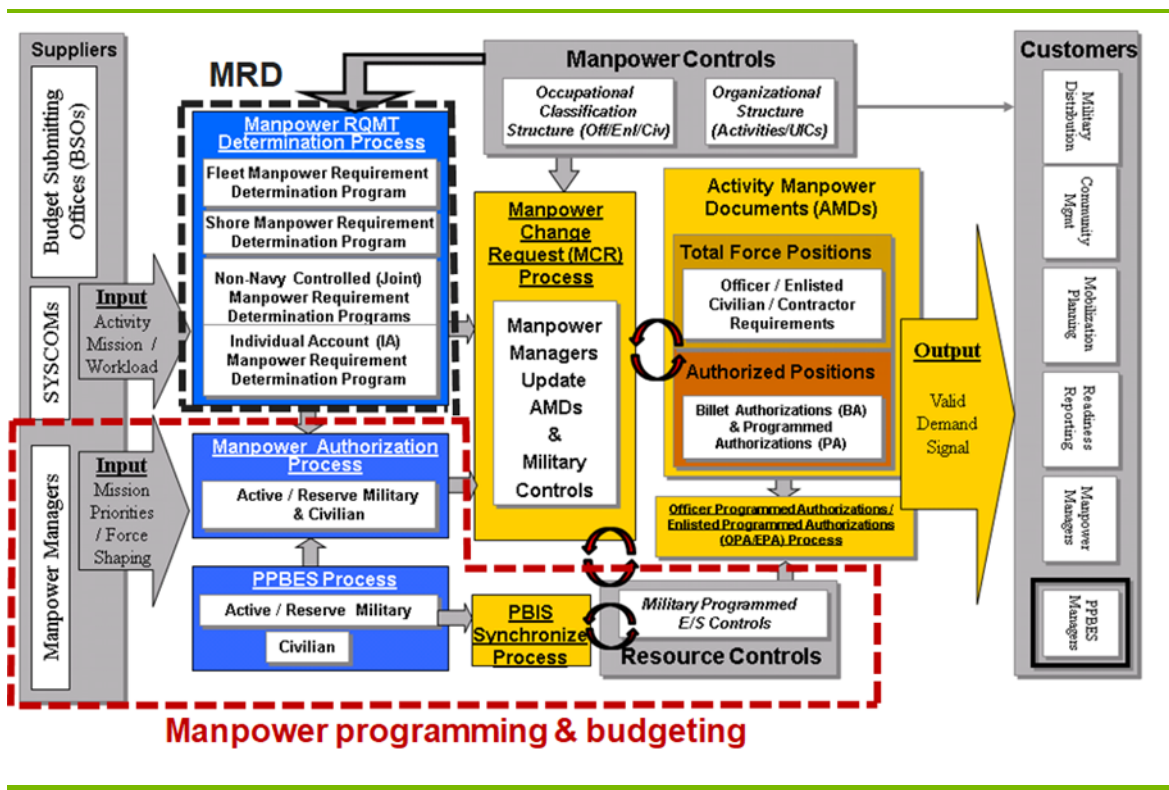
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<sup>33</sup> We held discussions with SMEs at the BSOs, CMAT, NAVMAC, N13, resource sponsors, and budgeting offices.

System (PPBES) process where the Navy’s OPNAV resource sponsors (RSs), in consultation with the BSOs and Type Commanders (TYCOMs), determine which requirements to fund based on mission requirements, risk assessments, and available funding. Once all authorized positions are determined, they are translated into personnel demand signals for each manpower type. For example, funded military billets, when aggregated, form the basis for military personnel endstrength planning, recruiting, training, promotion, and personnel distribution [5].

Although the Navy’s overall process is similar to those in the other services, as we will show in our descriptions of these subprocesses, execution is much more decentralized.

Figure 7. Navy’s MM process



Source: NAVMAC Command Overview Brief, 2019 [28].

## Navy’s MRD processes

The basis for all TF manpower requirements is the ability to execute the approved Navy mission. The specific MRD process depends on the type of command or unit. In general, fleet

manpower requirements are based on Required Operational Capability (ROC)/Projected Operational Environment (POE) documents and ship in-port workload, whereas shore manpower requirements are based on directed mission, function, and tasks.

## MRD programs

The Navy uses four MRD programs to determine its manpower requirements:

- Fleet manpower requirements determination (FMRD) program
- Shore Manpower Requirements Determination (SMRD) program
- Non-Navy Manpower Requirements Determination (NNMRD) program
- Non-Force-Structure Student Individuals Account Manpower Requirements Determination (IAMRD) program

As specified in NAVMAC's *Activity Manpower Management Guide* [4], the FMRD program determines requirements for the following types of fleet activities:

- Afloat ships/submarines FMRD activities—at-sea activities whose mission includes engaging in or maintaining readiness for military or military support operations under combat conditions. These activities have missions governed by a ROC/POE document. NAVMAC determines manpower requirements for these units, which are documented in Ship Manpower Documents (SMDs).
- Aviation FMRD activities—aviation activities whose mission includes engaging in or maintaining readiness for military or military support operations under combat conditions. These activities have missions governed by a ROC/POE document. NAVMAC determines manpower requirements for these units, which are documented in Squadron Manpower Documents (SQMDs), Manpower Requirements Worksheets (MRWs), and Sea Operational Detachment (SEAOPDET) documents.
- Expeditionary/deployable FMRD activities—land-based activities whose mission includes engaging in or maintaining readiness for military or military support operations under combat conditions (i.e., Deployable Shore-Based Force). These activities have missions governed by a ROC/POE document. NAVMAC determines manpower requirements for these units, which are documented in Fleet Manpower Documents (FMDs).

The methodologies for developing SMDs and SQMDs are fundamentally the same: workload engineering and observations are used to categorize the work and the amount of labor required to accomplish the work [5].



The SMRD program determines Navy manpower requirements for the following types of shore activities:

- Support Force SMRD activities: These are activities whose mission does not require engaging in or maintaining readiness for military or military support operations under combat conditions and are under direct Navy management control or under non-Navy management control supporting Navy Mission/Function/Task and Workload (MFT/WL) (i.e., Support Force). Requirement drivers are approved MFT signed by higher authority. Budget Submitting Offices (BSOs) determine manpower requirements for these activities, which are documented in Statement of Manpower Requirements (SMRs).
- Afloat Force/Aviation Force/Deployable Shore-Based Force SMRD activities: These are at-sea activities, aviation activities, and land-based activities whose mission includes engaging in or maintaining readiness for military or military support operations under combat conditions but lack a governing ROC/POE document. Requirement drivers are approved MFT signed by higher authority. BSOs determine manpower requirements for these activities, which are documented in SMRs.

The NNMRD program determines Navy manpower requirements for the following types of non-Navy activities:

- NNMRD activities: These are activities under non-Navy management control that support non-Navy MFT/WL. Manpower requirements are justified by the executive agent having authority over these activities. Director, Total Force Manpower, Training, and Education Requirements (OPNAV N13M) within the CNO N1 organization represents Navy for Joint, Defense Agency, NATO, and outside DOD manpower matters.
- Marine Corps NNMRD activities: These are activities under non-Navy management control that support non-Navy MFT/WL. Manpower requirements are justified by the executive agent having authority over these activities. The Commandant of the Marine Corps represents the Navy for Marine Corps manpower matters (i.e., Marine Force).

The IAMRD program determines Navy manpower requirements for non-force-structure accounts, such as students and transients, patients, prisoners and holdees (TPPH). These manpower requirements are determined by OPNAV N13M.

Table 9 shows the FY 2020 manpower requirements by the four MRD programs and, within each program, by the type of activities. It breaks out the requirements by manpower type: active duty officer, active duty enlisted, government civilian, and contractor. From a total force perspective, 60.9 percent of all manpower requirements were generated through the Shore MRD Program, 28.5 percent through the Fleet MRD Program, 7.8 percent through the Non-

Force-Structure MRD Program, and 2.8 percent through the Non-Navy MRD Program. In terms of manpower type, nearly all the requirements for civilians and contractors were generated through the Shore MRD Program. The one exception is the over 4,000 civilian requirements in the afloat subcategory of the Fleet MRD Program—most of which represent requirements on the civilian-operated military sealift command vessels.

**Table 9. Manpower requirements by MRD program and activity type (August 2020)**

Program	Activity type	Officer	Enlisted	Civilian	Contractor
Fleet	Afloat	10,116	110,936	4,091	0
	Aviation	7,235	39,415	53	122
	Expeditionary/deployable	2,369	18,089	210	2
	Total	19,720	168,440	4,354	124
Shore	Afloat/aviation/deployable	330	1,997	1,615	0
	Support force	29,778	106,055	251,712	20,113
	Total	30,108	108,052	253,327	20,116
Non-Navy	Marine Corps	1,449	6,750	0	0
	DOD	1,475	2,500	148	0
	Joint	2,557	1,996	766	0
	Other	894	523	109	0
	Total	10,407	16,265	1,937	0
Non-Force-Structure	Student	7,476	29,088	0	0
	TTPH	2,366	13,754	0	0
	Total	9,842	42,842	0	0

Source: Navy's Total Force Manpower Management System (TFMMS).

Each MRD program has a distinct method for determining manpower requirements. According to [5], there are fundamental differences between the shore and afloat manpower requirements determination processes. First, in shore manpower requirements determination, to a large extent, commands determine their own requirements, whereas an independent organization (NAVMAC) determines afloat manpower requirements. This has long given rise to concerns regarding the validity of shore manpower requirements.

Second, afloat manpower requirements are typically more concrete and easier to measure than shore manpower requirements. In addition, afloat units have more similarity in the structure/content of their manpower requirements than is found between ashore units. For example, a large part of afloat manpower requirements is to conduct required maintenance, and the determination of these requirements is empirical and based on statistics regarding preventive maintenance schedules and expected failure times. Conversely, MFTs typically contain many tasks that are much less precisely defined.

## Shore MRD process

Because the focus of this study is on workforce mix and given that nearly all civilian and contractor positions are in Support Force SMRD activities, we review the shore MRD process in more detail.

There are two primary Navy references for executing its Shore MRD process:

1. NAVMAC's *Total Force Manpower Requirements Handbook*, April 2000 [29]
2. U.S. Fleet Forces Command Manpower Analysis Team (CMAT), *Manpower Analysis Team Shore Manpower Requirements Determination Program Handbook*, Rev 17, May 2019 [16]

BSOs are responsible for determining shore manpower requirements. The main driver of shore workload is the approved MFT of the activity. The mission, functions, and tasks are translated into position-level staffing requirements. Other inputs include OPNAVINST 5450 (which contains the MFT for each shore activity, CNO (N1) approved staffing standards, and NAVMAC's manpower determination tools. The SMRD process is predominately conducted on site to ensure that the work is linked to a valid MFT statement. It involves measuring and quantifying the work using industrial engineering techniques, determining the manpower required to conduct the workload, and identifying the best manpower mix to accomplish the workload [30].

According to our discussions with SMEs, every BSO has its own process for determining shore manpower requirements. In fact, the two largest BSOs, US Fleet Forces Command (USFLTFORCOM) and Commander, Pacific Fleet (COMPACFLT), indicated that they don't determine any manpower requirements. They use the Command Manpower Analysis Team (CMAT) to conduct manpower requirement reviews for the shore commands under their purview. Individual commands can make manpower changes justified as "unit validated" through billet change requests (BCRs). These requests go through the BSOs, but approval is usually automatic unless the change requires funding. Requirements changes that require funding are submitted to the cognizant resource sponsor through POM issue papers. Resource sponsors are reluctant to fund requirements that are not validated through the SMRD.

## BSOs

BSOs are responsible for determining, validating, and approving the manpower requirements of the shore organizations under their cognizance. Table 10 shows the primary BSOs and the total number of manpower requirements (for active duty military and civilians) at units and organizations under their purview. Together they represent 84 percent of all active duty and civilian manpower requirements.

Table 10. Manpower requirements by BSO

BSO	Officer	Enlisted	Civilian	Total
Commander, U.S. Pacific Fleet	17,836	111,609	33,817	163,262
Commander, U.S. Fleet Forces Command	13,635	94,164	43,712	151,511
Naval Education and Training Command	4,640	43,093	4,773	52,506
Chief, Bureau of Medicine and Surgery	10,092	20,622	15,856	46,570
Commander, Naval Sea Systems Command	644	2,497	37,548	40,689
Commander, Naval Air Systems Command	764	1,013	34,169	35,946
Commander, Navy Installations Command	1,168	14,619	17,129	32,916
Commander, Naval Facilities Engineering Command	546	808	22,924	24,278

Source: TFMMS.

### Determining manpower mix

OPNAV Instruction (OPNAVINST) 1000.16L [5] directs that TF manpower requirements must reflect the appropriate mix of military, civil service, and contractor manpower necessary to accomplish DOD mission consistent with applicable laws, policies, and regulations per DOD Instruction (DODI) 1100.22. The manpower mix criteria codes in the *Activity Manpower Management Guide (AMM-G)* [31] guide the decision of whether a requirement should be military, civil service, or contractor. DODI 1100.22 provides additional guidance to support strategic planning and daily management of the DOD workforce.

OPNAVINST 1000.16L states that a requirement or position is identified as military if the successful performance of duties is required in the following circumstances:

- By reasons of law, executive order, treaty, or international agreement
- For command and control of crisis situations, combat readiness, risk mitigation, or esprit de corps
- When working conditions are not conducive to civil service employment
- When military provides a more cost-effective source of support
- When military-unique knowledge and skills are required for successful performance of duties
- Oversea and sea-to-shore rotation
- Education and career progression assignments
- Adequate military personnel to man wartime and ship in-port assignments [5]

OPNAVINST 1000.16L also directs that non-military manpower requirements that consist of functions and tasks that are inherently governmental in nature must be performed by government civilians. In addition, a non-military-essential requirement is identified as civil service if incumbency is required for the following reasons:

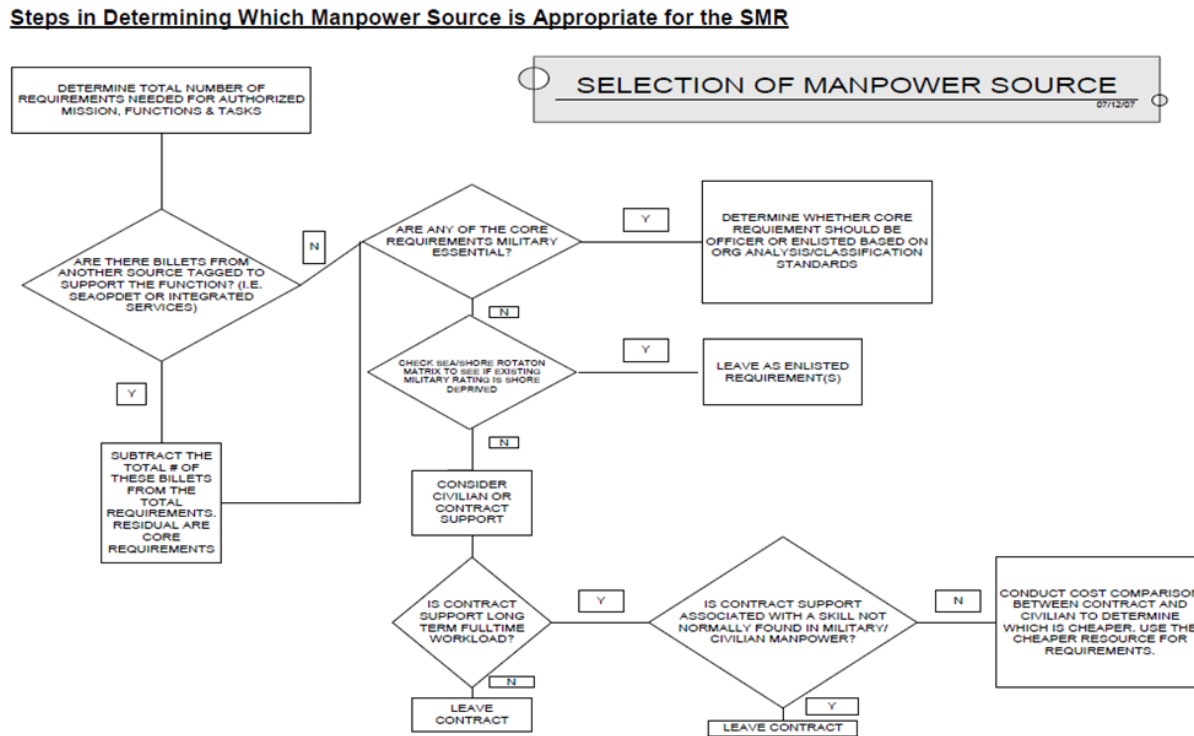
- By law, executive order, treaty, or international agreement
- For key personnel and emergency essential civil service manpower
- For continuity of infrastructure operations during national emergency or war
- For core logistics capability
- For cost comparison of military versus civilian or civilian versus contractor (in-sourcing)
- For a civilian position exempt from private sector performance [5]

Manpower requirements that do not meet any of the above criteria for military or government civilian requirements may be designated as contractor requirements, unless military or civilian manpower are more cost-effective.

CMAT's *Manpower Analysis Team Shore Manpower Requirements Determination Program Handbook* [16] includes a flow chart of the steps that are used to determine which manpower source is appropriate for a shore manpower requirement (SMR). We show this process in Figure 9. The key steps within this process are as follows:

1. Determine total number of requirements needed for authorized mission, functions, and tasks.
2. Are there billets from another source "tagged" to support the function?
  - If yes, the total # of these billets is subtracted from the total requirements. The residual requirements are defined as "core" requirements.
3. Are any of the core requirements military essential?
  - If yes, proceed to step 4.
  - If no, proceed to step 5.
4. Yes, core requirements are military essential.
  - Decide whether core requirement should be officer or enlisted based on organizational analysis and officer/enlisted classification standards.
5. No, core requirements are not military essential.
  - Consider civilian or contractor.

Figure 8. Steps in determining which manpower source is appropriate for the SMR



Source: [16].

6. Should core requirement be civilian or contractor?
  - Is the contract support for long-term full-time workload or short-term with a specific end date?
  - If the contract support is for long-term full-time workload, consider conversion to civilian (civil service) requirement(s).
  - If short-term with specific end date then contract support is appropriate.
7. Is the contract support for long-term full-time workload with a skill not normally associated with military/civilian manpower?
  - If yes, retain as contract support.
  - If no, consider conversion to military or civilian (civil service) requirements. [16]

## Navy manpower programming

Fiscal constraints can restrict the Navy from authorizing (buying) all of the validated TF manpower requirements. Working together, the RSs, BSOs, and Type Commanders (TYCOMs) choose the amount of mission or workload to fund to keep within fiscal constraints. The BSOs and TYCOMs specify which TF requirements to authorize by manpower type and present these recommendations to the RS as part of the programming process.<sup>34</sup>

Military manpower is programmed and budgeted in the PPBES process using programmed endstrength. It represents MPN or RPN dollars allocated to fulfilling the activity's warfighting capabilities or MFT. Because total active and reserve endstrength for a given year is fixed, new authorizations cannot be created for programs that lack available endstrength. Adding, deleting, and realigning programmed endstrength can only occur in the PPBES process.<sup>35</sup>

The Navy POM represents senior Navy leadership's decision on how to allocate Navy resources, including manpower resources, to accomplish the Navy's mission. During each POM cycle, manpower RSs add, delete, or move programmed endstrength to, from, and among LOAs and adjust the MPN and RPN accounts accordingly. Manpower programming is governed by CNO (N8) and RS direction. The POM submission is the mechanism to change the following:

- Total Navy endstrength
- Total active duty, FTS, or SELRES endstrength

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<sup>34</sup> Military enlisted and officer requirements are defined by skill and paygrade. Civilian requirements are defined by occupational series, career group, and payband.

<sup>35</sup> Reprogramming endstrength outside of the PPBES process, known as out-of-cycle programming, is a "zero sum" game, meaning endstrength can be reallocated among programs but total endstrength cannot change.

- Total officer, enlisted, or midshipman endstrength
- Total reserve endstrength within an MRC
- Endstrength allocated to OSD-controlled areas

Civilian and contractor billets are funded out of Operations and Maintenance appropriations. These billets are reported in the PPBES process, but the total number can change with the reallocation of resources. Although civilians and contractors are not managed to endstrength (as the military component is), civil service civilian endstrength is defined in the Program Budget Information System (PBIS) data dictionary as the total number of personnel on board at the end of the FY. Civilian endstrength can also be defined as the number of onboard civilians at the end of every month. These data are tracked in the Defense Civilian Personnel Data System (DCPDS).

According to our discussions with the RSs and budget offices, military and civilian manpower are programmed separately. Trade-offs between manpower types based on available funding do not occur within the PPBES process.

Table 11 lists the major manpower RSs and the number of authorizations they funded in FY 2020 by manpower type. These RSs account for just over 97 percent of all Navy authorizations.

**Table 11. FY 2020 billet authorizations for the major resource sponsors**

Resource sponsor	Officer	Enlisted	Civilian	Total
Air Warfare (N98)	13,293	78,236	36,333	127,862
DCNO MPT&E (N1)	17,247	52,793	27,969	98,009
Surface Warfare (N96)	6,658	43,423	39,510	89,591
Undersea Warfare (N97)	4,365	29,255	50,565	84,185
Fleet Readiness and Logistics (N4)	2,120	16,670	55,855	74,645
Expeditionary Warfare (N95)	4,664	41,104	4,133	49,901
Information Dominance (N2/N6)	4,198	18,043	21,407	43,648

Source: TFMMS.

## Supporting processes

The MRD processes discussed earlier focus almost entirely on the work requirements in individual units and organizations. When these requirements are aggregated across all units and organizations, the quantity, quality, and distribution of manpower requirements—particularly military manpower requirements—are subject to other constraints and controls. The Navy must ensure that these requirements can be executed (i.e., it can create and manage an inventory of personnel to fill these requirements) and that they support force rotation policies and provide opportunities for career development. The Navy has processes that



review and prioritize requirements at more aggregate levels to account for these personnel management policies and to ensure that it can execute its total manpower plan.

In this section, we examine two of these processes: sea-shore flow modeling and community billet structure analysis. Although these processes apply to military requirements, the results can directly influence whether some job positions are designated military or civilian.

## Sea-shore flow modeling

Enlisted career paths define the types and timing of assignments sailors should expect to undertake during their Navy careers. Career paths vary by rating and are influenced by many factors. Chief among them is the distribution of authorized billets, both by type of duty (i.e., sea versus shore) and by paygrade.

Since 2006, the Navy has managed the careers of most sailors through a policy known as sea-shore flow (SSF). This policy defines a career in terms of alternating sea and shore assignments, whose lengths vary between sea and shore over the length of a career. These sailors can expect to spend more than half their careers at sea, and their career paths are managed by SSF policies. Current SSF policy states that sea tour lengths will not involuntarily exceed 60 months for sailors with less than 20 years of service (YOS) or 48 months for sailors with more than 20 YOS. This usually equates to a maximum length of 60 months for the first and second sea tours and 48 months for the third and fourth sea tours. Shore tour lengths between sea tours will be at least 36 months long.

To assist in determining the optimal lengths of these assignments, the Navy developed an analytical tool known as the SSF Model. This model is used to determine sea and shore assignment lengths that would assign enough sailors to sea to fill all sea-duty authorizations. It also determines the number of shore billets that are needed to support a set of tour lengths. This requirement factors into the decisions to assign individual shore positions as military or civilian. As shown in the steps for determining which manpower source is appropriate for the SMR, this requirement factors into the decision to assign individual shore positions as military or civilian.

## Billet structure analysis

Military manpower is a closed labor market, meaning the Navy mostly recruits its all-volunteer force at entry levels and then trains and develops them for future senior positions. This closed labor market places many constraints on the quantity, quality, and experience level of military manpower requirements. One major constraint is the concept of an executable billet structure. For example, an enlisted rating with journeymen billets (E-5 and E-6 paygrades) must have junior paygrade billets (E-3 and E-4 paygrades) because the Navy needs to train and develop personnel in lower paygrades before they become E-5s and E-6s. The limits of what is

executable or unexecutable are difficult to establish and depend on various MPT&E policies (e.g., advancement rules) and retention. N1 is responsible for reviewing and analyzing aggregate enlisted and officer manpower authorizations in each community to ensure that they are executable. The results may influence the assignment of shore positions to military or civilian based on a need to have more or fewer military billets in particular paygrades to have an executable billet structure.

## **Future changes to shore MRD process**

The Navy is transforming its MRD processes for shore/support activities. The new process and associated organizational structure is expected sometime this year. Our understanding is that the plan calls for shifting primary responsibility for the shore MRD process from the BSOs to NAVMAC. Under this arrangement, NAVMAC would oversee both the fleet and the shore MRD process.

## Appendix D: Marine Corps MM Process

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The Marine Corps manpower requirements process is outlined in Marine Corps Order (MCO) 5311.1E, *Total Force Structure Process* [6]. The Marine Corps also complies with other relevant DOD directives and policies, but the manpower requirements process discussed below is primarily found in the service's order. The Total Force Structure Division (TFSD) within the Capabilities Development Directorate (CDD) of Combat Development and Integration (CD&I) is the Headquarters Marine Corps (HQMC) agency responsible for the Marine Corps' manpower requirements.<sup>36</sup>

The Marine Corps Total Force Structure Process (TFSP) is a “business process that integrates with other processes and systems to achieve overall Service force development goals” [6]. It must integrate the many adjacent processes and systems to create a uniform and consistent force development direction. While some of these processes and systems reside within the CD&I hierarchy, those that do not reside there belong to other HQMC agencies, such as Manpower and Reserve Affairs (M&RA) and Programs and Resources (P&R). These organizations must work collaboratively to ensure that the TFSP operates as intended.

Figure 10 identifies the many adjacent processes and systems that are part of this integrated business process, which includes, but is not limited to, the following:

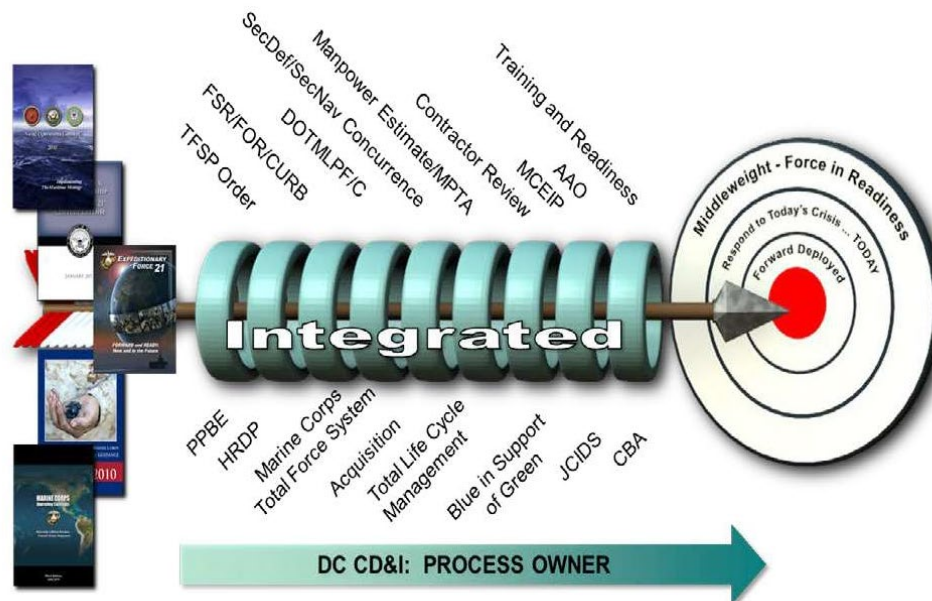
- Planning, programming, budgeting, and execution (PPBE)
- Human resource development process (HRDP)
- Doctrine, organization, training/education, materiel, leadership/strategic communication, personnel, facilities, and cost (DOTMLPF/C)<sup>37</sup>
- Force structure, force optimization, and civilian uncompensated review boards
- Marine Corps Enterprise Integration Plan (MCEIP)
- Manpower estimate and Manpower Personnel Training Assessment (MPTA)

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<sup>36</sup> At the outset of this analysis, we intended to conduct subject matter expert (SME) discussions with each of the services to enhance our understanding of the manpower requirements processes beyond the text of the respective directives and policy. We were unable to hold discussions with Marine Corps SMEs, and this appendix is based on our understanding of the information available in Marine Corps directives and policies.

<sup>37</sup> The DOTMLPF/C is designed to “examine and ensure the supportability of any new materiel or non-materiel program affecting force structure in the USMC and to provide oversight of these initiatives to full implementation” (MCO 5311.1E) [7].

Figure 9. Marine Corps Total Force Structure Process integration



Source: Marine Corps Order 5311.1E.

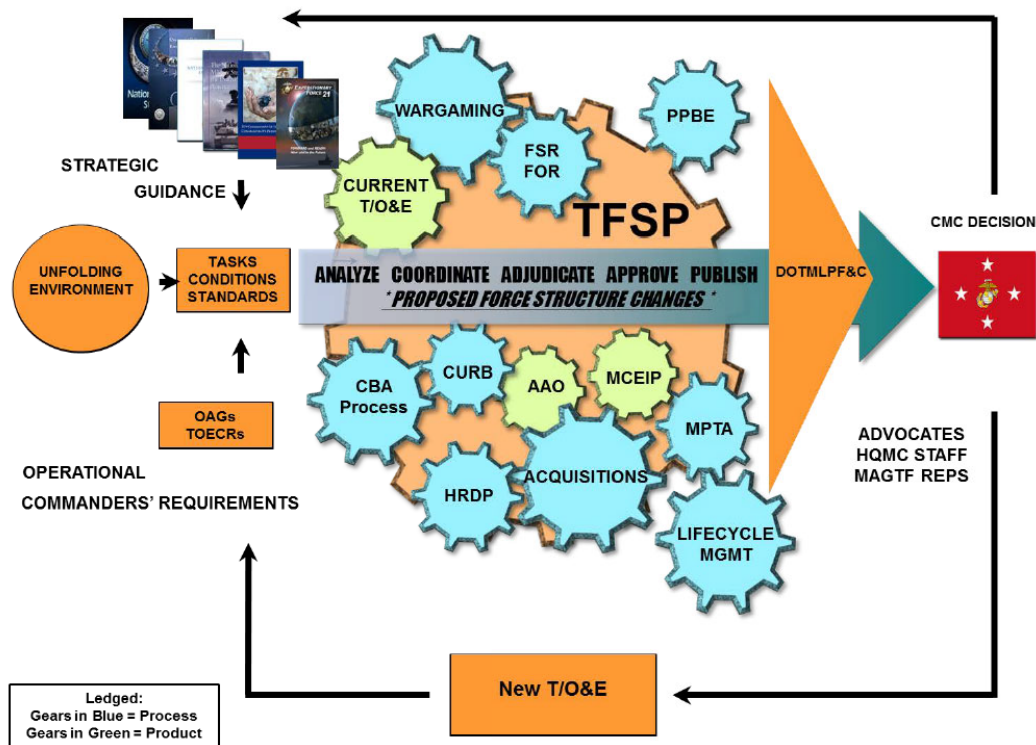
MCO 5311.1E very clearly states that the purpose of the TFSP is to “translate necessary organizational capabilities into force structure solutions and measure the cost of providing those capabilities consistent with financial resources available” to the service. To do that, the TFSP relies on the products and by-products of the adjacent processes and systems to inform the manpower requirements process. The TFSP is not a linear process, but a scalable and flexible system of processes. Regardless of where requirements are generated, the TFSP is adaptable to address significant changes that alter the character of the whole Marine Corps or small refinements to a single billet within a given organization.

## Manpower requirements

The Marine Corps operates under its Marine Air-Ground Task Force (MAGTF) concept. Its organizations and manpower requirements are divided by the different elements of the MAGTF (Command Element, Ground Combat Element, Aviation Combat Element, and Logistics Combat Element) and supporting establishment (service headquarters and agencies, installations, and other entities which support the operating forces). Each element of the MAGTF has advocates and proponents within CDD, CD&I that represent them and their respective interests.

Manpower requirements can enter from the top down, through DOD and/or service leadership and strategies, or from the bottom up, as requests generated by Fleet Marine Force operational commanders and the supporting establishment. Figure 11 illustrates the TFSP and identifies the adjacent processes and products that support it. While the TFSP also includes equipment, this report does not include equipment systems and processes because it is outside the scope of this analysis.

Figure 10. TFSP and supporting processes and products



Source: Marine Corps Order 5311.1E [6].

Manpower requirements that come from the top down are typically the result of a change in national, DOD, or service strategies, policies, and guidance and directed by senior DOD and/or service leaders. New (or refined) strategies, policies, and guidance can entail new missions and/or new capabilities the service will need to provide. The Marine Corps must translate these new missions and/or capabilities requirements to tasks and then to solutions with new (or existing) units and manpower requirements.

The TFSP begins with analysis, breaking down the new mission and capabilities requirements into tasks. These service-level tasks are found in the Marine Corps Task List (MCTL), “an authoritative and published standard of doctrinally based common language of tasks for use by units, installations and supporting establishments” [6]. The tasks found in the MCTL define service capabilities and are used in the development of Mission Essential Tasks<sup>38</sup> (METs) and the Mission-Essential Task Lists<sup>39</sup> (METLs) for Marine Corps organizations.

Once METs are established, the development of the Marine Corps organization(s) that will provide the capabilities can begin. CD&I, working in coordination with MAGTF advocates and proponents, will establish the force structure required to support the METs. The analysis continues with a mission-function-task (MFT) analysis to evaluate each MET to determine the right skills, rank, and quantity of personnel required to accomplish the task. Once the MFT analysis is complete, the organization build can begin. MFT analyses can include wargaming to help refine the results.

Building a new (or refining/modifying an existing) organization starts with the mission statement,<sup>40</sup> which defines the capabilities for the unit and is structured to include the METs the unit is expected to perform. This drives the organizational structure as well as the number of billets required. Once the organization is built (or existing organization modified), war gaming may occur to test the validity and effectiveness of the analysis and build. This is more typical for new units built for new missions and capabilities. Units that are modified and/or refined will typically conduct these assessments during routine field and training exercises.

Requirements that come from the bottom up are typically refinements to unit structure from commanders informed by operational advisory group (community of interest) analyses or emerging need forecasts based on the unfolding environment. The commanders may be at the lowest level units (companies, battalions, squadron, etc.), intermediate-level major subordinate commands (divisions, wings, and groups), high-level operational headquarters (Marine Expeditionary Force (MEF) and Marine Forces (MARFORs)), or the supporting establishment. TFSD, in coordination with MAGTF advocates and proponents and other HQMC agencies—M&RA (for personnel staffing) and P&R (for programming and budgeting)—conducts the final analyses and provides recommendations to Marine Corps senior leadership for decision-making.

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<sup>38</sup> A MET is “a specified or implied task which an organization must perform that is deemed ‘essential’ or ‘critical’ by a unit commander to accomplish the mission” [6].

<sup>39</sup> A METL is the list of METs a unit commander will use to report his organization’s ability to meet current, forecasted, and contingency requirements [6].

<sup>40</sup> A mission statement is a “concise publication of the unit’s responsibilities in relation to other organizations, and it describes the unit’s role in support of the MAGTF, the supporting establishment, and/or joint operations” [6].

The Marine Corps' manpower requirements mostly involve billets associated with military servicemembers. Although they are the primary source of manpower, these decisions include civilian manpower requirements as well. Active and reserve component manpower is limited to congressional authorizations enacted annually through the National Defense Authorization Act, but civilian manpower is not.

## Civilian personnel

Each service employs different management strategies for their direct-funded civilian personnel. The Marine Corps uses a "manage-to-payroll" concept in which civilian manpower requirements are limited by full-time equivalent (FTE) and the civilian payroll budget. Before a civilian billet can be added, three requirements must be met: FTE, manage-to-payroll, and table of organization billet inclusion.

FTE is the basic measure of the level of employment and equates to the total number of hours worked (or to be worked) divided by the number of compensable hours applicable to each fiscal year. The FTE targets are determined for each command based on the average cost per FTE from historical actual execution and the current funding level.

Manage-to-payroll is a concept that requires "the effective and efficient management of civilian appropriated funded positions through the application of position management, position classification, and compensation management principles" [6]. Commanders are provided an annual civilian personnel payroll funding control and FTE target which they must actively manage. The funding control and FTE target is monitored and reported monthly and commanders may change civilian billet requirements as necessary provided they do not exceed their payroll funding controls. Essentially, this means that commanders may add one civilian, at a salary of  $x$  dollars, or two civilians, at a salary of  $\frac{1}{2}$  of  $x$  dollars, so long as they do not exceed their current FTE or funding controls.

Table of organization billet inclusion is the addition of the requested civilian billet to the unit's manpower force structure. Each unit or command within the Marine Corps has an associated table of organization that details the unit's manpower requirements. It identifies each billet and includes supplementary information, such as personnel type, paygrade/rank, military occupational specialty or civilian series, and work section assigned within the unit. Civilian billets must be included on the unit's table of organization before the commander can submit a request for personnel action to the human resources office for hiring to a position. In addition, each civilian billet on the table of organization must have a published position classification and position description before the human resources office will initiate the hiring process for a civilian position.

## Manpower mix and DODI 1100.22

Along with determining manpower requirements, the Marine Corps must also determine the nature of the work performed in a billet and the most appropriate labor source to perform the function and tasks associated with a specific billet. There is currently no Marine Corps-specific directive or policy on manpower mix. The Marine Corps references the policy provided by DOD Instruction 1100.22, *Policy and Procedures for Determining Manpower Mix*.<sup>41</sup>

Manpower-mix decisions can occur at different levels depending on the specific situation. For new top-down manpower requirements (where a new organization is created or a new mission and function where a previous one did not exist), the decision on labor source would typically be made at the Service headquarters agency level. This decision should be made in coordination with the MAGTF advocates and proponents and the high-level operational headquarters, intermediate-level major subordinate command, or supporting establishment organization that will own the new unit. Once billet requirements for the new organization are identified, based on the mission statement and METs, manpower-mix decisions would follow based on MFT analyses. Based on DOD policies on manpower mix, the Marine Corps should evaluate each billet to determine which personnel type is required for each individual billet. The level within the respective hierarchy of the new organization and other factors outlined in the DOD policy guide those decisions.<sup>42</sup> For manpower requirements from the bottom up, manpower mix decisions are typically made by the unit commander who owns the billet in question or would own the new billet requested. The requesting commander is responsible for and expected to follow DOD policies and guidance in generating the request.

A 2011 CNA study titled *A Total Workforce Approach to Making Manpower Decisions*, however, found that the manpower mix guidance provided in DODI 1100.22 is not consistently applied during the manpower requirements decision-making process. Rather, manpower mix decisions are often made based on the availability of personnel and/or funding to fill the new billets or the urgency to fill the billet. In these instances, the manpower mix codes are populated in the Marine Corps' authoritative manpower system after the labor source decision has already been made in order to provide justification for the labor source. It is unclear if the Marine Corps has changed its processes since this 2011 study because we were unable to reach Marine Corps SMEs to update this information.

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<sup>41</sup> CNA was unable to conduct discussions with Marine Corps SMEs, and there are no service-specific directives or policies to reference for workforce mix decision-making processes and procedures. This information is based on a 2010 CNA study for the Marine Corps, *A Total Workforce Approach to Decision Making*.

<sup>42</sup> The process and criteria that help guide manpower mix decisions are found in Enclosures 3 and 4 of DODI 1100.22.



## Manpower and the PPBE process

The PPBE process is one of the many processes and systems that are integrated in the Marine Corps' TFSP. As previously mentioned, the purpose of the TFSP is to “translate necessary organizational capabilities into force structure solutions and measure the cost of providing those capabilities consistent with financial resources available” to the service [6]. The TFSP defines how the Marine Corps develops integrated force structure requirements, which feed the capabilities-based assessment (CBA) planning process in support of the development of the Marine Corps Enterprise Integration Plan. The current force structure requirements lay the foundation for PPBE.

The CBA is a deliberate process that supports the Marine Corps' responsibilities within the planning phase of the PPBE process. Through the CBA process, the Marine Corps is able to define objectives, identify and refine capabilities, and provide guidance for resource allocation necessary to meet service mission requirements. The CBA process feeds the development of the MCEIP to translate future-focused strategic guidance into a single integrated and consolidated plan to support capabilities development and provide programmers risk assessment for a given POM cycle. The TFSP feeds the CBA process and is the first step in developing the future fighting requirement.

The Deputy Commandant for CD&I is responsible for the CBA process, and his staff must work in coordination with the staff of the Deputy Commandant for P&R, who is responsible for the PPBE process. CD&I provides the current and projected future manpower requirements to P&R, and P&R drives the programming and budgeting process to help build the POM. P&R also provides PPBE guidance and constraints to CD&I for planning purposes to aid in force structure refinement and risk assessment in case of affordability concerns.

## Appendix E: Joint Staff

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The Joint Staff's manpower requirements determination and validation process is outlined in Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 1001.01B, *Joint Manpower and Personnel Program* [11].<sup>43</sup> This instruction provides policy and establishes responsibilities and procedures for determining, validating, documenting, and maintaining joint manpower requirements. CJCSI 1001.01B prescribes the procedures to follow for new joint manpower requirements, to request changes to existing joint manpower billets, and to manage the data elements in the Fourth Estate Manpower Tracking System (FMTS), the authoritative manpower system for the Fourth Estate.

Per [10], the objective of the Joint Manpower Program (JMP) is to ensure that joint activities have the minimum manpower with the appropriate skills and experience to carry out assigned missions, tasks, and functions. The JMP has three principal components: the Joint Manpower Validation Process (JMVP), the Joint Table of Distribution (JTD), and the Joint Table of Mobilization Distribution (JTMD).

CJCSI 1001.01B describes the JMP process as a cycle following three events:

1. The approval of joint manpower requirements and authorizations as depicted in the JTD
2. The additions, deletions, and changes made to those joint manpower requirements and authorizations
3. The mechanisms for translating the joint authorizations into specific service personnel assignment actions to fill the positions.

The instruction notes that the JMP begins with the mission, which generates the nature of the specific tasks and functions. The commanders and directors organize their commands to meet their assigned missions and determine the manpower requirements to carry out their missions within the established process and guidelines. Manpower requirements are coordinated with and approved by the Joint Staff and the services.

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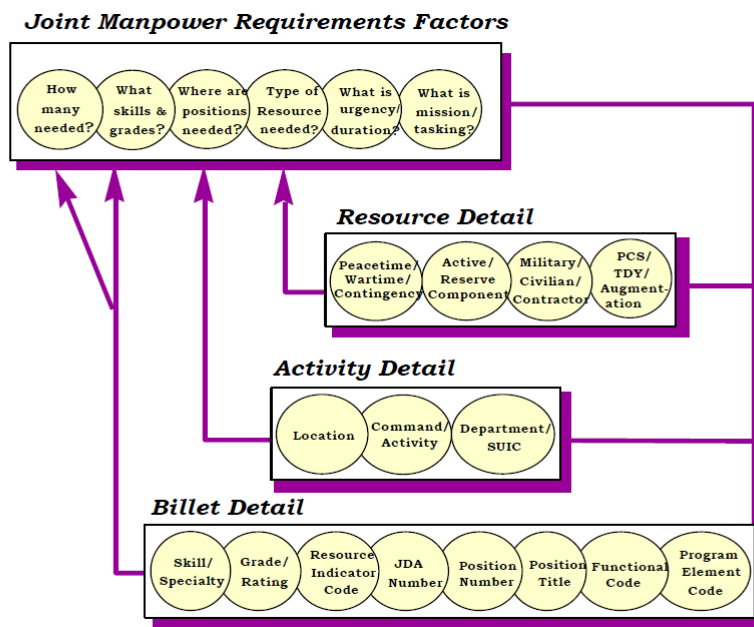
<sup>43</sup> CJCSI 1001.01B applies only to the Chairman of the Joint Chiefs of Staff, CJCS-controlled activities (CCAs), combatant commands, North Atlantic Treaty Organization (NATO), and other joint activities. It applies to the military departments and DOD agencies only with respect to manpower assigned to the above activities.

## Manpower requirements determination

Per CJCSI 1001.01B, the initial step in the joint manpower process is to define all the missions, tasks, and functions assigned to the activity by higher authority and establish an organizational structure to carry out these functions. Next, the organization structure is documented in FMTS and becomes the basis for determining the manpower requirements needed to perform the assigned missions. Statements of manpower needs are based on approved programs, force structure, and missions assigned by the Secretary of Defense and the Chairman of the Joint Chiefs of Staff. Each joint activity establishes its own internal system to determine joint manpower requirements in accordance with the guidelines in Figure 12.

Manpower requirements are stated in terms of the minimum manning required to accomplish the command's approved missions and workload. Joint manpower requirements are based on the average workload expected to continue for at least three years. Commanders and directors satisfy manpower changes in requirements associated with existing missions and functions by internal manpower realignments, and they submit updates with annual change manpower package (CMP) submissions.

Figure 11. Joint Staff manpower requirements considerations

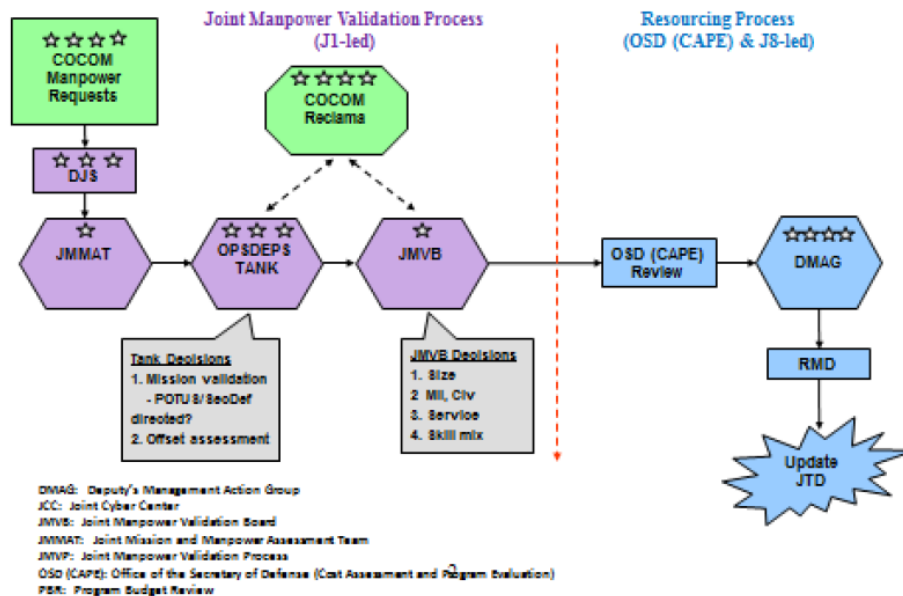


Source: CJCSI 1001.01B.

## Manpower requirements validation process

Next, per [10], requests for new joint manpower for combatant commands, CCAs, and other joint activities must be submitted to the Joint Staff for validation following the process outlined in Figure 13. Joint Staff J-1 then convenes a Joint Mission and Manpower Assessment Team (JMMAT) to analyze the CJCSI 1001.01B request and make recommendations to the Operations Deputies (OpsDepts) Tank. The OpsDepts Tank decides whether to endorse the mission brought forward by the combatant command for further resourcing consideration. If endorsed, the request moves to a Joint Manpower Validation Board (JMVB) for sizing (attributes such as grade, skill, and quantity). JMVB-validated billets are initially documented on the JTD/JTMD as unfunded requirements. During Program Budget Review (PBR) deliberations, the PPBE process determines whether these the requirements receive funding.

Figure 12. Joint manpower validation process



Source: CJCSI 1001.01B.

## Appendix F: Fourth Estate Manpower Management

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The Fourth Estate is any DOD organization other than the military services that has DOD manpower resources. This includes the OSD and the JCS and their staffs. Also part of the Fourth Estate are 20 defense agencies and 8 field activities (DAFAs) that, along with the three military departments, are considered “supporters and suppliers” for the operational combatant commands.

We spoke with SMEs in the Office of the Chief Management Officer who have been tasked with developing an overarching manpower management policy document for the Fourth Estate comparable to the manpower management documents for each of the services. Each of the DAFAs have their own approach to manpower management. Currently, only a few of the defense agencies have issued manpower management guidance,<sup>44</sup> indicating two things: not only is there no standard manpower management process in the Fourth Estate, there is likely no formalized process in many of the agencies and activities.

The SMEs with whom we spoke indicated that, due to other tasking and competing demands in their office as well as the scope and difficulty of writing a policy document that will encompass all of the organizations within the Fourth Estate, little progress has been made on the document. We asked these SMEs what they envision for the future policy document, however. They indicated that the eventual Fourth Estate manpower management document would need to be written at a high level because it has to cover manpower management in all of the Fourth Estate. They also indicated that the policy document will provide guidance up front on what criteria have to be met before a DAFA can request military manpower resources. The intent is to provide clear guidance on when DAFAs are allowed to request military resources. They note that only when it has been determined that the billet cannot be filled by a civilian or be satisfied by a short-term contract can the DAFAs request military resources. These SMEs also noted that the policy document would not include guidance on workforce mix but would reference supporting documents, such as DODI 1100.22.

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<sup>44</sup> See, for example, Defense Contract Management Agency (DCMA) Manual 4301-09, *Manpower and Mission Analysis* [8] and Defense Information Agency (DISA) Instruction 640-45-32, *Organization: Manpower Management* [9].

# Appendix G: Contract Approval Form

REQUEST FOR SERVICES CONTRACT APPROVAL FORM

\_ Project Name for Contract/Task Order (indicate if this is for Base Year/Modification)

Name of HQDA Principal, Army Command, Army Service Component Command, or Direct Reporting Organization

Dates and Cost of Requested Period of Performance (POP)      Contract Duration (base year including option years)

Base Year Cost	Option Year 1 Cost	Option Year 2 Cost	Option Year 3 Cost	Option Year 4 Cost	Option Year 5 Cost	Total Project Cost
						\$ 0.00

Estimated CFTEs	Labor Cost for Requested POP	Contract or Delivery/Task Order #	Unit Identification Code (UIC)	AMSCO	MDEP

Justification for Contract (consider the following):

- 1) Has a Cost-Benefit Analysis been completed? (If yes, please provide the approval date.) And, if so, has the cost of labor been determined using DoDI 7041.04?
- 2) Does this contract requirement support a core functionality of your mission or division?
- 3) Has this mission been mandated by regulation or directed by higher Headquarters?
- 4) In the event that this contract is not awarded, has the operational impact been considered?

ACCOUNTABLE OFFICIAL DECISION

sign or initial

OR

sign or initial

I approve and certify that:      I disapprove.

- 1) this requirement does not include inherently governmental functions;
- 2) in the case of work closely associated with inherently governmental functions or non-competitive contracts, special consideration has been given to using Federal Government employees;
- 3) this requirement does not include unauthorized personal services, either in the way the work statement is written or in the way the contract operates;
- 4) this contract (check the applicable box):
  - a) has been reported in the Contract Manpower Reporting Application (CMRA);
  - b) has not been reported in CMRA, and an explanation is enclosed;
  - c) the CMRA reporting requirement has been included in the statement of work for this new requirement;
  - d) has not been reported in CMRA, because it is Civil Works funded and is exempt from CMRA reporting;
- 5) the workload for this requirement has been validated using an accepted form of analysis and the contract requirement has been documented in the Panel for Documentation of Contractors module of CMRA;
- 6) sufficiently trained and experienced officials (including, but not limited to, Contracting Officer's Representatives) are available within the agency to manage and oversee the contract administration function and evaluate the contractor work product.

Name / Rank / Position

Signature

Date

Worksheets prepared by:

Signature:

Date

May 2017 Version 2 (Previous versions are obsolete) Official Use Only/Procurement Sensitive Information

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# INSTRUCTIONS

## FOR USE OF THE REQUEST FOR SERVICES CONTRACT APPROVAL FORM

The following rules govern the required use of the certification and worksheets of this Form:

1. The Request for Services Contract Approval (RSCA) Form is required by Army Federal Acquisition Regulation Supplement (AFARS) Subpart 5107.503(e).
2. The most current version of the Form must be used and can be found at:  
<http://www.asamra.army.mil/scra/documents/RSCA%20Version%202.0.pdf>  
 The Form may not be altered in any way; local supplementation is acceptable only when such supplements are used with—and attached to—the Form.
3. The Form is required and must be completed in the following circumstances:

- » Before new solicitations are issued or contracts are awarded;
- » Before contracts are modified;
- » When each task order/delivery order is issued;
- » When funds are added (although the incremental funding of contracts does *not* require re-submission of the form);
- » When Army funds are being used to buy contractor labor, regardless of which organization is awarding or administering the contract;
- » When Army is the requiring activity, or is the executive agent for the mission/organization requiring the services;
- » When Army funds are being transferred to contracts outside of the Department of Defense.

This Form is required for all service contracts, regardless of whether the contracts are enduring, temporary, about to end, funded in the base budget, or funded under Overseas Contingency Operations.

The RSCA form need not be used when options exercised, provided that there are no changes in the terms, conditions, scope of work or level of effort and provided that an RSCA form was completed when the contract was originally awarded. However, the RSCA business process must still be used when contracts are modified and when task orders, purchase orders or delivery orders are issued.

4. The RSCA Form is required for all service contracts (see FAR 7.502 Applicability). A “service contract” is for tasks to be performed, rather than supplies to be delivered. The following do not require the RSCA:

- » Manufacturing/production contracts;
- » Off-the-shelf software;
- » Construction projects funded using Military Construction Army funds (however, repairs, maintenance, construction, and demolition projects that utilize Operations and Maintenance funds do require the Form);
- » Help desk and customer service support incidental to equipment or off-the-shelf software purchases;
- » Software licensing agreements and updates (customized software development, maintenance, and upgrades, however, *are* considered services);
- » Manufacturer’s warranties (extended maintenance/repair beyond the standard manufacturer’s warranty, however, *is* considered a service requiring the RSCA);
- » Delivery services incidental to a supply purchase.
- » Rental of equipment
- » Rental of hotel rooms
- » Purchases using a government credit card

## INSTRUCTIONS

### FOR USE OF THE REQUEST FOR SERVICES CONTRACT APPROVAL FORM

5. Certification by the accountable GO/SES at the requiring activity is required.
  - »For a contract with a total value below the Simplified Acquisition Threshold (SAT) (including all supplies and services, as well as all the option years combined), the accountable GO or SES in a requiring activity may delegate signature authority to a GS-15/O-6.
  - »For National Guard contracts, the U.S. Property and Fiscal Officer (USPFO) may approve/certify the Form.
  - »For services to support Courts-Martial, no approval/certification is required, but the Form must still be completed.

Garrison commanders or equivalent at the O-6/GS-15 level are permitted to submit one RSCA form for facility contracts (O&M Funded Maintenance, Repair, and Construction) in conjunction with the garrison's annual work plan for a given year.
6. Worksheet questions should be answered by persons in the requiring activity who know how the contract is administered, how it is performed, and who thoroughly understand the work being performed by the contractor. Worksheet questions should be answered carefully, to ensure that the accountable GO/SES and the contracting officer have all relevant facts to support their decisions and/or certification.
7. Due to congressional moratorium on A-76/ public private competitions, no out-sourcing is currently allowed. If the moratorium on A-76/ public private competitions ends, a streamlined competition is required. Work currently being performed by in-house civilian employees or designated for in-house civilian employee performance may not be directly converted to contractor performance. If law and policy is ever changed to allow direct conversions to contract performance, a cost comparison must still be done under DoDI 7041.04 (Estimating and Comparing the Full Costs of Civilian and Active Duty Military Manpower and Contract Support, 3 July 2013), in order to establish which source of labor is the least costly.
8. For the purposes of the RSCA process, the term "contract" includes the following:
  - Intergovernmental support agreements (IGSAs)
  - any contract or agreement between a U.S. Federal government agency and a non-U.S. federal government entity which obligates the seller to furnish services and the buyer to pay for them using appropriated funds.
9. The term "contract" does not include grants and cooperative agreements pursuant to 31 U.S.C. 6301 et seq.
10. A CFTE is calculated by dividing the total direct labor hours by 2087. Calculations will be rounded to the one-hundredth (.xx) decimal level.

If issues arise regarding the correct use or completion of the Request for Services Contract Approval Form, please contact the Office of the Assistant Secretary of the Army (Manpower and Reserve Affairs) Force Management, Manpower and Resources, at (703) 693-2109 or [eileen.g.ginsburg.civ@mail.mil](mailto:eileen.g.ginsburg.civ@mail.mil).



## WORKSHEET A (1 OF 3)

### INHERENTLY GOVERNMENTAL FUNCTIONS

An “inherently governmental function” is one that has been determined to be—through statute or otherwise—a function that must be performed by Government personnel, either civilian or military, and may not be performed by a contractor. All the sections of Worksheet A must be filled out and are designed to help determine whether or not a function is inherently governmental in nature.

Read each question and apply it to the function in question. Answer “Yes” or “No” to the questions that apply below, based on the work statement and the way the contract is performed. A “Yes” response to any of the below indicates that the function must be performed in-house and may not be contracted.

Inherently Governmental		YES	NO
	<b>Does the function:</b>		
1	Involve contractors providing legal advice and interpretations of regulations and statutes to Government officials?	<input type="checkbox"/>	<input type="checkbox"/>
2	Involve the direct conduct of criminal investigations?	<input type="checkbox"/>	<input type="checkbox"/>
3	Involve the control of prosecutions and performance of adjudicatory functions other than those relating to arbitration or other methods of alternative dispute resolution?	<input type="checkbox"/>	<input type="checkbox"/>
4	Involve the command of military forces, especially the leadership of military personnel who are members of the combat, combat support, or combat service support role?	<input type="checkbox"/>	<input type="checkbox"/>
5	Involve the conduct of foreign relations and the determination of foreign policy?	<input type="checkbox"/>	<input type="checkbox"/>
6	Involve the determination of agency policy, such as—among other things—determining the content and application of regulations?	<input type="checkbox"/>	<input type="checkbox"/>
7	Involve the determination of Federal program priorities for budget requests?	<input type="checkbox"/>	<input type="checkbox"/>
8	Involve the direction and control of Federal employees?	<input type="checkbox"/>	<input type="checkbox"/>
9	Involve the direction and control of intelligence and counter-intelligence operations?	<input type="checkbox"/>	<input type="checkbox"/>
10	Involve the selection or non-selection of individuals for Federal Government employment, including the interviewing of individuals for employment?	<input type="checkbox"/>	<input type="checkbox"/>
11	Involve the approval of position descriptions and performance standards for Federal employees?	<input type="checkbox"/>	<input type="checkbox"/>
12	Involve the determination of what Government property is to be disposed of and on what terms (although an agency may give contractors authority to dispose of property at prices within specified ranges and subject to other reasonable conditions deemed appropriate by the agency)?	<input type="checkbox"/>	<input type="checkbox"/>
13	Involve:		
	i) Determining what supplies or services are to be acquired by the Government (although an agency may give contractors authority to acquire supplies at prices within specified ranges and subject to other reasonable conditions deemed appropriate by the agency);	<input type="checkbox"/>	<input type="checkbox"/>
	ii) Participating as a voting member on any source selection boards;	<input type="checkbox"/>	<input type="checkbox"/>
	iii) Approving any contractual document, including documents defining requirements, incentive plans, and evaluation criteria;	<input type="checkbox"/>	<input type="checkbox"/>

## WORKSHEET A (2 OF 3)

### INHERENTLY GOVERNMENTAL FUNCTIONS

Answer "Yes" or "No" to the functions that apply below, based on the work statement and the way the contract is performed. A "Yes" response to any of the below indicates that the function must be performed in-house and may not be contracted.

Inherently Governmental		YES	NO
	<b>Does the function:</b>		
13	(continued from the previous page) Involve:		
	iv) Awarding contracts;	<input type="checkbox"/>	<input type="checkbox"/>
	v) Administering contracts (including ordering changes in contract performance or contract quantities, taking action based on evaluations of contract performance, and accepting or rejecting contractor products or services);	<input type="checkbox"/>	<input type="checkbox"/>
	vi) Terminating contracts;	<input type="checkbox"/>	<input type="checkbox"/>
	vii) Determining whether contract costs are reasonable, allocable, and allowable; and	<input type="checkbox"/>	<input type="checkbox"/>
	viii) Participating as a voting member on performance evaluation boards.	<input type="checkbox"/>	<input type="checkbox"/>
14	Involve the approval of agency responses to Freedom of Information Act (FOIA) requests (other than routine responses that, because of statute, regulation, or agency policy, do not require the exercise of judgment in determining whether documents are to be released or withheld), and the approval of agency responses to the administrative appeals of denials of FOIA requests?	<input type="checkbox"/>	<input type="checkbox"/>
15	Involve the conduct of administrative hearings to determine the eligibility of any person for a security clearance, or involve actions that affect matters of personal reputation or eligibility to participate in Government programs?	<input type="checkbox"/>	<input type="checkbox"/>
16	Involve the approval of Federal licensing actions and inspections?	<input type="checkbox"/>	<input type="checkbox"/>
17	Involve the determination of budget policy, guidance, and strategy?	<input type="checkbox"/>	<input type="checkbox"/>
18	Involve the collection, control, and disbursement of fees, royalties, duties, fines, taxes, and other public funds, unless authorized by statute, such as 31 U.S.C. § 952 (relating to private collection contractors) and 31 U.S.C. § 3718 (relating to private attorney collection services), but does not include:	<input type="checkbox"/>	<input type="checkbox"/>
	i) Collection of fees, fines, penalties, costs, or other charges from visitors to or patrons of mess halls, post or base exchange concessions, national parks, and similar entities or activities, or from other persons, where the amount to be collected is easily calculated or predetermined and the funds collected can be easily controlled using standard case management techniques; and	<input type="checkbox"/>	<input type="checkbox"/>
	ii) Routine voucher and invoice examination.	<input type="checkbox"/>	<input type="checkbox"/>
19	Involve the control of the treasury accounts?	<input type="checkbox"/>	<input type="checkbox"/>
20	Involve the administration of public trusts?	<input type="checkbox"/>	<input type="checkbox"/>
21	Involve the drafting of Congressional testimony, responses to Congressional correspondence, or agency responses to audit reports from the Inspector General, the Government Accountability Office, or other Federal audit entity?	<input type="checkbox"/>	<input type="checkbox"/>

## WORKSHEET A (3 OF 3)

### INHERENTLY GOVERNMENTAL FUNCTIONS

Answer "Yes" or "No" to the functions that apply below, based on the work statement and the way the contract is performed. A "Yes" response to any of the below indicates that the function must be performed in-house and may not be contracted.

Inherently Governmental		YES	NO
	<b>Does the function:</b>		
22	Require the exercise of discretion in applying Federal Government Authority?	<input type="checkbox"/>	<input type="checkbox"/>
23	Require the making of value judgments in making decisions for the Federal Government?	<input type="checkbox"/>	<input type="checkbox"/>
24	Require making judgments relating to monetary transactions and entitlements?	<input type="checkbox"/>	<input type="checkbox"/>
25	Involve the interpretation and execution of the laws of the United States so as to bind the US to take or not take some action by contract, policy, regulation, authorization, order, or otherwise?	<input type="checkbox"/>	<input type="checkbox"/>
26	Involve the interpretation and execution of the laws of the United States to determine, protect, and advance the US' economic, political, territorial, property, or other interests by military or diplomatic action, civil or criminal judicial proceedings, contract management or otherwise?	<input type="checkbox"/>	<input type="checkbox"/>
27	Involve the interpretation and execution of the laws of the United States to significant affect the life, liberty, or property of private persons?	<input type="checkbox"/>	<input type="checkbox"/>
28	Involve the interpretation and execution of the laws of the United States to commission, appoint, direct, or control officers or employees of the United States?	<input type="checkbox"/>	<input type="checkbox"/>
29	Involve the interpretation and execution of the laws of the United States to exert ultimate control over the acquisition, use, or disposition of the property—real or personal, tangible or intangible—of the US, including the collection, control, or disbursement of appropriate or other Federal funds?	<input type="checkbox"/>	<input type="checkbox"/>
30	Involve security operations performed in direct support of combat as part of a larger integrated combat force, or performed in environments where there is significant potential for the security operations to evolve into combat? (Where the US military is present, the judgment of the military commander should be sought regarding the potential for the operations to evolve into combat.)	<input type="checkbox"/>	<input type="checkbox"/>
31	Involve representation of the Government before administrative and judicial tribunals, unless a statute expressly authorizes the use <sup>4</sup> of attorneys whose services are procured through contract?	<input type="checkbox"/>	<input type="checkbox"/>
32	Involve combat?	<input type="checkbox"/>	<input type="checkbox"/>
33	Involve the interrogation of detainees? (However, some functions in support of interrogation may be performed by contractors; see item 20 on Worksheet B.)	<input type="checkbox"/>	<input type="checkbox"/>
34	Involve the contractor performing as the effective or <i>de facto</i> decision-maker?	<input type="checkbox"/>	<input type="checkbox"/>

*The above functions/examples are drawn from the following sources: The Federal Activities Inventory Reform (FAIR) Act (31 United States Code (U.S.C.) Section 501); the Federal Acquisition Regulation (FAR) Part 7.5; and the Office of Federal Procurement Policy (OFPP) Policy Letter 11-01.*

## WORKSHEET B (1 OF 2)

### CLOSELY ASSOCIATED WITH INHERENTLY GOVERNMENTAL FUNCTIONS

A “closely associated with inherently governmental function” is one that approaches being inherently governmental in nature because of the nature of the function, the manner in which the contractor performs the contract, or the manner in which the government administers contract performance. A designation of closely associated with inherently governmental does not preclude from contracting for a function, but does require additional oversight, as well as special consideration for in-sourcing. Pursuant to 10 U.S.C. § 2330a(e), however, reliance on contractors to perform closely associated with inherently governmental functions should be reduced “to the maximum extent practicable.”

Answer “Yes” or “No” to the questions below, based on the work statement and the way the contract is performed.

Closely Associated with Inherently Governmental		YES	NO
	<b>Does the performance involve:</b>		
1	Services that involve or relate to budget preparation, including workload modeling, fact finding, efficiency studies, and should-cost analyses, etc.?	<input type="checkbox"/>	<input type="checkbox"/>
2	Services that involve or relate to reorganization and planning activities?	<input type="checkbox"/>	<input type="checkbox"/>
3	Services that involve or relate to analyses, feasibility studies, and strategy options to be used by agency personnel in developing policy?	<input type="checkbox"/>	<input type="checkbox"/>
4	Services that involve or relate to the development of regulations?	<input type="checkbox"/>	<input type="checkbox"/>
5	Services that involve or relate to the evaluation of another contractor’s performance?	<input type="checkbox"/>	<input type="checkbox"/>
6	Services in support of acquisition planning?	<input type="checkbox"/>	<input type="checkbox"/>
7	Contractors providing assistance in contract management (such as where the contractor might influence official evaluations of other contractors)?	<input type="checkbox"/>	<input type="checkbox"/>
8	Contractors providing technical evaluation of contract proposals?	<input type="checkbox"/>	<input type="checkbox"/>
9	Contractors providing assistance in the development of statements of work?	<input type="checkbox"/>	<input type="checkbox"/>
10	Contractors providing support in preparing responses to Freedom of Information Act requests?	<input type="checkbox"/>	<input type="checkbox"/>
11	Contractors working in any situation that permits or might permit them to gain access to confidential business information and/or any other sensitive information (other than situations covered by the National Industry Security Program described in 4.402(b))?	<input type="checkbox"/>	<input type="checkbox"/>
12	Contractors providing information regarding agency policies or regulations, such as attending conferences on behalf of an agency, conducting community relations campaigns, or conducting agency training courses?	<input type="checkbox"/>	<input type="checkbox"/>
13	Contractors participating in any situation where it might be assumed that they are agency employees or representatives?	<input type="checkbox"/>	<input type="checkbox"/>
14	Contractors participating as technical advisors to a source selection board or participating as voting or non-voting members of a source evaluation board?	<input type="checkbox"/>	<input type="checkbox"/>

## WORKSHEET B (2 OF 2)

### CLOSELY ASSOCIATED WITH INHERENTLY GOVERNMENTAL FUNCTIONS

Answer "Yes" or "No" to the functions that apply below, based on the work statement and the way the contract is performed.

Closely Associated with Inherently Governmental		YES	NO
	<b>Does the performance involve:</b>		
15	Contractors serving as arbitrators or providing alternative methods of dispute resolution?	<input type="checkbox"/>	<input type="checkbox"/>
16	Contractors constructing building or structures intended to be secure from electronic eavesdropping or other penetration by foreign governments?	<input type="checkbox"/>	<input type="checkbox"/>
17	Contractors providing inspection services?	<input type="checkbox"/>	<input type="checkbox"/>
18	Contractors providing special non-law enforcement, security activities that do not directly involve criminal investigations, such as prisoner detention or transport, and non-military national security details? (The direction and control of confinement facilities in areas of operations, however, is inherently governmental.)	<input type="checkbox"/>	<input type="checkbox"/>
19	Private security contractors in operational environments overseas?	<input type="checkbox"/>	<input type="checkbox"/>
20	Supporting the interrogation of detainees? ( <i>Pursuant to Section 1038 of the National Defense Authorization Act for Fiscal Year 2010, contractor personnel may not interrogate detainees.</i> )	<input type="checkbox"/>	<input type="checkbox"/>
	i) Contractor personnel may be used as linguists, interpreters, report writers, information technology technicians, and may fill other ancillary positions, including trainers of and advisors to interrogators.	<input type="checkbox"/>	<input type="checkbox"/>
	ii) Such personnel are subject to the same rules, procedures, and laws pertaining to detainee operations and interrogations as apply to government personnel, and must be properly overseen by Department of Defense military/civilian personnel.	<input type="checkbox"/>	<input type="checkbox"/>
21	Contractors providing combat and security training?	<input type="checkbox"/>	<input type="checkbox"/>
22	Contract logistics support required for weapon systems that deploy with operational units?	<input type="checkbox"/>	<input type="checkbox"/>
23	Work that is at risk of becoming inherently governmental?	<input type="checkbox"/>	<input type="checkbox"/>

Contracting for closely associated with inherently governmental functions is permissible, but levels of oversight must be employed to maintain the appropriateness of the contract. *If the answer to any of the prior questions, 1-23, is "Yes" and the answer to any of the following question, 24-26, is "No," then the function may not be contracted.*

Oversight of Contracted Functions		YES	NO
24	Is there sufficient organic Government expertise to oversee contractor performance of the contract?	<input type="checkbox"/>	<input type="checkbox"/>
25	Are there sufficient control mechanisms and sufficient numbers of military and civilian employees to ensure that contractors are not performing inherently governmental functions?	<input type="checkbox"/>	<input type="checkbox"/>
26	Is there sufficient COR capability to ensure adequate oversight of contract performance?	<input type="checkbox"/>	<input type="checkbox"/>

*"Closely associated with inherently governmental" is defined in Title 10, United States Code § 2383(b) and FAR 7.503. Additionally, pursuant to 10 U.S.C. § 2463, special consideration must be given to in-sourcing closely associated with inherently governmental functions.*

*On Worksheet H, please document the special consideration you gave to having in-house civilian employees perform the function.*

## WORKSHEET C

### PERSONAL SERVICES

A “personal services” contract is characterized by “the employer-employee relationship it creates between the Government and the contractor’s personnel.” This occurs when contractor personnel are being treated in a manner akin to that of a Government employee. A contract may involve unauthorized personal services either by its written terms *or in the way it is actually performed*. Care should be taken to avoid situations that may lend themselves to the performance of personal services (for example, having contractors on-site can lead to a “blended workforce” where contractors work side-by-side with government personnel and are treated in the same way).

Answering “Yes” to questions 2-9 may indicate a personal service and special scrutiny should be given to contracted functions for which any/all such items have been selected in order to avoid a personal services contract. A “Yes” answer to question 1, however, indicates a personal service and precludes contracting for that function. See Worksheet H for further instructions.

Personal Services		YES	NO
1	The contractor personnel are subject to the relatively continuous supervision and control of a Governmental officer.	<input type="checkbox"/>	<input type="checkbox"/>
2	The contractor personnel are performing on a Government site.	<input type="checkbox"/>	<input type="checkbox"/>
3	The principal tools and equipment are furnished by the Government.	<input type="checkbox"/>	<input type="checkbox"/>
4	The services are applied directly to the integral effort of agencies or an organizational subpart in furtherance of an assigned function or mission.	<input type="checkbox"/>	<input type="checkbox"/>
5	The need for the service provided can reasonably be expected to last beyond one year.	<input type="checkbox"/>	<input type="checkbox"/>
6	The inherent nature of the service, or the manner in which it is provided, reasonably requires (directly or indirectly) Government direction or supervision of contractor employees in order to: adequately protect the Government’s interest; retain control of the function involved; or, retain full personal responsibility for the function supposed in a duly authorized Federal officer or employee.	<input type="checkbox"/>	<input type="checkbox"/>
7	Comparable services meeting comparable needs are performed in this agency or similar agencies using civil-service personnel.	<input type="checkbox"/>	<input type="checkbox"/>
8	The contractor personnel are providing administrative support to Government personnel.	<input type="checkbox"/>	<input type="checkbox"/>
9	Government personnel are giving contractor personnel tasks on an ad hoc basis.	<input type="checkbox"/>	<input type="checkbox"/>

The questions below detail the situations in which a personal services contract is permissible (pursuant to 10 USC § 129b). Answering “Yes” to any of questions 10-14 indicates the statutory exception that allows a personal services contract. Select “N/A” either if you do not have a personal services contract and/or if none of the exceptions apply.

Exceptions: Authorized Personal Services		YES	N/A
10	Experts or consultants where the services cannot be adequately provided by the Department.	<input type="checkbox"/>	<input type="checkbox"/>
11	Direct support of a defense intelligence component or counter-intelligence organization of the DoD where the services are urgent or unique and cannot be practically obtained within the DoD.	<input type="checkbox"/>	<input type="checkbox"/>
12	Direct support of special operations command where the services are urgent or unique and cannot be practically obtained within the DoD.	<input type="checkbox"/>	<input type="checkbox"/>
13	Services provided by individuals outside the United States regardless of their nationality.	<input type="checkbox"/>	<input type="checkbox"/>
14	Carrying out healthcare responsibilities in DoD medical treatment facilities per 10 U.S.C. § 1091.	<input type="checkbox"/>	<input type="checkbox"/>

*Personal services are defined in FAR Part 37.104. A contract involving personal services, either by its written terms or in the way it is actually performed, must be modified, in-sourced, or divested, or the functions must be performed in such a way as to avoid creating an employer-employee relationship.*

## WORKSHEET D

### SPECIAL CONSIDERATIONS

Pursuant to 10 U.S.C. § 2463, special consideration should be given to in-sourcing closely associated with inherently governmental and critical functions. The following items may also be relevant when an agency/organization is considering in-sourcing a function to governmental performance. An answer of either "Yes" or "No" to question 1 does not preclude contracting. However, an explanation of the special consideration given to in-sourcing must be documented on Worksheet H.

Special Considerations		YES	NO
1	Has in-sourcing been considered? Special consideration should be given to civilians in the following situations:	<input type="checkbox"/>	<input type="checkbox"/>
	i) This function has been performed by DoD civilian employees at any time during the previous ten-year period.	<input type="checkbox"/>	<input type="checkbox"/>
	ii) The function is closely associated with the performance of an inherently governmental function (see Worksheet B).	<input type="checkbox"/>	<input type="checkbox"/>
	iii) The function is performed pursuant to a contract awarded on a non-competitive basis.	<input type="checkbox"/>	<input type="checkbox"/>
	iv) The contracting officer has determined that the contract has been performed poorly because of excessive costs or inferior quality.	<input type="checkbox"/>	<input type="checkbox"/>
	v) The function is an acquisition workforce function.	<input type="checkbox"/>	<input type="checkbox"/>
	vi) The function is a critical function (see Worksheet F).	<input type="checkbox"/>	<input type="checkbox"/>

Pursuant to 10 U.S.C. § 2383, the contracting officer for the contract must ensure there are no organizational conflicts of interest for the function at issue. In the event of an organizational conflict of interest, the requiring activity must take steps to remedy the situation: this may mean in-sourcing or divestiture of the function. However, a conflict of interest may be mitigated by utilizing a different contractor (i.e. a conflict of interest does not necessarily preclude contracting entirely, it may only preclude contracting with a specific contractor).

A "No" answer to question 2 precludes contracting until such time as the requiring activity has taken steps to mitigate the conflict of interest.

Organizational Conflict of Interest		YES	NO
2	Has the agency addressed any potential organizational conflict of interest of the contractor in the performance of this function, consistent with FAR Part 9, Subpart 9.5 and the best interests of the DoD?	<input type="checkbox"/>	<input type="checkbox"/>

## WORKSHEET E

### OUT-SOURCING AND CONVERSION OF FUNCTIONS

When contracting for services, care must be taken to ensure that no illegal out-sourcing or improper conversion is taking place. Illegal "out-sourcing" and improper conversion involve shifting work from civilian positions to contract personnel (this can happen even if the civilian position is not encumbered). In environments that involve fiscal uncertainty, declining budgets, or hiring freezes, special vigilance is required to ensure these things do not occur.

Due to congressional moratorium on A-76/ public private competitions, no out-sourcing is currently allowed. If the moratorium on A-76/ public private competitions ends, a competition is required. Work currently being performed by in-house civilian employees or designated for in-house civilian employee performance may not be directly converted to contractor performance. If law and policy is ever changed to allow direct conversions to contract performance, a cost comparison must still be done under DoDI 7041.04 (Estimating and Comparing the Full Costs of Civilian and Active Duty Military Manpower and Contract Support, 3 July 2013), in order to establish which source of labor is the least costly.

A "Yes" response to questions 1-4 below may make contracting this function prohibited and agencies are recommended to discuss the issue with their employment and personnel law advisor and their contract law advisor. A "Yes" answer to either or both of questions 5 and 6 below indicates that contracting is not allowed.

Out-sourcing and Conversion of Functions		YES	NO
1	Will any non-temporary or non-term appropriated fund employee currently performing any functions described in the contract Statement of Work be displaced, reassigned, subjected to a reduction in force, or otherwise adversely affected as a result of the proposed contract action?	<input type="checkbox"/>	<input type="checkbox"/>
2	Is the function proposed for contract performance meeting a requirement previously performed by a particular Army civilian position (or positions) when a program or budget decision eliminated the civilian position (whether that function was formerly documented with an authorization or was undocumented and performed by an overhire)?	<input type="checkbox"/>	<input type="checkbox"/>
3	Is the function proposed for contract performance meeting a requirement previously approved for in-sourcing but that was never encumbered?	<input type="checkbox"/>	<input type="checkbox"/>
4	Will the proposed contract action fundamentally change the nature of the work performed by appropriated fund employees?	<input type="checkbox"/>	<input type="checkbox"/>
5	Is this new contract (or this increase in level of effort on a pre-existing contract) the result of the establishment of numerical goals or budgetary savings targets regarding the civilian workforce?	<input type="checkbox"/>	<input type="checkbox"/>
6	Is this contract, modification, or this increase in level of effort on a pre-existing contract, the result of the imposition of a civilian hiring freeze?	<input type="checkbox"/>	<input type="checkbox"/>

*Title 10, United States Code § 2461 prohibits converting a function performed by at least one appropriated fund government employee to contract performance unless there has been a public-private competition under Office of Management and Budget Circular A-76. There is currently a Congressional moratorium on public-private competitions pursuant to the National Defense Authorization Act for Fiscal Year 2010, Section 325. However, "conversion" of functions does not include the augmenting of civilian staff with contractors unless government employees are displaced, reassigned, subjected to a reduction in force, or otherwise adversely affected. Please note that all in-house civilian authorizations must be filled before we supplement the in-house workforce with contractor labor.*

*(For additional information, please see the Government Accountability Office case John P. Santry B-402827. Agencies are recommended to discuss the issue with their employment and personnel law advisor and their contract law advisor.)*

*If there is an applicable bargaining unit agreement concerning out-sourcing, the provisions of the agreement will prevail and must be adhered to for bargaining unit employees (though such an agreement does not take precedence over Title 10, U.S.C.).*

*Further prohibitions on contracting under certain conditions can be found in 10 U.S.C. § 129a(f).*



## WORKSHEET F CRITICAL FUNCTIONS

A "critical function" is one that involves a function central to an agency's mission or operation. It is permissible to contract for critical functions, but agencies should ensure they have an adequate number of Federal employees that understand the agency's requirements and can monitor contractors supporting the Federal workforce.

Answering "Yes" to questions 1-3 may indicate a critical function.\* If the function is critical, you must be able to answer "yes" to items 4 and 5 in order to contract the function. See additional instructions for documenting your analysis below.

Critical Functions		YES	NO
1	Is the function necessary to the Army being able to effectively perform and maintain control of its core missions and operations and/or to maintain sufficient Government expertise/technical capabilities?	<input type="checkbox"/>	<input type="checkbox"/>
2	Is the function recurring and long-term in duration?	<input type="checkbox"/>	<input type="checkbox"/>
3	Does the performance of the function by a contractor entail operational risk to a core Army mission (for example, if the contractor were to quit or otherwise suddenly be unable to perform their duties)?	<input type="checkbox"/>	<input type="checkbox"/>
4	Does the agency have an adequate number of positions filled with Federal employees with the appropriate training, experience, and expertise to continue critical operations with in-house resources, another contractor, or a combination of the two in the event of contractor default?	<input type="checkbox"/>	<input type="checkbox"/>
5	Does the agency have sufficient capability and internal expertise to oversee and manage any contractors being used to support the Federal workforce, taking into account, among other things the: i) agency's mission; ii) complexity of the function and the need for special skill; iii) current strength of the agency's in-house expertise; iv) current size and capability of the agency's acquisition workforce; and v) effect of contractor default on mission performance	<input type="checkbox"/>	<input type="checkbox"/>

*Pursuant to 10 U.S.C. § 2463(b) and OFPP Policy Letter 11-01, special consideration should be given to in-sourcing "critical functions" to ensure that agencies have sufficient internal capability to maintain control over functions that are central to the agency's missions and operations.*

*In the event that a function is determined to be critical in nature, the preparer should ensure that adequate government oversight will be available, pursuant to OFPP Policy Letter 11-01.*

Please explain in Worksheet H, your organization's analysis in considering in-sourcing this critical function and how you plan to ensure adequate government oversight regarding questions 4 and 5 above.

## WORKSHEET G

### SECURITY, FIREFIGHTING, AND PUBLICITY FUNCTIONS

Security and/or firefighting functions may not be contracted unless they qualify for certain statutory exceptions. If the answer to question 1 is "Yes," then answer the subsequent questions to determine if one of the exceptions is applicable. If there are no applicable exceptions, then the function may not be contracted.

*Title 10, United States Code § 2465(a) prohibits the use of contracts for the performance of security guard or firefighting functions except under certain circumstances (reflected in the exceptions questions above). The prohibition was waived by Section 332 of the National Defense Authorization Act (NDAA) for Fiscal Year (FY) 2003 and then extended through FY12 by Section 343 of the FY08 NDAA. The waiver has expired and is no longer in effect.*

Security and Firefighting Functions		YES	NO
1	Is this contract for the performance of security guard or firefighting functions?	<input type="checkbox"/>	<input type="checkbox"/>
	<i>If the answer to the above question is "Yes," do any of the following exceptions apply?</i>	<input type="checkbox"/>	<input type="checkbox"/>
	a) The contract is to be carried out at a location outside the United States, its commonwealths, territories, possessions, and military installations, at which members of the armed forces would have to be used at the expense of unit readiness.	<input type="checkbox"/>	<input type="checkbox"/>
	b) The contract is to be carried out on a Government-owned but privately-operated installation.	<input type="checkbox"/>	<input type="checkbox"/>
	c) The contract (or renewal of the contract) is for the performance of a function under contract on September 24, 1983.	<input type="checkbox"/>	<input type="checkbox"/>
	d) The contract is for a firefighting function for a period of one year or less and covers only the performance of firefighting functions that, in the absence of the contract, would have to be performed by members of the armed forces who are not readily available to perform such functions by reason of a deployment.	<input type="checkbox"/>	<input type="checkbox"/>

Title 5, U.S.C. § 3107 prohibits the use of appropriated funds to pay for publicity experts unless such funds have been specifically appropriated for that purpose. If the answer to question 2 is "Yes" and the answer to question 2a is "No," then contracting is not allowed.

Publicity Experts		YES	NO
2	Is this a contract for a publicity expert?	<input type="checkbox"/>	<input type="checkbox"/>
	a) If so, were the funds for this contract specifically appropriated for this purpose?	<input type="checkbox"/>	<input type="checkbox"/>

Publicity and propoganda clauses in appropriations law restrict the use of funds for puffery of an agency, purely partisan communications, and covert propoganda. (These restrictions do not apply to OCONUS activities.) If the answer to questions 3a, 3b, 3c, or 4 is "Yes," then contracting is not allowed.

Publicity and Propaganda		YES	NO
3	Does this contract involve advertising and marketing or public relations functions?	<input type="checkbox"/>	<input type="checkbox"/>
	<i>If the answer to the above question is "Yes," does it involve any of the following?</i>	<input type="checkbox"/>	<input type="checkbox"/>
	a) Self-aggrandizement or puffery of the agency, its personnel, or activities;	<input type="checkbox"/>	<input type="checkbox"/>
	b) Any activity that is purely partisan in nature (i.e. an activity that is designed to aid a political party or candidate);	<input type="checkbox"/>	<input type="checkbox"/>
	c) Covert propoganda (i.e. communication that does not reveal that Government appropriations were expended to produce it).	<input type="checkbox"/>	<input type="checkbox"/>
4	Is the statement of work so broadly written that it could be interpreted to condone or encourage any of the activities described in 3a, 3b, or 3c?	<input type="checkbox"/>	<input type="checkbox"/>

**WORKSHEET H**  
**NARRATIVE DESCRIPTION OF WORK AND JUSTIFICATION**

**A. Brief description of the work the contractor will perform:**

[Empty light blue box for response to section A]

**B. For work which is closely associated with inherently governmental functions (Worksheet B), explain: 1) how special consideration was given to using in-house governmental personnel, and 2) how the risk of contractors performing inherently governmental functions will be eliminated.**

[Empty light blue box for response to section B]

**C. For work with personal services indicators ("yes" answers to any of items 1 through 9 on Worksheet C), please explain how the contract will be administered and performed in a way that does not constitute a personal service.**

[Empty light blue box for response to section C]

**D. For work which is a Critical Function (Worksheet F) describe: 1.) steps the requiring activity will take to maintain internal control over missions and operations considering the factors outlined on Worksheet F and 2.) explain how special consideration was given to using in-house civilian personnel.**

[Empty light blue box for response to section D]

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## Abbreviations

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AC	active component
AFCS	Air Force Corporate Structure
AFMAA	Air Force Manpower Analysis Agency
AF/RE	Chief of Air Force Reserve
AR	Army Regulation
BSO	Budget Submitting Office
CAPE	Cost Assessment and Program Evaluation Office
CBA	capabilities-based assessment
CD&I	Combat Development and Integration
CDD	Capabilities Development Directorate
CFL	Core Function Lead
CFTE	contractor full-time equivalent
CJCS	Chairman of the Joint Chiefs of Staff
CMAT	Command Manpower Analysis Team
COCOM	combatant command
COMPACFLT	Commander, Pacific Fleet
DAFAs	defense agencies and field activities
DCMA	Defense Contract Management Agency
DCPDS	Defense Civilian Personnel Data System
DISA	Defense Information Agency
DOD	Department of Defense
DODI	Department of Defense Instruction
DON	Department of the Navy
DOTMLPF-P	Doctrine, Organization, Training, Materiel, Leadership, Personnel, Facilities, and Policy
ECMRA	Enterprise-wide Contractor Manpower Reporting Application
FDU	force design update
FIFA	force integration functional area
FMD	Fleet Manpower Document
FMRD	fleet manpower requirements determination
FMTS	Fourth Estate Manpower Tracking System
FTE	full-time equivalent
GF	generating force
HASC	House Armed Services Committee
IA	individuals account
IAMRD	Individuals Account Manpower Requirements Determination
ICS	Inventory of Contracted Services
IGCA	Inherently Governmental and Commercial Activities

JMMAT	Joint Mission and Manpower Assessment Team
JMP	Joint Manpower Program
LCOM	Logistics Composite Model
MAF	man-hour availability factor
MAJCOM	major command
MARC	manpower analysis requirements criteria
MARFOR	Marine Forces
MCEIP	Marine Corps Enterprise Integration Plan
MCO	Marine Corps Order
MCTL	Marine Corps Task List
MEF	Marine Expeditionary Force
MET	mission-essential task
METL	Mission-Essential Task List
MFT	mission, function, and task
MM	manpower management
MPES	Manpower Programming and Execution System
MPTA	Manpower Personnel Training Assessment
MRD	manpower requirements determination
MRS	Manpower Requirements Squadron
MRW	Manpower Requirements Worksheet
M/TOE	table of organization and equipment
NAVMAC	Navy Manpower Analysis Center
NDAA	National Defense Authorization Act
NGB/CF	Director of the Air National Guard
NNMRD	Non-Navy Manpower Requirements Determination
OCMO	Office of the Chief Management Officer
OFPP	Office of Federal Procurement Policy
Ops Depts	Operations Deputies
OSD	Office of the Secretary of Defense
POM	Program Objective Memorandum
PPBES	Planning, Programming, Budgeting, and Execution System
PBIS	Program Budget Information System
RC	reserve component
ROC/POE	Required Operational Capability/Project Operational Environment
RS	resource sponsor
SAF/FM	Assistant Secretary of the Air Force for Financial Management and Comptroller
SAF/MR	Assistant Secretary of the Air Force for Manpower and Reserve Affairs
SAMAS	Structure and Manpower Allocation System
SEAOPDET	Sea Operational Detachment
SMD	Ship Manpower Document
SME	subject matter expert
SPPBE	Strategy, Programming, Planning, Budgeting, and Execution

SQMD	Squadron Manpower Documents
SSF	sea-shore flow
TDA	Table of Distribution and Allowances
TF	total force
TFM&RS	Total Force Manpower and Resources Directorate
TFMMS	Total Force Manpower Management System
TFSD	Total Force Structure Division
TFSP	Total Force Structure Process
TOE	table of organization and equipment
TPPH	transients, patients, prisoners, and holdees
TYCOM	Type Commander
UMD	Unit Manning Document
USAMAA	US Army Manpower Analysis Agency
USECAF	Under Secretary of the Air Force
USFFC	United States Fleet Forces Command
U.S.C.	United States Code
VCSAF	Vice Chief of Staff of the Air Force
YOS	years of service



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