



## Population Representation in the Military Services: Fiscal Year 2019 Summary Report

# Preface

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Since 1974, the Department of Defense (DOD) has provided this congressionally mandated annual report on the demographic and service-related characteristics of US military personnel. The *Population Representation in the Military Services (PopRep)* report provides comprehensive, reliable, and consistent data tabulations on military personnel for policy-makers, the media, and the public.

This *Fiscal Year 2019 Summary Report* highlights recent and historical personnel trends in the DOD services (the Army, Navy, Marine Corps, and Air Force) and the US Coast Guard, which is part of the Department of Homeland Security during peacetime. It examines both the active component (AC) and the reserve component (RC) of each service. It describes the demographic and socioeconomic characteristics of military applicants, accessions (new recruits), enlisted personnel, and officers as well as similar characteristics for comparable civilian populations.

A primary purpose of this summary report is to provide an accessible overview of the extensive amount of publicly available information on military personnel. The full selection of fiscal year 2019 (FY19) data tables, as well as *PopRep* reports for FY97 through FY19, can be found at [www.cna.org/research/pop-rep](http://www.cna.org/research/pop-rep). The FY19 technical appendixes (A through E), listed on the Contents page of the FY19 *PopRep* website, provide FY19 data on the demographics—including education and aptitude—of accessions, enlisted personnel, and officers of the AC and RC. Appendix D also provides historical data for selected demographic and service-related characteristics. Except where otherwise noted, data come from the Defense Manpower Data Center (DMDC).

This document provides summary figures, tables, and descriptions of the data in its appendix tables. Table references starting with letters refer to tables in the technical appendixes (e.g., Table A-1 refers to the first table in Appendix A), whereas table references without letters (e.g., Table 1) refer to tables in the main text of this summary document.

The summary report has six main sections. Section I summarizes overall endstrength (i.e., the total military population) and accessions for FY19 and highlights some relevant demographic trends found throughout the rest of the report. Sections II and III focus on the DOD AC enlisted force and officer corps, respectively. Sections IV and V, respectively, discuss the DOD RC and the US Coast Guard. Section VI concludes.

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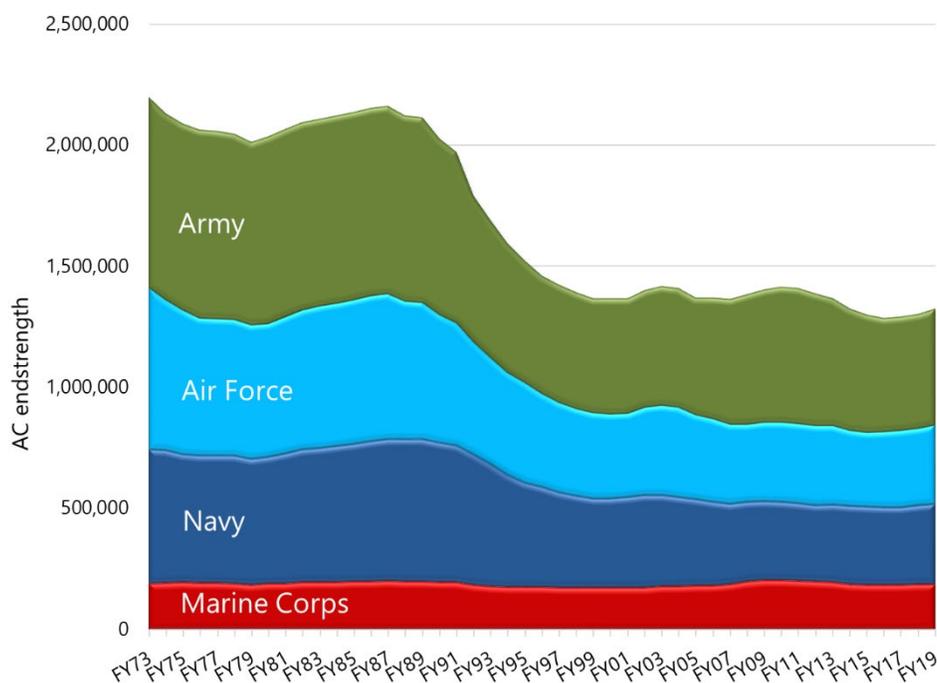
# **Section I: Executive Summary**

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## Fiscal year 2019 total endstrength and accessions

Each year, Congress sets authorized endstrength—the maximum number of servicemembers allowed—for each service. During a fiscal year (FY), actual strength may differ from authorized endstrength because the former officially refers to the number of servicemembers currently in service. In this report, the word *endstrength* refers to actual endstrength as of the last day of the FY, September 30. To meet authorized endstrength, each service balances retention (those remaining in the service) and attrition (those leaving the service) with accessions (those entering the service). Figure 1 shows each service’s active component (AC) endstrength—the sum of enlisted members, commissioned officers, and warrant officers in the AC—for FY73 through FY19. After years of drawing down, the total endstrength of the Department of Defense (DOD) AC, the largest military component, has risen slightly over the last few fiscal years. Table 1 shows AC and reserve component (RC) endstrengths by personnel type (enlisted members, commissioned officers, and warrant officers) for FY17 through FY19.

Figure 1. Total active component endstrength, by service, FY73–FY19



Source: Table [D-39](#).

Table 1. Actual endstrength, by service and personnel type, FY17–FY19

Component/ service	Endstrength			FY19 endstrength, by personnel type		
	FY17	FY18	FY19	Enlisted	Commissioned officers	Warrant officers
<b>DOD AC</b>						
Army	472,047	471,990	479,785	387,075	78,423	14,287
Navy	319,492	325,395	332,528	277,395	53,339	1,794
Marine Corps	184,401	185,415	186,009	164,565	19,292	2,152
Air Force <sup>a</sup>	318,580	321,618	327,878	263,976	63,902	0
<b>Total</b>	<b>1,294,520</b>	<b>1,304,418</b>	<b>1,326,200</b>	<b>1,093,011</b>	<b>214,956</b>	<b>18,233</b>
<b>DOD RC<sup>b</sup></b>						
ARNG	343,603	335,204	335,973	290,185	36,984	8,804
USAR	194,318	188,811	190,719	152,203	34,957	3,559
USNR	57,824	58,196	59,658	45,354	14,210	94
USMCR	38,682	38,333	38,389	33,890	4,257	242
ANG	105,670	107,469	107,197	91,702	15,495	0
USAFR	68,798	68,703	69,389	55,347	14,042	0
<b>Total</b>	<b>808,895</b>	<b>796,716</b>	<b>801,325</b>	<b>668,681</b>	<b>119,945</b>	<b>12,699</b>
<b>US Coast Guard</b>						
AC	41,553	41,132	40,830	32,265	6,814	1,751
RC	6,239	6,126	6,277	5,265	912	100
<b>Total</b>	<b>47,792</b>	<b>47,258</b>	<b>47,107</b>	<b>37,530</b>	<b>7,726</b>	<b>1,851</b>

Source: Tables [D-11](#), [D-16](#), [D-20](#), [D-21](#), [D-40](#), [D-41](#), [E-13](#), [E-16](#), [E-19](#), [E-24](#), [E-26](#), and [E-29](#).

<sup>a</sup> The Air Force does not have warrant officers.

<sup>b</sup> The RC consists of the Army National Guard (ARNG), the US Army Reserve (USAR), the US Navy Reserve (USNR), the US Marine Corps Reserve (USMCR), the Air National Guard (ANG), and the US Air Force Reserve (USAFR).

In FY19, there were more than 1.32 million military personnel in DOD’s AC and more than 801,000 in its RC. The Army continues to be the largest of DOD’s military services, with an FY19 AC endstrength of about 480,000; the Marine Corps is the smallest, with an AC endstrength of about 186,000. FY19 DOD AC endstrength was almost 22,000 more than in FY18 and 32,000 more than in FY17. Since FY17, the AC endstrength of each of the services has increased: the Army AC endstrength by 1.6 percent, the Navy by 4.1 percent, the Marine Corps by 0.9 percent, and the Air Force by 2.9 percent. Army AC endstrength, however, still is significantly larger than that of the other DOD services: it was about 2.6 times the size of the Marine Corps and about 1.5 times larger than the Navy and the Air Force.

The DOD RC has two National Guard elements—the Army National Guard (ARNG) and the Air National Guard (ANG)—and four reserve elements—the US Army Reserve (USAR), the US Navy

Reserve (USNR), the US Marine Corps Reserve (USMCR), and the US Air Force Reserve (USAFR). In FY19, the RC made up about 38 percent of DOD's total endstrength. Over the past two years, the DOD RC has decreased by more than 7,500 members (0.9 percent). The Army has the largest share of the DOD RC; its guard and reserve forces accounted for 66 percent of DOD RC endstrength in FY19.

Enlisted personnel make up the majority of DOD's total endstrength. In FY19, enlisted personnel constituted 82.4 percent of DOD AC endstrength and 83.4 percent of DOD RC endstrength. Among officers, commissioned officers made up about 92.2 and 90.4 percent of DOD AC and RC officers, respectively; the remaining were warrant officers.<sup>1</sup> Overall, the Army and the Air Force had the largest AC officer corps, both in total size (92,710 and 63,902, respectively) and in percentage of each of the service's total AC endstrength (19.3 and 19.5 percent, respectively) in FY19. For comparison, AC officers make up 16.6 and 11.5 percent of total AC endstrength in the Navy and Marine Corps, respectively.

The US Coast Guard, which falls under the Department of Homeland Security in peacetime, is the smallest of the five armed services. For comparison, the US Coast Guard had an AC endstrength of 40,830 in FY19, about 22 percent the size of the Marine Corps' AC. US Coast Guard RC endstrength was less than 6,300 in FY19, or roughly 16 percent the size of the USMCR, the smallest DOD RC element. Between FY17 and FY19, the US Coast Guard's total endstrength fell by nearly 700, or 1.4 percent. Like the DOD services, enlisted personnel represented the majority of the US Coast Guard's FY19 total endstrength (79.7 percent) followed by commissioned officers (16.4 percent) and warrant officers (3.9 percent).

Table 2 shows the number of DOD enlisted accessions and officer gains for the past three FYs, by component/service.<sup>2</sup> For enlisted personnel, we include non-prior-service (NPS) and prior-service (PS) accessions.<sup>3</sup> For officers, accessions include commissioned and warrant officer gains. The percentages of PS enlisted and warrant officer accessions/gains are shown in parentheses below the numerical accessions and officer gains.

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<sup>1</sup> Warrant officers are designated by warrants as opposed to commissions and generally are technical specialists. Most warrant officers are prior-enlisted members, but some receive direct appointments.

<sup>2</sup> Officer data from DMDC are based on a snapshot of all the unique individuals in service at the end of each FY (September 30 of every year). As a result, data will not include any officer who accessed after the beginning of an FY and separated from service before the end of the same FY. We thus identify a new officer by the addition of a record that was not in the previous FY file. Because this measure differs from the traditional measure of accessions, we refer to new officers as gains throughout this report to distinguish the measure from true accessions (i.e., the total number of officers that joined the service throughout the FY).

<sup>3</sup> PS accessions are typically those who previously have served in any of the DOD services at some point. The Marine Corps is an exception; it defines PS accessions as those who previously have served in the Marine Corps.

Table 2. Enlisted accessions and officer gains, by component/service, FY17–FY19

Component/ service	No. of enlisted (% prior service)			No. of officers (% warrants)		
	FY17	FY18	FY19	FY17	FY18	FY19
<b>DOD AC</b>						
Army	65,895 (7.6)	69,099 (8.1)	66,681 (6.9)	7,888 (14.4)	7,895 (15.6)	7,714 (17.6)
Navy	35,097 (0.4)	38,860 (0.3)	38,367 (0.3)	4,193 (4.7)	4,271 (4.5)	4,456 (4.7)
Marine Corps	31,850 (0.4)	31,412 (0.3)	31,521 (0.3)	1,942 (12.5)	1,867 (16.2)	1,810 (13.8)
Air Force <sup>a</sup>	30,994 (1.3)	30,430 (1.4)	32,106 (0.9)	4,518 (0.0)	4,992 (0.0)	4,755 (0.0)
<b>Total</b>	<b>163,836</b> <b>(3.4)</b>	<b>169,801</b> <b>(3.7)</b>	<b>168,675</b> <b>(3.0)</b>	<b>18,541</b> <b>(8.5)</b>	<b>19,025</b> <b>(9.1)</b>	<b>18,735</b> <b>(9.7)</b>
<b>DOD RC<sup>b</sup></b>						
ARNG	41,437 (27.0)	40,559 (22.7)	44,483 (19.9)	3,895 (15.9)	4,143 (18.4)	4,239 (18.8)
USAR	23,276 (49.2)	19,342 (46.3)	25,970 (49.6)	4,953 (7.2)	4,104 (8.4)	4,455 (8.6)
USNR	10,572 (79.7)	9,373 (81.8)	10,278 (97.3)	1,670 (0.7)	1,426 (1.0)	2,287 (0.6)
USMCR	8,743 (36.3)	8,667 (34.7)	9,132 (36.6)	997 (3.3)	940 (2.5)	952 (3.5)
ANG	8,309 (41.4)	8,290 (40.8)	9,404 (38.1)	1,308 (0.0)	1,252 (0.0)	1,280 (0.0)
USAFR	7,443 (61.8)	7,480 (59.0)	7,751 (53.5)	1,493 (0.0)	1,479 (0.0)	1,626 (0.0)
<b>Total</b>	<b>99,780</b> <b>(42.4)</b>	<b>93,711</b> <b>(39.1)</b>	<b>107,018</b> <b>(40.0)</b>	<b>14,316</b> <b>(7.1)</b>	<b>13,374</b> <b>(8.6)</b>	<b>14,839</b> <b>(8.3)</b>
<b>US Coast Guard</b>						
AC	3,660 (3.5)	3,422 (3.3)	2,575 (2.5)	447 (42.3)	455 (44.2)	746 (28.3)
RC	782 (52.8)	863 (53.7)	1,063 (65.0)	136 (3.7)	135 (4.4)	143 (9.1)
<b>Total</b>	<b>4,442</b> <b>(12.2)</b>	<b>4,285</b> <b>(13.5)</b>	<b>3,638</b> <b>(20.8)</b>	<b>583</b> <b>(33.3)</b>	<b>590</b> <b>(35.1)</b>	<b>889</b> <b>(25.2)</b>

Source: Tables B-14, C-3, C-10, C-18, C-28, D-16, D-38, D-40, E-5, E-10, E-18, E-19, E-20, E-22, E-26, and E-29 for FY17–FY19.

Note: Enlisted accessions include both non-prior-service (NPS) and prior-service (PS) accessions.

<sup>a</sup> The Air Force has no warrant officers.

<sup>b</sup> The RC consists of the ARNG, the USAR, the USNR, the USMCR, the ANG, and the USAFR.

DOD AC enlisted accessions have grown between FY17 and FY19, from roughly 163,800 to 168,700—a 3.0 percent increase. The Navy exhibited the largest relative growth in accessions during this period; its AC enlisted accessions grew by 9.3 percent over the past two FYs. The Marine Corps was the only service to see a decline in AC enlisted accessions over this period, decreasing by 1.0 percent. By comparison, Army and Air Force AC enlisted accessions grew by 1.2 percent and 3.6 percent, respectively.

Over the past two FYs, total AC officer gains for DOD have grown by 1.0 percent. The Navy and Air Force experienced increases in AC officer gains between FY17 and FY19, while the Army's and Marine Corps' officer gains declined.

Between FY17 and FY19, RC enlisted accessions increased by 7.3 percent, while RC officer gains rose by 3.7 percent. In total, AC and RC combined gains have risen by nearly 13,000 since FY17.

Between FY17 and FY19, US Coast Guard AC and RC combined enlisted accessions decreased, while combined officer gains increased. US Coast Guard AC enlisted accessions decreased by almost 30 percent, while AC officer gains increased by 66.9 percent. The US Coast Guard AC enlisted accessions fell for the first time in six years, to about 2,500 for FY19. That represents its lowest number of AC enlisted accessions since FY14. Despite these changes, US Coast Guard endstrength remains mostly unchanged from the recent historical average of 40,000 AC members and a total combined endstrength of 47,000.

## Demographic highlights

A key mission of the *Population Representation in the Military Services (PopRep)* report is to provide a thorough description of the armed services' demographic composition. This subsection highlights demographic trends that are discussed in more detail throughout the remainder of this report.

In FY19, female representation reached its highest level ever in the history of the US armed services. Across the DOD services, the female percentage reached 16.6 percent among AC enlisted members and 19.2 percent among AC commissioned officers. FY19 was the 11th consecutive year that female representation grew among DOD AC enlisted members and the 12th consecutive year that it grew among DOD AC officers. Among AC commissioned officer gains, 24.5 percent were for women. Similarly, the percentage of female new enlisted accessions has grown steadily from 16.2 percent in FY12 to 19.4 percent in FY19. The RC has an even larger percentage of women than the AC in both the enlisted (20.8 percent vs. 16.6 percent) and the officer corps (23.0 percent vs. 19.2 percent). These trends in female representation likely are the result of a number of steps taken by DOD in recent years to attract

more female recruits, such as opening all occupations and units to women without exceptions,<sup>4</sup> expanding maternity leave policies,<sup>5</sup> and increasing numbers of female recruiters.<sup>6</sup>

Hispanic representation also increased compared to FY18 for both enlisted personnel and officers in the AC and RC. Hispanic representation was highest for AC enlisted personnel at 19.6 percent. Relative to the civilian benchmark of 19.9 percent, Hispanics are overrepresented in the Navy's and Marine Corps' AC enlisted forces. Conversely, both RC enlisted and officers are less likely to be Asian or Hispanic relative to both AC members and the civilian population.

In the DOD AC enlisted force, non-Whites made up 30.2 percent of the population, exceeding the civilian benchmark of 24 percent. Across all services, 19.6 percent of enlisted servicemembers are Black, 4.7 percent are Asian, 2.5 percent are American Indian, Native Hawaiian, or Pacific Islander, and 3.3 percent identify as two or more races. The Navy has the highest proportion of non-Whites (37.9 percent) while the Marine Corps has the lowest (17.9 percent). Across DOD's AC, there is an overrepresentation of Black enlisted compared to the civilian benchmark (19.6 percent of enlisted servicemembers vs. 13.4 percent of the comparable civilian population). There is also an underrepresentation of Asian servicemembers (4.7 percent vs. 6.9 percent of comparable civilians).

One notable diversity factor in the military that differs from the civilian workforce is the intersection of gender and race/ethnicity. Among DOD AC enlisted and commissioned officers, women were more racially and ethnically diverse than men. Specifically, about 43 percent of enlisted women were non-White (versus 26 percent of the female civilian benchmark population). In comparison, about 28 percent of enlisted men were non-White (versus 23 percent of the male civilian benchmark population). This pattern also held true for FY19 enlisted accessions and officer gains. These gender differences are large, are found in every service, and are the continuation of a gender-racial/ethnic distribution seen in prior years.

DOD sets two recruit quality benchmarks for the population of accessions each FY: 90 percent with Tier 1 educational credentials (e.g., primarily high school diplomas) and 60 percent with Armed Forces Qualification Test (AFQT) scores at or above the 50th percentile. As in previous FYs, the services exceeded these benchmarks in FY19. Overall, 97 percent of AC enlisted

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<sup>4</sup> See <https://www.defense.gov/News/Article/Article/632536/carter-opens-all-military-occupations-positions-to-women/>.

<sup>5</sup> See <http://www.defense.gov/News/Article/Article/645958/carter-announces-12-weeks-paid-military-maternity-leave-other-benefits/>.

<sup>6</sup> See <http://www.usatoday.com/story/news/nation/2015/10/14/army-recruiting-women-combat/73885956/>.

accessions held Tier 1 education credentials and 68.8 percent had AFQT scores at or above the 50th percentile in FY19. Among RC enlisted accessions, 95 percent held Tier 1 education credentials and 66 percent had AFQT scores at or above the 50th percentile. These AFQT scores at or above the 50th percentile exceed the civilian population by substantial amounts; only 51 percent of the civilian population scores in the top half of the ability distribution.<sup>7</sup>

The percentage of AC enlisted accessions deemed high-quality—those with both a high school diploma (Tier 1 education credential) and AFQT at or above the 50th percentile—has been declining steadily from the high of 76 percent in FY12. In FY19, 66 percent of accessions met the definition of high quality. As the percentage with Tier 1 education remained above 96 percent over the past seven years, the drop in high quality percentage comes from a decline in the percentage of accessions with AFQT scores at or above the 50th percentile—from 78.8 percent in FY12 to 68.8 percent in FY19. This pattern has been most dramatic among Air Force enlisted accessions. Between FY12 and FY19, the percentage of Air Force accessions deemed high-quality fell from 97 percent to 79.8 percent, driven by a similar decline in AFQT scores at or above the 50th percentile (from 98 percent in FY12 to 80 percent in FY19). These changes may be partly driven by the economy’s steady recovery from the Great Recession, which has made employment outside the services increasingly attractive to potential recruits.

The South contributed the largest proportion of FY19 AC enlisted accessions, at 46.3 percent. The share of accessions originating from the South has slowly, but consistently increased over the past ten years, rising from 42.7 percent in FY09. The South is overrepresented in accessions relative to its 18-to-24-year-old population, providing more accessions than its population share (38 percent) would indicate. Conversely, the Northeast contributes the smallest total share of AC enlisted accessions (12.3 percent) and is the most underrepresented relative to its population, contributing only 72.6 percent of what its population share would indicate.

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<sup>7</sup> When the AFQT was normed to the civilian population in 1997, 52 percent of men and 50 percent of women scored in the top half of the ability distribution.

## **Section II:**

# **DOD Active Component Enlisted Corps**

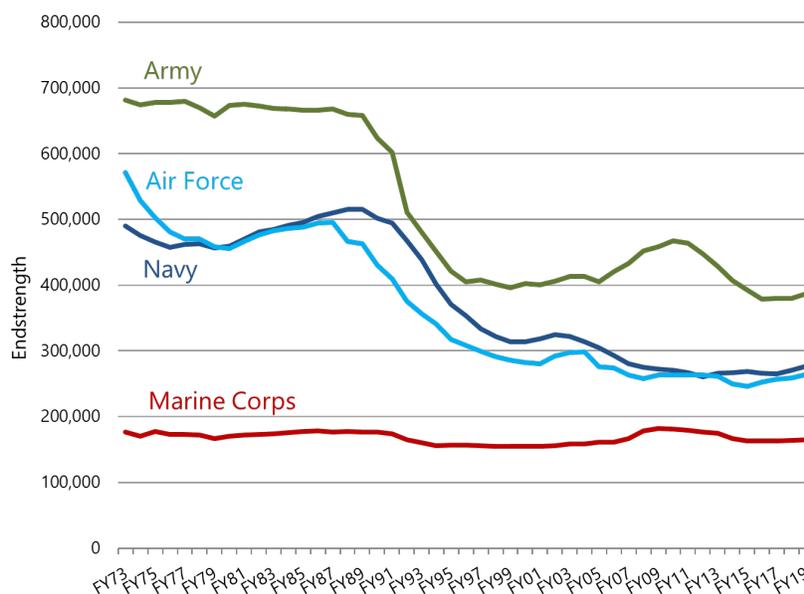
This section gives an overview of the size and demographics of DOD AC enlisted members and accessions. It begins with a historical description of enlisted endstrength by service, followed by discussions of the quality, geographic source, and family income of NPS enlisted accessions, both historically and in FY19.<sup>8</sup> We then discuss the demographics (age, gender, race, and ethnicity) of enlisted members and accessions, as well as the distribution of these enlisted members across occupations and paygrades.

## Total enlisted endstrength, applicants, and accessions

### AC enlisted endstrength

The AC's enlisted endstrength was 1,093,011 in FY19, accounting for 82 percent of total AC endstrength for the year. Figure 2 shows AC enlisted endstrength by service over the past 46 years.

Figure 2. AC enlisted endstrength, by service, FY73–FY19



Source: Table [D-11](#).

<sup>8</sup> NPS accessions typically are those who have no prior experience with a DOD service; however, the Marine Corps considers those with no prior Marine Corps experience as NPS.

At the beginning of the All-Volunteer Force (AVF) in FY73, 1.9 million servicemembers were in the DOD AC enlisted force. The end of the Cold War led to a significant drop in force size during the 1990s, stabilizing between 1.1 million and 1.2 million servicemembers from FY97 to FY19. The beginning of the wars in Iraq and Afghanistan in the early 2000s increased the size of the Army and the Marine Corps, but this increase was offset, at least partly, by decreases in the Air Force and the Navy. Reflecting reduced operational commitments, the Army and Marine Corps drew down their forces in the early 2010s; their endstrengths have leveled off in recent years.

The Marine Corps has been the smallest DOD service for the past 50 years. Despite all services shrinking in the 1990s, the Marine Corps decreased the least and, by FY08, its enlisted force matched its size at the beginning of the AVF. By FY19, the Marine Corps' enlisted force was 93 percent of its FY73 size. In contrast, the enlisted forces in the Air Force, Navy, and Army were 46, 57, and 57 percent of their respective sizes in FY73.

## AC enlisted applicants and NPS accessions

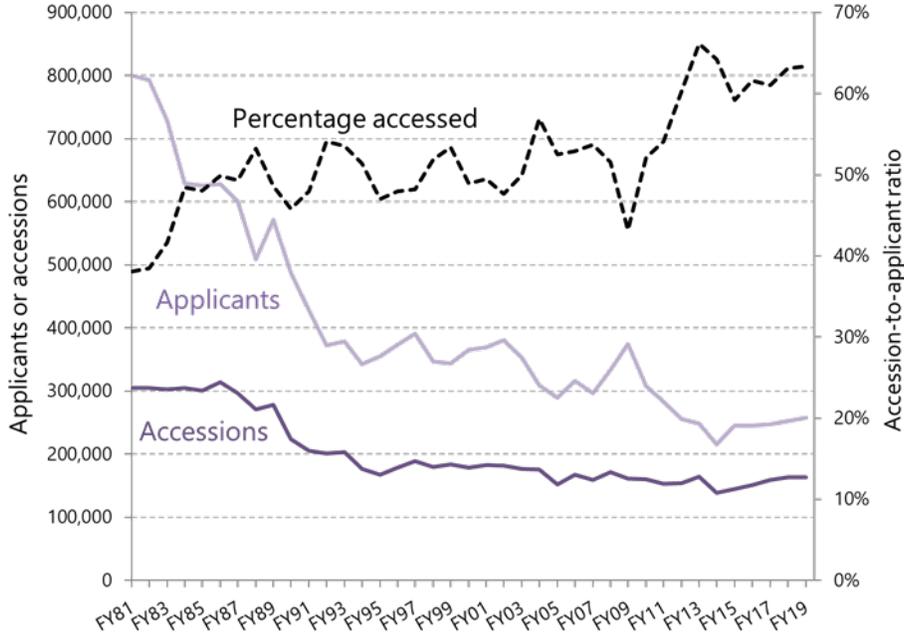
In general, both the number of applicants and the number of accessions have fallen since the early 1990s, with small increases in their respective numbers in the past few years.<sup>9</sup> The percentage of enlisted applicants accessed grew from 38 percent in FY81 to a high of 66 percent in FY13, a sign of improved efficiencies among the services' recruiting forces. A steady decrease in the number of applicants also drove the increase in percentage of enlisted applicants accessed (see Figure 3). While total accessions in FY19 were roughly half of those in FY81, the total number of applicants in FY19 was less than a third of the number in FY81. In FY19, the Military Entrance Processing Stations processed 257,990 applicants, and 163,574 (63 percent) became NPS accessions into the four services (see Figure 3).

Among the reasons for why an applicant for enlisted service may not be accessed is that many applicants simply change their minds and decide not to enter military service. Other reasons may include having a low aptitude-test score, a disqualifying medical or physical condition, too many dependents, disqualifying tattoos, a history of criminal activity, or testing positive or having a history of disqualifying drug use. However, in certain cases when an applicant is otherwise exceptionally qualified, he or she may be granted an enlistment waiver.

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<sup>9</sup> DMDC applicant data come from the Military Entrance Processing Stations (MEPSs). Applicants cannot go directly to a MEPS; recruiters must send them. Given the paperwork associated with sending applicants to the MEPSs, not all those who want to enlist will be sent and counted as applicants.

Figure 3. AC enlisted applicants, NPS enlisted accessions, and percentage of applicants accessed, FY81–FY19



Source: Table [D-3](#).

Note: Enlisted accessions include only NPS enlisted personnel.

## Quality, geographic source, and neighborhood income of NPS enlisted accessions

Next, we describe the characteristics of enlisted applicants and NPS accessions in the AC enlisted force.<sup>10</sup> We describe their quality and geographic backgrounds. We also discuss age and the neighborhood household income distributions for NPS accessions.

<sup>10</sup> We focus this discussion on AC NPS (vice PS) accessions. In FY19, AC PS accessions represented only 3.3 percent of AC accessions (see Tables [B-12–B-14](#) for information on AC PS accessions).

## Quality

DOD sets quality benchmarks for the aptitude and educational credentials of enlisted recruits. The Armed Forces Qualification Test, a nationally normed aptitude test of math and verbal skills, is used to predict training success and on-the-job performance. The DOD benchmark is to have 60 percent of accessions score at the 50th percentile or higher on the AFQT. In FY19, 69 percent of AC NPS accessions scored at or above the 50th percentile.<sup>11</sup>

In Figure 4, we show the percentage of FY19 applicants and enlisted accessions who scored at or above the 50th percentile on the AFQT. In every service, a higher percentage of accessions (dark-colored bars) than applicants (light-colored bars) scored at or above the 50th percentile. With the exception of Army applicants, applicants and accessions across the DOD services scored considerably higher on the AFQT than did the 18-to-23-year-old civilian population (represented by the black dotted line). The Air Force had the highest percentage of applicants and accessions scoring at the 50th percentile or above (71 and 81 percent, respectively) on the AFQT, followed by the Navy (61 and 72 percent), the Marine Corps (61 and 69 percent), and the Army (50 and 61 percent).

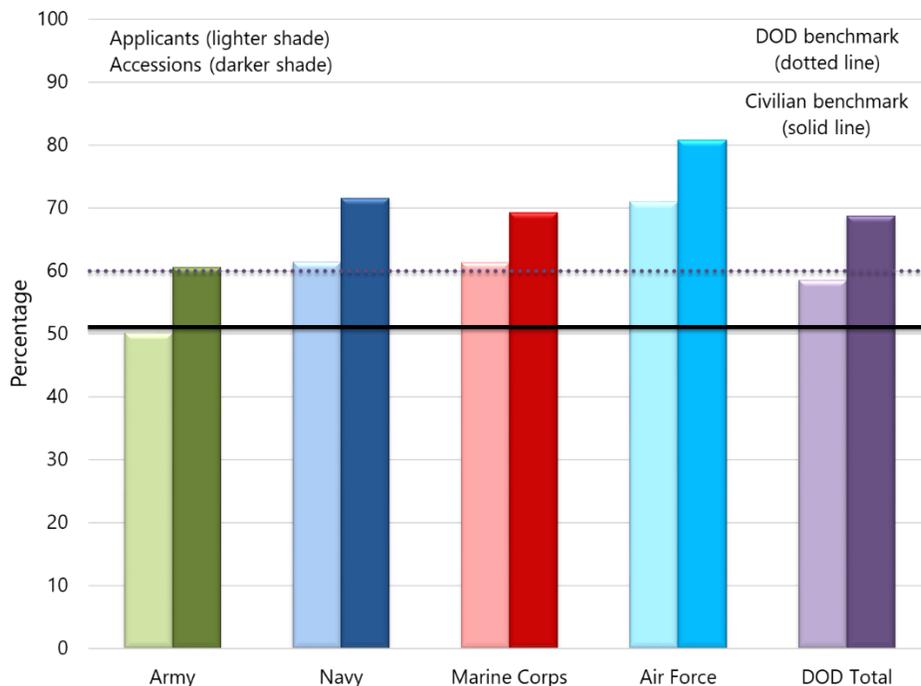
In addition to AFQT requirements, DOD requires that at least 90 percent of recruits have Tier 1 education credentials. Tier 1 recruits are primarily high school *diploma* graduates but include people with educational backgrounds beyond high school, as well as those who have earned adult education diplomas, homeschoolers, and those with one semester or more of college. Other educational backgrounds include Tier 2 recruits (those with alternative high school credentials and GED certificates) and Tier 3 recruits (no secondary school credentials). The services seek Tier 1 recruits because high school diploma graduates are more likely than recruits with other credentials to complete their first terms of service.<sup>12</sup> In FY19, about 97 percent of DOD NPS enlisted accessions held Tier 1 credentials; nearly all of Marine Corps and Air Force accessions were Tier 1, followed by 98 percent of Navy accessions and 95 percent of Army accessions.

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<sup>11</sup> When the AFQT was normed to the civilian population in 1997, 52 percent of men and 50 percent of women scored in the top half of the ability distribution.

<sup>12</sup> See Richard Buddin (1984), *Analysis of Early Military Attrition Behavior*, RAND, R-2069-MIL; Federico E. Garcia et al. (2001), *Evaluation of the Pilot Program from Home School and ChalleNge Program Recruits*, CNA, D0004598.A2; and Jennie W. Wenger and April Hodari (2004), *Predictors of Attrition: Attitudes, Behaviors, and Educational Credentials*, CNA, D0010146.A2/Final.

**Figure 4. Percentage of AC NPS enlisted applicants and accessions scoring at or above the 50th percentile on the AFQT, by service, FY19**



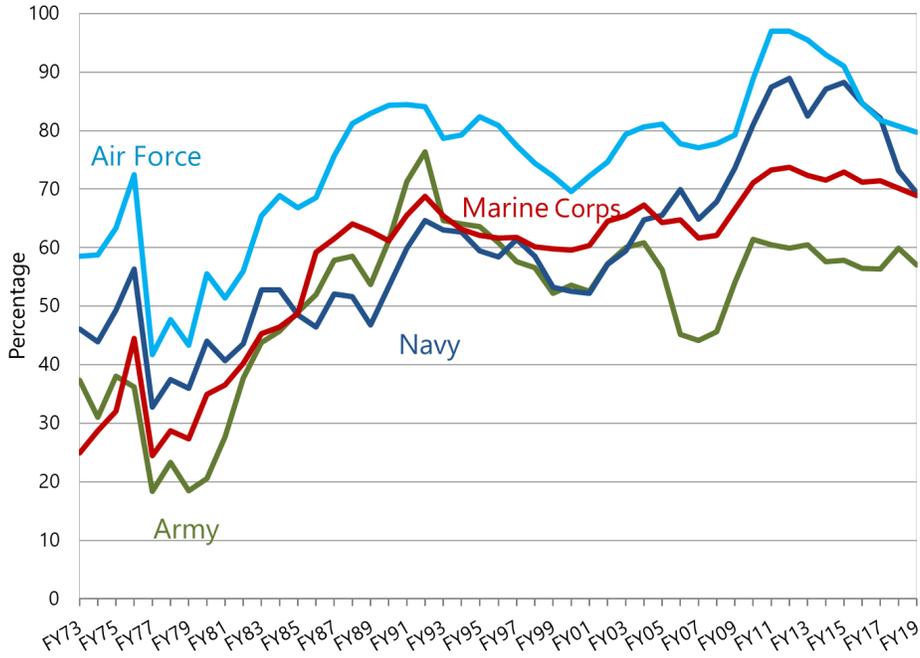
Source: Tables [A-4](#) and [B-4](#).

Note: Civilian benchmark is 51 percent of the population at or above the 50th percentile, derived from *1997 Profile of American Youth Study* (see [http://official-asvab.com/PAY97\\_res.htm](http://official-asvab.com/PAY97_res.htm)).

Recruits who have both Tier 1 education credentials and AFQT scores in the top 50 percentiles are classified as high quality. All of the services try to access as many high-quality recruits as possible. Because 97 percent of DOD NPS FY19 accessions had Tier 1 educational credentials, the main delineation for becoming a high-quality applicant or accession is AFQT score.

Figure 5 shows the percentage of high-quality accessions since the beginning of the AVF. The quality of accessions in all services generally increased through the mid-2000s, despite some fluctuations in recruiting budgets resulting in short-term setbacks in recruit quality (particularly in the Army). In recent years, however, recruit quality slightly declined for most services (the Air Force experienced the greatest decline during the 2010s). As Tier 1 education rates have remained high, this decrease comes primarily from a decrease in the percentage of accessions with AFQT scores in the top 50 percentile. Nevertheless, the majority of NPS accessions are high quality; in FY19, the percentage of high-quality recruits was 80 percent in the Air Force, 69 percent in the Navy, 69 percent in the Marine Corps, and 57 percent in the Army.

Figure 5. Percentage of high-quality AC NPS enlisted accessions, by service, FY73–FY19



Source: Table [D-9](#).

## Geographic source

The Census Bureau divides the country into four regions:<sup>13</sup>

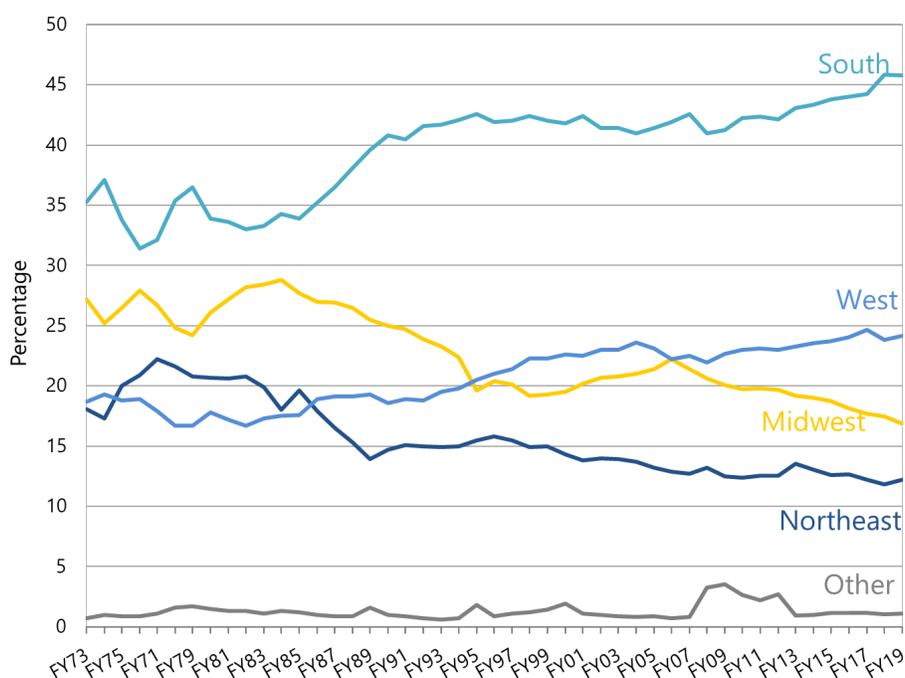
- Northeast—includes New England and Middle Atlantic division states
- Midwest<sup>14</sup>—includes East North Central and West North Central division states
- South—includes South Atlantic, East South Central, and West South Central division states
- West—includes Mountain and Pacific division states

<sup>13</sup> See <https://www.census.gov/geo/reference/webatlas/divisions.html>. For completeness, accessions from US territories, possessions, or “unknown” regions are grouped together in the “other” category.

<sup>14</sup> Referred to as the North Central region in Table [D-10](#).

Figure 6 shows the geographic distribution of AC NPS enlisted accessions across the Census regions since FY73.<sup>15</sup> We observe differences in the regional distribution of AC NPS enlisted accessions before and after FY85. Until about FY85, roughly 35 percent of AC NPS enlisted accessions came from the South and 25 percent from the Midwest, while the remaining 40 percent of accessions came from the West and the Northeast. After FY85, accessions were increasingly drawn more heavily from the South and the West and less so from the Northeast and Midwest. This partly reflects general population trends because states in the South and the West have made up an increasingly larger share of the US population. As recruiting commands determine where to place recruiters across the country, they account for geographic shifts in the population, as well as the propensity to serve in each region.

**Figure 6. Geographic distribution of NPS enlisted AC accessions, FY73–FY19**



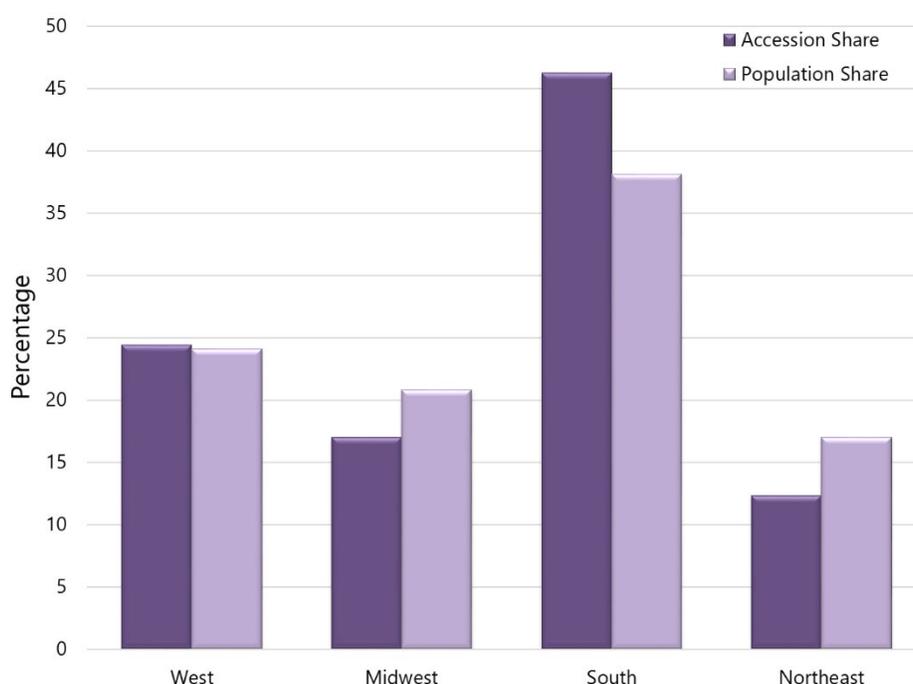
Source: Table [D-10](#).

Figure 6 shows that the four main regions do not contribute equal shares of total accessions, nor do they contribute equal shares of the US 18-to-24-year-old population. To determine whether regions are under- or overrepresented among DOD AC NPS accessions, Figure 7 shows

<sup>15</sup> We do not include data on the geographic representation of officer gains. Officers primarily are recruited from colleges and universities, and their geographic locations would reflect the locations of these universities and not necessarily the regions in which the officers grew up.

the accession share of each region for FY19 (darker bars) along with the share of the country’s 18-to-24-year-old population that resides in that region (lighter bars). While the South contributed the largest percentage of accessions (46 percent), it also had the largest share of the country’s 18-to-24-year-olds (38 percent). The accession share for the South, however, exceeded the population share, suggesting that relative to its population of 18-to-24-year-olds, the South was overrepresented in NPS accessions. Conversely, the Midwest and Northeast were underrepresented in NPS accessions relative to their populations of 18-to-24-year-olds.

**Figure 7. AC NPS accession share vs. geographic population share of 18-to-24-year-olds, by region, FY19**



Source: Table [B-46](#).

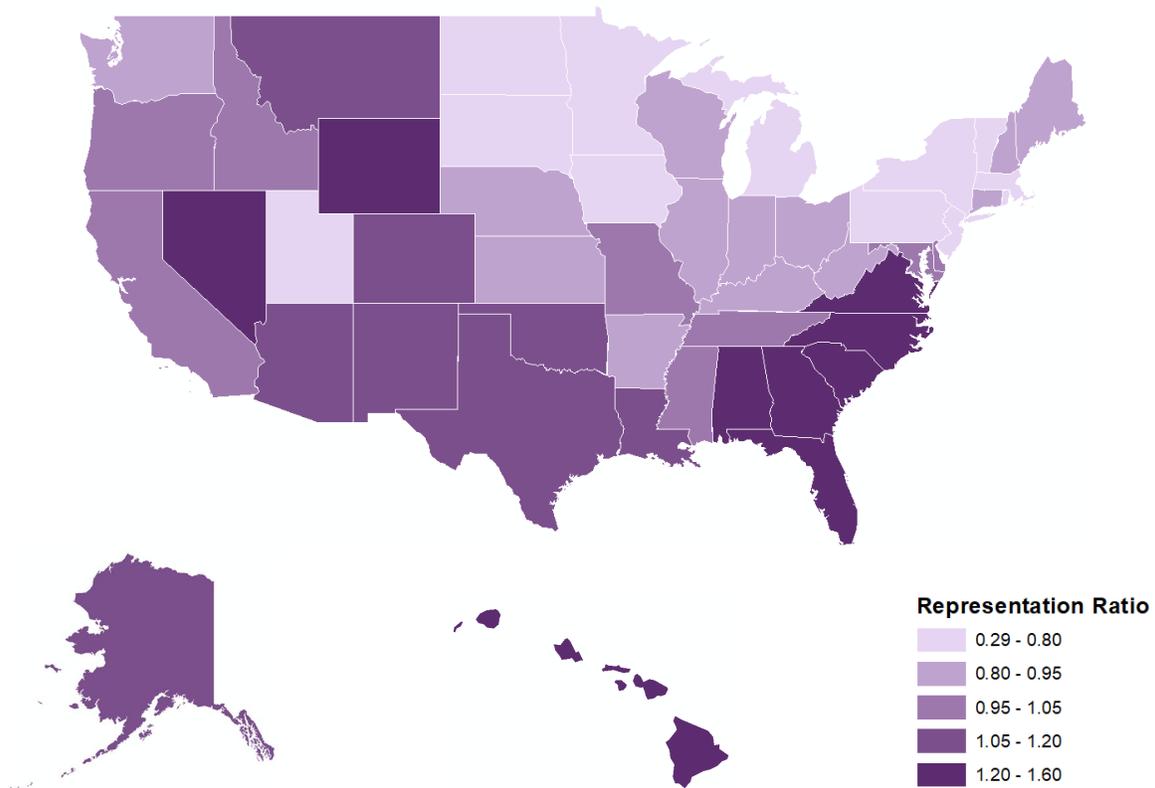
Note: Midwest is referred to as the North Central region in the appendix.

Figure 8 integrates the state-level geographic distribution of the US population data with the distribution of DOD AC NPS recruits. More precisely, it shows the ratio of a state’s accession share (the number of accessions from that state divided by the total number of accessions) to the state’s share of the US 18-to-24-year-old population (the number of 18-to-24-year-olds from the state divided by the total US 18-to-24-year-old population). This is called the state’s representation ratio. When viewing Figure 8, keep in mind the following three points:

- A representation ratio of 1 implies that the state’s share of DOD AC NPS accessions was equal to its share of 18-to-24-year-olds.

- A representation ratio greater than 1 implies overrepresentation—the state’s share of DOD accessions was larger than its share of the country’s 18-to-24-year-old population.
- A ratio of less than 1 implies underrepresentation—the state’s share of DOD accessions was smaller than its share of the country’s 18-to-24-year-old population.

Figure 8. AC NPS enlisted accession representation ratio, by state, FY19



Source: Table [B-46](#).

Note: The representation ratio is calculated by dividing a given state’s FY19 NPS accession share (number of accessions from the state divided by total accessions) by the state’s 18-to-24-year-old population share (number of 18-to-24-year-olds from the state divided by the total US 18-to-24-year-old population). Ranges in the heat map are chosen to be centered on 1 and to contain roughly equivalent numbers of states. All ranges include 9 to 12 states.

The FY19 state representation ratios ranged from 0.30 (District of Columbia) to 1.59 (Hawaii). In FY19, Missouri, California, Mississippi, Maryland, and Oregon all had ratios close to 1—meaning their shares of AC NPS enlisted accessions were relatively close to their shares of the 18-to-24-year-old population. Overall, about 40 percent of states can be considered overrepresented among accessions (ratios greater than 1), and about 60 percent of states and the District of Columbia could be considered underrepresented (ratios less than 1). Table 3 shows the top five largest and smallest representation ratios.

**Table 3. Five highest and lowest enlisted AC NPS representation ratios, by state, FY19**

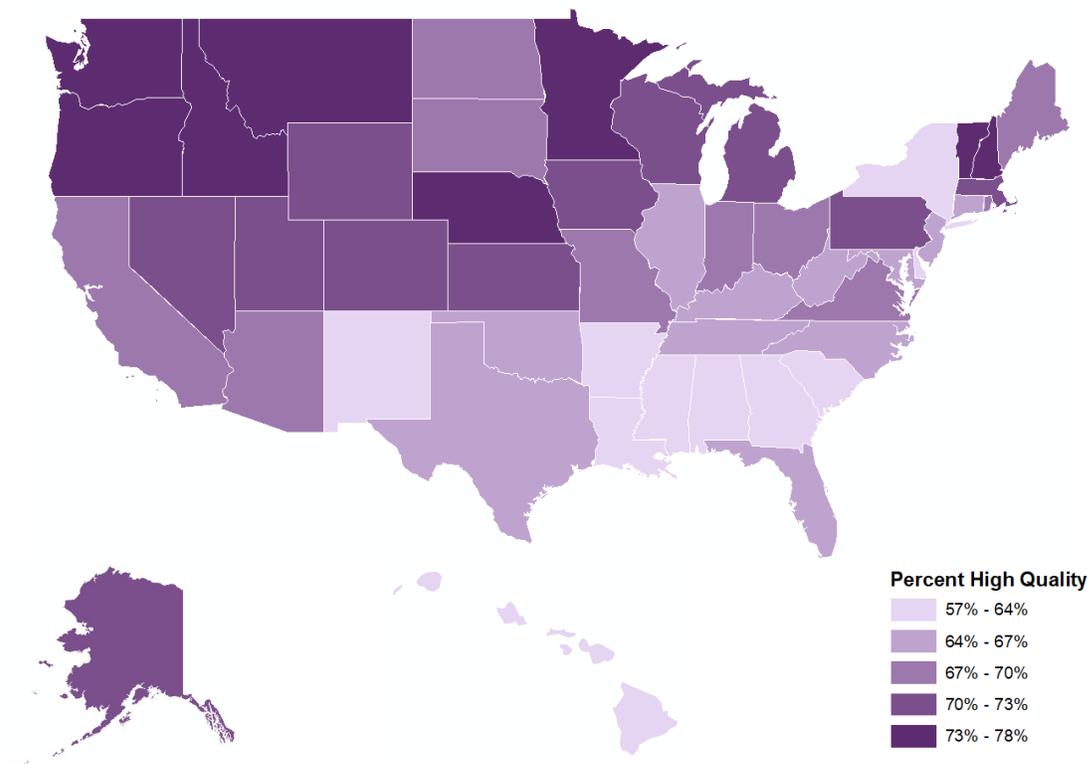
<b>Top 5</b>	<b>Ratio</b>	<b>Bottom 5</b>	<b>Ratio</b>
Hawaii	1.59	District of Columbia	0.30
South Carolina	1.48	North Dakota	0.40
Georgia	1.47	Minnesota	0.53
Florida	1.41	Utah	0.55
Virginia	1.40	Massachusetts	0.57

Source: Table [B-46](#).

Note: The representation ratio is calculated by dividing a given state’s FY19 NPS accession share (number of accessions from the state divided by total accessions) by the state’s 18-to-24-year-old population share (number of 18-to-24-year-olds from the state divided by the total US 18-to-24-year-old population).

Differences in the representation ratios reflect differences in the distribution of enlistment qualification rates and propensities, as well as recruiting resources across the country. To illustrate, Figure 9 shows the percentage of accessions from each state who were high quality, while Table 4 shows the states with the highest and lowest percentages of high-quality accessions. In FY19, New Hampshire had the highest percentage of high-quality AC enlisted accessions (77 percent), while Alabama had the lowest (58 percent). It is worth noting that, while Georgia had the third highest representation ratio in FY19, it also had one of the lowest percentages of recruits who were identified as high quality. Most of the states with higher percentages of high-quality accessions had relatively low representation ratios. For example, Minnesota had both the third lowest percentage of total accessions and the third highest percentage of high-quality accessions.

Figure 9. Percentage of high-quality AC NPS enlisted accessions, by state, FY19



Source: Table [B-46](#).

Note: Accession percentage ranges in the heat map are chosen to contain roughly equivalent numbers of states. All ranges include 9 to 11 states.

Table 4. States with highest and lowest percentages of high-quality AC NPS accessions, FY19

Top 5	% High quality	Bottom 5	% High quality
New Hampshire	77.1	Alabama	57.9
Idaho	76.6	Mississippi	58.3
Minnesota	75.7	District of Columbia	59.0
Montana	75.5	Georgia	59.5
Vermont	75.5	Louisiana	59.8

Source: Table [B-46](#).

## Neighborhood income

At the beginning of the AVF, there was concern about socioeconomic representation in the force. Researchers found that, for the most part, the socioeconomic backgrounds of accessions in the AVF's early years were similar to the US population as a whole.<sup>16</sup> More recent studies report similar findings on socioeconomic characteristics, such as neighborhood income, for the 1990s and early years of this century.<sup>17</sup> Because information on household or family income is not collected from recruits, these studies used proxies for recruits' household income. For example, in a 2012 study, Lien et al. used the median income for recruits' census tracts as a proxy for recruit household income.<sup>18</sup> In short, they measured "neighborhood affluence," or how well off recruits' neighborhoods were. Each neighborhood is synonymous with a census tract.<sup>19</sup>

Following the approach of Lien et al., Figure 10 shows FY19 AC NPS enlisted accessions by the median income quintile of their home-of-record census tracts.<sup>20</sup> Based on publicly available information about neighborhood income across the United States, these quintiles are constructed such that 20 percent of American civilians will fall into each quintile. The dashed line in Figure 10 indicates that, if accessions were equally drawn from each income quintile, 20 percent of all accessions should originate from each income quintile. As shown in Figure 10, FY19 NPS accessions were underrepresented in census tracts with the lowest and the highest median incomes, while those in the middle three quintiles were overrepresented. This distribution closely mirrors those from recent years. Lower income neighborhoods tend to have fewer people qualified to serve. In FY19, virtually all NPS accessions were high school diploma graduates, and high school dropout rates are higher in low-income neighborhoods. For the highest neighborhood median-income quintile, the lower representation is likely due to higher college attendance rates among youth in these census tracts.<sup>21</sup>

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<sup>16</sup> See, for example, Richard N. Cooper (1997), *Military Manpower and the All-Volunteer Force*, RAND, R-1450-ARPA.

<sup>17</sup> See, for example, Shanea J. Watkins and James Sherk (2008), *Who Serves in the U.S. Military? Demographic Characteristics of Enlisted Troops and Officers*, Heritage Foundation, CDA 08-05.

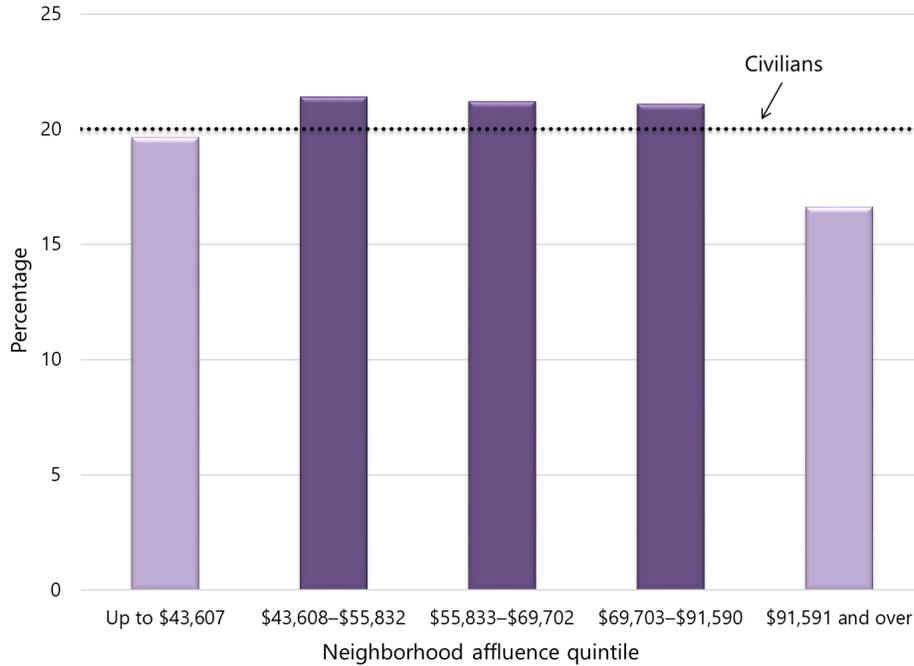
<sup>18</sup> Diana S. Lien et al. (2012), *An Investigation of FY10 and FY11 Enlisted Accessions' Socioeconomic Characteristics*, CNA, DRM-2012-U-001362-Final.

<sup>19</sup> In comparison to quintiles constructed from household income, quintiles constructed from median census tract income will be biased toward the mean of household income.

<sup>20</sup> The quintile ranges are based on all households in census tracts with non-missing median household incomes. FY19 AC NPS enlisted accession data were provided by DMDC and linked by census tract to median household income data from the Census Bureau's 2015–2019 American Community Survey.

<sup>21</sup> See <https://www.census.gov/newsroom/blogs/random-samplings/2013/12/discover-your-neighborhood-with-census-explorer.html>.

**Figure 10. Neighborhood affluence (median census tract household income) quintiles for AC NPS enlisted accessions, FY19**



Source: Table [B-41](#).

Note: These quintiles were constructed using 2015–2019 American Community Survey (ACS) data at the census tract level. FY19 NPS home-of-record accession data from DMDC were used to link NPS accessions with the census tract data.

## Age, gender, race, and ethnicity of enlisted personnel

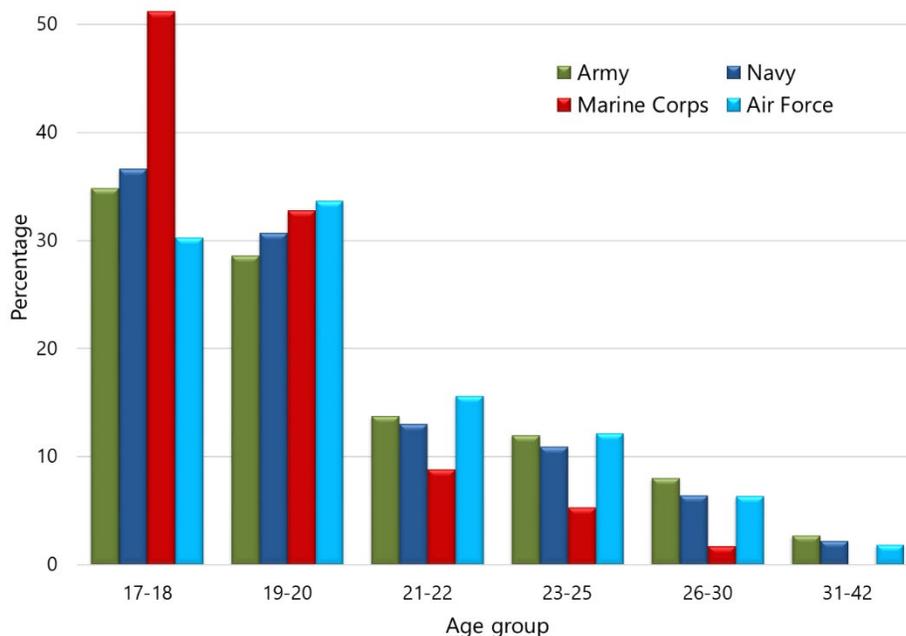
This subsection begins by showing the age distribution of DOD AC NPS accessions across the four services. It then details the current demographics and demographic trends among AC NPS enlisted personnel with respect to gender, racial, and ethnic composition. This is followed by a discussion of occupation and paygrade patterns across gender, race, and ethnicity.

### Age

Similar to previous years, there were significant differences across the services in the age distributions of AC NPS enlisted accessions across the DOD services in FY19 (see Figure 11). Marine Corps accessions were much younger than those in the other services; just over half of Marine Corps accessions were in the 17-to-18-year-old age group, and virtually all of them

were 18.<sup>22</sup> Those who were age 20 and younger made up 84 percent of NPS accessions in the Marine Corps, 64 percent in the Air Force, 63 percent in the Army, and 67 percent in the Navy.

Figure 11. AC NPS enlisted accessions, by age group and service, FY19



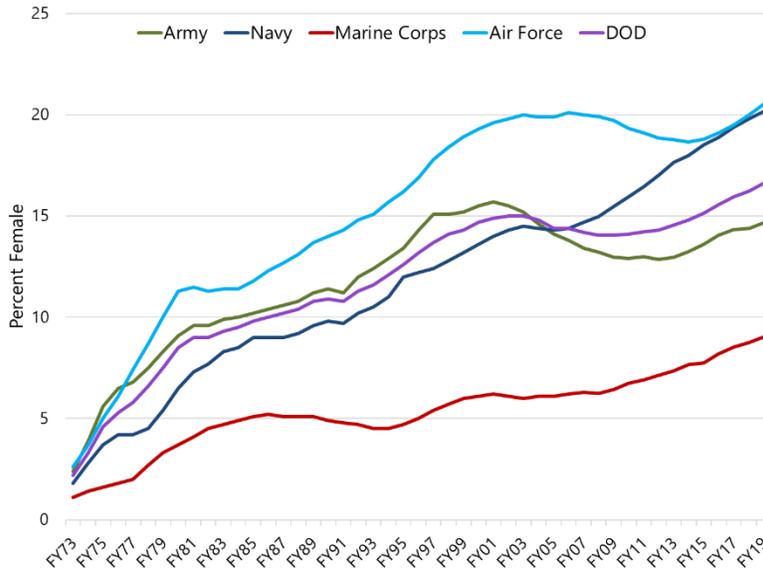
Source: Table B-1.

## Gender

FY19 saw continuation of the trend dating back to FY14—increases in female shares of both enlisted members and accessions in every service. Figure 12 shows the changes in the percentage of female AC enlisted members by service and across DOD. At the start of the AVF in FY73, women represented roughly 2 percent of AC enlisted members, and representation steadily grew until FY03. Enlisted female representation declined from 15.0 percent in FY03 to 14.1 percent in FY10. Since FY10, however, female representation in the AC enlisted force has increased, reaching its highest point to date—16.6 percent across DOD—in FY19. With the exception of the Army, the services also set historic highs in female representation in FY19.

<sup>22</sup> Accessions cannot be younger than 17, and a 17-year-old accession must have parental consent to enter military service. In Table B-1, we see that 4.0 percent of accessions were 17. DOD sets 42 as the maximum age for NPS accessions. The Army briefly raised its maximum to 42 but reverted to 35 in 2011. In 2014, the Air Force raised its maximum age from 27 to 39. The Navy and Marine Corps have maximum ages of 34 and 28, respectively.

Figure 12. Female percentage, AC enlisted members, by service, FY73–FY19



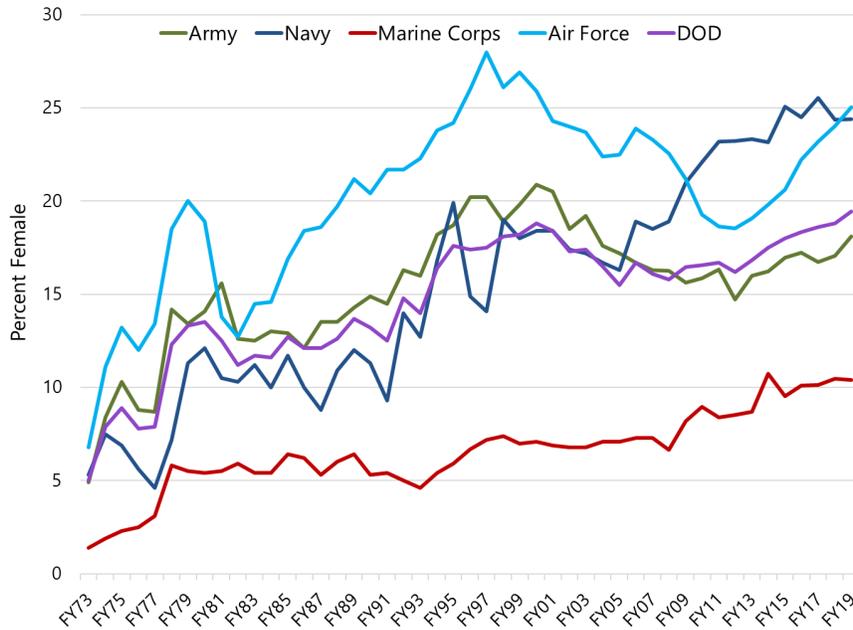
Source: Table [D-13](#).

Female representation among enlisted accessions followed a similar trend to that of AC NPS enlisted members. Figure 13 shows the changes in the percentage of female enlisted AC NPS accessions for each service and across DOD. At the beginning of the AVF, women represented 5 percent of DOD NPS enlisted accessions; that percentage increased through FY00, peaking at 18.8 percent, before steadily declining to 15.5 percent in FY05. Since the mid-2000s, female representation in accessions steadily increased, reaching its all-time high of 19.4 percent in FY19.

Until FY10, the Air Force had the highest enlisted female representation in accessions of all services. Female representation in accessions declined in the Air Force and Army from FY00 to FY12. Contrary to this trend, the Navy experienced steady growth in female representation among its NPS accessions since FY05 and, in turn, its overall enlisted force. In FY19, the Navy and Air Force had nearly identical female representation in both accessions and endstrength.

Female representation in the Marine Corps’ AC NPS enlisted accessions has been lower than the other services, but it has been steadily increasing since FY93, mirroring the increase in overall female representation among enlisted Marines. In FY19, female representation among AC NPS enlisted accessions was highest in the Air Force (25.0 percent), followed by the Navy (24.4 percent), the Army (18.1 percent), and the Marine Corps (10.4 percent).

Figure 13. Female percentage, AC NPS enlisted accessions, by service, FY73–FY19



Source: Table [D-5](#).

## Race and ethnicity

The next subsections present the racial and ethnic composition of AC enlisted personnel and accessions. Before FY03, self-identified race and ethnicity were reported in combined categories (e.g., non-Hispanic White or non-Hispanic Black). Since FY03, race (White, Black, Asian, etc.) and ethnicity (Hispanic or non-Hispanic) have been reported separately. Because race and ethnicity are separate fields, one person can be associated with two minority groups (e.g., Hispanic and non-White).

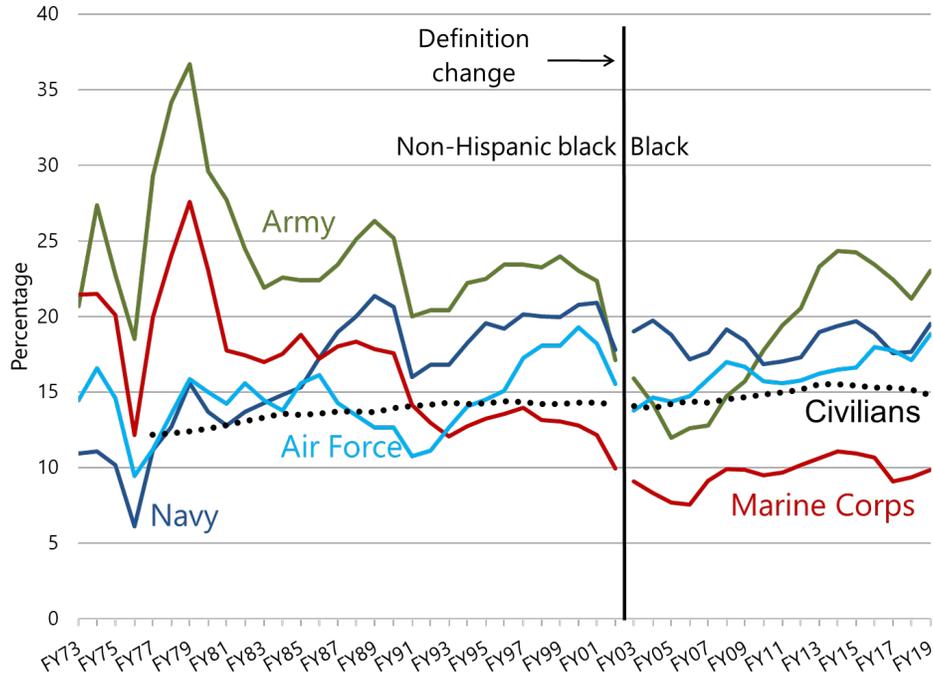
### Black accessions over time

Until the first Gulf War, the percentage of non-Hispanic Black recruits was considerably larger among DOD accessions than in the comparably aged civilian population. There was a decline in non-Hispanic Black accessions after the first Gulf War in 1990 and again in the mid-2000s, but the percentage of Black accessions has increased since. Black accessions now account for 18.9 percent of AC NPS enlisted accessions—a greater percentage than their proportion of the 18-to-24-year-old civilian population (14.8 percent).

There are service differences in the percentage of non-Hispanic Black enlisted accessions, particularly in the early years of the AVF (see Figure 14). At the start of the AVF, the percentage of non-Hispanic Black accessions in the Army and the Marine Corps exceeded civilian

percentages. In the mid-1980s, however, percentages in the Navy rose, while they fell in the Marine Corps and the Air Force. In FY19, in all services except the Marine Corps, the percentage of Black enlisted accessions exceeded comparable civilian percentages.

**Figure 14. Percentage of Black AC NPS enlisted accessions, by service, FY73–FY19**



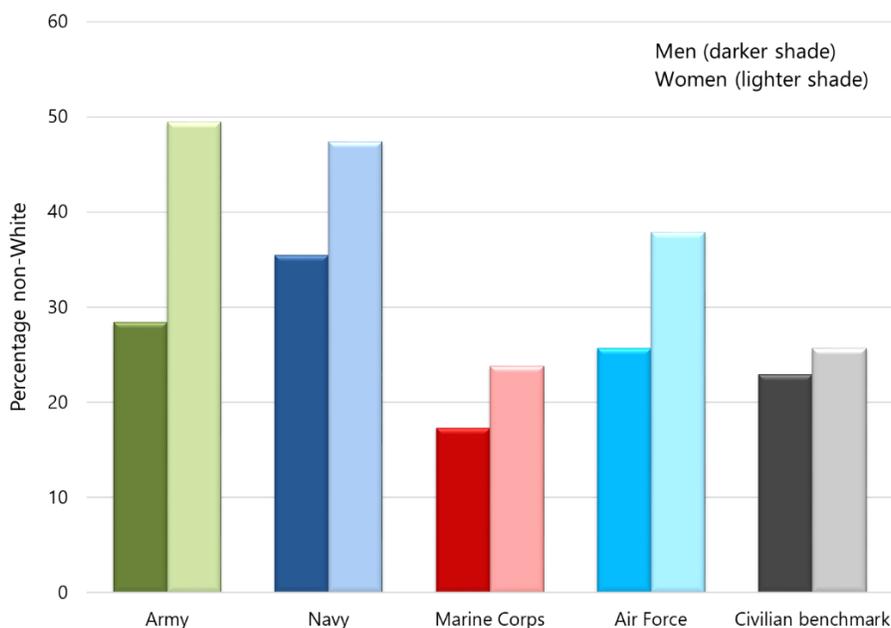
Source: Tables [D-23](#) and [D-26](#).

Since 1997, the Office of Management and Budget (OMB) has required that federal agencies use a minimum of five racial categories when categorizing a person’s race: (1) White, (2) Black or African-American, (3) American Indian or Alaska Native, (4) Asian, and (5) Native Hawaiian or Other Pacific Islander. DOD uses these five self-identified racial categories—separately and in combination—as codes to characterize recruits’ racial backgrounds. Asians are the fastest growing racial group in the US, but they remain a relatively small percentage in the military.<sup>23</sup>

<sup>23</sup> Pew Research Center, 2017 (<https://www.pewresearch.org/fact-tank/2017/09/08/key-facts-about-asian-americans/>).

Figure 15 shows the percentage of enlisted members who were not White in each service by gender.<sup>24</sup> Non-Whites make up 24.2 percent of the civilian benchmark population but 30.2 percent of DOD’s FY19 enlisted forces.

**Figure 15. Percentage of non-White AC enlisted members, by gender and service, FY19**



Source: Table [B-17](#).

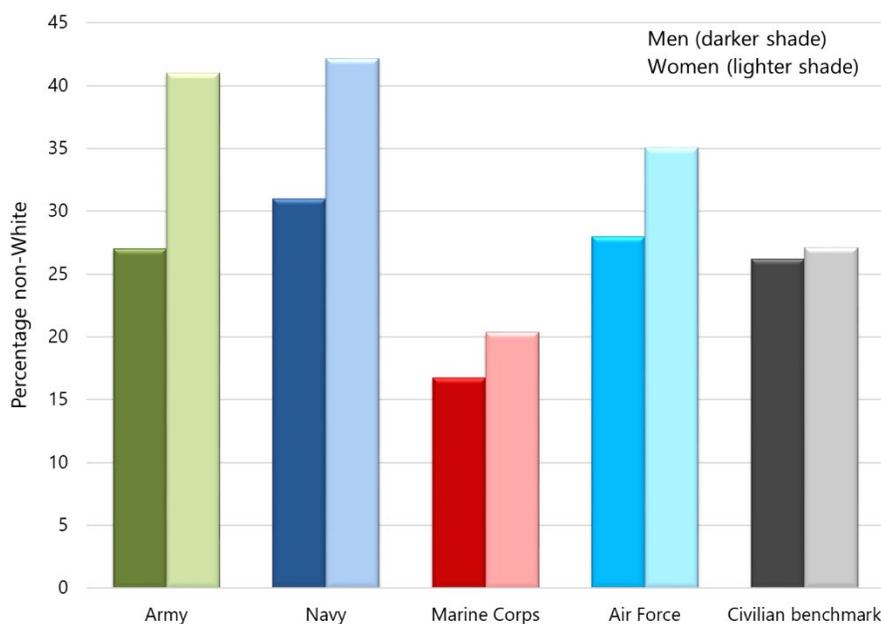
Note: The civilian benchmark is the 18-to-44-year-old civilian labor force. Those of unknown race are proportionally distributed as those with known races.

Figure 15 also shows gender differences in racial representation in the AC enlisted force. In the civilian labor force, 22.9 percent of men and 25.7 percent of women were categorized as non-White; in the AC, enlisted women are more likely to be non-White than enlisted men. This is especially clear in the Army: its percentage of enlisted non-White women is almost double that of enlisted non-White men. The overrepresentation of non-White women in the enlisted force is related to their higher representation in AC NPS accessions and their higher retention rates.

<sup>24</sup> We assume that the distribution of servicemembers whose race is unknown follows their service’s racial distribution, and we assign those selecting two or more races to the non-White category. Those with unknown race represent 3 to 5 percent of enlisted endstrength in each service. The percentages of servicemembers selecting two or more races are 7 and 5 percent in the Navy and Air Force, respectively, and only 1 percent in the Marine Corps. The Army does not report data on the number of AC enlisted personnel in the “two or more” category.

Figure 16 shows the percentage of enlisted *accessions* that were non-White in each service by gender. We see the same rough levels and differences by service and gender in Figure 16 as we did in Figure 15. Non-White recruits constituted 28.1 percent of DOD AC NPS accessions in FY19.<sup>25</sup> In comparison, non-Whites represented 26.7 percent of the civilian benchmark population, the 18-to-24-year-old civilian noninstitutionalized population. However, there are significant differences by service and gender. The Navy has the highest proportion of non-White accessions, while the Marine Corps has the lowest. Female accessions are more likely to be non-White than male accessions. For example, non-White women represented 41 percent of female Army accessions in FY19, while non-White men represented 27 percent of male Army accessions. These service findings are in contrast to the civilian benchmark, which shows small gender differences (27.1 percent female and 26.2 percent male).

**Figure 16. Percentage of non-White AC NPS enlisted accessions, by gender and service, FY19**



Source: Table [B-10](#).

Note: The civilian benchmark is the 18-to-24-year-old population. Those of unknown race are proportionally distributed as those with known races.

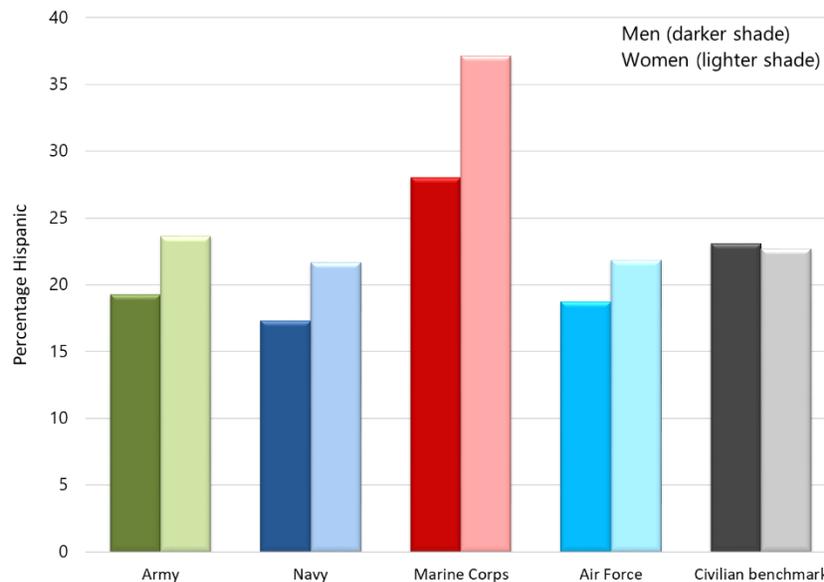
<sup>25</sup> To explore diversity in the enlisted force, we adjusted for the small number of those of unknown race. We assume that the distribution of recruits with unknown race followed their service’s racial distribution. In the Army, Marine Corps, and Air Force, less than 1 percent of AC NPS accessions for each service have an unknown racial background; the Navy has 8.9 percent of AC NPS accessions reporting unknown racial background. Similarly, the percentage of enlisted recruits selecting two or more races is highest in the Air Force (4.3 percent), followed by the Navy (3.7 percent), the Marine Corps (3.1 percent), and the Army (0.1 percent).

## Ethnic diversity in FY19

OMB requires federal agencies to use two ethnic categories: (1) Hispanic or Latino and (2) not Hispanic or Latino. Figure 17 shows the percentage of FY19 accessions that identified as Hispanic by service and gender, relative to the civilian benchmark population (18-to-24-year-olds). Similar to the patterns by race, female accessions are more likely than male accessions to be Hispanic. Hispanics made up the following percentages of all FY19 DOD AC NPS enlisted accessions and civilian labor forces:<sup>26</sup>

- 20.6 percent of male enlisted accessions vs. 23.1 percent of 18-to-24-year-old male civilians
- 24.0 percent of female enlisted accessions vs. 22.7 percent of 18-to-24-year-old female civilians

Figure 17. AC NPS accessions: Percentage of Hispanics, by gender and service, FY19



Source: Table [B-10](#).

Note: The civilian benchmark is the 18-to-24-year-old population. Those of unknown ethnicity are distributed as knowns.

The Marine Corps has the highest proportion of Hispanics among accessions, across both women (37.2 percent) and men (28.0 percent). However, across the rest of the services, with

<sup>26</sup> We assume that any missing ethnic observations follow each service's overall distribution.

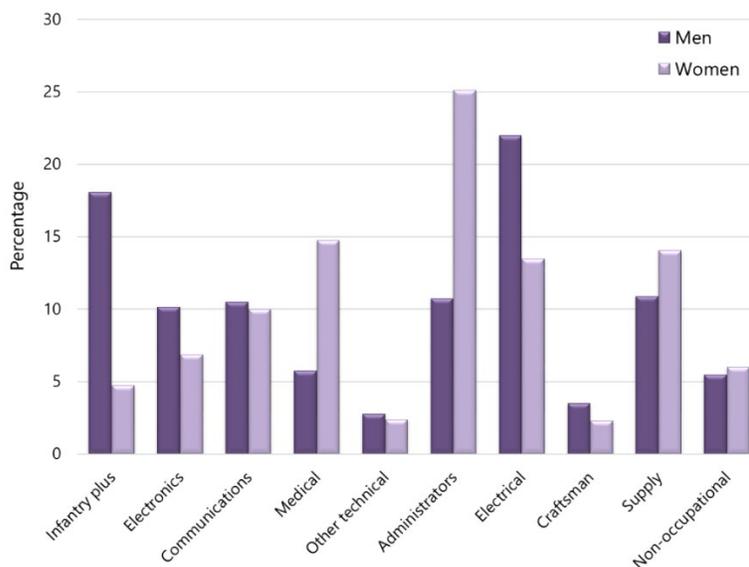
the exception of female Army accessions, there was a smaller proportion of Hispanics relative to the civilian benchmark.

## Occupations of enlisted personnel

### By gender

Figure 18 shows the enlisted force occupational distribution by gender in FY19. The three most common occupational groups for women were administrators (25.1 percent), medical (14.8 percent), and supply (14.1 percent). The top three occupational groups for men were electrical (22.0 percent), infantry/gun crews/seamanship (18.1 percent), and supply (10.9 percent). These occupational differences between men and women are similar to those in previous years. The lack of women in warfighting occupations is likely the result of both enlistees' preferences and prior restrictions on women's service in some of these occupations. We also note that, on average, female accessions score lower on the AFQT and thus may be less likely to qualify for all occupations.

Figure 18. Occupational distribution of the AC enlisted force, by gender, FY19



Source: Table [B-20](#).

Note: Infantry plus includes infantry, gun crews, and seamanship occupations. Although women were not in the infantry prior to the lifting of restrictions, they did serve in gun, aircrew, and seamanship occupations.

## By race

Although most occupational analyses of the enlisted force have focused on gender differences, there also are large racial differences. To further explore these differences, we divided the enlisted force into two categories (White and non-White), both because some racial groups are very small and because we wanted to illustrate broad differences.<sup>27</sup> In Table 5, we highlight with gray shading the largest differences in occupation choices across race (greater than 5 percentage points).

Almost 30 percent of non-White women in the enlisted force are in administrative occupations compared to 17 percent of White women. The next largest differences are in communications (8.0 percent of non-White women vs. 13.8 percent of White women) and in medical (14.0 percent of non-White women vs. 16.2 percent of White women). Non-White men are about twice as likely to be in administrative occupations as their White counterparts. Conversely, non-White men are much less likely than White men to be in infantry, gun crews, and seamanship occupations. We note that, on average, non-White men and non-White women score lower on the AFQT than their White peers and thus may be less likely to qualify for all occupations.

**Table 5. Occupational distribution of the enlisted force, by gender and race, FY19**

Occupational group	White men	Non-White men	White women	Non-White women
Electronics	9.9%	10.5%	7.4%	6.6%
Medical	4.8%	6.8%	16.2%	14.0%
Electrical	22.0%	22.0%	13.8%	13.4%
Craftsmen	3.4%	3.7%	2.2%	2.4%
Supply	9.6%	12.4%	13.9%	14.2%
Communications	12.1%	8.7%	13.8%	8.0%
Other technical	3.4%	2.2%	3.5%	1.8%
Administrative	7.4%	14.5%	17.3%	29.4%
Infantry, Gun Crews, and Seamanship <sup>a</sup>	21.9%	13.8%	5.0%	4.6%
Nonoccupational <sup>b</sup>	5.5%	5.5%	6.9%	5.6%

Source: Table B-20.

Notes: The largest differences between White and non-White men/women are highlighted in gray in the table.

<sup>a</sup> Although women were not in the infantry prior to the lifting the restrictions, they did serve in gun, aircrew, and seamanship occupations.

<sup>b</sup> Nonoccupational includes students, patients, those with unassigned duties, and unknowns.

<sup>27</sup> The non-White category is predominantly composed of servicemembers who identify as Black.

## Paygrades of enlisted personnel

In this subsection, representation is evaluated in two ways: by comparison with the civilian workforce and by paygrade representation relative to overall military representation. Table 6 illustrates the FY19 paygrade distribution for women, non-Whites, and Hispanics. For comparison, Table 6 also shows the representation of these groups for DOD overall and the civilian benchmark (the US 18-to-44-year-old population). Because there is very little lateral entry into military service, these paygrade distributions reflect both current and past accession and retention patterns. While women constitute 47.2 percent of the entire civilian workforce benchmark, servicewomen make up less than one-fifth of servicemembers in all military enlisted paygrades. Relative to the overall DOD percentage of 16.6 for women in the enlisted force, however, women are underrepresented in the senior paygrades (E7+), slightly underrepresented in the mid-level paygrades (E5–E6), and slightly overrepresented in the junior paygrades (E1–E4).

**Table 6. Percentage of AC NPS enlisted personnel by paygrade groupings for women, non-Whites, and Hispanics, FY19**

Demographic group	Percentage of E1-E4	Percentage of E5-E6	Percentage of E7+	Percentage of E1-E9	Civilian benchmark
Women	17.8	16.0	13.6	16.6	47.2
Non-Whites	28.5	32.8	30.2	30.2	24.2
Hispanics	21.9	17.8	15.2	19.6	19.9

Source: Tables [B-17](#) and [B-37](#).

Note: The civilian benchmark is each demographic group's share of the 18-to-44-year-old civilian labor force. To calculate non-White and Hispanic percentages, we assume that those of unknown race and Hispanic background are distributed the same way as those of known backgrounds.

For non-Whites, the picture is reversed. Relative to the civilian labor market benchmark of 24.2 percent, non-Whites are overrepresented in all military enlisted paygrades. However, relative to their overall military representation at 30.2 percent, non-Whites are underrepresented in the junior paygrades and overrepresented in the mid-level paygrades. These non-White paygrade distributions reflect the fact that recent non-White accession percentages, particularly for Black accessions, have been lower than historical percentages.

Hispanics are overrepresented in junior enlisted paygrades and underrepresented in mid-level and senior enlisted paygrades relative to their overall enlisted representation of nearly 20 percent. At higher paygrades, starting at E4, enlisted Hispanic servicemembers are underrepresented in the military relative to their civilian labor market representation of 19.9 percent.

**Section III:**  
**DOD Active Component Commissioned  
Officer Corps**

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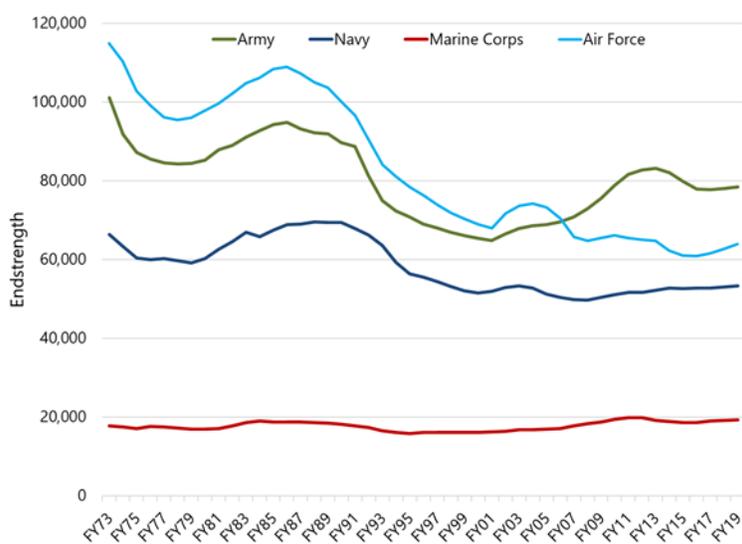
This section gives an overview of the size and demographics of DOD AC officers and officer gains. It begins with a historical description of officer endstrength by service. This is followed by discussions of the distribution of the gender, racial, and ethnic characteristics of AC officers and officer gains.

## Total commissioned officer endstrength

Figure 19 shows AC commissioned officer endstrength by service over the past 43 years. Starting from a high of 300,000 at the start of the AVF, the commissioned officer corps fell to 260,000 by FY80, grew to 292,000 by FY86, fell to 201,000 by FY01, and grew to 219,000 by FY12. In FY19, the commissioned officer corps was just under 215,000 (see appendix Table [D-16](#)). Commissioned officer gains followed similar patterns. In percentage terms, officer gains have fallen more than officer corps endstrength since the start of the AVF, resulting in a more experienced commissioned officer corps.

We noted earlier that, since the AVF began in 1973, the Army has had the highest number of AC enlisted personnel. The Army also has the highest number of commissioned officers, since surpassing the Air Force officer endstrength in FY07. In FY19, AC Army commissioned officer endstrength was roughly 14,500 more than AC Air Force commissioned officer endstrength.

Figure 19. AC commissioned officer endstrength, by service, FY73–FY19



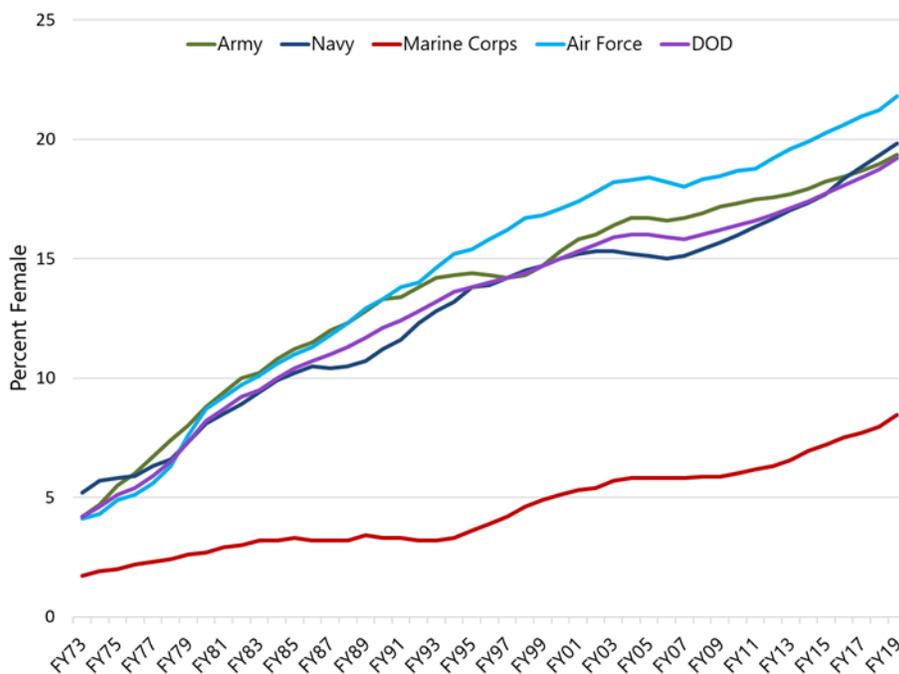
Source: Table [D-16](#).

# Gender, race, and ethnicity of commissioned officers

## Gender

Figure 20 shows changes in female representation among AC commissioned officers for each of the services and for DOD overall. Female representation among the AC officer corps has steadily increased since the beginning of the AVF from 4.2 percent in FY73 to 19.2 percent in FY19. Each of the services generally follows this same trend, with the exception of the Marine Corps, which had a low and relatively steady female representation among AC officers from FY74 to FY92 and increasing female representation after FY92. In FY19, the Air Force had the highest female representation among AC officers at 21.8 percent, followed by the Navy (19.8 percent), the Army (19.3 percent) and the Marine Corps (8.5 percent).

Figure 20. Female percentage, DOD AC officer corps, by service, FY73–FY19

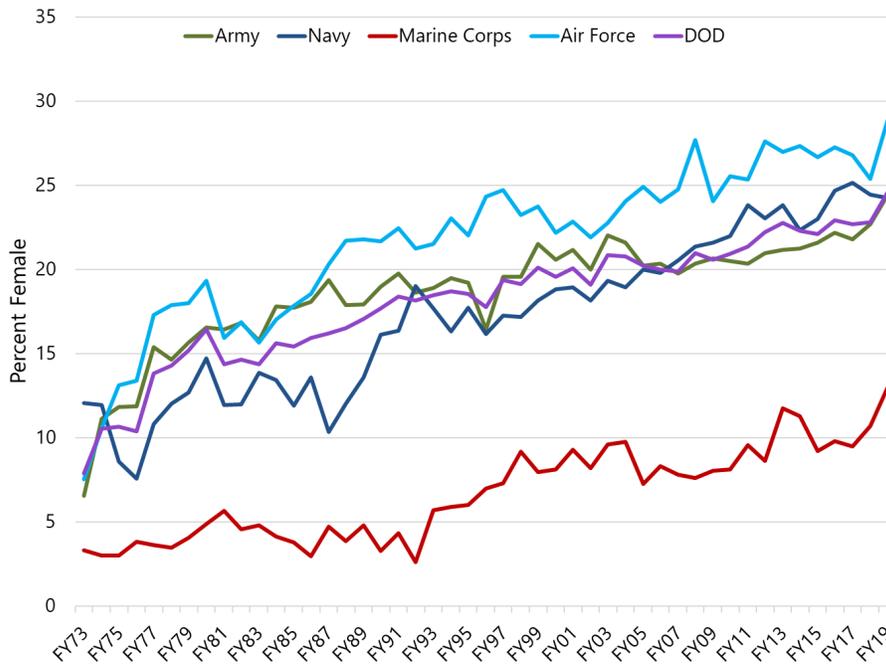


Source: Table [D-19](#).

Female representation in the services' AC officer gains follows a pattern similar to those among the AC officer corps: female representation has been increasing over time, the Air Force has

the highest female representation, and the Marine Corps has the lowest female representation (see Figure 21). In FY19, female representation in officer gains was highest for the Air Force (28.8 percent), followed by the Army (24.4 percent), the Navy (24.2 percent), and the Marine Corps (13.0 percent).

Figure 21. Female percentage, DOD AC officer gains, by service, FY73–FY19



Source: Table [D-19](#)

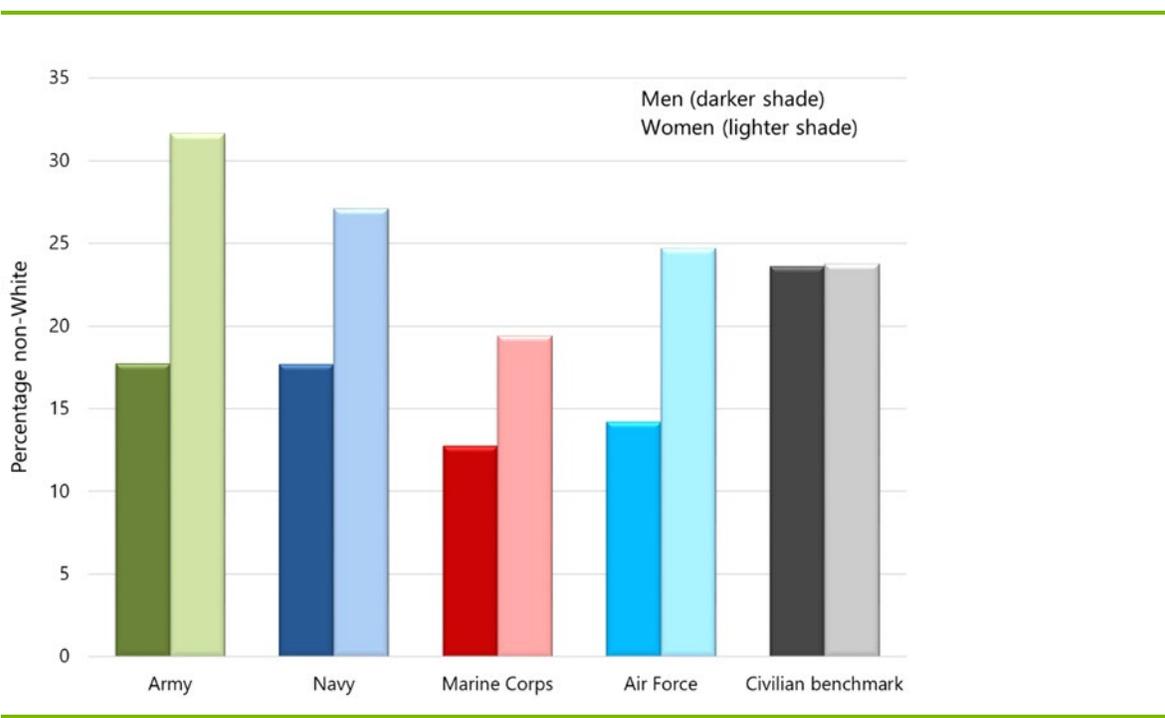
## Race

Figure 22 shows the non-White percentages for AC commissioned officers in each of the services.<sup>28</sup> Among the comparable civilian population (21-to-49-year-old college graduates), non-White representation is roughly equivalent for men and women (23.6 percent and 23.8

<sup>28</sup> For the remainder of this subsection, we consider an officer non-White only if he or she identifies with a race other than White. Note that personnel who are ethnically Hispanic but do not identify as Black or American Indian often identify as White.

percent, respectively). However, female officers are much more likely to be non-White than their male officer peers. In the Army, 17.7 percent of male officers are not White, compared to 31.6 percent of female officers.<sup>29</sup> Similar to the enlisted population, each of the services displays the pattern of female officers being more likely to be non-White than male officers. In contrast to the enlisted population, male commissioned officers in every service are much less likely to be non-White than males from the civilian benchmark population. As a result, the total population of all officers (when ignoring gender) is less likely to be non-White than the civilian benchmark (18.4 percent of all officers versus 23.7 percent of the benchmark population).

**Figure 22. Percentage of non-Whites in the AC commissioned officer corps, by gender and service, FY19**



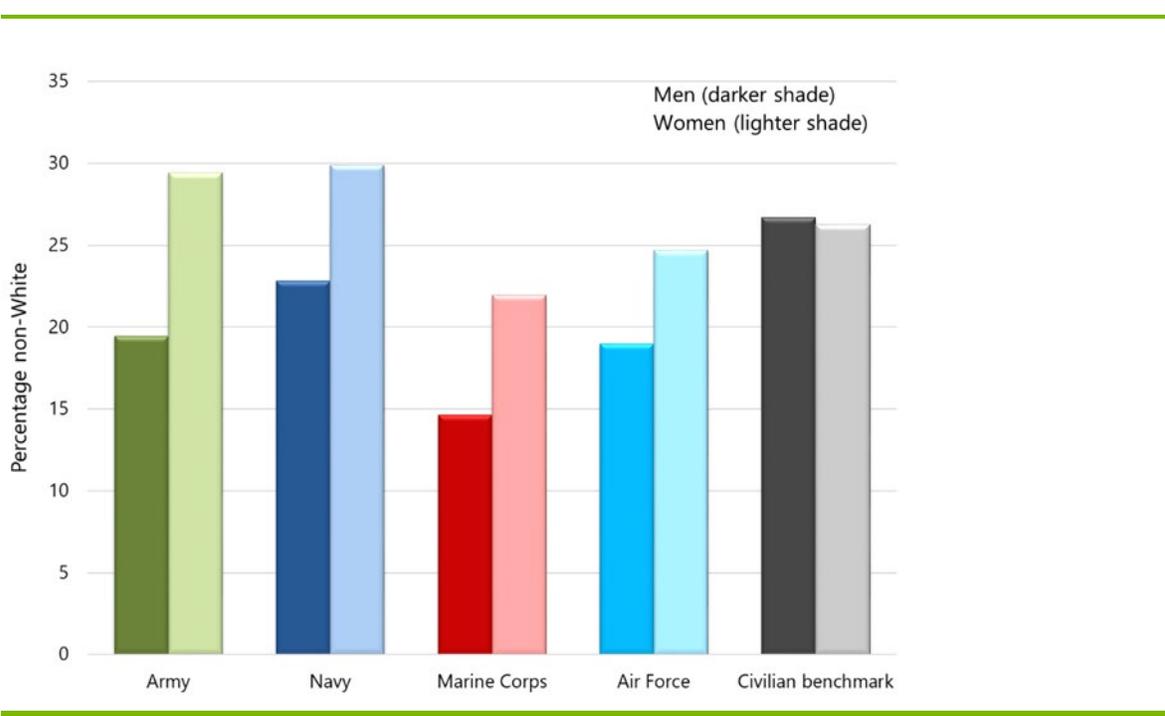
Source: Table B-25.

Note: The civilian benchmark is the 21-to-49-year-old college graduate labor force. Those of unknown race are distributed as knowns.

<sup>29</sup> We use the same methodology for commissioned officers that we used for enlisted personnel. We assume that any missing information for a service is distributed in the same way as the non-missing information, and we treat those who selected two or more racial categories as non-White. For both men and women, the largest non-White group in the college-educated benchmark population is Asians.

Female commissioned officer gains in each of the services are also much more likely to be non-White than male commissioned officer gains. This is counter to the civilian benchmark (the US 21-to-39-year-old college graduate population<sup>30</sup>) where there was a small difference between male and female racial diversity (see Figure 23). The distribution of non-Whites in the officer corps is reflected among FY19 officer gains. Non-White women in the Army and Navy are overrepresented in officer corps gains relative to the civilian benchmark. The remaining groups in both the officer corps overall and gains all exhibit underrepresentation relative to the civilian benchmark.

**Figure 23. Percentage of non-Whites among AC commissioned officer gains, by gender and service, FY19**



Source: Table [B-25](#).

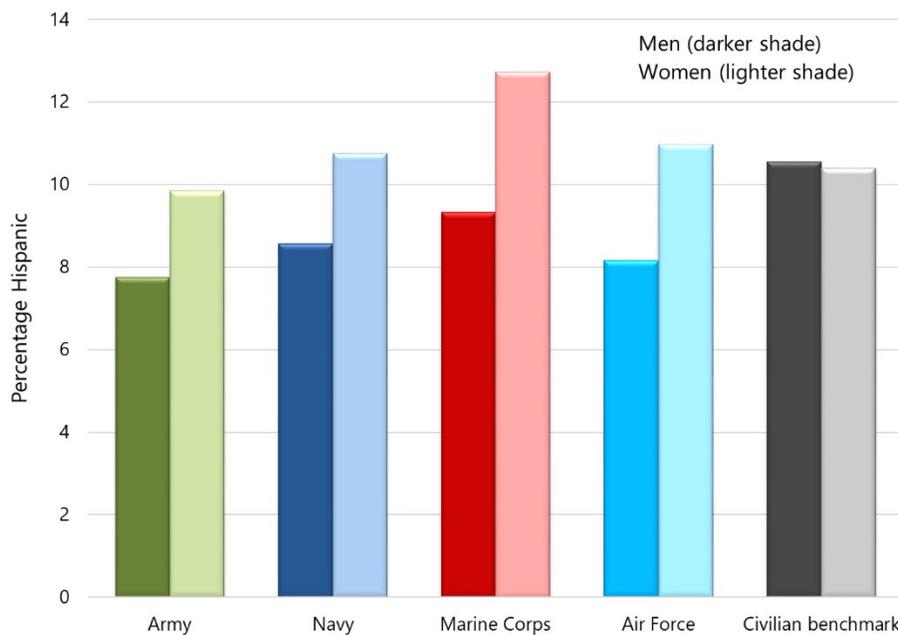
Note: The civilian benchmark for officer gains is the 21-to-39-year-old college graduate population. Those of unknown race are distributed as knowns.

<sup>30</sup> Women in this age group are slightly more likely than men to be college graduates.

## Ethnicity

Figure 24 shows Hispanic representation in the commissioned officer corps for each service. Similar to racial minority representation, Hispanic representation is generally greater among female officers than male officers, and Hispanic representation among male officers is lower than among the male civilian benchmark population (21-to-49-year-old college graduates). However, there also were differences from the non-White trends. For example, Hispanic women in the Marine Corps are overrepresented (as opposed to underrepresented for non-Whites) relative to the civilian benchmark.

Figure 24. Percentage of Hispanics in the AC commissioned officer corps, by gender and service, FY19



Source: Table [B-25](#).

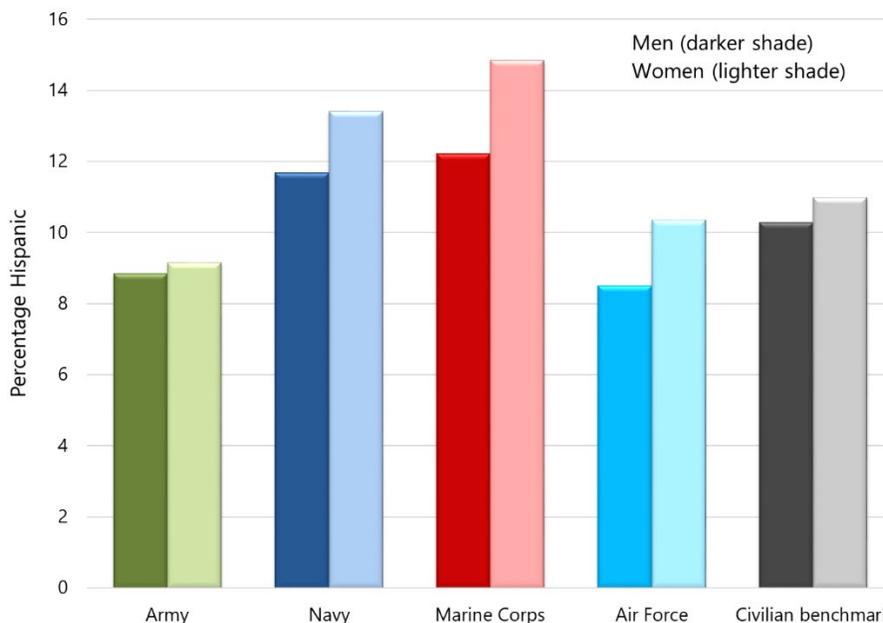
Note: The civilian benchmark is the 21-to-49-year-old college graduate labor force. Those of unknown race are distributed as knowns..

Figure 25 shows the percentages of officer gains by service that identify as Hispanic. The patterns in gains closely follow those seen in the officer corps. Marine Corps female gains are the most likely to be Hispanic (12.7 percent). With the exception of the Army, the percentages

of female Hispanic gains were all greater than the civilian benchmark. Similarly, male officer gains were below the civilian benchmark for all services.

Following the patterns that we found in the officer corps, female commissioned officer gains are more likely to be Hispanic than male commissioned officer gains, though the gender differences usually are smaller than those for non-Whites. In fact, throughout DOD, the proportion of female commissioned officer gains who identify as Hispanic is roughly equivalent to that of the civilian benchmark. In contrast, male commissioned officer gains were less likely to identify as Hispanic (9.8 percent of gains vs. 10.3 percent of civilians).

**Figure 25. Percentage of Hispanics among AC commissioned officer gains, by gender and service, FY19**



Source: Table [B-25](#).

Note: The civilian benchmark for officer gains is the 21-to-39-year-old college graduate labor force. Those of unknown race are distributed as knowns.

## Paygrades of commissioned officers

This subsection breaks down the percentages of women, non-Whites, and Hispanics that fall into different officer paygrade bands. In general, the percentage of women, the percentage of non-Whites, and the percentage of Hispanics fall as paygrade increases. All three groups shown in Table 7 are overrepresented in the junior paygrades (O1–O3), but underrepresented in the mid-level (O4–O6) and senior (O7+) paygrades relative to their overall percentage of commissioned officers. Relative to their civilian labor force benchmark (college graduates age 21 to 59), however, all three groups are underrepresented in the overall commissioned officer corps. This is particularly true for women, who make up just over half of the comparable civilian labor force, but only 19.2 percent of the AC officer corps.

**Table 7. Percentage of AC commissioned officers by paygrade grouping for women, non-Whites, and Hispanics, FY19**

Demographic group	O1–O3	O4–O6	O7+	Overall (O1–O10)	Civilian benchmark
Women	21.1	16.4	7.6	19.2	52.6
Non-Whites	19.7	16.3	9.4	18.4	23.7
Hispanics	9.8	6.9	1.8	8.7	9.8

Source: Tables [B-39](#) and [B-50](#).

Note: The civilian benchmark is the 21-to-59-year-old college graduate labor force. To calculate non-White and Hispanic percentages, we assume that those of unknown race and ethnicity are distributed the same way as those of known backgrounds.

## **Section IV: DOD Reserve Component**

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## Total RC endstrength

The DOD reserve component (RC) consists of six elements: the Army National Guard (ARNG), the US Army Reserve (USAR), the US Navy Reserve (USNR), the US Marine Corps Reserve (USMCR), the Air National Guard (ANG), and the US Air Force Reserve (USAFR). In FY19, the RC was 60.4 percent of the size of the AC. Total RC endstrength was 801,325, which breaks into the following categories:

- 668,681 RC enlisted (83.4 percent of RC endstrength)
- 119,945 RC commissioned officers (15.0 percent of RC endstrength)
- 12,699 RC warrant officers (1.6 percent of RC endstrength)

Virtually all RC warrant officers (97.4 percent) are in the Army's guard and reserve components. Few warrant officers exist in either the Navy or Marine Corps Reserve and the Air Force has no warrant officers in both the RC and AC.

Figure 26 shows total RC endstrength by service from FY97 through FY19. RC endstrength rose in FY19, for the first time in nine years. This slight uptick is in contrast with the greater downward trend in total RC endstrength over the past 20 years. While the Navy, Marine Corps, and Air Force reserves have experienced small fluctuations in recent years (both growth and decline), the Army has experienced consistent declines in RC endstrength resulting in a decrease in total RC endstrength across DOD, although this trend has reversed slightly in FY19. Although the AC has few prior-service (PS) enlisted accessions, many RC enlisted gains are PS personnel. In FY19, 40 percent of RC enlisted gains were PS personnel (see Table 2).<sup>31</sup>

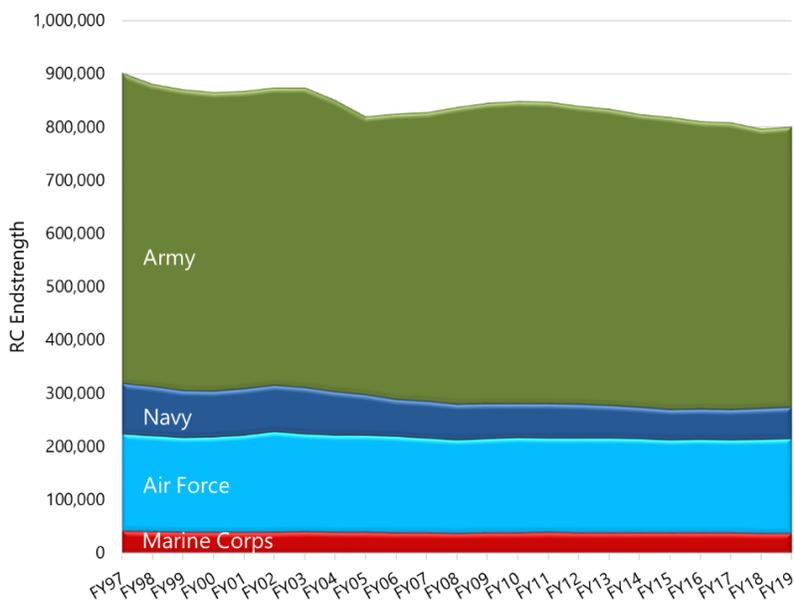
In terms of relative size, about two-thirds of DOD RC endstrength resides in the Army's RC (ARNG and USAR) (see Table 1). The Air Force, Navy, and Marine Corps make up the remaining one-third. More than half—55.3 percent—of DOD RC endstrength is in National Guard units. The ARNG is by far the largest reserve element, with 41.9 percent of DOD RC personnel. The smallest reserve element is the USMCR, with 4.8 percent of all DOD RC personnel.<sup>32</sup> Figure 27 shows the historical distribution of DOD RC endstrength (enlisted personnel plus commissioned officers) across the six service reserve and guard elements.

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<sup>31</sup> RC accession data from DMDC are available only as gains—that is, the addition of a record that was not in the previous FY file.

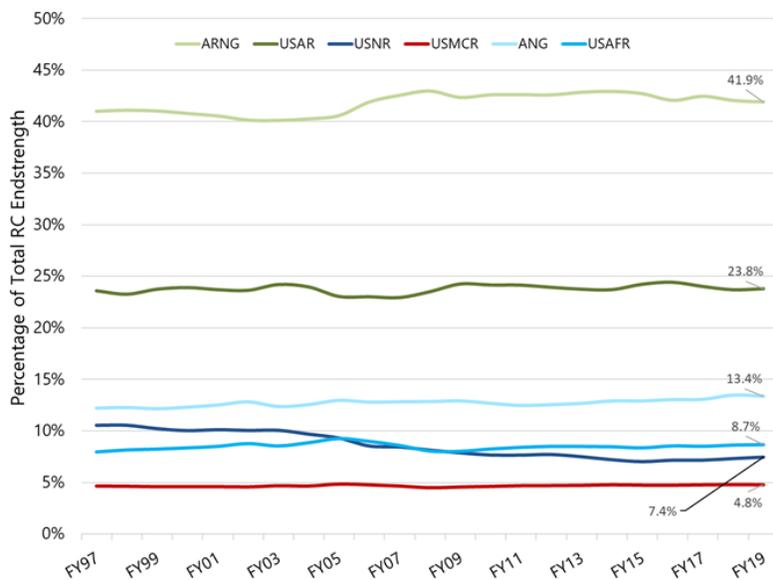
<sup>32</sup> If one broadens the definition of RC to include the Coast Guard, the Coast Guard's RC of 6,126 is the smallest component.

Figure 26. RC endstrength, by service, FY97–FY19



Source: Table [D-39](#).

Figure 27. RC percentages, by service reserve element, FY97–FY19



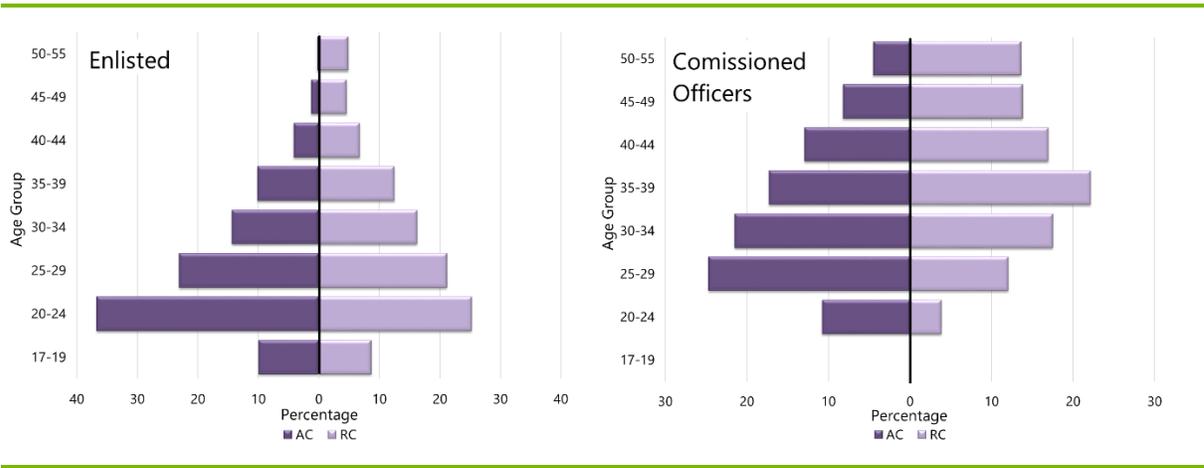
Source: Tables [D-20](#) and [D-21](#).

# Comparisons of RC and AC demographic characteristics

## Members' age

There are large differences in the age distribution of AC and RC enlisted members. The left panel of Figure 28 shows enlisted personnel, and the right shows commissioned officers. The bars extending to the left side of each panel illustrate the AC age distribution, while the right side shows the RC distribution. Looking first at enlisted personnel, it is clear that the AC enlisted force is younger than the RC enlisted force: 9.4 percent of enlisted reservists are age 45 or older, while the percentage for the AC enlisted force is only 1.6 percent. The differences for officers are equally dramatic; while 27.4 percent of RC officers are age 45 or older, the comparable percentage in the AC is only 12.8 percent.

Figure 28. DOD AC and RC age distributions, enlisted and officers, FY19



Source: Tables [B-15](#), [C-11](#), [B-22](#), and [C-17](#).

## Quality of NPS enlisted gains

As in the AC, RC gains are mostly those with Tier 1 education credentials and AFQT scores at or above the 50th percentile. In FY19, the RC had a slightly smaller proportion of Tier 1 enlisted gains than the AC; 95.4 percent of RC NPS enlisted gains were Tier 1 compared with 97.4 percent of NPS AC enlisted accessions. Overall, 66.4 percent of all NPS RC enlisted gains had AFQT scores at or above the 50th percentile in FY19, compared with 68.8 percent of NPS AC accessions.

Table 8 shows the percentage of RC NPS gains who held Tier 1 education credentials and the percentage that had AFQT scores in the 50th percentile or higher in FY19. For all of the reserve and guard components, over 90 percent of NPS enlisted gains were classified as Tier 1, and over 60 percent scored at or above the 50th percentile on the AFQT. The Air Force’s reserve and guard components had the highest percentages of Tier 1 NPS enlisted gains, while the Marine Corps Reserves had the highest percentage of gains with high-AFQT scores.

**Table 8. Percentage of RC NPS enlisted gains with Tier 1 education or AFQT at or above the 50th percentile, FY19**

Quality measure	ARNG	USAR	USNR	USMCR	ANG	USAFR	DOD
Tier 1	95.3	92.0	90.5	96.5	99.6	99.9	95.4
AFQT 50+	63.7	64.3	64.6	74.4	74.0	75.3	66.4

Source: Tables [C-4](#) and [C-6](#).

## Marriage rates, gender, race, and ethnicity

### Marriage rates

There are some notable differences in married rates between RC and AC personnel. Overall, despite RC personnel generally being older than their AC counterparts, RC personnel are less likely to be married than AC personnel, and their age-specific marriage rates are closer to those of civilians than to AC personnel (within age and gender groups in Table 9, we bold categories with the highest marriage rates).

**Table 9. Percentage of married AC and RC enlisted personnel, by age and gender, with civilian comparisons, FY19**

Age	Enlisted men			Enlisted women		
	AC	RC	Civilian	AC	RC	Civilian
20	<b>12.8</b>	1.8	2.9	<b>21.9</b>	3.5	4.1
25	<b>47.4</b>	21.9	17.9	<b>46.9</b>	24.2	21.9
30	<b>70.2</b>	49.7	42.5	<b>55.9</b>	41.0	44.9
35	<b>82.3</b>	67.5	61.1	<b>62.9</b>	52.5	57.6
40	<b>86.5</b>	75.2	68.5	62.1	53.0	<b>62.8</b>

Source: Tables [B-16](#) and [C-12](#).

Note: The civilian data are for the civilian labor force age 17 to 55 and are from the Bureau of Labor Statistics' Current Population Survey, September 2019.

The most striking differences are at younger ages. For example, at age 20, both AC enlisted men and women were much more likely than reservists or the civilian benchmark to be married. Even at older ages, enlisted men in the AC are more likely than those in the RC to be married, and RC enlisted men are more likely than comparable civilians to be married. In general, AC marriage rates for men and women are higher than RC marriage rates and, with the exception of women at age 40, AC marriage rates are higher than civilian marriage rates.

## Gender

Like the AC, the RC strives for a diverse force. For enlisted personnel and officers, the RC has a higher percentage of women than the AC. In FY19, the RC enlisted force was 20.8 percent female; the AC enlisted force, 16.6 percent female. In the RC's enlisted forces, the percentage of women varied from a high of 27.5 percent for the USAFR to a low of 3.5 percent for the USMCR. For commissioned officers, the AC was 19.2 percent female, whereas the RC was 23.0 percent female, ranging from a high of 26.6 percent in the USAFR to a low of 9.1 percent in the USMCR.<sup>33</sup>

## Race and ethnicity

In FY19, the AC enlisted force was slightly more racially diverse than the RC enlisted force. AC and RC commissioned officer comparisons show roughly equal racial and ethnic diversity (see Table 10).<sup>34</sup> The civilian comparison group for commissioned officers includes only college graduates. AC enlisted and RC enlisted have an overrepresentation of Blacks relative to the civilian benchmark, while RC and AC commissioned officer percentages for Blacks are close to the civilian benchmark. Asians and Hispanics are underrepresented in both the enlisted and

<sup>33</sup> See Tables [B-16](#) and [C-11](#) for enlisted personnel and Tables [B-23](#) and [C-18](#) for commissioned officers.

<sup>34</sup> Those with unknown racial and ethnic backgrounds are distributed the same way as those with known racial and ethnic backgrounds.

officer populations of the RC. Hispanics are roughly equally represented with the civilian benchmark among AC enlisted, but underrepresented among AC officers.

**Table 10. AC and RC race and ethnicity percentages for enlisted personnel and commissioned officers, with civilian comparison group, FY19**

Race or ethnicity	Enlisted personnel			Commissioned officers		
	AC	RC	Civilians	AC	RC	Civilians
White	69.8	72.6	75.9	81.6	79.2	76.3
Black	19.7	17.7	13.5	8.8	9.7	10.0
Asian	4.7	4.4	6.7	6.0	4.8	11.1
Other <sup>a</sup>	5.9	5.3	3.9	3.6	6.3	2.5
Hispanic ethnicity	19.6	15.5	19.7	8.7	7.4	9.8

Source: Tables [C-13](#), [C-20](#), [B-17](#), and [B-25](#). We used the portion of the source tables that distributed those with unknown race and ethnicities as known race and ethnicities.

<sup>a</sup> “Other” includes American Indian/Alaska Native, Native Hawaiian/Pacific Islander, and two or more races.

Note: The civilian data include the 18-to-55-year-old civilian labor force for enlisted personnel and 21-to-59-year-old civilian college graduates for commissioned officers.

## **Section V: US Coast Guard**

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Table 11 shows the breakdown of the US Coast Guard’s FY19 AC and RC endstrength. Overall, the US Coast Guard is less than one-fourth the size of the Marine Corps, making it the smallest of the five armed services. Part of the Department of Homeland Security (DHS) in peacetime, the US Coast Guard may be called in wartime to join the Department of Navy and, therefore, would fall under DOD jurisdiction.<sup>35</sup>

**Table 11. Coast Guard endstrength, by personnel category and component, FY19**

Personnel category	AC	RC
Enlisted personnel	32,265	5,265
Commissioned officers	6,814	912
Warrant officers	1,751	100
<b>Total</b>	<b>40,830</b>	<b>6,277</b>

Source: Tables [E-12](#), [E-15](#), [E-19](#), [E-24](#), [E-26](#), and [E-29](#).

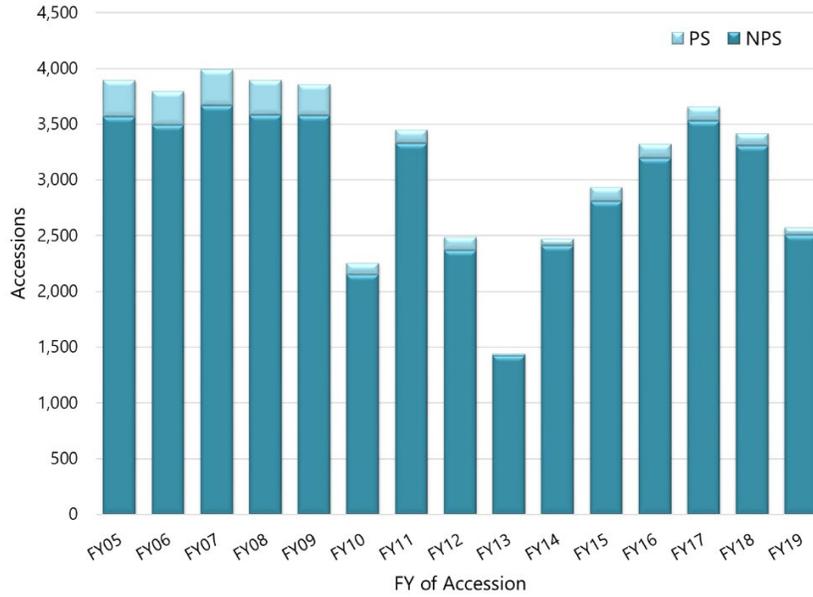
## Number and quality of AC NPS enlisted accessions

The number of US Coast Guard accessions has experienced greater year-to-year fluctuations in percentage terms than the DOD services (see Figure 29). NPS accessions were around 3,500 yearly from FY05 to FY09. Since FY10, NPS accessions have fluctuated between a low of 1,424 in FY13 to a high of 3,532 in FY17, to the current FY19 number of 2,510. The US Coast Guard’s 65 PS accessions in FY19 accounted for less than 3 percent of total accessions.

Like the DOD services, the US Coast Guard seeks high-quality recruits—those with AFQT scores at or above the 50th percentile and Tier 1 educational credentials. Similar to the rest of the services, the US Coast Guard had a successful recruiting year in FY19. Figure 30 illustrates this, comparing US Coast Guard recruiting achievement with that of the DOD AC services. Nearly 80 percent of US Coast Guard enlisted recruits scored in the top half of the AFQT distribution, and 99 percent had Tier 1 educational credentials. The Air Force and US Coast Guard had the highest percentages of high-quality recruits in FY19.

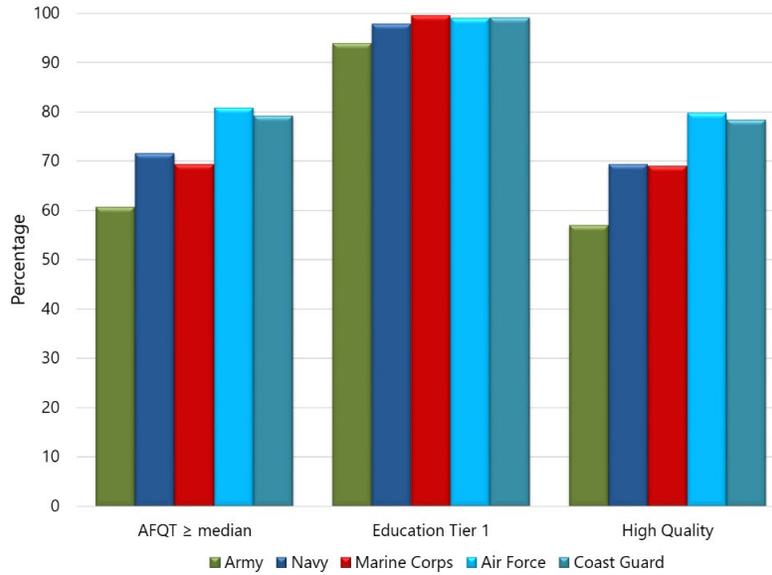
<sup>35</sup> Title 14 of the United States Code governs the process by which authority over the Coast Guard may be transferred to DOD in wartime.

Figure 29. Coast Guard AC NPS and PS accessions, FY05–FY19



Source: Table E-6, E-11, and prior years of the PopRep (found at <https://www.cna.org/research/pop-rep>).

Figure 30. Quality of AC NPS enlisted accessions, by service, FY19



Source: Tables B-4, B-6, B-8, E-7, E-8, and E-9.

## Gender, race, and ethnicity in the US Coast Guard

In FY19, the US Coast Guard's percentage of female officer gains (27.9 percent) exceeded the DOD overall (24.5 percent), as well as its percentage of NPS female AC enlisted accessions (21.0 percent) relative to DOD (19.4 percent). The US Coast Guard has a larger percentage of women in its officer corps (23.6 percent) than in its enlisted force (13.5 percent).<sup>36</sup> This is similar to differences found in the AC Army, Navy, and Air Force, but it differs from the Marine Corps in which the percentages of women in the AC enlisted force and the AC officer corps were similar.

The DOD RC has a higher percentage of women in both the enlisted force and the officer corps than does the DOD AC. That pattern also appears in the US Coast Guard, with women constituting 15.8 percent of RC enlisted members (compared to 13.5 percent in the AC) and 25.2 percent of RC commissioned officers (compared to 23.6 percent in the AC).<sup>37</sup>

Compared to the civilian population, Hispanics are slightly overrepresented in the AC officer corps (11.1 percent vs. 10.5 percent benchmark), similarly represented in the US Coast Guard's AC NPS enlisted accessions (23.0 percent vs. 22.9 percent benchmark), and underrepresented in the enlisted corps (17.9 percent vs. 19.9 percent benchmark), and AC officer gains (9.4 percent vs. 10.7 percent benchmark).<sup>38</sup>

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<sup>36</sup> See Tables [E-6](#), [E-13](#), and [E-16](#).

<sup>37</sup> See Tables [E-25](#) and [E-27](#).

<sup>38</sup> See Tables [E-6](#), [E-13](#), and [E-16](#).

## **Section VI: Conclusion**

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As mandated by Congress, DOD has provided the *Population Representation in the Military Services (PopRep)* report on the demographic and service-related characteristics of US military personnel every year since 1974. Though AC endstrength fell consistently from FY10 to FY16, the past three years have shown consecutive growth. In FY19, there were more than 1.3 million military personnel in DOD's AC and about 800,000 in its RC. The Army is the largest of DOD's military services, with a total endstrength of over 1 million, distributed approximately equally between the AC and RC. The Marine Corps is the smallest DOD service, with a total endstrength of over 224,000 (around 83 percent of whom are in the AC). The US Coast Guard is the smallest of the US armed services with an FY19 total endstrength of over 47,000 (87 percent of whom are in the AC).

FY19 was the 11th consecutive year that female representation grew among DOD enlisted members, and the 12th consecutive year that it grew among DOD officers. Female representation reached its highest level ever in the history of the US armed services, rising to 16.6 percent among enlisted members and 19.2 percent among officers.

The US military continued to exceed the DOD recruit quality benchmarks of 90 percent Tier 1 educational credentials and 60 percent with AFQT scores at or above the 50th percentile. Overall, 97 percent of AC enlisted accessions held Tier 1 education credentials and 69 percent had AFQT scores at or above the 50th percentile. This comes despite a continued fall in some services in the number of accessions who are high quality—meaning they hold at least a high school degree *and* scored at or above the 50th percentile on the AFQT. The percentage of AC accessions deemed high quality fell for a seventh consecutive year. These changes have been driven by a reduction in the percentage of accessions with AFQT scores at above the 50th percentile, particularly in the Air Force and Navy.

The share of total DOD NPS AC accessions coming from the South remains the highest across all of the regions of the US, at 46 percent. The South is also relatively overrepresented in terms of accessions, providing a larger proportion of accessions than its general population shares would indicate. Conversely, the Midwest and Northeast are underrepresented.

RC endstrength rose in FY19, for the first time in nine years. In FY19, the share of NPS RC gains with an AFQT score at or above the 50th percentile is 66.4 percent, and the share of NPS RC gains classified as Tier 1 is 95.4 percent.

The US Coast Guard saw a large reduction in accessions in FY19 relative to FY18, from 3,422 to 2,575. Still, almost 80 percent of Coast Guard AC NPS accessions were considered high quality, higher than any of the services except the Air Force.

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# Abbreviations

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AC	active component
ACS	American Community Survey
AFQT	Armed Forces Qualification Test
ANG	Air National Guard
ARNG	Army National Guard
AVF	All-Volunteer Force
DHS	Department of Homeland Security
DMDC	Defense Manpower Data Center
DOD	Department of Defense
FY	fiscal year
GED	Tests of General Educational Development
MEPS	Military Entrance Processing Station
NPS	non-prior-service
OMB	Office of Management and Budget
PopRep	Population Representation in the Military Services
PS	prior-service
RC	reserve component
USAFR	US Air Force Reserve
USAR	US Army Reserve
USMCR	US Marine Corps Reserve
USNR	US Navy Reserve