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Civilian Workforce Planning in the Department of Defense

Different Levels, Different Roles

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Prepared for the Office of the Secretary of Defense

Approved for public release; distribution unlimited



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The research described in this report was prepared for the Office of the Secretary of Defense (OSD). The research was conducted in the RAND National Defense Research Institute, a federally funded research and development center sponsored by the OSD, the Joint Staff, the Unified Combatant Commands, the Department of the Navy, the Marine Corps, the defense agencies, and the defense Intelligence Community under Contract DASW01-01-C-0004.

Library of Congress Cataloging-in-Publication Data

Gates, Susan M., 1968–

Civilian workforce planning in the Department of Defense : different levels, different roles / Susan M. Gates, Christine Eibner, Edward G Keating.

p. cm.
"MG-449."

Includes bibliographical references.

ISBN 0-8330-3901-6 (pbk. : alk. paper)

1. Manpower planning—United States. 2. United States—Armed Forces—Civilian employees. 3. United States. Dept. of Defense—Personnel management. I. Eibner, Christine. II. Keating, Edward G. (Edward Geoffrey), 1965– III. Title.

UB193.G375 2006
355.6'190973—dc22

2006008446

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Published 2006 by the RAND Corporation

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Summary

In response to more than a decade of downsizing and restructuring, the Department of Defense (DoD) is engaged in a human-resources strategic planning effort to address resulting imbalances in both skills and experience levels in many parts of DoD. The current human-resources strategic plan addresses the need to provide management systems and tools to support total workforce planning and informed decisionmaking (U.S. Department of Defense, 2003b). Attention to Department-wide civilian workforce planning stems in part from the President's Management Agenda of 2001 and the continuing assessments of Department-level progress on workforce planning. DoD civilian workforce-planning efforts are complicated and, at the same time, made more important by the implementation of the National Security Personnel System (NSPS), slated to begin in 2006. The NSPS will replace the traditional federal civil service personnel management system within DoD, providing DoD managers with more management flexibility.

To support Department-wide efforts, the DoD asked the RAND Corporation to explore how workforce planning and requirements determination are accomplished at specific installations, to identify potential roles for the Office of the Secretary of Defense (OSD) in the planning process, and to identify potential data sources for Department-wide workforce planning.

Objective

The primary aim of this study is to consider DoD civilian workforce planning from a Department-wide perspective. We do so by taking a close look at local (installation-level) workforce-planning efforts, assessing the challenges that such efforts face, and considering the ways in which a Department-wide perspective might support or enhance local activities. The objectives of this research are to

- describe the workforce-planning process, including the sources of data and methods used for workforce planning, at individual military bases
- identify challenges to workforce planning at these sites
- consider the options for DoD-wide workforce-planning efforts or OSD-level support for local efforts.

In the process of examining installation-level efforts, we learned about workforce-planning efforts at the service, agency (e.g., the Defense Logistics Agency, the Defense Finance and Accounting Service), and command levels.

Although we do not provide a comprehensive or systematic look at such higher-level efforts across DoD, we do report information on such efforts that relates to our six sites.

Approach

In addressing the objective of this project, we applied a bottom-up research approach. The centerpiece of our research effort was site visits at installations to gather information on local workforce-planning efforts. Data collection at the sites was informed by a simple, generic workforce-planning model. This model has four basic steps:

- Step 1 is to forecast demand—i.e., to estimate the staffing levels and competencies required in the future workforce. The term

workforce requirements is often used to describe the output of the demand forecast. These *requirements* reflect the required number of positions and characteristics that the workers who fill those positions must have in order for the organization to meet its strategic intent.

- Step 2 (which may be performed in tandem with Step 1) is to project workforce supply. This step involves projecting current staffing levels and competency profiles into the future, based on current trends in hiring, attrition, and retention.
- Step 3 brings together the results of Steps 1 and 2 to identify any gaps between supply and demand.
- Step 4 is to develop strategies that address the key gaps.

This conceptual framework provides the structure for our research activities.

In our research, we conducted case studies at six purposefully selected DoD installations. The six sites we visited were Dahlgren Naval Surface Warfare Center, Virginia; Tinker Air Force Base, Oklahoma; the Defense Supply Center in Philadelphia (DSCP); Patuxent River Naval Air Warfare Center, Maryland; Norfolk Naval Shipyard (NNSY), Virginia; and Fort Lewis, Washington. We selected these six sites for in-depth analysis and to visit a variety of installations with different organizational missions and workforce characteristics. The sites were drawn from a variety of services/agencies, including the Army, Navy, Air Force, and Defense Logistics Agency (DLA). The sites were diverse in the age distribution and occupational characteristics represented in the civilian workforce. Finally, the sites were geographically diverse, located in the Northwest, Midwest, South, and Northeast.

The final sample reflects our best efforts to achieve a diverse sample according to the characteristics just discussed. Ultimately, we were limited by the willingness of installations to host a time-intensive site visit. One limitation of our final sample is that a disproportionate number of the sites were Navy installations. We document the workforce-planning activities at these installations and

review data sources that could potentially support DoD-wide workforce-planning efforts.

Findings

Although workforce-planning and requirements-determination processes are in place to varying degrees at DoD installations, DoD currently lacks a Department-wide process for the civilian workforce. However, DoD does possess a set of resources that would provide a starting point for the development of a DoD-wide workforce-planning role.

Workforce Planning in DoD Is More Complicated Than the Basic Workforce-Planning Framework Would Suggest

Our site visits indicate that a wide variety of workforce-planning approaches is currently practiced in DoD. All installations engage in some form of supply analysis, using personnel data from the Defense Civilian Personnel Data System (DCPDS). Many commands, services, and agencies take an organizationwide look at workforce supply as well. The main limitation of existing data is a lack of information on competencies and skills.

Demand analysis and gaps analysis are significantly more challenging for DoD installations than the basic workforce-planning framework would suggest. First, nearly all installations reported some difficulty in estimating customer demand. Installations also vary in their ability to translate customer demand into estimates of the required workforce. We also discovered that customer demand is not the only factor that managers must consider in assessing workforce demand. In the DoD, local managers face constraints on the total number of civilian work years they are allowed, as well as the total wage bill for civilian personnel. These additional constraints complicate gaps analysis, because local managers must be conscious of at least two gaps: that between the required (the estimated workforce needed or required to accomplish the organization's goals) workforce and the workforce supply, and that between the budgeted (the

workforce that can be supported with resources that have been budgeted for civilian personnel in that organization) workforce and the workforce supply. Gaps that are identified may vary in urgency and expected duration. Some gaps are immediate, whereas others will not emerge for many years into the future. Both immediate and distant gaps can be temporary or long-term.

DoD installations have a wide range of strategies for addressing gaps. Some strategies are more useful for addressing the difference between the required workforce and supply rather than the gap between supply and the budgeted workforce. Similarly, some strategies are more useful for immediate gaps and some are more useful for long-term gaps. The strategies for addressing gaps feed back into future supply-and-demand analysis, either directly or, indirectly, through the budgeting process and the production-planning process.

DCPDS Data Provide a Rich Starting Point for Supply Analysis at All Levels

DCPDS data, and the Civilian Personnel Master Files that the Defense Manpower Data Center (DMDC) compiles based on these data, provide information for supply analysis that can be used at all organizational levels. Specifically, this information could support DoD-wide supply analysis. DCPDS records an abundance of demographic and job-related information on all DoD civilian employees, including data on occupation, career history, wage grade, base location, and years of service.

Yet, although the DCPDS data have many advantages, they are also limited because reporting of specific fields is not consistent across DoD and because reporting of information on skills and competencies is limited.

Approaches to Demand Analysis Are More Varied and Sources of Data Are Limited

Demand analysis involves two important types of data: projections of customer demand and data that allow that demand to be translated into workforce requirements. The DCPDS data are a source of DoD-wide information that can be used for supply analysis; however, we

found no DoD-wide data sources that are available for demand analysis. Few organizations appear to have concrete customer-demand projections that are translated into workforce demand. Even when customer-demand data are available, inherent variability in customer demand can get in the way of workforce planning. Data systems can raise an organization's awareness of changes in customer demand, but they may not help the organization respond to such changes.

We reviewed two potential sources of information for Department-wide demand analysis, Manpower Estimates Reports (MERs) and Most Efficient Organization (MEO) reports, and found each lacking comprehensive data on customer demand and workforce requirements for the DoD.

Program managers of major acquisition programs are required to submit MERs, indicating the personnel needs that will exist over the life of the program. The guidelines for developing the MER are consistent with the process for demand analysis: The general "customer," or program, demands are articulated, and those demands are translated into estimates of military, civilian, and contractor workforce requirements. Although this process sounds useful in theory, the MER guidelines require the reporting of workforce requirements only at an aggregate level and do not lead to the generation of detailed and consistent reports of civilian manpower requirements by grade level, occupation, or skill level. As a result, no database on civilian workforce requirements results from the MER process. Even if there were, it would be of limited usefulness for a Department-wide requirements-determination process, because it would cover only personnel who work on the acquisition programs that are required to submit MERs.

Another process that generates information on customer demand and workforce requirements is the development of MEOs that occurs as part of an A-76 cost comparison. *A-76* refers to the Office of Management and Budget circular that specifies the procedures that the federal government must follow when it competitively sources a function that is currently being provided by civil service or military employees.

As part of the A-76 process, an organizational unit must develop a Performance Work Statement (PWS), specifying the work that needs to be accomplished without articulating how that work should be performed. Managers must then consider the specifications of the PWS and develop a detailed workforce plan—called the Most Efficient Organization—for accomplishing that work with the in-house workforce. In theory, these reports could feed into data systems that record information on customer demand and on the workforce used to meet such demand. As with the MERs, MEOs do not cover the entire civilian workforce, only the workforce required to perform specific functions that the DoD seeks to competitively source. However, they are focused on activities that are currently performed by DoD civilians, rather than by military personnel or contractors.

The process of translating estimates of customer demand into specific workforce requirements involves the application of historical data to validated formulas or relationships. Data on customer projections are not available for all activities. Even when they are available—for example, in the shipyards—they are often subject to change. Similarly, validated formulas that relate customer demand to workforce requirements exist for only a small number of activities with stable demand and relatively clear methods for accomplishing the task.

Gaps Analyses and Policy Responses Depend on the Level at Which Workforce Planning Occurs

A primary reason for conducting demand-and-supply analysis is to enable an organization to perform gap analysis. The gap analysis should lead to action on the part of the organization to eliminate those gaps. A finding that arose from our analysis is that gaps that are identified and the tactics to address those workforce gaps are influenced by the level at which workforce planning occurs. Such efforts are undertaken at local installations and at the command, service, and agency levels. Efforts to address gaps at the DoD-wide level are currently limited to specific occupations or specific functional areas.

It Is Important to Weigh the Costs and Benefits of Additional Data Collection

A lack of data, both on the skills and competencies of the workforce and on customer demand, limits workforce planning at several of the installations we visited. Additional data collection would be required to support DoD-wide demand analysis, and gap analysis in particular. However, one of the lessons that we learned from our site visits is that data collection is costly; the costs may sometimes outweigh the benefits.

The value of additional data collection may also vary by occupation. It may be less costly to develop skills codes and labor standards for highly structured, frequently repeated tasks, such as those performed at Navy shipyards and Air Force and Army depots. In contrast, the costs associated with developing skills codes and labor standards for occupations in which tasks are more likely to be organization-specific, such as research-and-development tasks, may outweigh the benefits. It may also be difficult to develop skills codes and labor standards for high-tech occupations, since job requirements in these fields change very quickly as technology advances.

Recommendations

In crafting policy recommendations for OSD, we considered two important questions. First, what needs would DoD-wide workforce planning serve in what contexts? Second, how might OSD add value to the workforce-planning process by supporting local and agency-wide efforts?

Certain Occupations or Geographic Regions Might Benefit from a Department-Wide Workforce-Planning Perspective

The organizational level at which workforce planning should be conducted depends on many factors, including the size of an occupation or workforce and the distribution of that occupation or workforce across DoD. In most cases, workforce planning should be left to local installations or other organizational units, such as commands, agen-

cies, or functional sponsors, which may be more attuned to their specific personnel requirements than OSD. Yet, OSD can play a supportive role by helping to identify the need for coordinated efforts across installations or occupations within DoD.

To identify potential candidates for DoD-wide coordination, we conducted an analysis of Functional Occupational Groups. *Functional Occupational Groups* are occupation-based categories used to aggregate the workforce into groups based on the type of function a worker performs and/or the occupation of which s/he is part. Each worker is assigned to one of 38 occupation categories in the DMDC database. Examples are Metal Workers, Engineers, and Central Management. Our analysis distinguishes among Functional Occupational Groups that (1) are highly concentrated in one bureau, (2) are concentrated in two or three bureaus, and (3) are fairly broadly dispersed across DoD. For Functional Occupational Groups that are highly concentrated in one or two bureaus, such as Medical Attendants, it would not likely make sense to engage in Department-wide workforce planning. However, OSD may want to encourage the organization that is the primary employer to take the lead in workforce planning-related activities, including the development of workforce-competency definitions and data-gathering efforts. OSD could support outreach efforts or communication between the lead bureau and other bureaus. For functional occupations whose workforces are dispersed fairly broadly throughout DoD—such as support and management activities, including personnel management, fire and police, data systems management, and secretarial—it might make sense for OSD to take the lead in workforce planning, if OSD concludes that there would be some benefit to DoD-wide coordination of workforce planning in these areas. DoD-wide coordination might also make sense in certain geographic areas, such as Washington, D.C., where more than one service or agency employs civilians.

Because the benefits of DoD-wide workforce planning may be greatest where there are possible benefits to be reaped by moving individuals across locations to address workforce gaps, OSD might focus attention initially on areas for which the workforce requires a

relatively high degree of specialized training and where the workforce is not primarily local. Examples of such areas are human resources professionals, financial clerks, and medical attendants.

OSD Could Help Improve Existing Data Systems and Their Use

There are several ways that OSD could improve current DoD-wide data-collection efforts without imposing unduly high costs on the services and/or agencies. First, OSD could advocate broader use of existing fields, such as skills codes, in the DCPDS, without necessarily requiring that managers report this information. OSD could also require more-frequent updating of the DCPDS education field to ensure that this information accurately reflects the current state of the workforce.

OSD Could Promote the Collection of Requirements Data

Our research reveals that managers rely on a wide variety of data sources for demand analysis, that the level of detail available varies dramatically by location, and that there is no DoD-wide source of information on requirements. If OSD wanted to support the collection of better and more-consistent information on workforce requirements and have greater visibility over Department-wide workforce demand, the information in the Performance Work Statements and Most Efficient Organization studies, collected as part of A-76 cost-comparison studies, could serve as a starting point. These studies require an articulation of customer demand in the Performance Work Statement and a projection of the workforce required to perform the work in the MEO. The MEO must also discuss any gaps between supply and demand. The MEO template could be applied, even to activities that are not under consideration for competitive sourcing. However, these studies are costly to conduct and OSD must weigh the costs and benefits.

OSD Could Work to Make the Gaps-Analysis Process Meaningful

Our research highlights the fact that local DoD managers face a workforce-planning process that is substantially more complicated than the simple workforce-planning model would suggest. Local

managers must consider both the gap between workforce demand and workforce supply and the gap between workforce supply and the workforce that can be supported with budgeted resources. If DoD wants managers to take requirements determination seriously, it must devise a way to eliminate the distinction between required and budgeted resources. It is possible that better DoD-wide data on workforce requirements could support this aim.

Better Integration of Strategic Workforce Planning and Budget Processes Is Needed

Our study highlights the fact that the program objective memorandum (POM) process, and the budget process more generally, place substantial constraints on the ability of local managers to engage in effective strategic workforce planning—particularly when unexpected changes in demand require quick adaptation of the workforce. The development of an objective methodology for quantifying the relationship between mission and workforce requirements, coupled with a commitment to fully funding any mission, could facilitate a stronger link between the budget and workforce-planning processes. In addition, OSD (P&R) could work to promote a closer link between funding decisions and strategic workforce-planning processes. A study of how strategic personnel management is integrated (or not) into the POM process could yield some important insights into this issue.

These recommendations emphasize OSD's most likely roles in supporting and facilitating an activity that is primarily a local effort, and creating an environment in which workforce planning can be successful.