CNA

The All-Volunteer Force and the Need for Sustained Investment in Recruiting

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Introduction

Enlisted recruiting is the heart of the All-Volunteer Force (AVF). The young men and women the Services recruit will define what the military force will look like in numbers and characteristics. Because the military is a hierarchical organization—that is, people enlist in the military as youth and advance through the ranks as they age—the Services must find recruits with the attributes that will make them successful Soldiers, Sailors, Airmen, and Marines today and in the future.

To sustain the volunteer military, the Services need to attract a sufficient number and quality of recruits to maintain their desired force profiles, by years of service and paygrade. For a constant enlisted force endstrength, annual military enlistments must equal annual separations. If there is an increase in the number of people who leave the Service or if endstrength increases, recruiters must work harder to achieve higher recruiting goals to make up the difference [1]. In short, a successful volunteer military begins with recruiting—the engine of the AVF. If the Services do not recruit what they need, the AVF's viability is questioned, the force is degraded, military readiness is threatened, and national defense is compromised.

But recruiting can be challenging. Senior leaders should recognize the following:

- The recruiting environment is fluid, and some elements, such as the economy and the size and composition of the youth population, are beyond their control. As most of these factors are externally dependent they should not get distracted trying to fix them.

- Consistent recruiting resources must be properly allocated in both good times and bad. Factors over which they have control, such as the number of recruiters, advertising expenditures, and bonuses, should be the focus of their efforts.

- Recruiters are the military's sales force and a valuable asset. Senior leaders must ensure that recruiters know how to recruit. Recruiters' ability to "sell" the Service is key, and how they tailor the "sale" changes over time.

- They must stay engaged with other policy initiatives, such as military pay and benefits and policies related to changing social norms, because these can have a long-term effect on recruiting.

- Being innovative in changing times is good, but they must avoid investing substantial time, energy, and resources in previously tried and failed efforts at reorganizing the command and/or the recruiting force. History has demonstrated that the return on such investments has been limited, and the long-term effects often have required refocusing scarce resources to return to their prior state.

- A primary focus of recruiting leadership should be on how to expand the quality youth market by enticing youth who are currently not inclined to join the military.

Much has changed since the AVF's inception 46 years ago: dramatic economic fluctuations, long-term conflicts overseas, changing youth demographics, more young people pursuing college, a large percentage of youth ineligible for military service, the absence of or minimal use of

military advertising and marketing campaigns, and fewer veterans encouraging youth to join the military. What has not changed is the periodic fluctuation in recruiting resources—cutting recruiting budgets in good recruiting times and struggling to increase them when the recruiting climate deteriorates. While some fluctuation is understandable, its magnitude can be problematic and is not always a sound management strategy; adequate and relatively stable recruiting budgets are needed to maintain recruiting success and the viability of the AVF. This is the overarching theme of this report.[1]

Today's Volunteer Military

OVERVIEW

As the largest employer of youth in the nation, the military Services have recruited an average of 259,000 young men and women each year over the last decade to maintain the Active and Reserve Components. In FY 2019, the recruiting for the Active Components alone was 171,067 enlistments, with Service targets of 68,000 for the Army, 39,000 for the Navy, 32,300 for the Air Force, and 31,767 for the Marine Corps.[2] But today's goals are considerably lower than they were during most of the 1980s, when the Services had to recruit about 300,000 new enlistees for the active components annually to support an enlisted force of over 2 million.

The volunteer military is now more than 46 years old. Since abolishing the draft in 1973, the Services have relied on volunteers to sustain their enlisted ranks. For most of that time, the Services have been remarkably successful in meeting their annual recruiting goals. Since 1980, the Services have missed their recruiting goals only four times—in 1998, 1999, 2005, and 2018. The Army accounts for over 40 percent of the Department of Defense (DOD)-wide recruiting goal each year, so its recruiting experience tends to drive the department's recruiting outcomes. The four times that DOD missed its recruiting targets coincided with the years in which the Army missed its goals. In addition, the Navy missed its target in 1998, the Air Force in 1999, and the Marine Corps in 1982 and 1994.

Supplementing *numerical* recruiting goals are goals for the *quality* of new recruits. It is not enough to simply "fill the ranks"; they must be filled with high-quality Soldiers, Sailors, Airmen, and Marines. Typically, the Services measure quality along two dimensions:

1. Educational attainment as established by a high school diploma[3]

2. Aptitude as reflected by a score derived from the Armed Services Vocational Aptitude Battery (ASVAB), the military's enlistment and job assignment examination

Educational attainment is important because individuals with a high school diploma or better are more likely to complete their initial terms of

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[1] The report updates one published a decade ago by Strategic Analysis, Inc. [2].

[2] This report will focus on the active component, although some of what will be discussed can be generalized to the Reserve components as well. The FY19 missions for the Reserve components were as follows: 39,000 for the Army National Guard, 15,600 for the Army Reserve, 8,162 for the Navy Reserve, 8,388 for the Marine Corps Reserve, 9,422 for the Air National Guard, and 5,410 for the Air Force Reserve.

[3] Or an equivalent credential, which does not include those with General Educational Development (GED) certificates.

service—typically three or four years. As a result, they are a better training investment. About 75 percent of high school diploma graduates complete their initial enlistment terms compared to only 60 percent for their nongraduate counterparts. Recruits with GED certificates have attrition rates nearly as high as those for nongraduates. Nongraduates also are more likely to experience disciplinary problems. For those with alternative credentials (including homeschool diplomas), only 56 percent complete their initial enlistments [3-4].

Aptitude is important as well and is measured by the ASVAB, the most widely used test battery in the world. The instrument includes ten individually timed subtests, which cover a variety of subjects. By combining the subtest results in various ways, the Services can assess whether candidates possess the aptitudes, specific skills, and knowledge needed not only to enlist but also to succeed in a wide range of military occupations.

One particularly important ASVAB component is the Armed Forces Qualification Test (AFQT), which is composed of two verbal and two mathematical subtests. This is an important academic, or cognitive, composite because studies have shown that recruits who score in the 50th percentile or higher on the AFQT are easier to train and have more successful job performance.[4] Notably, a multiyear DOD research project, validated by the National Academy of Sciences, showed that initial aptitude (as measured by the AFQT) is a strong predictor of first-term job performance (as

measured by hands-on performance tests) across an array of jobs in all four Services [4, 6].

Although a high-quality force performs better than a low-quality one, it also costs more to recruit and retain. A trade-off analysis between personnel performance and the costs of recruiting and attrition showed how recruit quality would decline and performance would deteriorate as recruiting budgets were reduced [7]. Based on the results of this study, DOD established the following enlisted recruiting benchmarks for the two quality dimensions to maximize performance and minimize costs:

- ▶ 90 percent or more for high school diploma graduates or equivalent

- ▶ 60 percent or more for those scoring at or above the 50th percentile on the AFQT

These were established in 1993 and validated in 2000 [8]. In 2014 these benchmarks were again reviewed and determined to still be applicable. Title 10, United States Code, states that no more than 20 percent of enlistees may be high school graduates who are in AFQT category IV [5], but DOD policy limits the Services to no more than 4 percent of recruits in AFQT category IV, and the Services may impose even tighter limits.

The Department is continually striving to utilize a whole person concept for applicant enlistment and assignment into technical occupations. Traditionally, DOD has relied on ASVAB and education, for both the selection of new recruits and their classification into occupations. However, over several decades, the Services have been developing special purpose tests, to include cognitive and non-cognitive (e.g. personality and interest) assessments, which complement traditional tests. These additional assessments enhance the selection and classification process by improving job fit. Special purpose testing

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[4] AFQT scores are divided into five aptitude percentile categories: I = 93–99; II = 65–92; III = 31–64; IV = 10–30; and V = 1–9. AFQT category III is typically further divided into subcategories IIIA (percentiles 50–64) and IIIB (percentiles 31–49). Non-high-school graduates in AFQT category IV and, all applicants in AFQT category V—the lowest category—typically are not eligible to enlist . However, a person may not be denied enlistment solely for lacking a high school diploma if the enlistment is needed to meet established strength requirements [5].

is used to determine the qualification of an applicant for specific occupational specialties or special enlistment programs . An example of a cognitive special purpose test is the Air Force developed Cyber Test. This is a knowledge based assessment measuring Information Technology related knowledge. Examples of non-cognitive special purpose assessments include personality and interest measures, such as the Army's Tailored Adaptive Personality Assessment System (TAPAS). TAPAS assesses personality traits such as achievement, temperament, and tolerance.[5] An example of an interest assessment is the Navy's Job Opportunities in the Navy (JOIN), which further aids in assigning recruits into best-fit occupations.

Figure 1 provides a historical look at the quality of enlisted accessions. It depicts the quality benchmarks for education and aptitude along with the Services' actual achievement as measured by high school diploma graduates and those scoring in the top half of the AFQT.

Since the mid-1980s, the military has met or exceeded its quality benchmarks, although quality has fluctuated somewhat—historically rising when the recruiting market is more favorable, and falling when recruiting becomes more challenging. At the end of FY 2019, 97 percent of recruits held a high school diploma, and 69 percent were high aptitude.

Achieving recruiting success involves a complex management process with many moving parts. Recruiters sign prospective recruits to enlistment

contracts months in advance of accessment, during which the enlistees enter the delayed entry program (DEP) for up to a year. Recruiters must manage the DEP pool to minimize attrition until the recruits actually access and "ship" to basic (entry-level) training. The recruiting commands must adjust the size of the DEP pool during the course of the year to meet training "seat" requirements and to adapt to changes in the recruiting climate. During this time, the commands also must manage incentives and resources (enlistment bonuses, advertising, and the number of recruiters) within budget constraints to induce prospects to sign an enlistment contract and enter the DEP. The commands also must consider changes to recruit eligibility criteria as the recruiting environment changes while, at the same time, not compromising important enlistment standards.

THE EARLY YEARS OF THE AVF

The first few years of the AVF succeeded primarily because it was adequately resourced. As the Gates Commission recommended, Congress enacted a pay raise of over 60 percent to provide new recruits with pay comparable to that of their civilian peers [10]. Recruiting resources increased, enhancing recruiting facilities and improving advertising. The GI Bill, established in 1944, still was in effect and was an attractive incentive for new recruits. A growing youth population and rising unemployment in these early years resulted in a richer recruiting pool for the Services.

By 1977, however, circumstances changed. Recruiting resources were thought to be at least adequate, if not excessive, and became cost-cutting targets [11]. This coincided with a rebounding economy and lower youth unemployment. Educational benefits were sharply

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[5] Use of TAPAS varies across the Services. The Army is initiating a pilot program to evaluate the performance of IIIB recruits with high TAPAS scores. The Air Force is using it for classification into selected occupations, and the Marine Corps is administering it but not using it for operational decisions. TAPAS uses a methodology that controls for social desirability and "faking," which adversely affects the reliability and validity of the test results. The Services are working to ensure the effectiveness of the approach. The Navy has developed its own personality assessment for aviators called the Naval Aviation Trait Facet Inventory.

Figure 1. Recruit quality and DOD benchmarks, 1980–2019
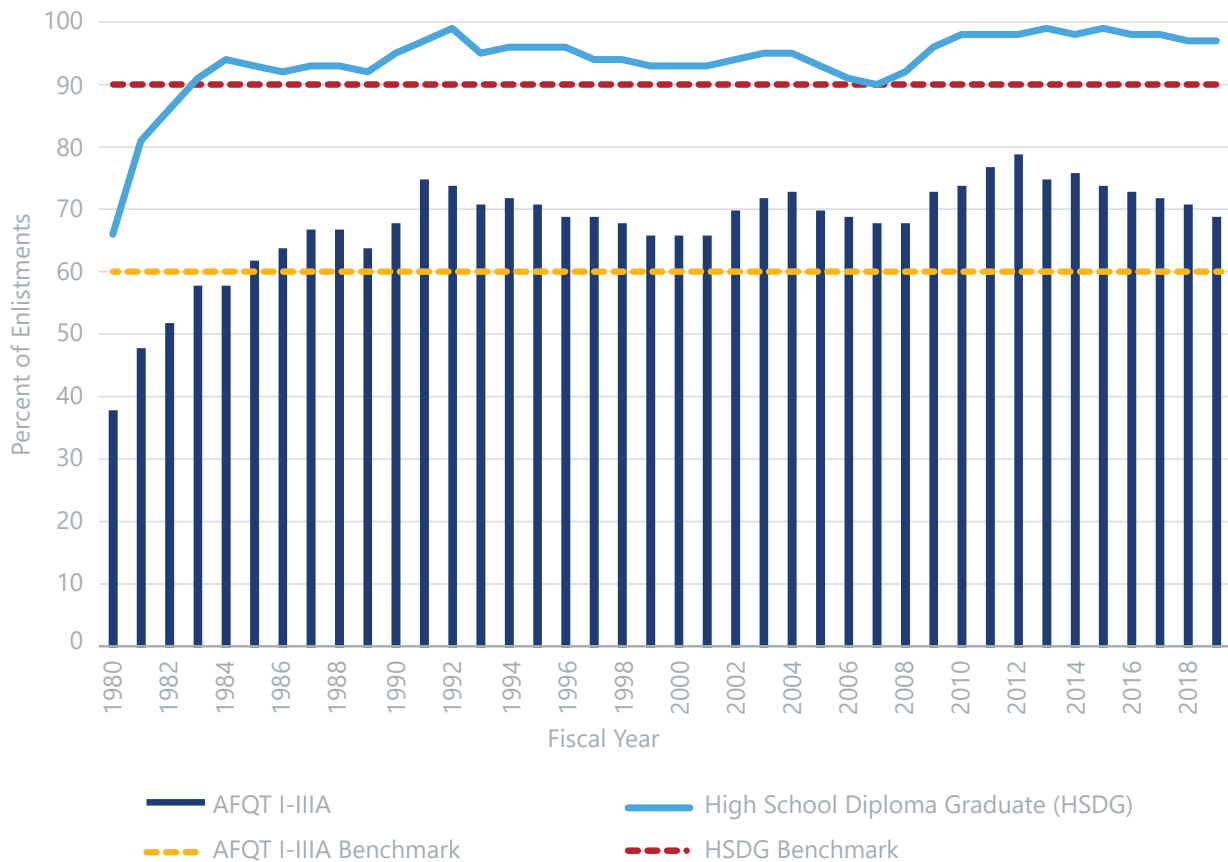
Source: OUSD (AP) [9].

reduced as the GI Bill expired, and military pay was allowed to lag behind civilian earnings. The recruiting difficulties that ensued should have come as no surprise [1].

By 1979, all four Services had missed their numerical recruiting goals. The Army and Marine Corps suffered the most, falling short of their recruiting targets by about 24,000 and 5,000, respectively [1, 12]. Not only did the Services miss numerical recruiting objectives from 1977 through 1979, but enlistment quality also fell. Enlistments from the top half of the AFQT distribution shrank to 25 percent (Army)

and 37 percent (Marine Corps).[6] These are in sharp contrast to the 61 and 69 percent figures for those Services today. The Army's recruiting problems became so acute that Chief of Staff GEN Edward C. Meyer was moved to make his now-famous "hollow Army" remark before Congress in 1980 [14]. Either the Army had to solve its manpower shortage problems or DOD would have to call for a return to the draft.

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[6] The "misnorming" of the ASVAB also contributed to the decline in recruit quality. The scoring algorithm for interpreting applicants' test scores was flawed. Scores at the lower end of the distribution were artificially inflated, and more than 400,000 low-quality recruits (who should not have been eligible) enlisted between 1976 and 1980 [13].

Today's Volunteer Military

As a response to eroded private-sector pay comparability, Congress enacted military pay raises of 11.1 percent in 1980 and 14.3 percent in 1981. Although pay comparability was a necessary condition for recruiting success, it was not sufficient. The Services needed to learn how to recruit an all-volunteer military. At a conference marking the 20th anniversary of the AVF, GEN Maxwell Thurman catalogued the actions that turned the Army's failures of the late 1970s into the successes of the 1980s and beyond [1, 15]. His recruiting principles became a recipe for recruiting success that still applies to the Services today. Thurman emphasized the following:

- Understand the youth population from which volunteers can be recruited, their demographics, and other characteristics. Also, understand their influencers.

- Understand what motivates youth.

- Develop a marketing strategy to expand the recruiting base and an advertising program to get messages out to youth and their influencers.

- Establish a professional, highly trained, and motivated recruiting force.

- Recruiting goals must be established by Service leadership for the quality dimensions of education and aptitude. Recruiting quality people is the objective, and recruiters must recruit with integrity.

- Establish an independent military enlistment processing organization to administer enlistment tests, medical examinations, and other screens for citizenship, moral character, and law enforcement. Enlistment tests should be used not only to select recruits, but also to classify and assign them to military specialties for which they are qualified and interested.

- People join the military for different reasons, so they must have a variety of enlistment options and occupations from which to choose.

Many consider GEN Thurman to be the most important military leader in the AVF's history. One study quantified the "Thurman Effect," which showed that innovative leadership can have important effects [16-18]. Thurman recognized that the military had to vigorously compete for youth in the civilian labor market and that, to do so, it needed to understand the key elements for recruiting success.

KEY RECRUITING ELEMENTS

The elements that affect recruiting fall into three categories. The first comprises factors that are *environmental* and generally beyond the Services' control, such as the size and characteristics of the youth population, the state of the economy, youth postsecondary education aspirations, military engagements, and youth influencers. The second category, *recruiting resources*, comprises those factors over which the Services exert control, such as the number of recruiters, marketing research and advertising, and bonus expenditures. The third category, *policy considerations*, includes enlistment waivers, educational benefits, military compensation, and DOD policies on changing social norms. Although the Services cannot change environmental factors directly, they can counter their effects by employing internal levers in the second and third categories. In the next few sections, we discuss these categories of recruiting elements in more detail.

Environmental Factors Affecting Recruiting

In this section, we focus on environmental factors that affect DOD's ability to meet its recruiting mission. These factors fit into two categories: (1) factors beyond the department's control and (2) factors over which the department has some influence.

ENVIRONMENTAL FACTORS BEYOND THE DEPARTMENT'S CONTROL

Youth population

An adequate pool of qualified youth is critical for the Services to recruit young men and women. According to the Census Bureau, the size of the 17-to-24-year-old population—the group of most interest to recruiters—is expected to remain stable at about 35 million until 2030, then grow to 36.5 million by 2060 [19]. In terms of r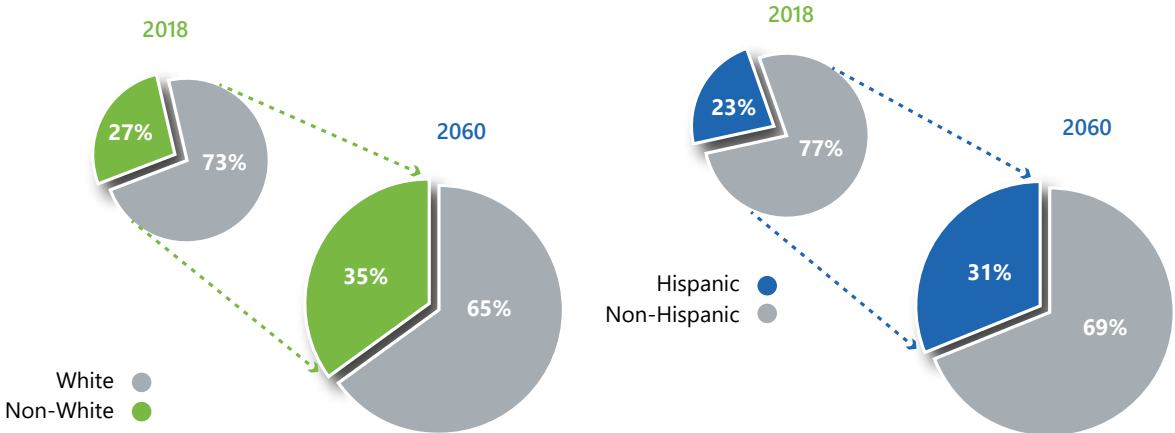ace and ethnicity, the proportion of white youth is expected to fall substantially from 73 percent in 2018 to 65 percent by 2060, while the percentage of black youth is expected to remain around 15.5 percent. The percentage of Asians is projected to increase from 6 percent to 8.5 percent. The Hispanic proportion, however, is projected to rise significantly from 23 percent to 31 percent (see Figure 2) [19].

Able to enlist (eligibility)

Although the Services recruit only a small fraction of the total youth population—about 162,000 youth per year on average—the percentage of youth *eligible* for military service is substantially smaller than the overall population as well. The proportion of youth *interested* in military service is also small. In short, not all youth are both *able* and *willing* to serve.

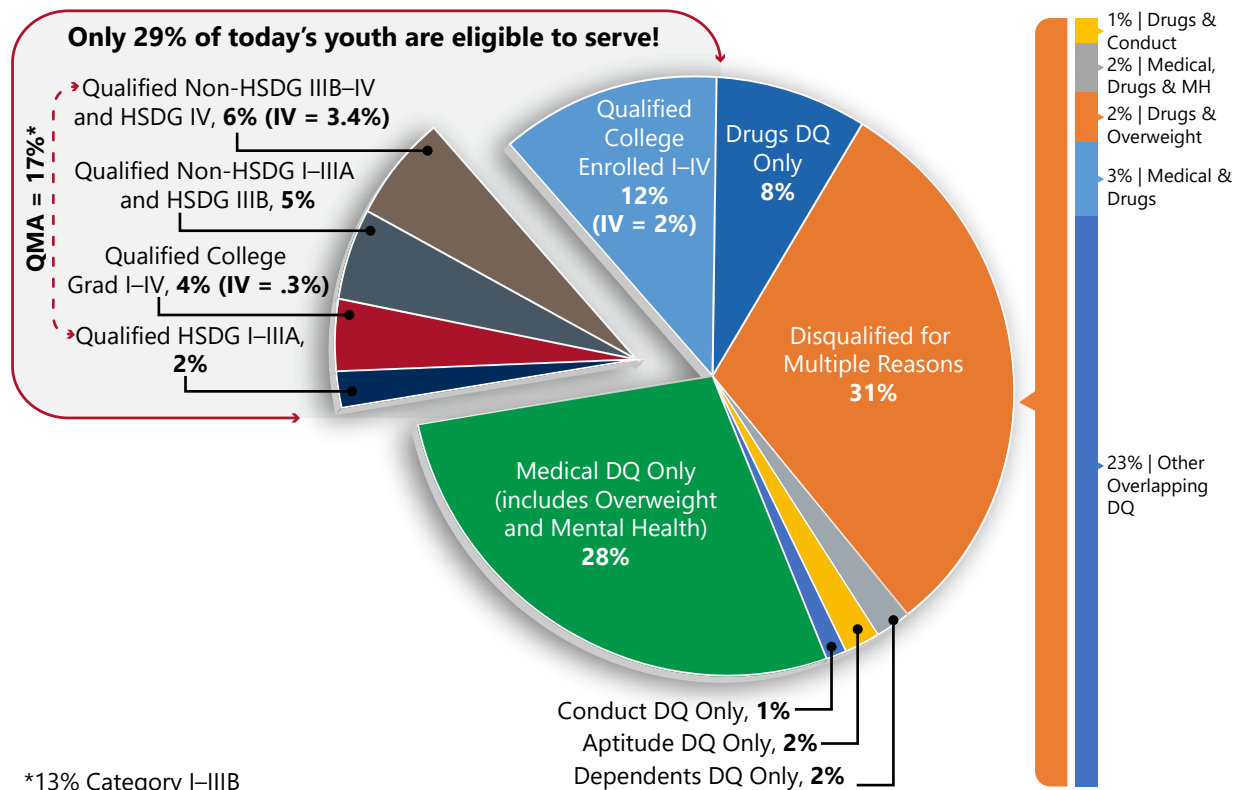Of the 35 million in the youth population, only 29 percent are qualified to serve without a

Figure 2. Projected changes in race and ethnicity of the 17-to-24-year-old population, 2018 to 2060

Environmental Factors Affecting Recruiting

Figure 3. Eligibility for military service

Only 29% of today's youth are eligible to serve!

Qualified Non-HSDG IIIB–IV and HSDG IV, **6% (IV = 3.4%)**

Qualified Non-HSDG I–IIIA and HSDG IIIB, **5%**

Qualified College Grad I–IV, **4% (IV = .3%)**

Qualified HSDG I–IIIA, **2%**

QMA = 17%*

Qualified College Enrolled I–IV **12% (IV = 2%)**

Drugs DQ Only **8%**

Disqualified for Multiple Reasons **31%**

Medical DQ Only (includes Overweight and Mental Health) **28%**

Conduct DQ Only, **1%**
Aptitude DQ Only, **2%**
Dependents DQ Only, **2%**

1% | Drugs & Conduct
2% | Medical, Drugs & MH
2% | Drugs & Overweight
3% | Medical & Drugs
23% | Other Overlapping DQ

*13% Category I–IIIB

Source: OUSD (AP) [9] [20].

waiver.[7] The largest disqualifier is for medical reasons (28 percent), which includes those with medical and mental health conditions, but also a large proportion who are simply overweight. Another 8 percent are disqualified for drug or alcohol use. Other ineligibility reasons include the existence of dependents (2 percent), falling below aptitude standards (2 percent), and conduct and criminal behavior (1 percent). Finally, 31 percent are disqualified for multiple reasons. Taking away the 12 percent who already are enrolled in college from the 29 percent remaining, the proportion

of *qualified military available* (QMA) drops to 17 percent. Subtracting AFQT IV youth (3.4 plus .3) leaves only 13 percent of the youth population that are qualified (see Figure 3). Further, if "interest" in joining the military is considered, the 13 percent drops dramatically, to 3.2 percent for AFQT I–IIIB youth, and to 2.2 percent of AFQT I–IIIA youth— the military's prime market [20].

The magnitude of the disqualification rates, particularly with respect to obesity, was first reported in congressional testimony in 2009 [21]. The prospect that the situation may endure prompted a message from nearly 100 generals, admirals, and civilian military leaders to the nation about how youth were ready and willing

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[7]   The Services are able to grant enlistment waivers under certain circumstances for medical issues, child dependency, conduct, or drug use if they feel that applicants still will be able to perform their duties both physically and morally as Servicemembers.

Figure 4. Obesity trends in the 18-to-34-year-old US population, 1987–2017
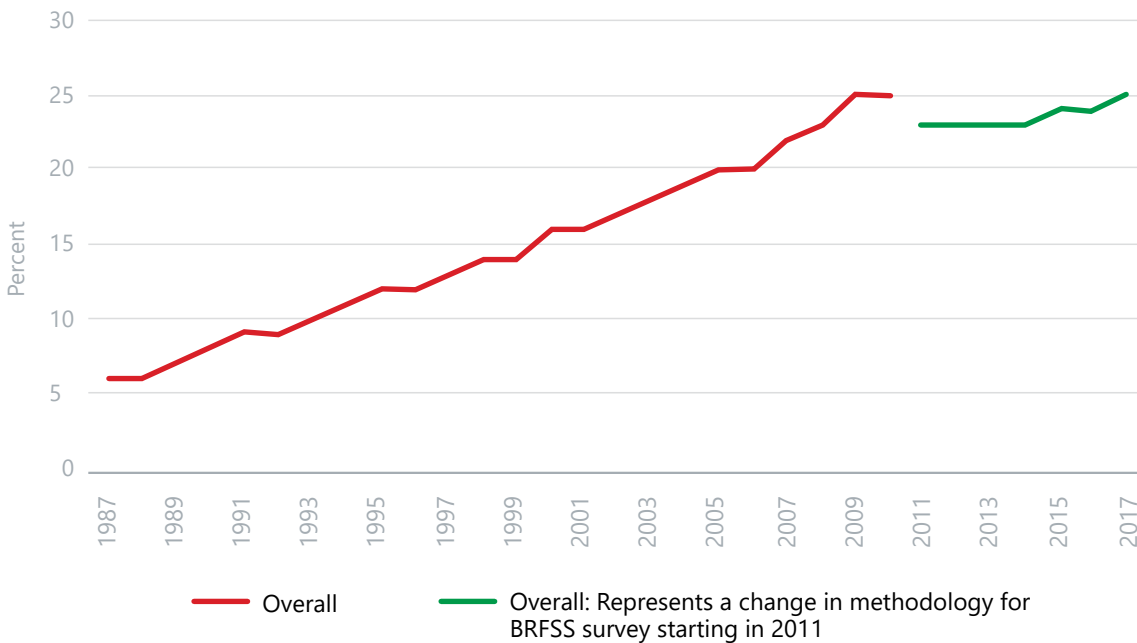
Source: Joint Advertising Marketing Research & Studies (JAMRS) [25].

Note: Obesity is defined as Body Mass Index (BMI) ≥ 30. BRFSS = Behavioral Risk Factor Surveillance System.

but *unable* to serve because they had inadequate education, had engaged in criminal behavior, and were unfit or overweight [22]. In response to continued increases in obesity rates (see Figure 4), a second message was issued in 2018, explaining that promoting a healthy lifestyle at an early age is vital for national security [23].

The continued increase in US obesity rates is alarming. The rate for 18-to-34-year-olds has risen fourfold, from 6 percent in 1987 to 25 percent in 2017 (see Figure 4) [24-25].

Because of the projected increase in racial and ethnic minorities as a percentage of the youth population mentioned earlier, it is important to consider differences in qualifications and eligibility by race and ethnicity. Enlistment standards can have a significant impact on the minority representation of the force since education,

aptitude, and other factors differ by demographic group [26]. In general, blacks and Hispanics have higher high school dropout rates than whites; however, this gap has narrowed over time [27]. In 2000, for example, the Hispanic high school dropout rate was almost 27.8 percent, and, as of 2016, it was 8.6 percent. During the same period, the high school dropout rate for whites declined from 6.9 to 5.2 percent; for blacks, it fell from 13.1 to 6.2 percent. The decline in dropout rates is an encouraging statistic.

In terms of aptitude, previous research has found that Hispanics and blacks are significantly less likely than whites to score in the upper half of the AFQT [26, 28]. Table 1 shows the distribution of AFQT score categories by race and ethnicity for two selected years.

Environmental Factors Affecting Recruiting

In 1997, only 26 percent of blacks and 31 percent of Hispanics scored in the upper half (I–IIIA) of the AFQT and 50 and 47 percent of blacks and Hispanics scored in the lowest categories (IV and V). By contrast, 63 percent of whites scored in the upper half of the AFQT and only 16 percent in the lowest two categories. By 2017, 42 percent of blacks and 55 percent of Hispanics scored in the upper half of the AFQT. At the lowest end, 22 percent of blacks and 14 percent of Hispanics scored below the 31st percentile [29]. Even with this improvement, minorities are more likely to be disqualified from some Services that require higher minimum AFQT scores and disqualified from certain military occupations that mandate higher scores on the various combinations of the ten ASVAB subtests [30].

In addition, other factors, such as weight, differ among demographic groups. One study referenced earlier found that blacks and Hispanics weigh more, on average, than whites and are less likely to meet the military's weight standards [28]. More than one in four Hispanic children and 22 percent of black children are obese, compared to 14 percent of whites. Among adults, 47 percent of both blacks and Hispanics are obese, compared to 38 percent of their white counterparts [31]. Again,

disproportionately more minorities are unable to serve because they cannot meet the Services' necessary weight standards. If these trends continue, it will become more difficult for the Services to recruit a force that is representative of the population it serves.

Are recruits representative of the nation?
One of the major concerns when the nation moved to an all-volunteer military was that the force would not be representative of all segments of society. One former member of Congress expressed a view held by many that "a volunteer force…would be mercenary, composed mostly of the poor, black, and uneducated" [32]. This has not been the case [33].

First, recruits are not primarily composed of the poor. Recruits are representative of all income classes. In fact, data show that, by dividing American households into five equal parts (quintiles) by income, recruits come mostly from the middle three income groups, slightly less in the lowest income group (probably because some did not meet educational qualifications) and slightly less in the highest quintile (because so many were in college) [29].

Table 1. AFQT category by race/ethnicity, 1997 and 2017

AFQT	Percentile	1997			2017		
		White or Other	Black	Hispanic	White or Other	Black	Hispanic
I, II	65 – 99	45%	12%	17%	44%	20%	30%
IIIA	50 – 64	18%	14%	14%	24%	22%	25%
IIIB	31 – 49	20%	24%	22%	23%	36%	30%
IV	10 – 30	13%	34%	37%	7%	19%	12%
V	1 – 9	3%	16%	10%	1%	3%	2%

Sources: [26, 29].

Second, with respect to race and ethnicity, 16 percent of new recruits in 2019 were black, while their share of the 18-to-24-year-old population was about the same—15 percent. About 17 percent of recruits were Hispanic, compared to their share of the youth population of 19 percent. Hispanic representation in the military has been steadily increasing from the early 1980s when it was only 4 percent. Among Asians, their representation is below their share of the population, but their interest in military service is low.

Third, in terms of education, recruits actually are more educated than their civilian peers; 97 percent of recruits are high school diploma graduates compared with only about 80 percent of the youth population. And, in terms of aptitude, over 69 percent of recruits score above average on the AFQT, compared with only 50 percent of youth nationwide.

There are other important categories in which the military surpasses the general youth population. The military, as a discriminating employer, recruits young people who are more physically fit as well as those with a higher moral character. Further, federal law requires military recruits to be under the age of 42, but the Services set their own policies at younger ages to promote youth and vigor in the force.

With respect to women, their proportion of accessions has increased substantially—from less than 4 percent at the inception of the AVF in 1973 to 19 percent in 2017—partly because of a promotion system that is well defined and the opening of all occupations (including combat) to women [34–35]. The Navy and Air Force have the highest proportions of women (26 and 23 percent, respectively), while the Army and Marine Corps have about 17 and 10 percent. The proportion of women is, in part, limited by their lack of interest in military service; their propensity is roughly half that of men.

Ideally, the AVF should be geographically representative of the nation, with each of the regions contributing its share of recruits in proportion to its qualified military-aged population. Data show that the north central region of the US accounts for 22 percent of the youth population and 20 percent of the military's recruits. The West is exactly proportional, accounting for 24 percent of both recruits and its youth population. However, the Northeast is somewhat underrepresented (18 and 13 percent, respectively), while the South is overrepresented (37 and 43 percent).

In this regard, there is some concern that the military is becoming a "family business," as more recruits are enlisting from areas in the south and communities near military installations with high concentrations of veterans as well [36-37]. And youth are more likely to enlist if there is a family member who has served. Disproportionately more recruits are children of older/retired Servicemembers [38]. One Army study estimated that for every 100 enlistees from families in which no parent served, 114 enlistees came from families in which one or more parents served [39]. However, the percentage of youth with a family connection to the military has been declining [40].

So, while recruits are representative of the nation in terms of some important categories, there are reasons not to expect the force to be completely representative—nor would DOD want it to be. The experience of the past 46 years showed that the Services have been able to recruit a force that is highly educated, of high aptitude, disciplined, physically fit, and generally representative of the nation in terms of race and ethnicity, socioeconomic status, and geography [41].

Environmental Factors Affecting Recruiting

Table 2. Percent (number) short of recruiting mission, by Service and select year

Year	Army	Navy	Marine Corps	Air Force	Youth unemployment rate
1982			1.0% (417)		17.8%
1994			0.3% (89)		12.5%
1998	1.2% (817)	12.4% (6,892)			10.4%
1999	8.4% (6,341)			5.0% (1,727)	9.9%
2005	7.8% (6,627)				11.3%
2018	8.5% (6,528)				8.6%

Source: OUSD (AP) [9].

The economy

The Services must monitor trends in the civilian economy and the youth labor market because these factors reflect employment opportunities outside the military. The state of the civilian economy, as reflected by the unemployment rate, always has been an important influence on military recruiting. Often, it is a leading indicator of recruiting success. Since 1990, the unemployment rate has fluctuated considerably—from an annual high of 9.6 percent in 2010 to a low of 3.7 percent in 2019. The youth (16-to-24-year-old) unemployment rate, which is of greatest Service interest, is always above the national average—ranging from a high of 18.4 percent in 2010 to a low of 8.4 percent in 2019 [42].

On one hand, in periods of high unemployment when civilian jobs are harder to find, more youth are willing to consider joining the military, and it is easier to recruit high-quality men and women. On the other hand, when unemployment is low in a "tight" labor market, the competition for youth (in particular, high-quality youth) is intense, and the military can struggle to enlist them since they have attractive civilian employment opportunities.

Although the military has experienced long periods of recruiting success, there have been times when recruiting has been difficult and some recruiting goals were missed. For example, in 1982, 1994, the late 1990s, 2005, and 2018, the Services faced challenging recruiting environments. The economy was strong and youth unemployment was relatively low. Although other factors were at work in these periods, such as the military engagements in Somalia, the Balkans, Iraq, and Afghanistan, the relationship between the state of the civilian youth labor market and recruiting success was obvious. Table 2 shows how much each Service missed its goal in those years when the recruiting environment was difficult. All Services felt pressure during these periods, and it highlights the importance of being prepared with adequate resources when the recruiting climate becomes more difficult.

Figure 5. High-quality enlistments and youth unemployment, 1990–2018
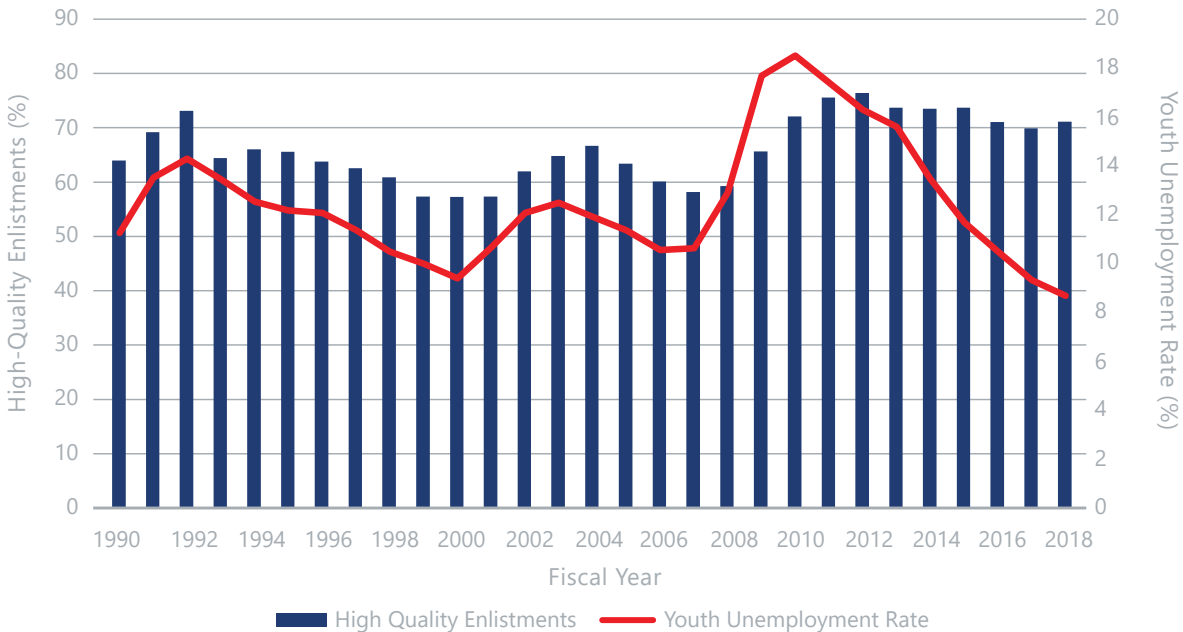
Source: OUSD (AP) [9].

Challenging recruiting periods affect not only the number of recruits but also the quality of recruits. As shown in Figure 5, there is a positive correlation between the percentage of high-quality enlistments and the youth unemployment rate: the proportion of high-quality enlistees increases (decreases) as youth unemployment increases (decreases).[8]

But how strong is the relationship between high-quality enlistments and unemployment? Over the years, many studies have estimated the effect, and all report—to varying degrees—a positive and significant relationship between youth unemployment and high-quality enlistments across all the Services [43-46]. However, one could question whether this relationship has held true over the past five years. One recent study of Army enlistments showed that a 10-percent

decrease in the youth unemployment rate—say, from 10 percent to 9 percent—would decrease high-quality enlistments by 3 percent, or approximately 1,000 recruits [39]. A more recent study found similar unemployment effects; a 10-percent decrease in the unemployment rate would decrease high-quality enlistments by 2 to 4.5 percent, indicating "a strong association between a tightening of the external labor market (i.e., the civilian unemployment rate) and the ability...to meet...[the Army's] monthly enlistment contract mission" [47]. This is within the range of the 2–4 percent effect from studies reported a decade earlier [2]. Another recent study found that 59 percent of the achieved high school graduate enlistment mission was explained by the unemployment rate [48]. These are important findings because the business cycle (unemployment fluctuations) appears to still be important [40]. As one study noted, "unemployment change[s] a lot over the business

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[8] *High quality* is defined as those recruits who not only possess a high school diploma, but also score in the upper half of the AFQT.

cycle and causes enlistment cycles, which have been a chronic problem since the advent of the All-Volunteer Force in 1973" [39].

Recent work has shown that the unemployment rate alone does not wholly capture civilian economic conditions [49]. This may partially explain why the tight link between unemployment and high-quality recruits begins to degrade during the last decade. To better capture the state of the overall economy, several studies developed an economic index based on blue chip economic indicators that more closely tracks the change in high-quality enlistments [49-50].[9] These blue chip economic indicators include factors like real GDP, industrial production, and the Consumer Price Index.

To maintain force levels that meet military mission needs, the Services must consistently achieve their recruiting goals, regardless of the economic climate. Unlike the private sector, in which businesses can expand and contract as economic conditions change, it is important for the military to maintain a recruiting presence through good times and bad. The demand for national defense is unwavering, regardless of business cycle fluctuations. The Services do not want the public to forget about them as a quality employer.

To ensure that the Services are able to recruit, they need to have an array of recruiting levers they can use during more difficult periods. A key to recruiting success is not only to have these tools available but to have recruiting resources at the right level and mix to meet challenges *promptly*. It takes time to see the results of investments in some recruiting resources (e.g., the number of recruiters and advertising expenditures); therefore, it is important to maintain those investments because the Services cannot expect results from

them immediately. It is critical that the Services know how to position themselves when recruiting challenges arise because "even in the best of times recruiting is a complex, tough business" [15].

Educational opportunities

The military competes with not only business firms in the civilian sector for high-quality youth, but also 2- and 4-year colleges and universities. One of the most important trends in the youth population has been the continued growth in college enrollment. The percentage of recent high school graduates or those with equivalent credentials enrolling in college has grown from 49 percent in 1980 to 66 percent in 2017 (see Figure 6). This is one reason for the relative lack of interest in military service among high-academic-quality youth [51]. One study finds that, even with the rise in college costs, the benefits of postsecondary education still outweigh the costs [52], which partially explains the consistently high enrollment rates over the last decade.

Studies have shown that college attendance has a substantial and negative effect on military enlistment over the years [44, 53-54]. In addition, youth who attend college tend to have higher aptitude than those who do not pursue postsecondary education. This not only reduces the number of potential recruits, but also does so disproportionately for the high-quality youth that the Services prefer.

Traditionally, high school students have been the primary market for enlisted military recruiting because of their higher military success rates. Because public schools are required by law to provide student lists to military recruiters, high school students are easier to locate than youth who have graduated and moved on to

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9   This report forecasts real Gross Domestic Product (GDP) and 15 other macroeconomic indicators.

Figure 6. College enrollment rates, 1980–2017
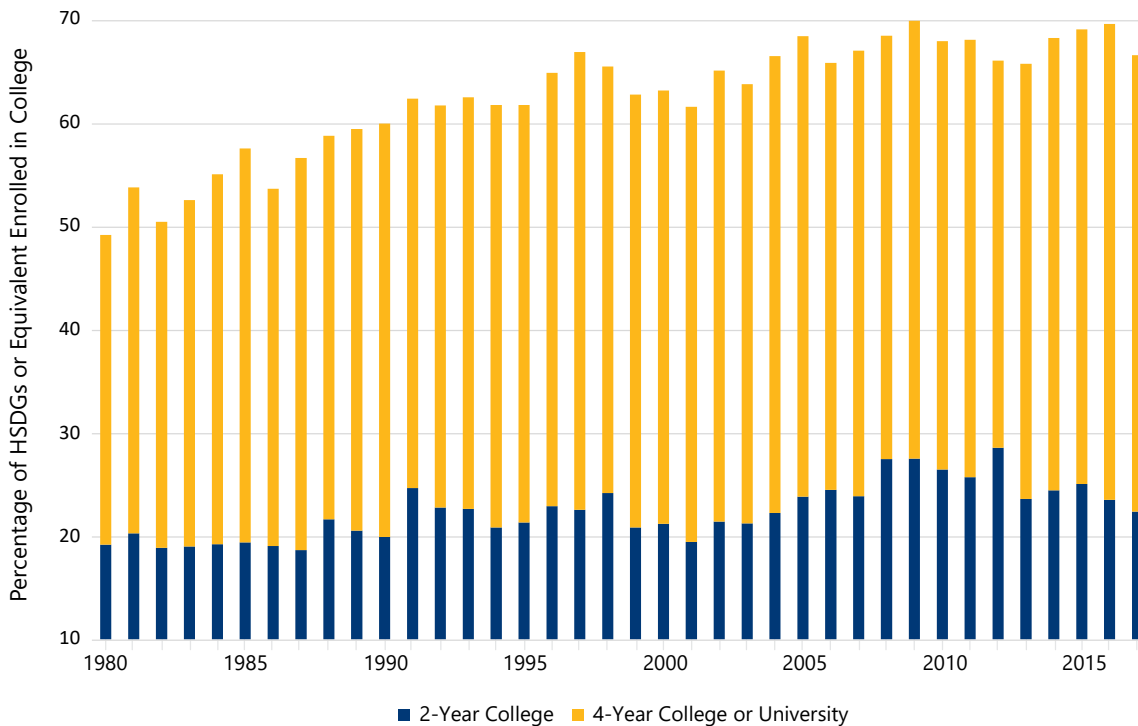
Source: [51].

Note: In these data, the category high school diploma graduates (HSDG) or equivalent includes 16-to-24-year-olds who have graduated from high school or have completed a GED or other high school equivalency credential.

postsecondary education or other opportunities. In addition, younger youth are more likely to be in high school (16- and 17-year-olds) and to have much greater interest in military service than 18-to-21-year-olds and 22-to-24-year-olds [25].

With large numbers of youth enrolling in college right after high school, the Services should focus some recruiting efforts on the older youth market. One study found that relatively older recruits often turn to the military because college did not work out or because of dissatisfaction with their civilian jobs [36].

Although community college enrollment rates have declined from 29 percent in 2012 to 23 percent in 2017, this group still accounts for

a large proportion of the youth population, suggesting that this market should not be ignored either. Previous research has found that community college graduates, dropouts, and stopouts may be promising recruits because of family background and other factors that suggest greater interest in military service [55]. One study shows that those with associate's degrees are more likely than those with high school diplomas to serve in more technical occupations, promote at higher rates, and have similar retention outcomes, fewer enlistment waivers, and higher AFQT scores. This study also examines innovative ways to attract community college and technical school students to the Army [56].

Environmental Factors Affecting Recruiting

While older recruits and the college market both show potential, previous efforts by some Services have met with mixed results as they attempted to tap into these markets. The high school market will continue to play a critical role in military recruiting for the foreseeable future. In addition, because postsecondary degree attainment continues to be a high priority of youth today, the Services should highlight to potential recruits the educational assistance available to Servicemembers while in service and after they leave the military, which we will discuss in more detail later in this report.

Military engagements

Since the Global War on Terrorism (GWOT) began in 2001, the US has been engaged in conflicts in Iraq (Operation Iraqi Freedom and Operation New Dawn), in Afghanistan (Operation Enduring Freedom and Operation Freedom's Sentinel), and against ISIS (Operation Inherent Resolve). These military engagements have adversely affected recruiting, having an impact on both youth and those who influence them. The impact has been felt particularly in the Army and, to a lesser extent, the Marine Corps, which have endured the most lengthy and frequent deployments and suffered the most casualties [57].

Focusing on the period when casualties were highest, one Army study found that high-quality enlistments fell 25 to 33 percent a year during the Iraq war [45]. Another Army study found that high-quality enlistments fell for both men and women during the conflicts in Iraq and Afghanistan. For men, the decline in enlistments ranged from 10 to 20 percent and, among women, the decline was as high as 55 percent [39]. Another Army study found that by 2006,

"the war could account for a 50 to 60 percent decline in [high-quality enlistment] contracts" [46]. In addition, the Joint Advertising Marketing & Research Studies (JAMRS) Youth Poll finds that the GWOT situation makes youth less likely to join the military [25],[10] and another study finds that the likelihood of joining the military is negatively related to wartime casualties and public support for a war [58]. The variation in these estimates shows the difficulties in measuring the effects of war. Nonetheless, they are consistent in showing that war has a sizable and negative effect on military recruiting.

While the impact of war on total enlistments has been negative, there are significant differences in the magnitude of the "war effect" by race and ethnicity. One study found that the Iraq War reduced high-quality black enlistments in the Army by 45 percent, compared to 21 percent for whites and Hispanics. Notably, for the Navy, the war increased high-quality Hispanic enlistments by 20 percent, and left black enlistments unchanged. This may reflect the fact that fewer Navy personnel were involved in combat operations compared with those in the Army and Marine Corps [59]. In addition, based on the Youth Poll, whites and Hispanics are more likely than blacks to join when taking into account the current GWOT engagements.

The Services may not directly control involvement in US military engagements, but they should develop strategies through thoughtful advertising messages to mitigate the perception among youth and influencers that the risks of service outweigh the benefits.

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[10] The Youth Poll is a nationally representative survey of 16-to-24-year-olds conducted on a rolling monthly basis. Sample size varies, but the summer 2018 sample was 5,418 and the spring 2018 sample was 6,073. In 2001, it replaced the Youth Attitude Tracking Study (YATS), which was administered annually from 1975 to 1999.

Figure 7. 16-to-21-year-old youth propensity for military service by gender, 2001–2018
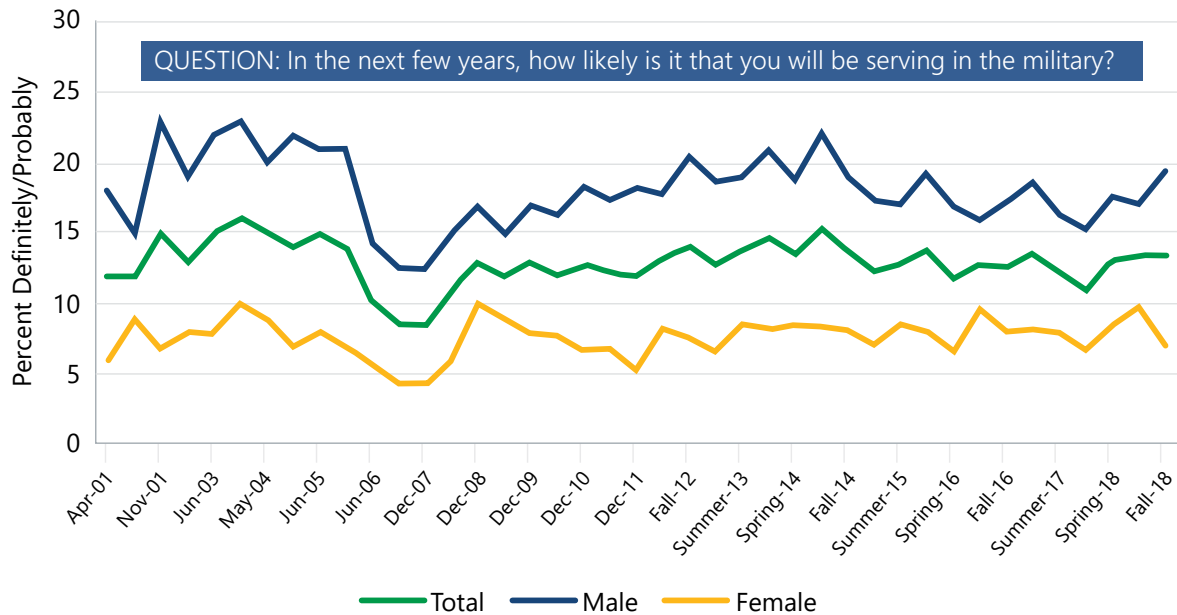
Source: JAMRS [25].

Note: Response options are definitely, probably, probably not, and definitely not.

ENVIRONMENTAL FACTORS THAT DOD CAN INFLUENCE

Thus far, we have discussed factors that are largely outside the department's control and influence. However, while the department does not control youth willingness to enlist or youth influencers, it does have the ability to influence both of these factors. For example, youth intention to join the military is affected by the state of the economy, recruiters with whom they interact, advertising they see, current events, and military benefits.

Willingness to enlist (propensity)

Youth propensity is broadly defined as an intention to enlist in the military, and it is measured by answers to the following question in the Youth Poll: "In the next few years, how likely is it that

you will be serving in the military? Definitely, Probably, Probably Not, Definitely Not." Because propensity is one of the more important indicators of enlistment (i.e., propensity tends to parallel enlistment trends) and is related to military tenure as well, it is of particular interest [60-62].[11,12]

Although propensity data have been collected since 1975, the last 20 years are of most interest. Since 2001, positive propensity for men was highest following the September 11, 2001 attacks—between 19 and 23 percent (see Figure 7). Propensity dropped significantly to a low of 12 percent at the end of 2007, gradually increased to 22 percent in 2014, and has settled between 15 and 19 percent since. Propensity for women has

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[11] Youth who answered "Definitely" or "Probably" to the question have a positive propensity toward military service, which is of the greatest interest here.

[12] The major drivers of propensity are self-efficacy, attitudes about service, and social norms.

always tracked substantially below that of men, but the two series parallel one another closely. Women's propensity has fluctuated between 7 and 10 percent since 2014.

Propensity by race/ethnicity

As the demographics of the US population continue to change, it is important to understand racial and ethnic differences in propensity (see Figure 8). Traditionally, whites have a lower propensity than blacks and Hispanics, but a higher propensity than Asians. Blacks generally have had the highest propensity over the last decade, but, from 2000 to 2010, Hispanics had the highest propensity.

Acknowledging propensity differences by gender, race, and ethnicity can help recruiters understand that it might be more difficult to recruit certain groups compared with others and that they should use individualized recruiting strategies based on a prospective recruit's needs.

Propensity by academic quality

There also are significant differences in military propensity by quality, or academic standing. Over the last two decades, military occupations have become more technical, which has accelerated the need for more academically proficient recruits. This is why the Services are most interested in high-quality youth; they are easier to train and they perform better on the job [6]. While it is desirable to recruit individuals of the highest possible quality, it comes at a cost in terms of required resources. In addition, there are still many positions in each of the Services where individuals possessing lower-quality attributes still perform well. The propensity of high-academic-quality youth (with average grades of As, or mostly As

Figure 8. 16-to-21-year-old youth propensity for military service by race/ethnicity, 2001–2018
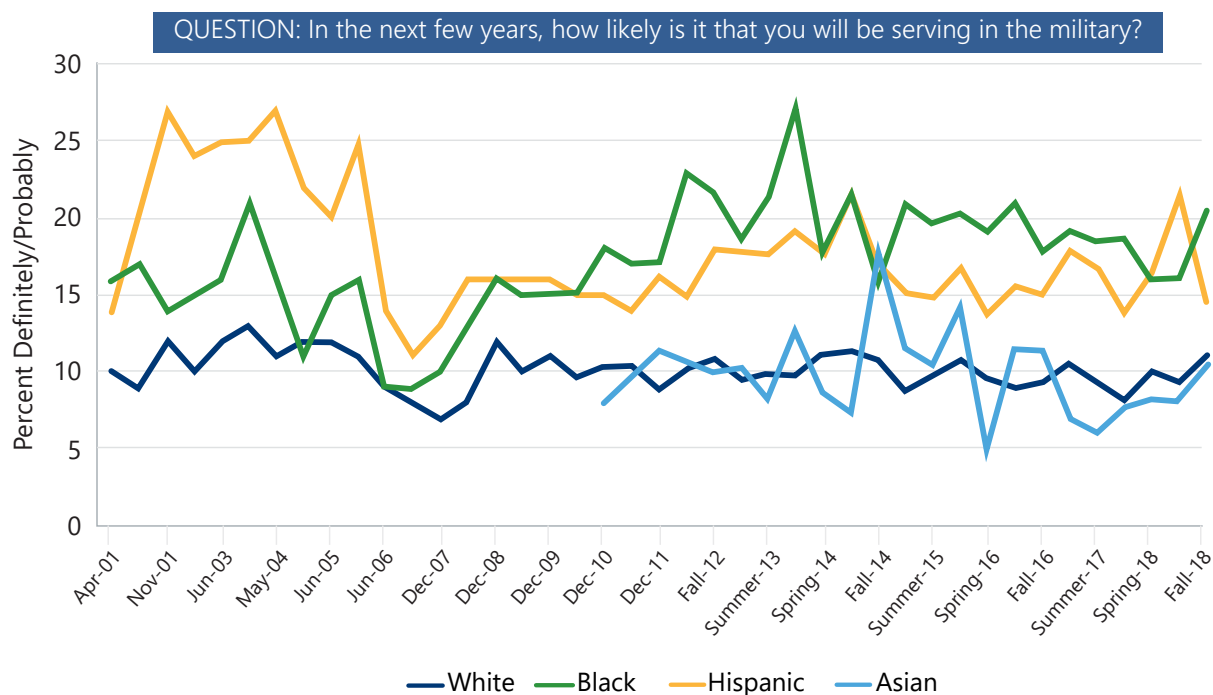
QUESTION: In the next few years, how likely is it that you will be serving in the military?

Source: JAMRS [25].

Note: Response options are definitely, probably, probably not, and definitely not.

and Bs, in high school) is below that of their lower quality counterparts (see Figure 9). This is expected because the former have many more attractive civilian options in employment or college. Their propensity, generally between 7 and 10 percent, has been somewhatmore stable between 2009 and 2018 than for lower academic quality youth.

While it is important to understand which populations have higher propensity, it does not mean that recruiters should ignore lower propensity populations. For example, data from the JAMRS New Recruit Survey show that about 40 percent of new recruits did not begin thinking about military service until one year before joining [63]. This suggests that propensity is not constant and that a youth who was low propensity at one point in time may quickly switch to high propensity.

Influencers

The decision to join the military is a major one—and usually not made alone. Parents often exert a strong influence on their children's enlistment decisions. Advice from relatives, friends, teachers, guidance counselors, coaches, clergy, veterans, and significant others also can be important. Through market research and advertising, DOD strives to use its tools and policies to educate influencers on the advantages of military service.

Data are available on influencers' likelihood to *recommend* military service as well as to *support* military service for young people. Figure 10 shows that the percentage of influencers who are "likely" or "very likely" to recommend military service has increased from 32 percent in 2007 (when the war in Iraq was at its height) to 46 percent in 2017. Influencer likelihood to support a youth's decision to enlist ("strongly agree" or "agree") has risen from 61 to 71 percent over that same period.

Figure 9. 16-to-21-year-old youth propensity for military service by academic quality, 2001–2018
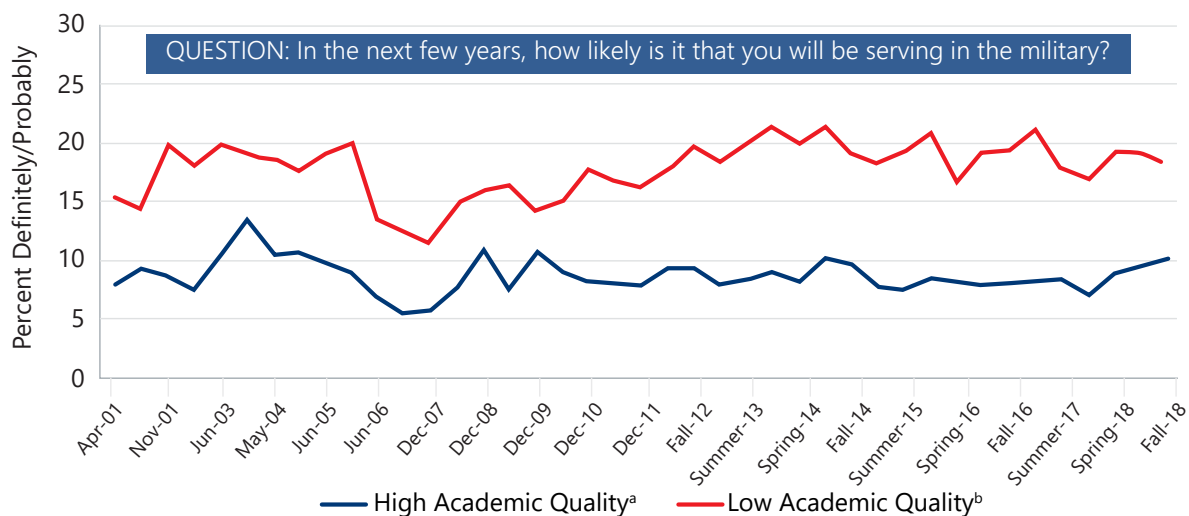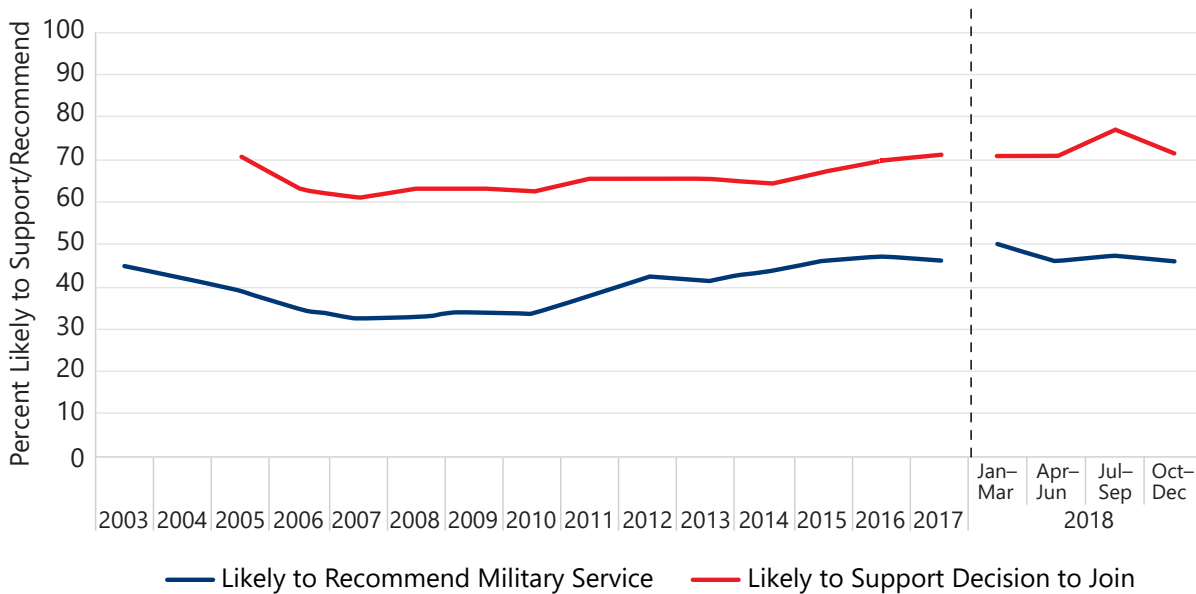

Source: JAMRS [25].

Note: Response options are definitely, probably, probably not, and definitely not.

[a] *Youth Poll "high academic quality" youth reported receiving average grades of either As or "mostly As and Bs" in high school. These youth are more likely to achieve high AFQT scores.*

[b] *"Lower academic quality" youth refers to youth who reported receiving average grades lower than "mostly As and Bs."*

Environmental Factors Affecting Recruiting

Figure 10. Likelihood of influencers to recommend and support military service, 2003–2018

Source: JAMRS [25].

Note: The first question is, "Suppose [a youth] asked for your advice about various post-high-school options. How likely is it that you would recommend joining a military Service, such as the Army, Navy, Marine Corps, Air Force, or Coast Guard?" Possible responses are very likely, likely, unlikely, and very unlikely. The other question is, "If [a youth] told me he or she was planning to join the military, I would support his or her decision." Possible responses are strongly agree, agree, disagree, and strongly disagree.

Looking in more detail at the likelihood to recommend, Figure 11 shows that parents, particularly mothers, are less likely than other influencers to recommend military service. Grandparents have been most likely to recommend service since 9/11, and their support generally has been increasing since 2010. Other influencers (which include veterans) also are more likely than parents to recommend military service.

Since 2003, the likelihood of influencers to recommend or support military service has exhibited a U-shaped pattern—decreasing from 2003 to 2007 and a general upward trend from 2007 to 2018. Influencer likelihood to recommend or support military service generally responds to many of the same factors that affect youth propensity, including unemployment,

educational opportunities, the value of military benefits, and the state of wartime engagements. Indeed, the decrease in influencer likelihood to both recommend and support military service between 2003 and 2007 corresponds to rising (but still historically low) casualty rates in Iraq, and a general upward trend in influencer support from 2008 to 2018 corresponds to diminishing casualty rates. While it is likely that the casualty rates were a big factor in influencer support it is unclear whether this was the sole factor in the increased influencer support. Following the high casualty rates the Services and the Department expended considerable resources in marketing efforts to counter the difficult recruiting environment.

Figure 11. Likelihood to recommend military service by fathers, mothers, grandparents, and others, 2003–2018
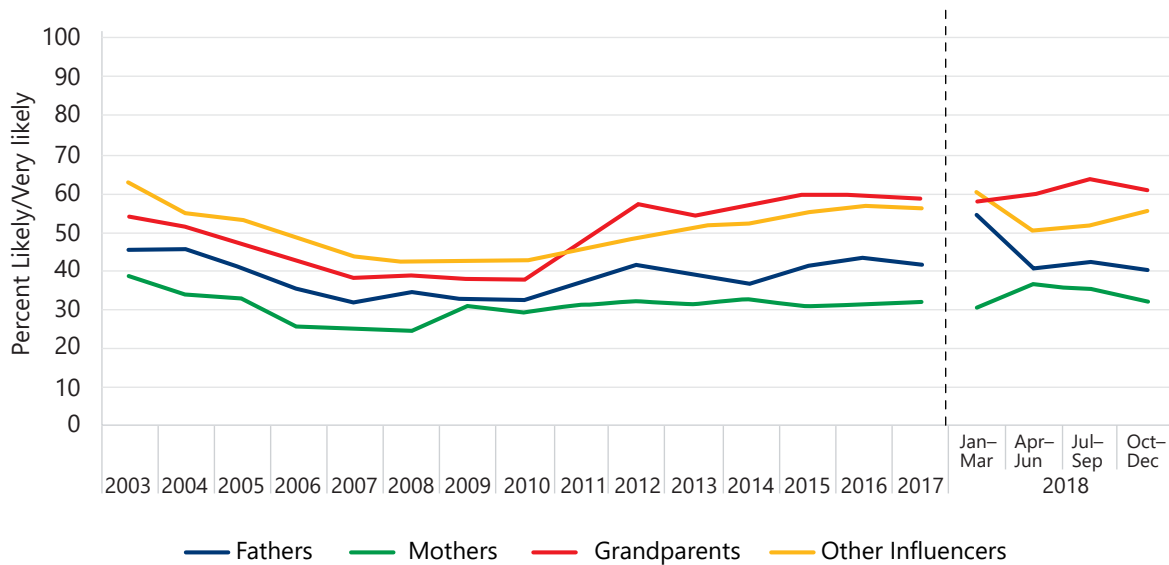
Source: JAMRS [25].

Note: The question is, "Suppose [a youth] asked for your advice about various post-high-school options. How likely is it that you would recommend joining a military Service, such as the Army, Navy, Marine Corps, Air Force, or Coast Guard?" Possible responses are very likely, likely, unlikely, and very unlikely.

Youth enlistment propensity also is affected by whether youth influencers are veterans, but veterans—as a percentage of the adult civilian population—have decreased from 10.9 percent in 2005 to 7.3 percent in 2017 [64]. Furthermore, the number of veterans is estimated to decrease from 20 million in 2017 to 13.6 million in 2037 [65]. The result is that youth, and the general public, will have fewer role models who have served in the military and can share their positive experiences with potential recruits. In addition, the veteran population is becoming more geographically concentrated, regionally and around military installations, which means that youth and their influencers will be exposed to even fewer veterans than the national average [61]. According to the JAMRS Youth Poll, in 1995, about 40 percent of 16-to-24-year-olds had a parent who had served; by 2018, that proportion had fallen to 15 percent [25]. This is important because, as

we have seen, youth with parents who served are more propensed, and youth from areas with strong social norms for service and large veteran population communities are more likely to join.

Therefore, the declining veteran population has had a significant effect on recruiting. One study estimated that the decline in the number of veterans between 1987 and 1997 resulted in a 19 percent decline in enlistments [44]. A later study also found negative and significant effects of a declining veteran population on enlistments [66], and a recent study found similar results across regions [67]. With fewer veteran influencers, youth are having fewer conversations about the military with people who have first-hand knowledge. The Services must find other ways of exposing youth and their parents to the positive aspects of military service.

DOD and Service Recruiting Resources

Having adequate resources to support the AVF is essential to its continued success. Though the Services have little or no control over such environmental factors as population changes, wartime engagements, or college enrollment rates, they can counteract the deleterious effects of short-term (i.e., cyclical) factors, such as the unemployment rate. The Services can make timely investments in the number of recruiters, marketing and advertising, and enlistment bonuses to mitigate the adverse effects of cyclical swings in the recruiting environment.

On several occasions, recruiting resources were reduced too much during successful recruiting periods, leading to shortfalls when the recruiting climate changed. Each time recruiting suffered. Perhaps senior leaders did not understand fully the fragile relationship between recruiting and economic factors, the importance of adequate and sustained recruiting budgets, and the role that monetary and nonmonetary incentives play in the civilian youth labor market [1, 12], which have led to the fluctuations in recruiting budgets and recruiting achievement depicted in Figure 12.

Figure 12. DOD recruiting resources and high-quality enlistment contracts, 1980–2017
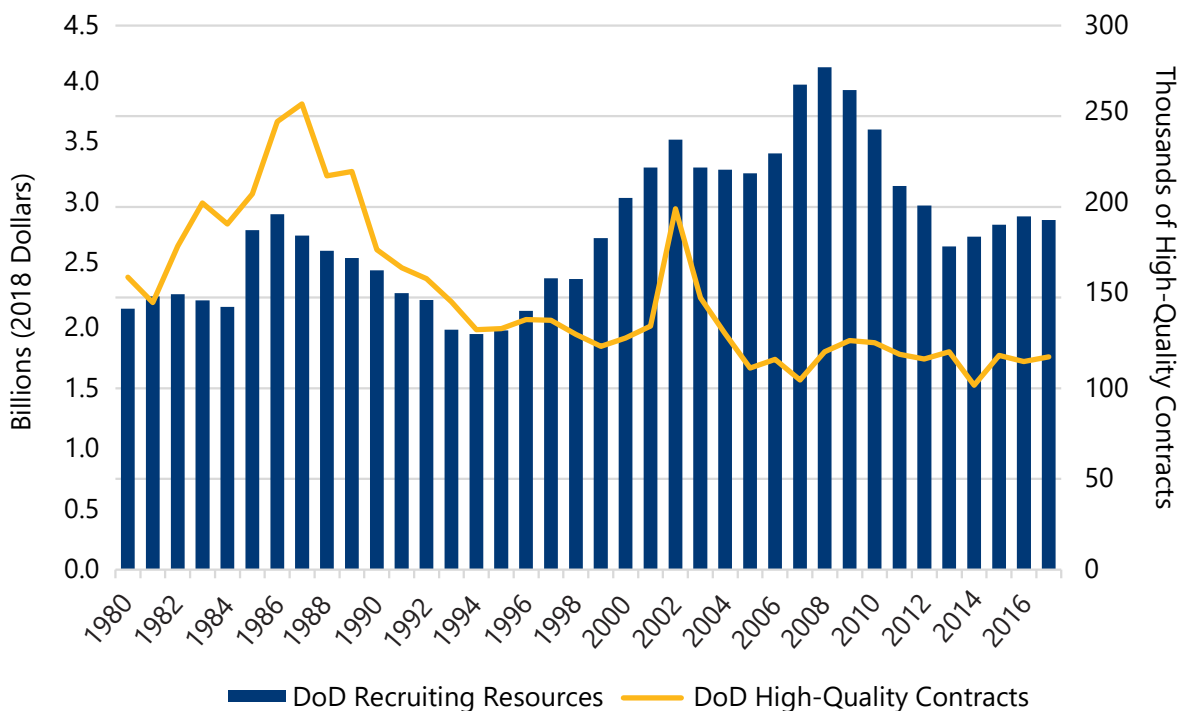
Source: OUSD (AP) [9].

Note: The number of high-quality contracts rather than accessions is the proper measure to use here since the decision to enlist is made when a contract is signed, not when a recruit accesses and ships to basic training, which is at the convenience of the Service/recruit.

Noting the strong relationship between resources and recruiting achievement, GEN Thurman wrote the following after only a decade of AVF experience:

> *The quality of the enlistee tracks with the expenditure of recruiting resources. We must understand this relationship… and so must the Congress. An interesting aspect…is the lag in the response of applicants to resource application. [11]*

And 20 years later, former Deputy Secretary of Defense John White made the following remarks:

> *It takes some time for the system to detect any important shifts in program effectiveness. Once the remedies are fashioned there is a further, inevitable, lag in the time it takes to make either internal, programmatic adjustments or legislative changes. [68]*

In other words, it takes time to facilitate an increase in recruiting budgets. It is easy and quick to make budget cuts; it takes time to ramp up again. Leadership must be mindful that recruiting is not only about current recruits but also about the broader support for the military and influencing future cohorts. The Services cannot, and should not, try to fine-tune recruiting too much. The message must get to the senior leadership and Congress of the need for adequate and sustained investments in recruiting.

Although the correlation between recruiting resources and high-quality enlistment contracts persists, it is less pronounced over the last fifteen years as contracts have remained somewhat flat. What is striking is that the Services are spending more money in recent years than they did decades ago at a time when recruiting missions were larger. Some have argued that the "cost of doing business" has gone up as the Services faced more challenging recruit market trends, which include the following:

- ▶ The significant decline in the veteran population which has been an important influencer of youth

- ▶ The continued high proportion of youth going on to college right after high school

- ▶ A growing disconnect between the military and civil society

- ▶ Growing misconceptions among youth about military service and what it offers

- ▶ The military's relatively strict standards for enlistment as they relate to changing social norms (e.g., marijuana use and tattoos)

- ▶ The continual decline in unemployment, offering youth civilian alternatives to military service

The result is that the cost per high-quality recruit has risen substantially and has dampened somewhat the link between recruiting resources and enlistment success in recent years. While sufficient resources are still needed to fund the key recruiting levers (recruiter manning, marketing research and advertising, and bonuses), it is less clear now what the return on investment is, especially when some Services have faced recruiting challenges at the same time they struggle to spend the recruiting resources they have. More quantitative analysis must be undertaken to explain the recent relationship between resources and high-quality enlistments.

Figure 13 shows the allocation of the military's 2018 recruiting budget of $3.13B among the various resource categories. The largest share of recruiting resources—over 50 percent—

went to pay for the Services' recruiting forces and supporting personnel. Recruiter support (i.e., administration, automation, and logistics) accounted for another 11 percent. Enlistment bonuses and educational incentives accounted for another 17 percent, while 16 percent was allocated to advertising and market research.
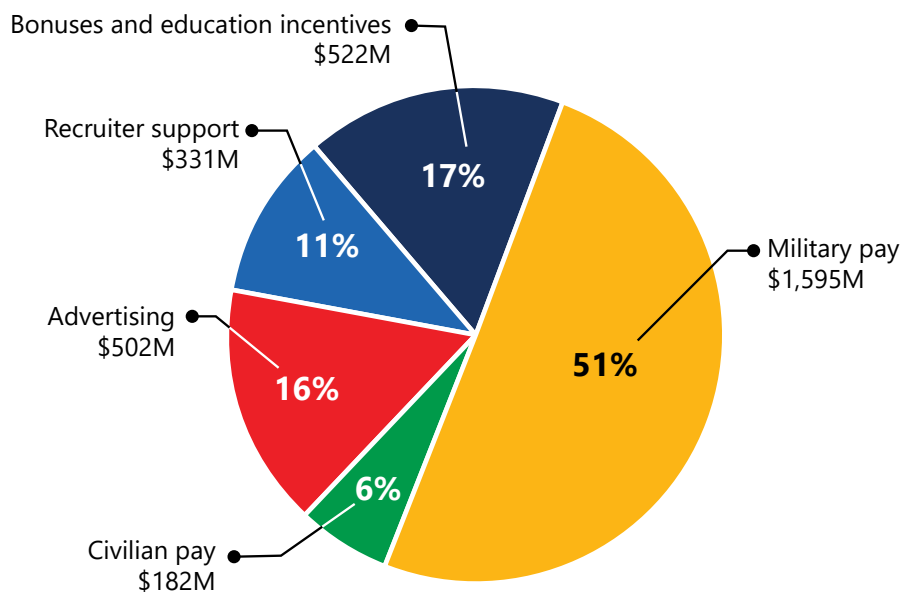
DOD typically provides these recruiting resources to the Services, with each Service administering its own program. However, the Office of the Secretary of Defense provides some resources of its own. Examples include oversight of the Service's recruiting activities by the Office of Accession Policy; applicant screening, testing, and processing by the US Military Entrance Processing Command; administrative data and analysis by the Defense Manpower Data Center; and youth market research and analysis as well as joint advertising by the JAMRS program. The next subsections describe the resources available to the Services to respond to changes in the recruiting climate.

RECRUITERS

If recruiting is the heart of the AVF, then recruiters are the heart of recruiting. As GEN Thurman noted, "The military may be called an 'All-Volunteer Force,' but it really is an all recruited force" [11]. Recruiters are the most critical component of the Services' recruiting efforts because all young people who enlist (and even those who do not) will interact with a recruiter to gain a better understanding of military opportunities. Recruits report that recruiters are most influential in their enlistment decisions [63].

Most significantly, recruiters are the military's "sales force." Each Service maintains its own recruiter force, which operates from local offices in every state, and, often recruiters from different Services share office space within a multi-Service recruiting station. With the largest numerical mission, the Army has the largest number of recruiters (7,887 in 2018), whereas the Air Force has the fewest (1,157).

Figure 13. DOD resource investments, FY 2018 (in millions of dollars)

Bonuses and education incentives $522M — 17%

Recruiter support $331M — 11%

Advertising $502M — 16%

Civilian pay $182M — 6%

Military pay $1,595M — 51%

Source: OUSD (AP) [9].

Each Service provides a range of recruiting support—management, recruiter training, marketing and advertising, and administrative services—to assist the recruiter. Recruiters can then focus on their main task of developing "leads" and converting them into enlistments, which can be an arduous task. Leads come from advertising, referrals, purchased lists of contact information, community outreach programs, high school visits, local displays and presentations, direct mail, phone calls, and, more-so today, use of the internet, social media, and chat rooms operated by the Services. Only a small proportion of leads actually become enlistments, and often it can take weeks to sign up one enlistee. For example, as of 2019, an average Army recruiter contacted approximately 170 leads before "closing the deal" for one recruit [69].

As members of the sales force, recruiters have a positive and significant effect on enlisting high-quality recruits. A number of studies suggest that, on average, the effect of a 10-percent increase in the number of recruiters leads to an increase in high-quality enlistments of 3 to 6 percent [44-46, 59, 70-71]. These estimates come from several studies of different Services over different time periods and recruiting environments. Recruiters have an effect on propensity, too. As they interact with prospects and their influencers, they grow propensity one interview at a time and increase the support of the military throughout the communities in which they live.

One study found that increasing the number of recruiters by 10 percent would increase high-quality enlistments by 4.1 to 4.7 percent, but a decrease in the recruiter force of 10 percent would reduce high-quality enlistments by more in the short term—between 5.6 and 6.2 percent [45]. This is an important finding because a decline

in the number of experienced recruiters has a greater *negative* impact on enlistments than a *positive* impact of increasing the recruiter force. This is partly because new recruiters are less productive than their more experienced counterparts, and it takes time to turn them into experienced recruiters [44, 72].

The number of recruiters has fluctuated considerably for the Army and Navy over the last 30 years. The Services typically cut back on the number of recruiters when the recruiting climate is favorable, or when enlistment goals are reduced. When times become more challenging or goals are increased, the Services increase the recruiter force. This fluctuation can make it difficult for the Services to use the recruiter force as quickly and effectively as they would like in response to emerging recruiting challenges. Once the recruiter force has been cut, its size and expertise cannot be quickly reestablished. It takes considerable time to assign recruiters from the field or fleet, send them to school for training, and develop skills to make them as productive as their more experienced colleagues.

Figure 14 shows the fluctuation of the recruiter force since 1987. Clearly, it makes sense to cut back during good times, but the Army and Navy must dampen these fluctuations to be able to surge to the appropriate number of recruiters when the recruiting environment becomes more difficult. The timeliness of these surges also is important because, if the response is too slow, it can take too long to recover.

An additional benefit to keeping a sizable and stable recruiting force is that maintaining a military presence in communities across the country ensures that the public understands that the military continues to "hire." In addition, it serves to counteract the shrinking veteran population

Figure 14. Annualized monthly average of recruiter count, by Service, FY 1987–2018
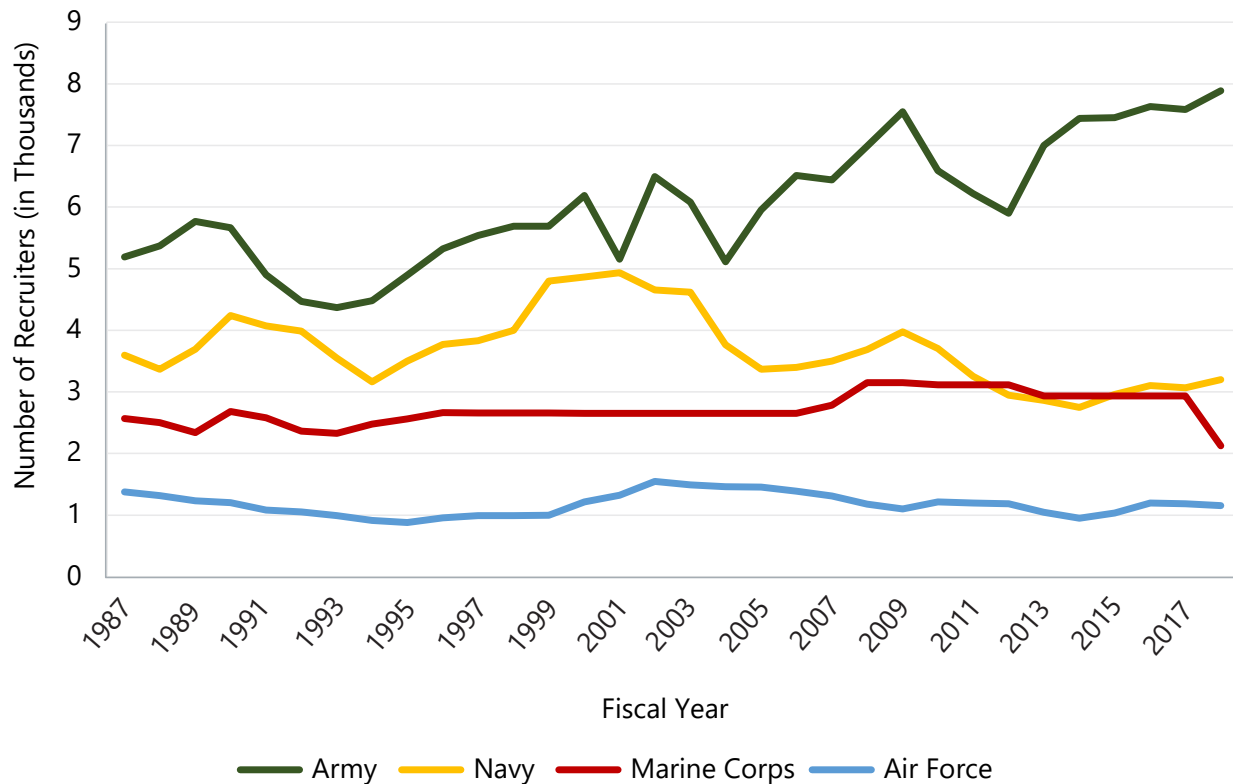
Source: OUSD (AP) [9].

that traditionally provided role models for youth. Seeing men and women in uniform throughout the community is important. Recruiters can become role models themselves as they share their military experiences with youth and influencers. Cutting back the recruiter force, as well as recruiting stations, during favorable recruiting climates diminishes this presence. It could adversely affect propensity and, in turn, could negatively affect recruiting. Interested youth may have little opportunity to see a uniformed recruiter or to walk into a recruiting station. Although more costly, in some cases, it may be more beneficial for the Services to keep a station open or to open a new station than to expand the number of recruiters in an existing station just to maintain a broader military presence [73]. For example, a recent

Army study found that a 10-percent increase in the number of recruiters leads to a 4.7 percent increase in high-quality enlistments. But if the Army also opens more stations, a 10-percent increase in both would result in a 7.6-percent increase in enlistments [39]. Some Services have closed stations and reduced the recruiter force in favor of "virtual" recruiting where recruiters work remotely and online, but these actions have had limited success and have entailed significant costs. Recent work generally finds that closing stations and reducing recruiters' physical presence hurts enlisted production. This is partly because there are fewer role models in the community, resulting in a reduced military footprint and creating a Service void.

An increase in recruiter presence for one Service, however, will affect the recruiting production of another Service in the same recruiting area. One study found that an additional Navy recruiter that produces 10 high-quality recruits will reduce high-quality Army enlistments by approximately 3 recruits. Meanwhile, the total number of enlistments in an area will increase for each Service if all Services increase the number of recruiters proportionately [73].

Besides increasing the size of the recruiter force, the Services continually look for ways to enhance recruiter productivity. Because recruiters are the military's sales force, selection criteria, training protocols, incentive structures, and support systems should be designed to increase their sales potential. A recent study addresses these issues, including recruiters' views on the state of their occupations [73-74].

The diversity of recruiters also can be an advantage to recruiter productivity because recruiters with similar characteristics (race, gender, ethnicity) to the youth they are recruiting tend to be more effective. Recruiters assigned to their home states or communities and minority recruiters assigned to areas with significant minority populations can be an advantage [40, 75].

Recruiter goals are an important factor in recruiter success. Setting goals too high may mean failure; setting them too low may mean that Service missions are not achieved. Studies have argued that recruiters should be held personably accountable for their goals [11, 73]. In such a scenario, recruiting commanders, together with other recruiting leadership, would establish individual goals for which recruiters would be responsible [15]. The bottom line is that, however they are set and to whomever responsibility is assigned, recruiting goals must be realistic and achievable.

MARKETING AND ADVERTISING

Advertising and market research play significant roles in a Service's recruiting effort. Market research allows the Services to better understand the youth market and the most effective ways to reach it. Advertising provides a strategy that not only enhances awareness to the public about military service as an option for young people and the presence of the military as an institution, but also provides specific information on what the Services offer in benefits and job opportunities. Messages should be directed at both the youth population (those who are thinking about entering the military and those who are not) and the various influencers of youth so that they can be well informed.

A main goal of military advertising is to show the diverse range of opportunities that the military offers young people. The Services can use the following strategies to accomplish that goal:

▶ Emphasize the intangibles of military service: service to country, honor, courage, commitment, leadership, and positive preparation for adulthood.

▶ Inform youth about the tangible benefits available, such as comparable pay and benefits, money for college, bonuses for enlisting in critical occupations, and skill training.

▶ Address and correct the misconceptions that youth and their influencers have about military service. For example, they may believe that every job in the military is combat related, when that is not the case.

▶ Recognize that some media channels are better for certain kinds of messages. A 30-second television spot, for example, should highlight the more transformational or emotional appeal of joining the military, whereas digital is better for marketing the tangible benefits of service.

Marketing and advertising budgets

The advertising and market research budget for the Services totaled about $500 million in 2018, which was 16 percent of the total recruiting resources budget. There are separate advertising programs for each Service, as well as a joint DOD program. JAMRS continues to play an important role in supplementing Service-specific advertising by providing foundational market research so the Services do not have to duplicate efforts. JAMRS also plays an important role in educating youth and their influencers about the values of military service and exposing them to positive messages about the military. Each Service, however, attempts to market its "brand" by promoting the attributes of its Service, whether in terms of educational assistance, job training opportunities, adventure, or personal growth.

Studies of military advertisement have concluded that it has a positive effect on high-quality enlistments [44, 76-77]. The most recent study for the Army shows a strong significantly positive effect of TV advertisements on both high-quality and total enlistments [47]. The precise impact of advertising, however, is difficult to measure partly because advertising does not immediately generate a lead, and it takes at least a dozen impressions to move someone to not only consider military service but to actually enlist [77]. Another reason for the imprecise effects is that lag times vary among the different media types.

For example, historically, television advertising has had a large initial impact on enlistment decisions, while the impact of digital tools, such as social media, may take longer to materialize, but may last longer. Further, studies that measure advertising effects during a narrow timeframe may not capture the effects that occur outside that period [78].

Finally, if estimates of advertising effectiveness are based on less than optimal levels of advertising spending, they will underestimate their effectiveness, which has been shown to follow an "S" curve, in which advertising must reach a certain threshold before it begins to have an effect. Below that level, it would have little or no effect. These threshold and saturation points are most relevant for expensive advertising, such as TV, and the recent Army study addresses this issue at length [47].

Advertising funding has suffered from the same cyclical swings as recruiter funding— increasing during challenging recruiting periods and falling when the recruiting climate improves (see Figure 15). Advertising budgets dropped 60 percent from 1986 to 1993 as force size shrank. Recruiting challenges in the late 1990s forced the Services to ramp up spending on advertising. Budgets grew significantly from 2000 to 2008; then cutbacks occurred as the recruiting climate improved. Budgets hovered in the $450-to-$500-million range until 2018, when they ramped up in response to a more challenging recruiting environment. For example, the Army has had drastic swings in its advertising expenditures:

▶ Reaching a high of $432 million in 2008

▶ Falling to $200 million in 2011

▶ Rising to $328 million in 2015

▶ Dropping to $194 million in 2017

▶ Rising to $259 million in 2018

Figure 15. Advertising expenditures by Service, FY 1985–2018 (in 2018 dollars)
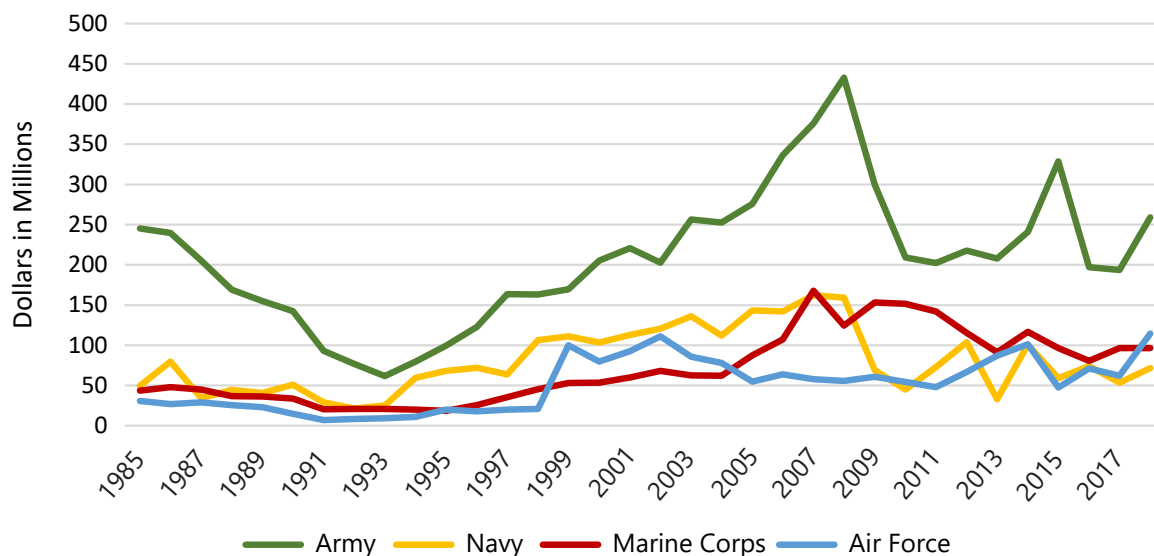
Source: OUSD (AP) [9].

Tying military advertising budgets to fluctuations in military recruiting is not sound policy because it disregards the delayed impact of advertising programs on behavior, as well as the long-term role advertising plays in generating military awareness and support. An ongoing advertising program, regardless of the state of the recruiting climate, can promote military service and increase propensity. If advertising is cut back too much when recruiting is healthy, potential long-term gains in awareness and propensity can be lost [79]. The drastic cutbacks in the early 1990s resulted in a lack of awareness of military service, causing the general public to think the military was no longer "hiring" and resulting in missed missions several years later [80].

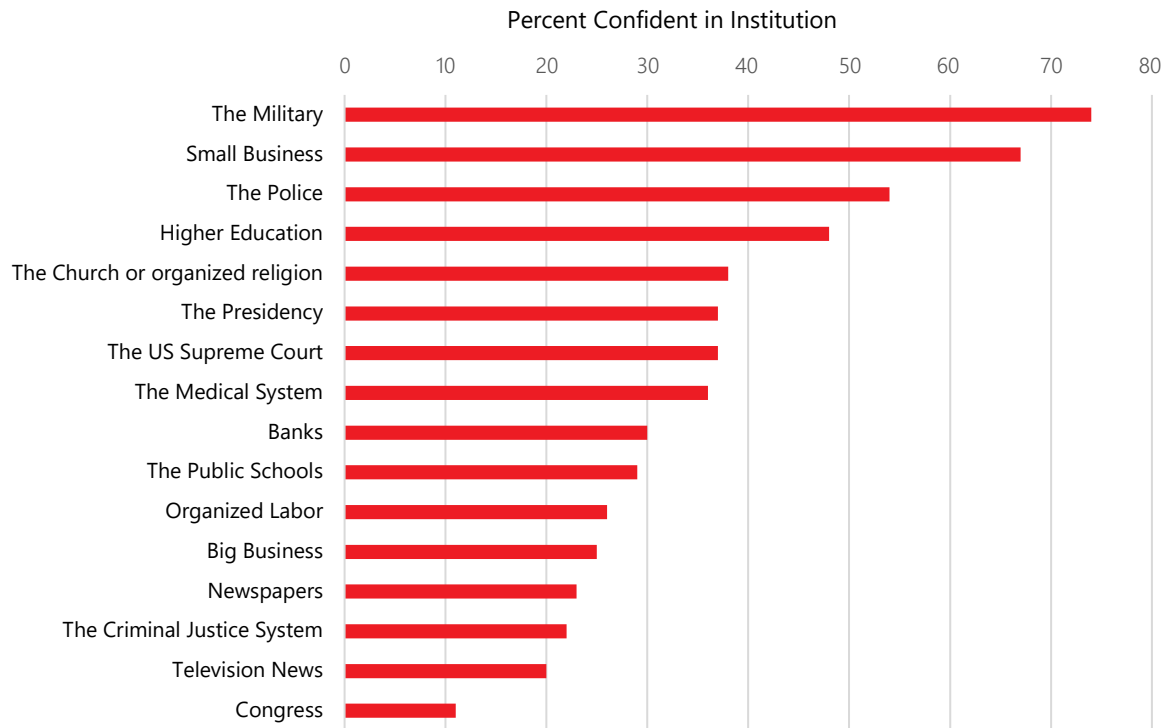## Disconnect between military and civilian populations

Young people enlist in the military for different reasons: job training, adventure and a desire to see the world, the warrior ethos, to work in a high-tech environment, to earn money for college, or to serve their country and be part of something larger than themselves. The Services market their brands and emphasize certain attributes, but what the Services also must address is a changing recruiting landscape. This is obvious from the annual results of a Gallup poll asking Americans how confident they are in various institutions. Each year, the military receives the highest score (see Figure 16). While 74 percent of the American people continue to express a "great deal" or "quite a lot" of support for the military as an institution and its leadership, this support does not translate into a high propensity to enlist. Only 13 percent of youth say they would "definitely" or "probably" be serving in the military in the next few years (see Figure 7).

The youth market is seemingly disconnected from today's military, judging from the fact that relatively few are interested in considering military service. The shrinking military footprint has contributed to a population that is unfamiliar

Figure 16. Public confidence in American institutions, 2018

Percent Confident in Institution

Institution	
The Military	
Small Business	
The Police	
Higher Education	
The Church or organized religion	
The Presidency	
The US Supreme Court	
The Medical System	
Banks	
The Public Schools	
Organized Labor	
Big Business	
Newspapers	
The Criminal Justice System	
Television News	
Congress	

Source: [81].

Note: Those defined as "confident" in an institution responded that they had a "great deal" or "quite a lot" of confidence in the institution.

with the military. Consider the responses of high school youth to the question, "How much consideration have you given to the possibility of joining the military?" Forty percent have never thought about it, 47 percent have given it some thought, and only 13 percent have given it some serious thought. Consideration is the first step in the career decision-making process that begins in high school, and the Services need to focus more on youth at this stage. This situation could be the result of either a lack of awareness and knowledge about the military or misperceptions. For example, only 57 percent of youth think that joining the military would prepare them for a future career, down from 75 percent in 2004. Only 59 percent think they could receive money for college, down

from 85 percent in 2004. Thirty-four percent think they would have an attractive lifestyle, down from 63 percent. Only one-third think that they could keep in contact with family and friends. Further, between 12 and 27 percent feel that people in the military are very different from themselves in many ways.

In addition, the risks of service are foremost in the minds of youth and influencers today and, for them, outweigh the benefits. Most youth believe that once a person leaves the military, he or she will have psychological and emotional problems (65 percent), difficulty adjusting to everyday life (64 percent), and aftereffects of physical injury (57 percent) [25]. Most of these impressions are

from media coverage (which, to a large extent, is negative) and not from personal connections or Service outreach. The military does not control much of the narrative in the American public, of course, and it heavily focuses on sacrifice [25]. Youth and their influencers see TV advertisements from different organizations requesting donations for struggling veterans and wounded warriors. While it is true that those who enter military service are putting their lives and health at risk, the perceived risk is likely higher than the casualty data from modern conflicts actually show [82]. These are the impressions that the Services need to counterbalance with positive images of military service and how the nation cares for its veterans.

One way is to emphasize the intangible benefits of service by focusing on the honorable and patriotic aspects of service and personal development. The Marine Corps' iconic motto—"The Few. The Proud. The Marines"—was very successful in setting the Corps apart from the other Services. The Army's "Be all that you can be" slogan was another example. Placed at number 18 in the top 100 advertising campaigns of the 20th century, it helped turn Army recruiting around in the 1980s and sustained it through the 1990s. It also demonstrated that you could "be all you could be" in a variety of ways: by learning marketable skills, by earning money for college, and by serving your country. The slogan became the signature for all Army ads during that era [83]. The intangible aspects of military service make a compelling message in military advertising. The Services can build on the intangibles as well. By making youth more positively inclined toward military service, this expanded value-focused advertising could increase the pool of young people who would be receptive to Service-specific advertising [2].

As the Services attempt to get their messages out through their advertising campaigns, they face an ever-changing media market. The Services

need to be aware of what drives today's youth. Not only is the demographic composition of the country changing, so are generational attitudes and preferences. Generational definitions vary, but, according to the Pew Research Center, current youth are part of what has been termed "Generation Z" (Gen Z).[13]

Like the Millennial Generation, Gen Z believes that government should do more to solve problems, that increasing racial/ethnic diversity is good for society, and that there are other countries better than the US [84].

Specifically, members of Gen Z

- ► Have not known a world without the internet or smart phones. They spend 6 to 9 hours a day absorbing media. Ninety-two percent are online daily. They are digital natives; their preferred communication mode is social media and texting.

- ► Live in a world in which they do not feel safe. They are aware of a troubled planet with terrorist attacks, and they saw their parents live through the Great Recession with job loss and home foreclosures.

- ► Are open, accepting of different lifestyles, and tolerant, and emphasize diversity and equality. They are justice-minded and they volunteer. They are not necessarily religious.

- ► Value their privacy and need space. They are very independent, self-directed, and confident, but not equipped with "real-life wisdom" and practicality.

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[13] Gen Z is defined as being born after 1996, Millennials were born from 1981 to 1996, Generation Xers from 1965 to 1980, Baby Boomers from 1946 to 1964, and the Silent Generation from 1928 to 1945. As of 2019, Gen Z includes those ages 14 to 22 and so it is already the majority of the target recruiting population.

► Are entrepreneurial, but worried about their financial future. A large proportion go to college after high school [84].

Further, the youth market is fragmented. For example, a household had an average of 10 TV channels from which to choose in 1980; today, there are over 200. In 2004, 93 percent of households had a landline phone; today, only 42 percent do. The proportion of youth who view traditional TV was 84 percent in 2012; today, it is down to 50 percent. Three-quarters of youth view TV on their mobile phones, 69 percent use computers, and 31 percent use tablets. Social media has evolved from a few sites to a plethora of over 150 sites and apps today. The fragmented nature of the media landscape means the Services must pursue many avenues with tailored content to interact with youth and convey the right messages [26]. Therefore, the Services must continue to explore the many options available to reallocate advertising dollars away from traditional media (e.g., network TV) and toward helping create content and targeted ads for social networking sites (e.g., Twitter, Facebook, and Instagram). This will further fragment marketing efforts. It is too early to tell if these changes will have a positive impact on overall recruiting efforts.

Nevertheless, there must be an adequate and sustained investment in advertising. In addition, annual fluctuations, let alone monthly variations, limit the effectiveness of advertising resources as well as the message and the campaign. Because military advertising speaks not only to the current generation of eligible recruits but also to future generations of recruits, any dips in advertising expenditures in the short term can have long-term effects. If the Services are not reaching the younger generation today, they are less likely to be propensed in the future. Allocating resources more evenly throughout the year and from year to year, just as private businesses do, will yield lasting messages and impressions. The public needs to know that the military is always "hiring" those who have the right qualifications for service.

ENLISTMENT BONUSES

Enlistment bonuses (EBs) are financial incentives that the Services can offer to potential recruits and that recruiters can leverage to meet endstrength and skill requirements. EBs have the potential to attract those who were not considering joining the military, to encourage recruits into specific military occupations, to manage the recruit training pipeline, and to influence the enlistment contract length [85]. Each Service separately manages its EB program and has latitude within DOD regulations on how to best implement it [86]. Because EBs are not an entitlement and not available to every new recruit, the Services impose constraints to manage their utilization. For example, the Services regularly modify the EB amounts and "turn on or off" eligibility for various occupations depending on personnel needs, the supply of quality recruits, and available budgets.

In 2019, the Army offered a quick-ship (QS) bonus as well as EBs between $1,000 and $40,000 for 46 occupations; the higher the bonus amount, the longer the service obligation. The Navy had 12 occupations eligible for EBs, with amounts ranging from $10,000 to $38,000, as well as shipping bonuses. The Marine Corps had 8 occupation groups that were EB eligible, with amounts between $2,000 and $8,000, in addition to a shipping bonus for all military occupational specialties (MOSs). The Air Force offered bonuses for 15 skills ranging in value from $3,000 to $15,000 [87].

Table 3. Enlistment Bonus programs offered by Service, FY 2008 and FY 2018 (in 2018 dollars)

	Total enlistments (Non-prior service)	Number receiving EBs	Percentage receiving EBs	Average EB amount ($)	Bonus obligated ($M)
Army					
2008	69,360	46,994	67.8	18,304	860.2
2018	69,972	37,678	53.8	11,834	445.9
Navy					
2008	37,959	17,524	46.2	11,065	193.9
2018	39,018	14,407	36.9	10,005	144.2
Marine Corps					
2008	37,019	11,638	31.4	6,998	81.5
2018	31,566	2,152	6.8	4,164	8.9
Air Force					
2008	27,765	5,376	19.4	4,359	23.4
2018	30,343	6,930	22.8	4,458	30.9
DOD					
2008	172,103	81,532	47.4	14,215	1,159
2018	170,899	61,167	35.8	10,298	629.9

Source: OUSD (AP) [9].

Table 3 shows the size of the EB programs offered in each Service in 2008 and 2018.[14,15] The Army has the largest EB program ($445 million) with well over half of its recruits receiving a bonus averaging nearly $12,000. The Navy offered bonuses of about $10,000 to 37 percent of its new enlistees. The Marine Corps and Air Force typically have much smaller programs, both paying about $4,000, on average, to 7 and 23 percent of their enlistees, respectively.

When comparing 2008 and 2018 data, two recent periods when bonus levels were relatively high, only the Marine Corps had fewer total enlistees, and it also had the largest decrease in the percentage of new enlistees who received an EB, down 24.6 percentage points. The Air Force was the only Service that increased slightly, both the number and percentage of recruits receiving EBs. Overall, the total amount of enlistment bonuses that DOD paid decreased by over $529 million, while the overall number and proportion of enlistees receiving a bonus declined by over 20,000 (or 12 percent).

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[14] 2008 is used as the reference point, because the 2009 Bicksler and Nolan report [2] had data through that year.

[15] These are bonuses offered in the year and do not include residual payments nor do they reflect actual budget numbers.

In general, to qualify for an EB, an enlistee must both be a high school diploma graduate and score in the upper 50 percentiles on the AFQT, and agree to serve in an eligible occupational specialty (typically hard-to-fill or hazardous duty) for a specified term of service. Congress increased the size of the maximum allowable bonus amount from $20,000 to $40,000 in 2007 in response to a relatively challenging recruiting environment. In 2013, that cap was further increased to $50,000 [88].

Figure 17 uses budget data to show the significant fluctuation in EB expenditures from 1990 to 2018. The Services typically cut back bonus expenditures and program eligibility during favorable recruiting periods and expand them when recruiting becomes more challenging. This is precisely how this program is to be used. In 1990, EB expenditures among the Services continued their downward trend, reaching their lowest point in

FY 1994 at $28 million. FY 2009 had the highest EB expenditures at $896 million, when endstrength was growing across the Services. During that year, the Army accounted for over three-quarters of the total amount of EB expenditures, and the Marine Corps' expenditures reached their highest point, $53.8 million. From 2009 to 2014, EB expenditures trended downward, with the Army still using the program at a higher rate than the other Services. In the last five years, EB expenditures have begun to increase again across the Services as the labor market tightened and recruiting became more challenging.

The impact that EBs have on recruiting depends on the Services' intent in implementing them. One study, conducted between 2004 and 2008 when endstrength was growing and the Services began to face recruiting challenges, found that the Army used EBs to expand the recruit market and to channel recruits into specific occupations [46].

Figure 17. Enlistment bonus expenditures, FY 1990 through FY 2018 (in 2018 dollars)
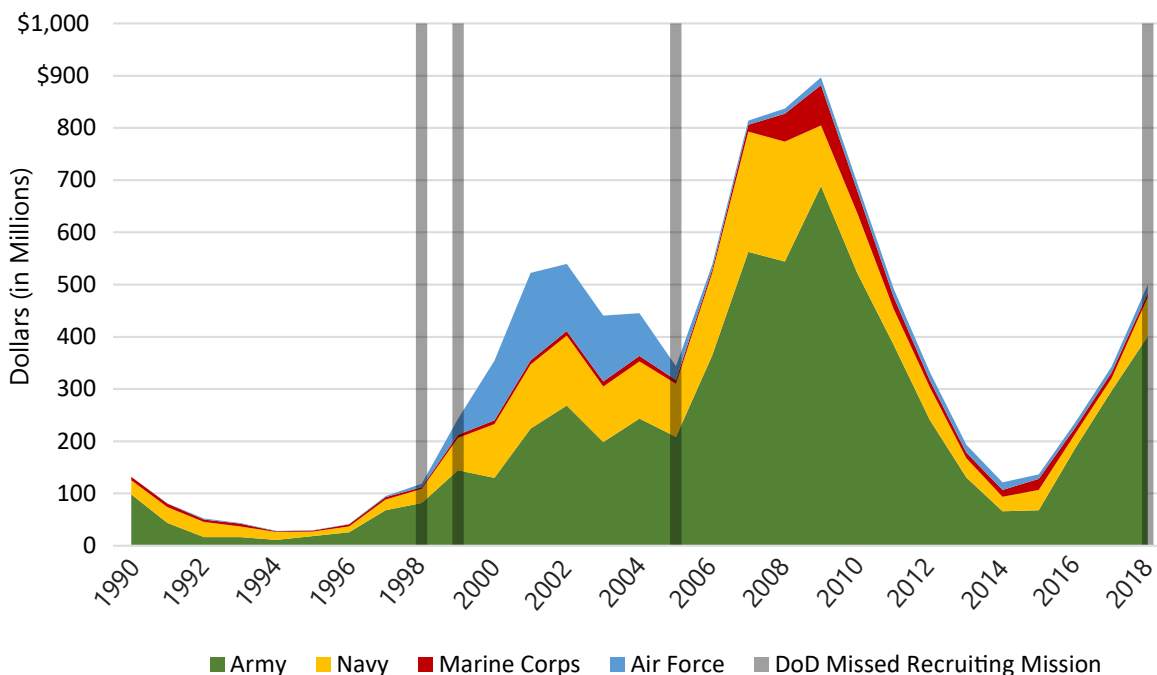
Source: OUSD (AP) [9].

The Navy used a slightly different approach, marginally increasing bonus amounts but reducing EB eligibility [46], implying that the Navy was more focused on filling its critical occupations than expanding the market.

Furthermore, the Services also use EBs to decide the length of the initial contracts they will offer recruits, and that depends, in large part, on Service needs and training requirements. The Army, for example, offers an array of contract lengths—from two to six years—with most in the range of three to four years. The Air Force, in contrast, offers its recruits four-to-six-year contracts. Theoretically, in difficult recruiting times, it might seem advantageous to offer shorter contract lengths to potential recruits who are not willing to commit to a long period of military service. However, there is little evidence for the Navy that contract lengths alone have any impact on enlistment likelihood or subsequent Servicemember outcomes [89–90]. However, there is evidence for the Army that shorter enlistment contracts can attract new recruits [13, 91].

The Air Force and Army also use EBs to extend contract lengths. Encouraging longer terms of service leads to a more skilled and experienced force, reduced training costs, and lower enlistment requirements in the long run. The Air Force has used the Enhanced Initial EB program for occupations that have high turnover and/or training costs, which has been a very cost-effective policy tool. By setting six-year enlistment bonuses $5,000 higher than four-year bonuses, longer enlistment contracts increased by 30 percentage points [92]. And, as of May 2019, Army recruits could receive $50,000 if they enlist for six years within three critical hard-to-fill occupations [88].

In addition, the Services use EBs to better manage when recruits ship to basic training, which helps to balance the training pipeline and any facilities

capacity constraints that the Services face. The Army uses the QS bonus as an important part of its EB program. For select occupations, if recruits can ship within 30 days, they are eligible for $16,000; if they can ship between 31 and 60 days, they are eligible for $8,000 [88]. In addition, a report found that targeted EBs for shipping dates were effective in leveling recruit shipping in Nuclear Field occupations. The analysis concluded that a 1-percent increase in EBs during off-peak months decreased the summer (peak) shipping by 1.9 percent [93]. If recruits ship to basic training before they are ready, however, it is possible that QS bonuses could have negative attrition consequences for the Services.

Studies show that EBs have positive effects on recruiting. The effects are relatively small and differ by Service because, as stated earlier, each Service has a different strategy for or intent in implementing them. Nonetheless, studies generally find that a 10-percent increase in EB amounts can lead to a 0.5–1.2 percent increase in enlistments [94]. Another study estimated that an increase of 10 percent in the EB amount would increase high-quality enlistments between 0.5 and 1.7 percent. For the Army, high-quality enlistments increased by about 5,300 per year between 2004 and 2008—a period when EBs nearly tripled in response to a challenging recruiting environment. In other words, had EBs not increased, the Army might have enlisted 26,500 fewer high-quality Soldiers over that five-year period [46].

A more recent study finds that a 10-percent increase in both QS and occupation-specific EBs would increase high-quality enlistments by 0.2 to 1.1 percent for the Army—still a relatively small effect and consistent with estimates reported above. The study also finds that the effects are larger at low EB levels and then diminish at higher levels [47].

An advantage of EBs is that they can be turned on and off quickly in response to recruiting performance and that they can be targeted to certain recruits as we have described. One disadvantage, however, is that EBs could be paid to some recruits who would have enlisted anyway (i.e., without the EB). The recent Army study determined that increasing the EB amount by 10 percent would yield only 0.9 percent more high-quality recruits, which means that about 90 percent of the additional dollars are paid to those who would have enlisted without the EB [47]. In other words, EBs have a saturation point after which more money does not necessarily garner the results desired or warrant the additional investment.

RELATIVE EFFECTS OF RECRUITING RESOURCES

In addressing the key elements that affect the military recruiting environment, personnel managers must determine the most cost-effective way to allocate resources to ensure that the Services meet their recruiting goals. This, of course, is determined by the impact that the various recruiting resources have on enlistment, as well as their cost. Table 4 shows the impact that these resources have on the enlistment of high-quality youth, as well as the effects of other factors that impact recruiting. These estimates are for the Army because most studies are Army specific, and they are summaries from the most recent and comprehensive analyses. Impacts are expressed as a range because studies differ in methodology, data, time period, and variables used.

Recruiters are key to recruiting success; their impact is significant and should not be discounted in the interest of technology or resources. Recruiting success depends heavily on the number of recruiters, which points to the importance of maintaining an appropriately sized recruiter force. As we have seen, and as the table shows, the negative impact of losing experienced recruiters is

Table 4. Impacts of various factors on high-quality Army enlistments

Resources and other factors	Percent change in high-quality enlistments
Recruiting resources	
10-percent increase in recruiters	3.7 to 6.0
10-percent decrease in recruiters	-5.6 to -6.2
10-percent increase in advertising budget	0.8 to 1.4
10-percent increase in bonus amount	0.3 to 1.7
10-percent increase in military pay	5.9 to 11.5
Environmental factors	
10-percent increase in unemployment	2.7 to 4.2
10-percent change in the veteran population	14
Wartime operations	-10 to -33
College enrollment	-0.9 to -2.1

Note: This table is the summary of the results from studies discussed throughout the document.

greater than the positive impact of increasing the number of less experienced recruiters.

The impact of advertising is significant as well and, like the recruiter force, it is important to establish a level that is sizable and sustained. The policy implication for the Services is not to cut their advertising budgets too much during periods of low demand for recruits, lest they operate in the least efficient part of the S curve discussed earlier and not even reach their target market [95].

Bonuses also are important to induce potential recruits to enlist. Their effect is relatively small, however, since bonuses also are used to channel recruits into certain occupations, to enlist for longer terms, and to ship to basic training at a specific time (often quickly). However, there are diminishing returns to bonuses and there is a threshold at which bonuses will cease to provide a significant return on investment. For example, there are years where the Army struggled to meet its recruiting mission, but it was also hard-pressed to effectively spend all of its allocated bonus dollars.

There are, of course, trade-offs among these three key resources—recruiters, advertising, and bonuses. For example, bonuses can help with short-term enlistment challenges as they can be spent immediately and the funds reprogrammed during the year, but they are less effective in the long term. Advertising, on the other hand, is helpful in the long term, but not as effective in the short term. Recruiters can be effective in both the short- and long-term when adequately staffed.

Although each Service has no direct control over the level of military pay, it is a significant enlistment incentive. It is a very expensive incentive, however, because an increase in pay would apply not only to new enlistees but to the entire force. While it is not viewed as an efficient

recruiting tool, it is critical that there be pay comparability with the civilian sector to attract and retain high-quality personnel.

In terms of environmental factors over which the Services have no control, the effects also are significant. Rising unemployment leads to an increase in high-quality enlistments. A declining veteran population has a negative effect, as do wartime operations, and college attendance. The Services must use their resources—recruiters, advertising, and bonuses—together with other policy tools, such as eligibility criteria, to counter the negative effects of environmental factors.

RECRUITER MANAGEMENT POLICIES

Figure 18 is useful for understanding the recruiting organizational structure. As shown, the Army, Navy, and Air Force follow similar structures, but the Marine Corps is more streamlined. The Marine Corps' recruiting commander reports directly to the Commandant. In the other Services, the recruiting commander reports through a three- or four-star command to the Service chief [74]. The Commandant is known as the Marine Corps' chief recruiter; recruiting is *that* important for the Corps. In addition, the Marine Corps maintains a close relationship between recruiting and training. The commanding generals for the two Marine Corps recruit training depots also are the commanding generals of the East/West recruiting regions. Below the command headquarters level, the recruiting organization across Services is divided into smaller recruiting regions down to the station/office/substation level at which recruiters generally are managed [74].

Over the history of the AVF, the Services have traditionally followed a conventional recruiting model that featured individual recruiter missions/

Figure 18. Recruiting organizational structure by Service

Army	Navy		Marine Corps	Air Force
Chief of Staff ★★★★	CNO ★★★★		Commandant ★★★★	Chief of Staff ★★★★
TRADOC ★★★★	CNP-N1 ★★★			AETC ★★★
USAREC ★★	NETC ★★		MCRC ★★	AFRS ★★
DCGs East/West ★	CNRC ★		East/West Regions ★	
Brigades (6)	East/West Regions		Districts (6)	Groups (3)
Battalions (44)	Districts (26)	Talent Acquisition Groups (10)	Recruiting Stations (48)	Squadrons (28)
Companies (257)	Division Leading Chief Petty Officers (205)	Talent Acquisition Onboarding Ctr (18)		Flights (216)
Recruiting Stations (1453)	Recruiting Stations (1318)		Recruiting Sub-Stations (590)	Recruiting Office (1067)

Source: OUSD (AP) [9].

goals to meet their overall recruiting mission. Driven by budget cuts and reduced recruiter manning, since 2007, the Services have explored new approaches and strategies to meet recruiting goals. While these initiatives conceptually have merit, over time, these strategies have proven to be less successful, resulting in the Services reverting back to the traditional model to meet their recruiting missions.

In particular, Army Small Unit Recruiting (SUR) began to roll out in 2007 and resulted in station missions, recruiter task specialization, and station closures. Air Force Hub and Spoke (HUB) began in 2013 and resulted in station closures in favor of fewer, more centralized hubs. Finally, Navy Optimization (OPT), in which stations in underperforming areas were closed and reassigned to virtual recruiting, began in 2015.

A recent analysis found that Army SUR slightly decreased production and recruit quality. Air Force

HUB very slightly increased production and quality. Navy OPT slightly decreased production and increased quality. The Navy has also increased its virtual recruiting locations as part of Navy OPT. These efforts have shown some promise; however, in other cases the other Services' more traditional recruiting practices have reported market improvement in areas where the Navy transitioned to virtual recruiting. In light of the effects, ranging from very small positive to negative, the Services should carefully consider such large policy changes in the future. Indeed, the Army discontinued SUR in 2017 (although station missions remain) and the Air Force plans to roll back HUB where necessary. In addition, station closures and recruiter consolidation diminishes recruiter presence across the US, which can negatively affect future recruiting and may affect recruit diversity.

The Marine Corps is the only Service that did not alter its recruiting model. Since 1977, the Marine Corps has used its "systematic recruiting" model, which relies on a quality recruiting force (choosing the best Marines in the field to become recruiters) and formal school training, monthly proficiency training, and other doctrine, policy, and programs outlined in MCO 1130.76 [96]. Another reason the Marine Corps did not have to search for efficiencies through such large policy changes is that the recruiting commander reports directly to the Service chief, who can protect recruiting resources and avoid swings in recruiting budgets [73].

CONNECTION BETWEEN

RECRUITING AND OTHER SERVICE-LEVEL RESOURCES

While certain resources are earmarked in the Service-level budgets for recruiting, other Service resources can interact with recruiting resources and affect recruiting success. For example, recruiting and entry-level training are closely linked in the Servicemember accession pipeline; thus, recruiting success or failure is closely linked to the resources of the entry-level training schoolhouses. If there are not enough "bedspaces" at the recruit training schoolhouses for all of the scheduled recruits to ship from the DEP, this can delay recruit ship dates, and there is a potential for increased DEP attrition as those in the DEP wait to begin training. In addition, bottlenecks in the training pipeline could make it more difficult for the recruiting commands to set missions for their recruiters because they have delayed information about attrition rates from the training pipeline.

In a similar vein, the next section discusses DOD and Service-level policy levers that, if not planned for and resourced properly, can make it more difficult to attract enlistees to the Services.

DOD and Service Policy Considerations

In this section, we discuss additional policy considerations in which recruiting commanders should stay engaged, even if they do not have direct control over the decisions, because the policies can affect recruiting.
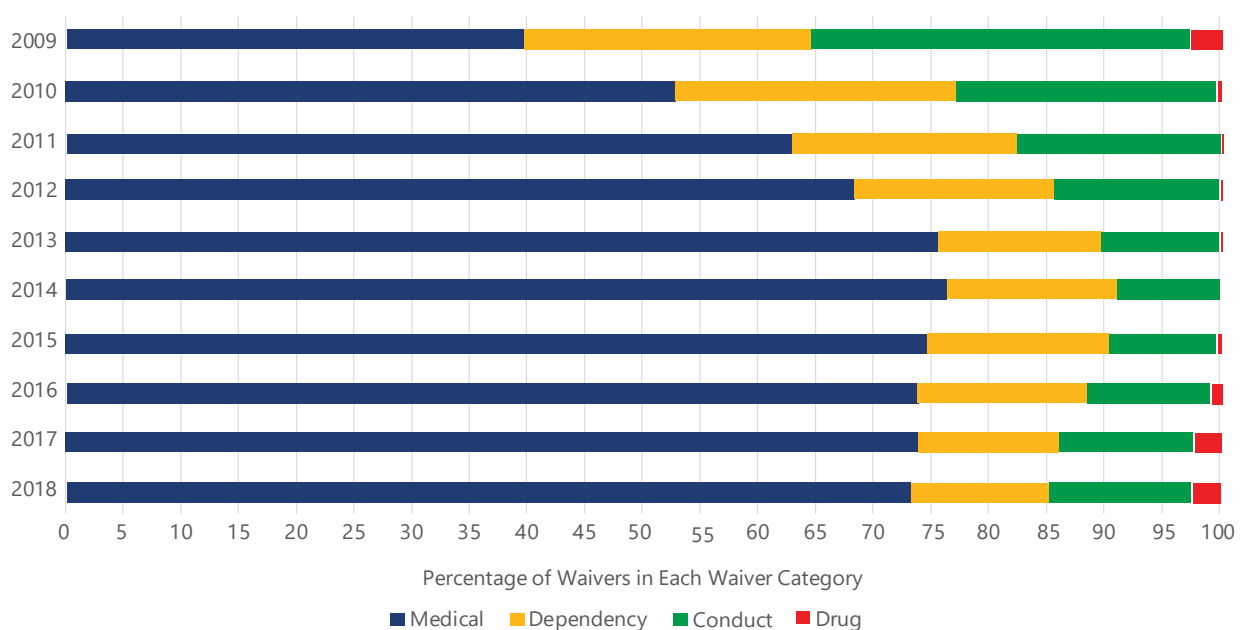
WAIVERS

The Services can grant enlistment waivers to some recruits who do not meet initial enlistment standards. This is an important tool because, in many cases, applicants who may not meet all enlistment criteria and are offered waivers still become successful Servicemembers. However, in general, waivered recruits are somewhat less likely to complete basic training and their initial enlistment terms.

Figure 19 shows that, across DOD, most waivers issued are for medical reasons (73 percent in 2018), while drug waivers are the least common type

(2 percent in 2018). Waivered recruits are closely scrutinized because recruiters are willing to spend time processing these requests and want to ensure that the applicant is going to be a successful Servicemember.

A DOD study found that first-term attrition is highest for recruits with major misconduct waivers, followed by those with drug use waivers [97]. The percentage of recruits with DOD-defined waivers varies over time, falling when the recruiting environment is more conducive to recruiting success (higher unemployment) and rising when the recruiting climate is more challenging (lower unemployment) and qualified recruits are difficult to find. This can have long-term implications if waivered recruits have higher attrition rates because attrition is expensive. Also, enlisting waivered recruits is costly, as recruiters must spend more time processing paperwork for them.

Figure 19. All Service/Component waivers by type, FY 2009–2018

Percentage of Waivers in Each Waiver Category

■ Medical ■ Dependency ■ Conduct ■ Drug

Source: OUSD (AP) [9].

As society changes, the Services may need to examine their policies regarding certain waivers and determine the factors that introduce the highest risk to an enlistee's future success in the military. For example, the legalization and increased use of marijuana in certain states, as well as the increased prevalence of tattoos, could have a significant effect on disqualification rates. The trade-offs between the benefits of enlisting waivered recruits and the costs of their processing and attrition will need to be considered.

EDUCATIONAL BENEFITS

Servicemembers may be eligible for an array of educational benefits that cover different educational costs incurred before, during, or after service. These include the GI Bill, college funds, Tuition Assistance, and student loan repayment. Considering the rising costs of college and the returns to a college degree [51, 98], it is not surprising that 40 percent of new recruits reported that one of the reasons for wanting to join the military was "to pay for future education" or that 33 percent indicated "educational opportunities within Service" [63]. In the following subsections, we discuss the various educational incentives and their effects on recruiting.

GI Bill

The original GI Bill, the Servicemen's Readjustment Act of 1944, was created to provide educational benefits to WWII veterans. Since then, the federal government has provided some form of educational assistance to Servicemembers, including several replacements to the original GI Bill. Three GI Bills are in effect today: the Montgomery GI Bill of 1985 (MGIB),[16] the Post-9/11 Veterans Educational Assistance Act of 2008

(Post-9/11 GI Bill),[17] and the Harry W. Colmery Veterans Educational Assistance Act of 2017 (Forever GI Bill).[18]

MGIB and the Post-9/11 GI Bill benefits may be used during Service or after.[19] Researchers estimate that the Post-9/11 GI Bill increased average benefits over its predecessor, the MGIB, by $20,000 to $30,000 (more than a 40-percent increase) [101-103]. The Post-9/11 GI Bill is the largest tangible enlistment incentive after basic pay and allowances [104].

Studies have estimated the effects of MGIB and the Post-9/11 GI Bill on enlistment. One Marine Corps study found that the Post-9/11 GI Bill increases high-quality enlistments by 10 percent and that the positive effects are larger for blacks and Hispanics [103]. Further research finds that an increase in MGIB benefits increases high-quality Army enlistments and has a positive, but statistically insignificant, effect on Navy enlistments [46]. Finally, a more recent analysis finds that the Post-9/11 GI Bill slightly increases the proportion of high-quality enlistments (by, at most, 1 percentage point) when looking across Services, both active componen and reserves [105].

College funds

College funds are lump-sum supplements to the GI Bill (limited to $950 per month) and also are known as "kickers." The Army introduced kickers in 1982 and, when coupled with a two-year

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16 The MGIB provides a flat monthly benefit paid to students with no housing or book stipend. Servicemembers must contribute $100 monthly in the first year of service to participate.

17 Full benefits cover 36 months of tuition (up to the maximum public university tuition in any state) and fees, provide a monthly housing stipend, and provide $1,000 per year for books and supplies. Servicemembers who served at least 6 years may transfer benefits to a spouse or dependents if they agree to 4 additional years of service.

18 The Forever GI Bill enhanced veterans' education benefits [99]. One of the most important changes is the elimination of the 15-year time limit to use Post-9/11 GI Bill benefits.

19 However, active-duty members cannot receive the housing allowance or the stipend for books and supplies [100].

enlistment option, they became a very successful recruiting tool for those high-quality youth who were college-bound but wanted educational assistance and short enlistment terms [12]. The Navy and Marine Corps introduced kickers later and have offered them to high-quality recruits at various times for select occupations [85, 104]. Earlier studies have found that Army and Navy College Funds increase high-quality enlistments [16, 43-44, 106-107]. However, these studies rely on data before the implementation of the Post-9/11 GI Bill, which substantially expanded benefits and effectively eliminated college funds as an enlistment incentive [47].

Tuition Assistance

The DOD Tuition Assistance (TA) Program is available to Servicemembers while serving. The Services are authorized to pay all or part of the tuition for courses taken during off-duty time [104]. TA is not tied to an enlistment contract, and availability is based on available funding. TA may be attractive to those interested in college and military service, but it is not a policy over which recruiting commands have control [104].

Two studies find that the Post-9/11 GI Bill increased demand for or use of TA [103, 105].[20] This may be because a more generous GI Bill increases the demand for higher education, which Servicemembers are more likely to start while in the military. It also may be because Servicemembers are more likely to use TA and transfer the Post-9/11 GI Bill to their spouses or dependents [103].

Student loan repayment

The Services are authorized to repay loans for prior education to recruits going into critical military occupations. In the past, the Services have offered loan repayment programs at various times and with different benefit amounts [85]. The Army and Navy offered payments up to $65,000 for critical occupations, and discussions with Army recruiters suggested that loan repayment was an effective enlistment lever when it was more widely available [104].[21] Student loan repayment may be an attractive incentive to potential recruits considering the substantial amount of US student debt [104]. In addition, loan repayment may be a valuable enlistment lever in attracting youth with college experience who may be high quality and able to fill occupations that are more technical.

COMPENSATION

To compete effectively in the civilian labor market for high-quality youth, the military must offer comparable pay rates. Pay comparability is not, by itself, sufficient to guarantee AVF success, but, without the perception of a fair and equitable pay package, it will fail. As GEN Thurman noted, when the military was "unable to pay competitive salaries, we lost the heart of our non-commissioned officer corps and, with it, the mid-level troop [and] technical leadership we needed" [11].

Pay is a significant enlistment incentive, and a recent study shows how critical the military pay package is to recruiting success [110]. Studies consistently have found a close relationship between military pay and the enlistment of high-quality youth. When pay declines relative to civilian earnings, high-quality enlistments fall. For

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[20] Tuition Assistance Top-Up also may be used to supplement TA. This program allows Servicemembers to use part of their GI Bill during service [108].

[21] Those receiving loan repayment are not eligible for the Post-9/11 GI-Bill unless they reenlist [85]. In the past, the Navy also has restricted the use of EBs alongside loan repayment [109].

example, a decrease of 10 percent in the ratio of military to civilian pay would reduce high-quality enlistments by 6 to 11 percent in the Army and by 7 to 10 percent in the Navy [39, 43 – 46, 95]. As the AVF's history has shown, when military pay is allowed to fall too far behind civilian wages, the volunteer military is in peril.

Setting military pay correctly takes constant vigilance. To this end, every four years, Congress directs DOD to review various aspects of military pay to ensure that it is adequate to recruit and retain a volunteer force. One review of particular importance was the 2002 *Ninth Quadrennial Review of Military Compensation* (QRMC), which found a significant pay gap between military and civilian wages and recommended the largest pay increase in 20 years [111].

Furthermore, it is not sufficient for military pay to just be comparable to civilian wages, but it should reflect the special demands associated with military life, and should be set above average private-sector pay to compensate for these demands. Setting pay at about the 70th percentile of comparably educated and experienced civilians is necessary to recruit and retain the quantity and quality of personnel needed [111]. This recommendation was endorsed by the *Tenth QRMC* [112]. This above-average pay level reflects the personal hardships and potentially hazardous working conditions associated with military service [113].

Pay comparability is not of particular concern today. This is due in part to the recommendations of the *Ninth and Tenth QRMCs*, and to the "premium" added to the annual pay raise. The annual military pay raise is set by Congress and is based on the increase in private-sector earnings as measured by the employment cost index (ECI) calculated by the Bureau of Labor Statistics. Until 2011, Congress had set the pay raise at

0.5 percentage point above the ECI increase [114]. Now the pay raises are set equal to the ECI.

In general, however, a military pay increase is not viewed as an efficient recruiting tool because it is an expensive across-the-board policy. The pay raise, of course, would have to be paid to all new enlistees—even those who would have enlisted at the old lower pay level—and to the entire force, both active and reserve. A single percentage-point increase in basic pay adds about $1.0 billion to the annual defense budget. But a pay raise is important when pay comparability is out of line, and when increases are needed not only to ensure that the military is a competitive employment option for youth, but to retain the current force [2].

Blended Retirement System

To the extent that youth—or, even more importantly, their influencers (parents)—consider retirement in their enlistment decisions, the recent and dramatic changes to the military's retirement system could be important. In 2018, DOD implemented the Blended Retirement System (BRS) in which all Servicemembers entering on or after January 1, 2018, are automatically enrolled in a Thrift Savings Plan (TSP) and are eligible for Service matching contributions. Servicemembers are fully vested after two years and will receive some retirement benefits when they leave. Under the old system, members received no benefits if they left service before 20 years.

The addition of a TSP might entice recruits to consider a career of less than 20 years because they can leave service with some 401(k)-like retirement benefits, much like those offered by many private-sector employers. Although it is too early to determine the BRS's impact, studies show that some forward-looking recruits may prefer the new system and consider this as an enlistment incentive [115-116].

Conclusion: Recruiting in the 21st Century

Conclusion: Recruiting in the 21st Century

DOD invests substantial resources in managing the force—training, pay and benefits, promotion, retention, family policies, and retirement. These efforts will matter little, however, if the Services cannot recruit the number and quality of youth they need to achieve their missions. Individuals the Services recruit will define what the military looks like and how it performs, both now and in the future. If recruiting fails, the viability of the AVF will be questioned; more importantly, the force is degraded and national defense compromised. Recruiting is the heart of the volunteer military and critical to the readiness and lethality of the force and the nation.

Of paramount importance for the Services is understanding the recruiting environment, particularly the youth labor market. The recruiting environment, however, is ever evolving. It is characterized by both long-term trends, such as a growing and changing youth population, and short-term fluctuations, such as the surge in patriotism after 9/11 or the Great Recession, which improved the recruiting environment significantly.

In addition, as social norms evolve, so do DOD's policies related to those norms. To the extent that policy changes (e.g., in such areas as marijuana use, tattoos, and women serving in combat occupations) do not introduce unnecessary risk to the Services' missions, readiness, and lethality, DOD policies generally have kept pace with changing societal norms, because of social and political pressure. When DOD policies are at odds with the views of the society from which it recruits, it can make recruiting more difficult and it can threaten Congressional and Administration support.

The recruits the Services enlist today are not like those of 10 years ago, and those were not like the ones 10 years earlier. Changes are happening not only in the country's demographic composition, but also in generational attitudes and preferences. Youth today are different in the way they interact with people and how they consume information. The Services need to adapt their recruiting practices with each generational change. They must deal with a new cohort of Generation Zs who think differently than the previous generation (Millennials), and recruiters must find effective ways of reaching them in a very fragmented media market. What makes communicating with today's youth particularly challenging is that they are less connected to the military than in previous decades. And, there is a lack of awareness about the military among youth. Further, youth often hold misconceptions about military service. This is the supply side of the recruiting landscape.

On the demand side, the Services will continue to require quality personnel—at least 90 percent with a high school diploma and at least 60 percent who score in the upper half of the AFQT. We know that high-quality youth are more difficult and costly to recruit, particularly when the economy is strong. But there is no substitute for quality because the nature of war is changing, due primarily to technological advancements. Not only is conventional weaponry more advanced, but cyber warfare is becoming more relevant as nations attempt to disrupt other nations' computer networks rendering power, water, communications, and transportation systems vulnerable. The Services will have an increased need for high-quality recruits who are trained in such fields as artificial intelligence, information technology, database administration, and electronics.

Conclusion: Recruiting in the 21st Century

Over much of the AVF's 46-year history, the Services have been able to recruit the number of high-quality youth needed by using the resources described in this report. With these resources, they have been able to maintain an educated and high-aptitude "workforce" and address challenges posed by factors outside the Services' control, such as a healthy economy, military engagements, shifting youth demographics, high college attendance rates, and a shrinking military footprint across the country.

Unfortunately, recruiting budgets have fluctuated widely over the decades—falling during good recruiting times and ramping back up when the recruiting climate becomes more challenging. While some fluctuation is understandable and even desirable, if adequate funding is not in place when recruiting conditions deteriorate, valuable response time is lost as new resources are added. Entering challenging recruiting periods with insufficient resources—such as little advertising and inexperienced recruiters, contributes to the "boom and bust" recruiting cycle. This cyclical funding strategy also ignores the impact that advertising and recruiters have on youth attitudes, propensity, and broader national support for the military.

The need for adequate and sustained recruiting investments emerges from the research and data highlighted in this report. Constant fluctuations in recruiting budgets make it difficult for the Services to plan for and ensure success. Twenty years ago, the Defense Science Board on Human Resources Strategy noted that "successful recruiting depends on adequate (and stable) resources" that support a long-term and "generous" funding level [117]. The Services need to take a long-term perspective when planning recruiting investments. Cyclical funding in response to last year's recruiting market does not reflect effective or efficient resource planning.

The Services' experiences in the late 1970s, the late 1990s, 2005, and 2018 illustrate an important lesson—one that needs to be at the forefront of senior leadership decision-making: avoid basing recruiting investments on the prior year's recruiting market because two of the most important resources—advertising and recruiters—operate with a lag. Such "fine tuning" (to use the words of the Defense Science Board) is ineffective and can be detrimental to future recruiting efforts [2].

Abbreviations

Abbreviations

AETC	Air Education and Training Command
AFQT	Armed Forces Qualification Test
AFRS	Air Force Recruiting Service
ASVAB	Armed Services Vocational Aptitude Battery
AVF	All-Volunteer Force
BMI	Body Mass Index
BRFSS	Behavioral Risk Factor Surveillance System
BRS	Blended Retirement System
CNO	Chief of Naval Operations
CNRC	Commander, Navy Recruiting Command
CPS	Current Population Survey
DCG	Deputy Commanding General
DEP	Delayed Entry Program
DOD	Department of Defense
DODI	Department of Defense Instruction
EB	enlistment bonus
ECI	Employment Cost Index
GED	General Educational Development
GWOT	Global War on Terrorism
HUB	Hub and Spoke Optimization (Air Force)
JAMRS	Joint Advertising, Market Research & Studies
JOIN	Job Opportunities in the Navy
MCRC	Marine Corps Recruiting Command
MGIB	Montgomery GI Bill
NCO	noncommissioned officer
NETC	Navy Education and Training Command
NPS	non-prior-service
OPT	Optimization (Navy)
OUSD (P&R)	Office of the Under Secretary of Defense (Personnel & Readiness)
QMA	qualified military available
QS	quick ship
SUR	Small Unit Recruiting (Army)
TA	Tuition Assistance
TAPAS	Tailored Adaptive Personality Assessment System
TRADOC	Training and Doctrine Command
TSP	Thrift Savings Plan
USAREC	US Army Recruiting Command
YATS	Youth Attitude Tracking Study

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