

## **Statement from Dr. Julie A. Lockwood, Director of Modernization, Institute for Defense Analyses**

Chairman Reed, Ranking Member Wicker, and fellow distinguished Members of the Senate Armed Services Committee, I am honored to contribute to today's important discussion on appropriately and efficiently staffing the nation's defense civilian workforce. My perspectives are informed by my own research, that of fellow economists, and the work of numerous talented human capital researchers at the Institute for Defense Analyses and at other Federally Funded Research and Development Centers supporting the Department of Defense and the military Services. The views expressed in this testimony are my own and do not necessarily reflect those of IDA or its research sponsors.

To succeed in its mission to defend the United States (U.S.), the Department of Defense (DOD) and its partners in the defense industrial base must maintain skilled, capable, and adequately staffed workforces. Several societal and economic trends have converged in recent decades to produce a competitive—and increasingly globalized—labor market. In a number of important respects, DOD and its industry partners are not well-positioned to compete effectively for the high-demand talent that our national security necessitates. In this submission, I briefly enumerate some of these trends, review a selection of current features of DOD labor force management, and offer policy choices that might address some of the challenges raised for the DOD's wage grade and the General Schedule workforces.

### Suggested policy action areas:

1. Reduce time to hire
2. Set competitive wages
3. Reward performance and effectively manage underperformance
4. Establish conditions conducive to efficient workforce mix decisions

### Labor market trends

Despite the considerable size of DOD and our defense-related industries, DOD is not a market-maker. DOD and the private sector both compete for talent and must evolve to match market realities. At present, there is significant excess demand for labor in the U.S., with 9.5 million open positions competing for just 6.5 million job seekers.<sup>1</sup> The last 30 years have witnessed significant and accelerating changes in the American workforce and economy, impacting workers' choices in the labor market. Some U.S. workforce trends can benefit DOD, while others present challenges that require action.

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<sup>1</sup> "Understanding America's Labor Shortage," US Chamber of Commerce, February 2024.  
<https://www.uschamber.com/workforce/understanding-americas-labor-shortage>

**Job market polarization by skill:** Many economists have noted a hollowing out of the labor market at the center of the skilled labor distribution.<sup>2</sup> Automation, technological advances, and offshoring have led to high rates of job growth for workers at the highest and at the lowest levels of the skill distribution, and to a significant decline in opportunities for those in the middle of the skill distribution. Typical mid-skill industries observing a reduction in employment share include construction, manufacturing, and mid-level administration. Low-skill service sector employment and high-skill professional employment have driven much of the job growth observed over the last three decades in the U.S. The recent burst of innovation in AI Large Language Models is likely to continue the technology-driven reshaping of work across the skill dimension in the coming years. DOD and its industry partners can benefit by attracting the relative surplus of mid-skill workers to roles in DOD and the defense industrial base, including some who will be displaced by AI advances.

**An aging workforce:** According to employment projections produced by the U.S. Bureau of Labor Statistics (BLS), 14.3% of the American workforce was aged 55 and older in 2002, climbing to 20.9% in 2012 and 23.3% in 2022. BLS projects the share of older workers to surpass 24% by 2032.<sup>3</sup> Individuals are also retiring later. While retention of experienced personnel is a major benefit to the DOD, it must prepare for coming waves of retirements. Intentional succession planning, even for mid-grade positions, would significantly benefit continuity of operations and institutional knowledge preservation.

**Gig economy provides flexible options:** Increasingly, workers—even those who are highly skilled—enjoy many options for extremely flexible, short-term “gig” employment. This reduces the attraction of traditional employment and reduces costs of prolonged part-time training or school attendance. Moreover, it gives DOD and its industry partners opportunities to attract workers seeking flexibility.

**Varied careers:** While commonplace in decades past, today’s workers do not often remain with a single employer or even within a single industry for the duration of their careers. This contrasts sharply with traditional federal employment typified by long tenures and vesting pension arrangements. Expanding offerings of portable benefits (such as increasing TSP benefits) and accommodating more variety in career paths would better align DOD and the defense industrial base with civilian employers.

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<sup>2</sup> A seminal paper in this literature is Autor and Dorn (2013), “The Growth of Low Skill Service Jobs and the Polarization of the U.S. Labor Market.” *American Economic Review* 103(5): 1553–1597.  
<http://www.nber.org/papers/w15150>

<sup>3</sup> See <https://www.bls.gov/emp/tables/civilian-labor-force-summary.htm>

**Housing costs, shortages, and decelerating geographic mobility:** High home prices, high mortgage interest rates, and a shortage of affordable housing impede the geographic mobility of workers and slow the rate of household formation among young Americans. Curtailed geographic mobility disrupts the efficient flow of workers to high-demand areas, thus driving up employment costs.

**Remote work:** The move to remote work arising from the COVID-19 pandemic has further shifted labor market power to workers, and has induced migration out of costly metropolitan areas. This trend has disproportionately benefited the white-collar workforce, which matters for DOD and industry middle management and to Science, Technology, Engineering, and Mathematics (STEM) employment. While some rebalancing will occur, remote work is here to stay.

**Deceleration in college achievement among young men:** Bachelor's degree completion by young men has fallen behind that of their female counterparts. Young men differentially cite lack of interest in studies and availability of employment that does not require college as reasons for not completing a degree.<sup>4</sup> DOD and its industry partners can benefit from this trend by ensuring that educational requirements for its tradesmen and wage-grade roles are appropriately set and by partnering more closely with trade schools and community colleges to create training-to-work pipelines.

**Increasing competition for STEM graduates:** Rapid technological progress in AI and other fields has markedly increased competition for professionals with advanced STEM credentials. Further exacerbating the labor market pressures faced by DOD, the majority of U.S. STEM graduates in key fields—such as engineering and computer and information sciences—are not U.S. Citizens.<sup>5</sup> Current education-to-hire pipeline programs have shown recruiting success, but DOD risks alienating high-demand U.S. Citizen STEM professionals through outmoded hiring practices, uncompetitive pay, deteriorating the work content, and overly-bureaucratic working environments. Greater coordination among programs could improve outcomes and allow for optimization of these important hiring mechanisms.

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<sup>4</sup> For example, see “What’s behind the growing gap between men and women in college completion?” Pew Research Center, November 2021. <https://www.pewresearch.org/short-reads/2021/11/08/whats-behind-the-growing-gap-between-men-and-women-in-college-completion/>

<sup>5</sup> “STEM Jobs See Uneven Progress in Increasing Gender, Racial and Ethnic Diversity,” Pew Research Center, April 2021. [https://www.pewresearch.org/science/wp-content/uploads/sites/16/2021/03/PS\\_2021.04.01\\_diversity-in-STEM\\_REPORT.pdf](https://www.pewresearch.org/science/wp-content/uploads/sites/16/2021/03/PS_2021.04.01_diversity-in-STEM_REPORT.pdf)

## Policy Options to Enable DOD and Defense Industry Competition for Talent

### 1. Reduce time to hire and other structural barriers

To be an attractive employer, DOD must select and onboard employees more rapidly. Applicant wait times of three months to a year are commonplace. While long timelines discourage all applicants, delays particularly impede hiring the youthful talent the DOD urgently needs. New entrants fresh out of school, many with loans looming, often cannot afford to forgo months of wages while awaiting a hiring decision or the results of a lengthy security clearance investigation.

Hiring organizations must also endure long waiting periods, often with gapped positions and attendant inefficiencies. Requiring that an incumbent leave prior to posting a vacancy guarantees delays in hiring actions after a retirement and hampers succession planning. Gapped positions transfer workload onto remaining staff or create a backlog of work awaiting the unlucky hire. Either scenario damages morale.

Civilians are hired into the DOD using one of two methods: through competitive hiring authority administered by OPM (the standard method); or through direct hiring authority (DHA) which bypasses certain OPM procedures on ratings, assessments, certifications, and veteran's preference. Managers within DOD describe the competitive hiring authority as a "clunky, bureaucratic, and ineffective hiring tool that makes it difficult for the Department to compete for talent."<sup>6</sup> Communications gaps between OPM and the hiring agency and stale hiring documents cause delays and ineffective candidate searches. Position descriptions maintained by OPM are frequently outdated or not well-crafted to the specific hiring need, particularly in STEM fields. OPM's filtering of applicants against outmoded position descriptions or lack of context for how the hiring organization values different training, credentials, and work experiences cause problems in identifying individuals who would be a good fit. DHA helps, and should be expanded to empower more hiring at the local level. OPM process reforms are also needed.

Equally troubling is a general lack of strategic planning around what civilian hires are needed, with one recent study concluding that "requirements are almost always structured around the existing workforce rather than around a strategic analysis of the work that needs to be done and how it could best be performed."<sup>7</sup> DOD should aggregate and review staffing requirements annually to set strategic civilian hiring objectives, including a high-level assessment of the needed skills, desired experience profile, and

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<sup>6</sup> "Optimization of DOD Civilian Hiring Processes through the use of Cohort Hiring," Institute for Defense Analyses, November 2022.

<sup>7</sup> "Accessing Critical Skills in the Department of Defense," Institute for Defense Analyses, November 2022.

expected turnover. Requirements should be reviewed at a mission-responsible level to ensure that trends can be systematically addressed, and to help focus a coordinated recruiting message to potential hires. The Defense Civilian Training Corps program might pilot such planning. Timely metrics and training on workforce mix management should be provided to those setting organizational hiring objectives.

The health of DOD's STEM workforce—approximately 150,000 strong—is particularly important to DOD's mission success. DOD offers many opportunities for internships, co-ops, and post-doctoral positions.<sup>8</sup> Such education-to-career engagement strategies have proven successful in attracting talented individuals in high-demand STEM fields to roles in DOD and its supporting Labs.<sup>9</sup> Such programs should be expanded, with expedited hiring authorities for applicants who have been vetted through program participation. Hiring programs should coordinate to share best practices and improve planning.

Finally, improving the visibility of open positions across hiring organizations and geographic locations can benefit each of DOD's workforces. Greater visibility can help us retain talent when employees need or want to move jobs or cities. At present, delays in posting positions combined with siloed information about hiring objectives stymies the mobility of talent across the enterprise. These measures would help DOD to retain the individuals it has invested in by facilitating transfers to new roles.

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#### **SUGGESTED ACTIONS TO IMPROVE HIRING OUTCOMES:**

**Form a civilian hiring strategy** to identify key skills, roles, and shortfalls. Develop a related hiring plan and establish metrics. Review consolidated hiring plans for adherence to the strategy.

Provide **metrics and training** to those setting organizational hiring objectives.

**Empower local managers** to drive the hiring decision and cut red tape.

Adopt a **cohort hiring approach** based on best practices and empowered to target critical skills and leadership abilities.

Ensure that **job descriptions and postings are up-to-date** and meet hiring organization needs.

**Allow positions to be posted for known future gaps** in advance of the incumbent vacating the role.

**Improve the visibility of open positions and hiring objectives** across hiring organizations and geographic locations to facilitate retention of individuals desiring a move or new role.

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<sup>8</sup> Example programs within DOD include SMART, the Naval Research Enterprise Internship Program, the Army Educational Outreach Program Internships, and the Air Force's Premier College Internship Program.

<sup>9</sup> "Understanding STEM Education Opportunities to Build the Future Workforce," Institute for Defense Analyses, August 2023.

## 2. Set competitive wages

DOD's wage-grade, General Schedule (GS), and private sector workforces are critical to accomplishing key defense activities, freeing Service members to complete military-essential tasks. Pay must be competitive to attract and retain talented civilians. While the Davis-Bacon Act of 1931 protects the wages of federal contractors, federal employees' wages are not always comparable to market rates.

### Reform the Federal Wage System to offer competitive wages

The Federal Wage System (FWS)—which sets compensation levels for nearly 200,000 hourly federal workers within the DOD and other federal agencies—is a relic of 1970s-era statistical techniques applied to data collected through an unrepresentative survey and circumvented by pay caps and floors.

Congress has the ability to drive wage-grade reform for the entire federal hourly workforce by modernizing this DOD-administered wage setting apparatus.

At present, the FWS groups all wage-grade occupations into grades. Federal hourly workers at each equidistant Step within a Grade receive the same rate of pay. Challenges in this pay system include:

- Pay rates set using the FWS structure are overridden by statutes, including application of the GS locality increase beginning in FY04 and subsequent pay caps beginning in FY11. Actual pay rates are frequently out-of-sync with local wages.
- The OPM classification of occupations into Grades—based on relative wages in 1970—bears little relation to today's labor market. Some occupations within a Grade and Step are overpaid relative to their current-day market wage, while other occupations are underpaid.
- Prevailing wage surveys underlying FWS calculations are unrepresentative and redundant to existing government surveys conducted by the Bureau of Labor Statistics (BLS).
- The calculation of FWS wages does not consider the market for the target occupation outside of a narrow geographic locality. As an example, DOD will not attract or retain adequate skilled labor in our shipyards if the relevant local wage is lower than the trade's national average.

### Reform the General Schedule methodology to offer competitive salaries

While DOD's GS pay rates are in principle flexible to market conditions, pay is not competitive in all geographies and across all roles. Misalignments between DOD and private sector salaries can occur when the skills required in a role are not well understood by those grading positions, and when salaries for particular role-by-geographic area combinations do not align with trends.

As an example, Defense Health Agency has **struggled to hire in some areas due to misaligned wages**. Mid-skill medical technicians (GS-3 to GS-5) and some physicians are particularly difficult to recruit and retain at present wages in certain locations. Some have noted that the Department of Veterans Affairs has authority under Title 38 to pay providers more and may be competing with DOD for medical talent.

As in the case of the wage grade workforce, grouping GS occupations into grades and applying locality pay to account for geographic variations in living costs introduces inefficiencies. Setting salaries directly within occupation-by-geography bins to match prevailing civilian wages would be a more efficient and effective salary-setting methodology. This approach would account for local variations in demand for specific professions that impact salaries for some professions but not for others. If setting GS salaries directly at the occupation-by-geography level is not a feasible option, then DOD should consider studying pay differentials to identify specific areas of disconnect between private sector and DOD salaries.

Finally, while pay freezes appear to be a simple and expedient cost-cutting measure, freezing pay distorts the natural market-driven variation in wages across professions, reduces DOD's competitiveness as an employer, and subjects the workforce to undesirable non-market dynamics.

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#### **SUGGESTED ACTIONS TO IMPROVE FWS WAGE AND GS SALARY SETTING:**

**Determine FWS wages and GS salaries at the Occupation-by-Geography level (not by Grade category)** with meaningful Step increases for superior performance and seniority.

Remove artificial caps and floors; **set wages annually based on current labor market conditions**.

**Stop conducting unrepresentative prevailing wage surveys** for all occupations that have a civilian counterpart; instead utilize the copious occupation-specific wage data already compiled by the BLS.

**Reassign excess staff currently devoted to FWS pay calculations** to readiness-enhancing activities.

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### **3. Reward performance, manage underperformance**

Like all people, DOD and defense industry employees respond to the incentive structures around them. Because DOD wants superior performance from its workforce, it must align the environment in which employees at all levels invest their personal effort, manage their careers, make choices impacting DOD operations, and ultimately excel.

If pay for high performers equals that of lackluster contributors, the most productive employees will become discouraged and may eventually seek higher pays in the private sector. Pay signals esteem.

Some supervisors have reported feeling constrained in the effective management of federal civilians. Examples given include a perceived inability to ask civilians to work long hours, a perceived inability to effectively manage underperformance, and a fear of career-damaging retaliatory complaints. Both uniformed and civilian supervisors need effective and efficient mechanisms for managing employee performance that do not open managers to spurious complaints. Instead, today's underperformers are often passed along to supervisors in other employment areas. It should not take years of administrative effort to remove someone who is not adequately contributing to the mission and who does not improve with reasonable training investments.

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#### **SUGGESTED ACTIONS TO INCENTIVIZE SUPERIOR PERFORMANCE:**

**Recognize superior performers** with higher pays and bonuses. Tangible appreciation matters.

**Ensure that both uniformed and civilian supervisors can effectively manage the performance of civilian employees.** DOD and the Services need the means to accelerate reprimand or separation in cases of underperformance that does not improve with reasonable training investments.

**Provide management training to civilian middle managers.** Unlike their uniformed counterparts, mid-level civilian managers receive very little practical training for these important duties.

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#### **4. Establish conditions conducive to efficient workforce mix decisions**

The DOD can obtain significant cost and operational efficiencies by staffing roles that are not military-essential with a higher complement of government civilians.<sup>10</sup> Moving uniformed individuals out of such roles frees them for greater use at the “tip of the spear,” thus enhancing military readiness—essentially “militarizing the military.”<sup>11</sup> Civilian employees have more available working hours per year than uniformed members, who must complete military training, physical training, permanent change of station moves, and other military-specific duties. Civilians also serve at significantly lower cost per staff

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<sup>10</sup> See “Replacing Military Personnel in Support Positions With Civilian Employees,” Congressional Budget Office, December 2015.

<sup>11</sup> “Enhancing the Readiness of Expeditionary, Training, and Medical Workforces Through Workforce Mix Reforms,” Institute for Defense Analyses, September 2018.



year than either uniformed members (who accrue costly benefits) and contracted staff support (for whom DOD pays a premium). DOD has the necessary authorities and official Instructions<sup>12</sup> requiring use of the lowest-cost allowable staffing choice. However, significant research reveals the consistent over-use of uniformed military Service members and contractors relative to federal civilians. **Simply mandating that hiring managers make “efficient choices” will not produce the needed results. Only improvements in the incentive structure facing managers will succeed in altering behaviors.**

#### Minimize indiscriminate civilian cuts

While laudable in their cost-savings intent, cuts to DOD civilian personnel budgets have had a negative impact of the effectiveness and efficiency of the defense enterprise overall.

Defunding of civilian billets reduces military efficacy by pulling uniformed members into necessary duties previously performed by civilians. DOD officials have reported completing the burdensome process of converting military billets into civilian billets, only to find their civilian personnel budgets cut: effectively a “mil-to-nil” conversion. Managers will not make efficient workforce mix decisions if civilian staff are at risk of summary cutbacks. Cut organizations thus suffer a double hit to morale: uniformed members typically want to be operators, not administrators, while the remaining civilians are pressured with additional duties and worries that their roles are viewed as expendable. Research on corporate layoffs indicates that during staff reductions, often the most productive employees with the most marketable skills leave first. There is little reason to expect different behavior from civil servants.

Indiscriminate civilian cuts also increase the use of costly contractors to perform necessary duties. Use of contractors is attractive to commands because staff shortfalls can be backfilled immediately, OPM action is not required, and underperformers can be quickly dismissed. Contractors can be hired using operating funds when civilian billets have been eliminated. Unfortunately, these flexibilities come at high marginal cost. Pushing work to contractors appears to save manpower dollars but actually increases the total defense bill. Further, the remaining civilians’ time spent managing contractors increases at the expense of effort devoted to their original roles, further reducing morale.

Congress should improve the ability of DOD decision makers to make efficient force mix choices by aligning their decision incentives with taxpayer interests through the following actions.

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<sup>12</sup> See DOD Instruction 7041.04, “Estimating and Comparing the Full Costs of Civilian and Active Duty Military Manpower and Contract Support.”

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## **SUGGESTED ACTIONS TO INCENTIVIZE EFFICIENT WORKFORCE MIX DECISIONS:**

**Align DOD budgets for uniformed Service members, civilians, and contractor support staff at the level at which the staffing decision is made, and eliminate zero-budget-impact use of uniformed Service members.** Currently, managers making the force mix decision do not bear the budget cost of military manpower, but they do pay for civilians and contractors. If Service members are free to a utilizing command, the command will generally not consider the total cost to the taxpayer of its workforce mix choice and will overutilize uniformed members.

**Publicize official “manpower prices” to be borne by utilizing commands for all labor types.** The Office of the Secretary of Defense’s Cost Assessment and Program Evaluation (CAPE) office currently has such a costing function. Prices should be updated annually, capture all employment-related costs and worker types, and be communicated actively to those making staffing decisions.

**Ensure that both uniformed and civilian supervisors can effectively manage the performance of civilian employees.** DOD and the Services need the means to accelerate separation or reprimand in cases of underperformance for all types of contributors.

**Protect civilian billets and budgets from indiscriminate reductions.** “Salami-slice” cuts to civilian personnel budgets disincentivize the use of civilian personnel and undermine morale.

**Pilot the use of fixed-term federal civilian employment contracts.** Frequently used by European firms in highly regulated employment environments, fixed-term employment contracts could offer DOD the ability to manage federal civilian employee performance over defined employment terms subject to bilateral renewal. This mechanism could enable the Department to manage billet allocation more dynamically across its needs and attract workers who prefer gig-style employment. This mechanism has been used by the Army Research Lab and might be studied and expanded.

**Make it easier and faster to hire civilians.**

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## **Conclusion: Decisive Action will Improve Morale**

Taken together, the decisive actions outlined here will reinvigorate the DOD civilian workforce by clearly signaling that DOD values its talented FWS, GS, and defense industry personnel and that it will recognize and reward their contributions. Cutting unnecessary bureaucracy, paying competitively, aligning incentives, rewarding performance, and filling staffing shortages can reinforce the entire DOD workforce, improve morale, and create conditions for DOD to advance as a high-performing organization. Thank you for your time and consideration, and I look forward to today’s discussion.