Introduction

Since 1974, this annual Department of Defense (DOD) report has described characteristics of U.S. military personnel. The goal of the Population Representation in the Military Services (Pop Rep) report is to provide the most comprehensive, reliable, and consistent data tabulations on military personnel for policy-makers, the media, and the general public.¹

Since 2009, the recruiting environment has been extremely favorable for the military. This success is largely attributed to continued weakness in the civilian labor market, which has produced a prolonged period of historically high unemployment. Young adults have had difficulty finding employment; the unemployment rate for 16- to 24-year-olds ranged from 15.5 percent to 18.4 percent during FY09 through FY13.² As a result of this economic morass, most of the services have consistently met their recruitment goals.³ In fact, the recruiting environment has allowed recruiters to be increasingly selective, so the quality of newly enlisted accessions is higher than ever before.

Of course, the environment for recruiters is likely to become significantly less fertile in the near future. In 2014, the unemployment rate for 16- to 24-year-olds dropped to 13.4 percent, and it is reasonable to assume that this percentage will continue to decline as the United States recovers from the lingering effects of recession. In addition, high school graduates are more likely to enroll in college immediately and thus not be available for the military services.⁴ Finally, budget constraints have created pressure for DOD to reduce the growth of military pay. With slower or no pay growth, fewer young Americans may view the military as an attractive career path.

Another significant concern for DOD is that the population of potential recruits has become increasingly unqualified for military service. Accession Policy, in the Office of the Under Secretary of Defense (OUSD-AP), sponsored a recent study to estimate the “qualified military available,” or QMA.⁵ This is an estimate of the proportion of the 17- to 24-year-old youth population in the United States who would qualify without needing a waiver and be available to enlist in the active-component military. The 2013

---

¹ Summaries and appendixes (for FY97 through FY14) of the Pop Rep report are available online at https://www.cna.org/research/pop-rep.
² To put this range into context, consider that, during the 1986-2008 period, the average annual unemployment rate for 16- to 24-year-olds was only 11.7 percent.
³ While the active components met their recruiting goals, the Army Guard failed its recruiting goal in FY13 and the Army Reserve failed its recruiting goal in both FY12 and FY13.
⁴ The immediate college enrollment rate (the year after high school or a GED award) was 60 percent for high school graduates in 1990 and 66 percent in 2013, the most recent year available. See https://nces.ed.gov/fastfacts/display.asp?id=51.
QMA report estimates that only 17 percent of 17- to 24-year-olds are available (i.e., not enrolled in college) and qualified to enlist without a waiver. In practice, the services typically deny enlistment to youth who score in the bottom 30 percentiles (i.e., category IV and V) on the Armed Forces Qualification Test (AFQT).<sup>6</sup> Incorporating this criterion, only 13 percent of youth would qualify without a waiver, be available, and score above the 30<sup>th</sup> percentile on the AFQT. Disqualification reasons include medical/physical, obesity, drugs, conduct, dependents, and aptitude.<sup>7</sup>

Relative to representation in the civilian labor market, women are underrepresented in the military, making up 15.1 percent of the active-component military population. The recruitment and retention of women has become a hot topic throughout DOD, and several services already have taken steps to attract more female recruits. The Navy has been especially aggressive in this regard, including a dramatic increase in maternity leave time (from 6 weeks to 18 weeks) for Navy mothers.<sup>8</sup> While the Navy’s efforts have received significant media attention, other services are also taking steps to attract more women. For instance, the Army is attempting to train more female recruiters, in the hope that these soldiers will have more success at attracting female recruits.<sup>9</sup> Finally, the decision of the Secretary of Defense to open up all military occupations to women may increase interest in military service among young women.

Although today’s recruiting environment continues to be favorable for the military, it is imperative to plan for a future in which that is no longer the case. Without sufficient planning and resources, military recruiting will be characterized by “boom and bust” periods, as has been the case in past years. This sort of volatility leads to higher recruiting costs, in part because contracting and expanding recruiting resources are not symmetric processes. Cuts in the recruiting force, for example, can be achieved quickly; expansions, however, take much more time because recruiters must be selected and trained. Newly trained recruiters are not immediately productive; some estimates indicate that their learning curve is almost a year long.<sup>10</sup> Thus, considerable care must be taken to ensure that recruiting resource cuts are not so severe that they cause recruiting failure and reduced military readiness when the economy recovers. Because there is no lateral entry in the military, new accessions are both tomorrow’s career force

---

<sup>6</sup> The AFQT score is computed from Armed Services Vocational Aptitude Battery (ASVAB) subtests.

<sup>7</sup> Many youth have more than one disqualifying factor. In fact, 31 percent of all youth are predicted to be disqualified from enlisting in the military for more than one reason. Medical/physical, overweight, and drugs are common multiple disqualifiers.


<sup>10</sup> The time period from initial selection to full productivity may be as long as 18 months; see Dana Samuelson, Amanda Kraus, David Reese, and Michael Moskowitz, *Productivity Effects of Changes in the Size of the Enlisted Recruiter Force*, CRM D0013975. A2/Final, May 2006.
and tomorrow’s leaders. If the military accesses low-quality recruits today, it jeopardizes future readiness.

This summary report highlights recent and historical personnel trends in the DOD services (the Army, Navy, Marine Corps, and Air Force) and the U.S. Coast Guard, which is part of the Department of Homeland Security. It examines both the active component (AC) and the reserve component (RC) in all services. It describes demographic characteristics of applicants, accessions, enlisted personnel, and officers, referencing data from the tables in the technical appendices, as well as from previous Pop Rep reports. Finally, it includes information on the socioeconomic characteristics of the neighborhoods of those AC non-prior-service (NPS) recruits accessed into the military in FY14.

The remainder of this report is organized as follows: In section I, we present an overall summary of the armed services. Section II covers DOD’s AC. Section III is a special section on AC diversity where we examine representation by racial and ethnic backgrounds separately for male and female servicemembers. Section IV describes the RC. In section V, we discuss the U.S. Coast Guard. Section VI presents concluding highlights.

The FY14 technical appendixes (A through E), located on this website, provide current data on the demographics—including education and aptitude—of new recruits, enlisted personnel, and officers of the AC and RC, as well as historical data on their selected demographic and service-related characteristics. Except where otherwise noted, data are provided by the Defense Manpower Data Center (DMDC), and all data are derived from the technical appendixes.
Section I: Summary Statistics

Each year, Congress sets authorized endstrength — the maximum number of servicemembers allowed — for each service. Actual endstrength may differ from authorized endstrength, however, in that the former refers to the number of servicemembers as of the 30th of September in a given fiscal year. To meet authorized endstrength, each service balances retention (those remaining in the service) with accessions (those entering the service). In this report, “endstrength” refers to actual endstrength. In table 1, we show individual service total endstrength — the sum of enlisted members, commissioned officers, and warrant officers — for the past three fiscal years. The table also shows FY14 endstrength by personnel type.

Table 1. Actual endstrength, by service and personnel type, FY12–FY14

<table>
<thead>
<tr>
<th>Component</th>
<th>FY12 Endstrength</th>
<th>FY13 Endstrength</th>
<th>FY14 Endstrength</th>
<th>FY14 Enlisted</th>
<th>FY14 Commissioned Officers</th>
<th>FY14 Warrant Officers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Active (AC)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Army</td>
<td>546,059</td>
<td>528,070</td>
<td>504,330</td>
<td>406,699</td>
<td>82,144</td>
<td>15,487</td>
</tr>
<tr>
<td>Navy</td>
<td>314,339</td>
<td>319,839</td>
<td>321,599</td>
<td>267,159</td>
<td>52,778</td>
<td>1,662</td>
</tr>
<tr>
<td>Marine Corps</td>
<td>198,820</td>
<td>195,848</td>
<td>187,891</td>
<td>166,977</td>
<td>18,813</td>
<td>2,101</td>
</tr>
<tr>
<td>Air Force</td>
<td>328,812</td>
<td>326,573</td>
<td>312,453</td>
<td>250,104</td>
<td>62,349</td>
<td>0</td>
</tr>
<tr>
<td>DOD total</td>
<td>1,388,030</td>
<td>1,370,330</td>
<td>1,326,273</td>
<td>1,090,939</td>
<td>216,084</td>
<td>19,250</td>
</tr>
<tr>
<td><strong>Reserve (RC)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ARNG</td>
<td>358,078</td>
<td>357,735</td>
<td>354,072</td>
<td>308,446</td>
<td>37,015</td>
<td>8,611</td>
</tr>
<tr>
<td>USAR</td>
<td>201,166</td>
<td>198,209</td>
<td>195,438</td>
<td>160,043</td>
<td>32,132</td>
<td>3,263</td>
</tr>
<tr>
<td>USNR</td>
<td>64,715</td>
<td>62,444</td>
<td>59,254</td>
<td>44,700</td>
<td>14,471</td>
<td>83</td>
</tr>
<tr>
<td>USMCR</td>
<td>39,544</td>
<td>39,501</td>
<td>39,450</td>
<td>35,242</td>
<td>3,942</td>
<td>266</td>
</tr>
<tr>
<td>ANG</td>
<td>105,389</td>
<td>105,708</td>
<td>106,380</td>
<td>91,356</td>
<td>15,024</td>
<td>0</td>
</tr>
<tr>
<td>USAFR</td>
<td>71,817</td>
<td>70,913</td>
<td>69,784</td>
<td>55,967</td>
<td>13,817</td>
<td>0</td>
</tr>
<tr>
<td>DOD total</td>
<td>840,709</td>
<td>834,510</td>
<td>824,378</td>
<td>695,754</td>
<td>116,401</td>
<td>12,223</td>
</tr>
<tr>
<td><strong>U.S. Coast Guard</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AC</td>
<td>41,849</td>
<td>40,420</td>
<td>39,454</td>
<td>31,130</td>
<td>6,626</td>
<td>1,698</td>
</tr>
<tr>
<td>RC</td>
<td>7,982</td>
<td>8,000</td>
<td>7,614</td>
<td>6,383</td>
<td>1,098</td>
<td>133</td>
</tr>
<tr>
<td>Total</td>
<td>49,831</td>
<td>48,420</td>
<td>47,068</td>
<td>37,513</td>
<td>7,724</td>
<td>1,831</td>
</tr>
</tbody>
</table>

Notes:
1. The RC consists of the Army National Guard (ARNG), the U.S. Army Reserve (USAR), the U.S. Navy Reserve (USNR), the U.S. Marine Corps Reserve (USMCR), the Air National Guard (ANG), and the U.S. Air Force Reserve (USAFR).
2. Data come from appendix tables B-17, B-23, B-34, D-20, D-21, D-39, D-41, E-12, E-15, E-19, E-24, E-26, and E-29.
3. The Air Force does not have warrant officers.

FY14 DOD AC endstrength totaled 1.26 million servicemembers, 44,000 fewer than in FY13 and 62,000 fewer than in FY12. Given the overall size of the AC, these are small
changes. The Army’s endstrength has fallen most rapidly in the last two years, but it is still 2.7 times the size of the Marine Corps and about 55 percent larger than the Navy and 61 percent larger than the Air Force. Relative to the military services, the Coast Guard is small—about one-fifth the size of the Marine Corps—making it the smallest AC service.

The small overall reduction in AC endstrength since FY12, however, masks somewhat different patterns among the services’ active components; the Navy endstrength increased slightly, while the Army, Air Force, and Marine Corps decreased. The Army and Marine Corps are programmed for further AC endstrength reductions.

At 824,378 members in FY14, the RC is 62 percent the size of the AC. The RC has two National Guard components—the Army National Guard (ARNG) and the Air National Guard (ANG)—and four reserve components—the U.S. Army Reserve (USAR), the U.S. Marine Corps Reserve (USMCR), the U.S. Navy Reserve (USNR), and the U.S. Air Force Reserve (USAFR). In terms of size, the Army dominates the RC; its guard and reserve forces make up over 67 percent of reserve endstrength. In recent years, RC endstrength declines have been proportionally less than those in the AC.

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

While AC enlisted accessions increased in most services from FY12 to FY13, they fell in all services in FY14. RC enlisted gains show a similar pattern, in FY14 falling by over 5,000 from their FY13 level.

PS accessions for the AC are small, only 1.4 percent of accessions in FY14. In sharp contrast to enlisted AC gains, PS personnel represent 40 percent of yearly reserve force enlisted gains, and these percentages vary considerably by component. The largest reserve component, the ARNG, recruits the smallest percentage of PS and the largest percentage of NPS each year relative to the other reserve services.

---

11 Our DMDC data track “accessions” for AC enlisted personnel and “gains” for officers and all reservists. Gains data count officers and RC members who exit one component and enter another. We follow the definitions from the Office of the Secretary of Defense for accessions and gains:
- **Accessions:** Number associated with recruiters’ productivity and used in reporting the achievements of the services’ recruiting commands (and other accessioning agencies).
- **Gains:** Number associated with transactions in a database that reflects the addition of a Social Security Number (SSN) that was not in the previous file.

12 We use each service’s definition for PS and NPS. In the Army, Navy, and Air Force, PS accessions are those that served previously in any of the four services. In the Marine Corps, PS accessions are only those who served previously in the Marine Corps.
Table 2. Number of accessions and gains, by service and personnel type, FY12–FY14

<table>
<thead>
<tr>
<th></th>
<th>Enlisted (% PS)</th>
<th>Officers (% Warrants)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FY12</td>
<td>FY13</td>
</tr>
<tr>
<td><strong>Active</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Army</td>
<td>60,253</td>
<td>68,776</td>
</tr>
<tr>
<td></td>
<td>(2.3)</td>
<td>(3.4)</td>
</tr>
<tr>
<td>Navy</td>
<td>36,329</td>
<td>39,970</td>
</tr>
<tr>
<td></td>
<td>(0.1)</td>
<td>(0.2)</td>
</tr>
<tr>
<td>Marine Corps</td>
<td>30,504</td>
<td>32,185</td>
</tr>
<tr>
<td></td>
<td>(0.0)</td>
<td>(0.3)</td>
</tr>
<tr>
<td>Air Force</td>
<td>29,035</td>
<td>26,586</td>
</tr>
<tr>
<td></td>
<td>(1.0)</td>
<td>(1.2)</td>
</tr>
<tr>
<td><strong>DOD</strong></td>
<td>156,121</td>
<td>167,517</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>(1.1)</td>
<td>(1.7)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Enlisted (% PS)</th>
<th>Officers (% Warrants)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FY12</td>
<td>FY13</td>
</tr>
<tr>
<td><strong>Reserve</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ARNG</td>
<td>51,128</td>
<td>52,966</td>
</tr>
<tr>
<td></td>
<td>(28.4)</td>
<td>(26.5)</td>
</tr>
<tr>
<td>USAR</td>
<td>26,077</td>
<td>26,863</td>
</tr>
<tr>
<td></td>
<td>(53.8)</td>
<td>(52.0)</td>
</tr>
<tr>
<td>USNR</td>
<td>13,260</td>
<td>11,319</td>
</tr>
<tr>
<td></td>
<td>(75.8)</td>
<td>(71.7)</td>
</tr>
<tr>
<td>USMCR</td>
<td>8,996</td>
<td>9,220</td>
</tr>
<tr>
<td></td>
<td>(37.7)</td>
<td>(34.8)</td>
</tr>
<tr>
<td>ANG</td>
<td>8,417</td>
<td>9,213</td>
</tr>
<tr>
<td></td>
<td>(36.5)</td>
<td>(46.8)</td>
</tr>
<tr>
<td>USAFR</td>
<td>8,463</td>
<td>7,940</td>
</tr>
<tr>
<td></td>
<td>(55.9)</td>
<td>(59.6)</td>
</tr>
<tr>
<td><strong>DOD</strong></td>
<td>116,341</td>
<td>117,521</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>(42.8)</td>
<td>(41.2)</td>
</tr>
</tbody>
</table>

Notes:
1. Enlisted accessions for all components include both non-prior-service (NPS) and prior-service (PS) accessions.
2. The RC consists of the Army National Guard (ARNG), the U.S. Army Reserve (USAR), the U.S. Navy Reserve (USNR), the U.S. Marine Corps Reserve (USMCR), the Air National Guard (ANG), and the U.S. Air Force Reserve (USAFR).
3. Data come from appendix tables B-14, C-10, C-18, C-28, D-16, D-38, and D-40.
4. The Air Force has no warrant officers.

Since FY12, AC Army and Air Force officer gains have fallen, and Navy officer gains have been relatively constant. Marine Corps officer gains fell sharply from FY12 to FY13 and then returned to FY12 levels in FY14. Overall, reserve officer gains have been relatively constant over the last three years.
Enlisted personnel make up the bulk of total endstrength and accessions or gains for all DOD services (AC and RC). In FY14, enlisted personnel made up between 80 percent (Air Force) and 89 percent (Marine Corps) of AC endstrength. This follows the historical pattern of the Air Force having the richest mix of officers and the Marine Corps the leanest.

**Warrant officers**

Most officers are commissioned officers. Across DOD, warrant officers accounted for over 8 percent of AC officer strength. There are no warrant officers in the Air Force, but warrant officers make up 16 percent of Army, 10 percent of Marine Corps, and 3 percent of Navy AC officer strength. In the RC, warrant officers average less than 10 percent of the officer corps, except in the ARNG, where the percentage is almost 19 percent. Warrant officers are generally technical leaders and specialists, and most are PS enlisted, although the Army does have a direct accession program for helicopter pilots.14

---

13 The Air Force stopped accessing warrant officers in 1958 when the services expanded enlisted paygrades to include E8s and E9s. The last warrant officer retired from the Air Force in 1984.
14 For the remainder of this report, we focus almost exclusively on enlisted personnel and commissioned officers.
Section II: DOD Active Component (AC)

In this section, we focus on the AC, beginning with a historical analysis of trends in the size of the enlisted force and the commissioned officers corps. We then focus on non-prior-service (NPS) enlisted accessions, as well as on applicants for the enlisted force. After discussing trends, we provide descriptive statistics on the quality, age, geographic background, and neighborhood median household income for enlisted NPS recruits. We then turn to a special section on gender and racial diversity for AC personnel, also examining marital patterns for AC personnel. After that, we look at separation and continuation rates for enlisted personnel and how continuation rates translate into different retirement probabilities for the various services. We conclude by comparing trends in years of completed service for AC enlisted personnel and commissioned officers.

Strength over time

After examining patterns in enlisted and commissioned officer endstrength, we review how the enlisted-to-officer ratio has changed over time.

Enlisted endstrength

The AC’s enlisted endstrength was 1,090,939 in FY14, accounting for 82 percent of total AC endstrength for the year. Figure 1 shows AC enlisted endstrength by service over the past 40 years.

Figure 1. AC enlisted endstrength, by service, FY74–FY14

Note: Data are from appendix table D-11.
At the beginning of the All-Volunteer Force (AVF) in FY73, 1.9 million servicemembers were in the enlisted force. The end of the Cold War in the early 1990s led to a significant drop in force size, and, from FY97 to FY14, the enlisted force fluctuated between 1.1 and 1.2 million servicemembers. Because of the wars in Iraq and Afghanistan in the last decade, there was an increase in the size of the Army and the Marine Corps, but this increase was at least partly offset by decreases in the size of the Air Force and the Navy. Reflecting reduced operational commitments, the Army and Marine Corps are now drawing down their forces.

The Marine Corps has been the smallest of the DOD services for the past 50 years. But, while all the services shrank in the 1990s, the Marine Corps decreased the least and, by FY08, its enlisted force was almost back to the size it had been at the beginning of the AVF. In contrast, the Air Force, Navy, and Army were 44, 55, and 60 percent of their respective FY73 totals in FY14.

**Commissioned officer corps**

Figure 2 shows AC commissioned officer endstrength by service over the last 40 years.

**Figure 2. AC commissioned officer endstrength, by service, FY74–FY14**

![Graph showing endstrength of AC commissioned officers by service from FY74 to FY14](image)

Note: Data are from appendix table D-16.
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 back to approximately 216,000 in FY14. (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 saw earlier that, since the onset of the AVF, the Army has had the highest number of AC enlisted personnel. For commissioned officers, however, the Air Force had the highest number until FY07 when the Army overtook it. In FY14, AC Army commissioned officer endstrength was 82,144, whereas Air Force commissioned officer endstrength was 62,349.

**Ratio of enlisted to commissioned officers**

Although Congress sets authorized endstrength, each service determines its own enlisted and officer mix. Figure 3 illustrates how the ratio of enlisted to commissioned officers for each service has changed over time.

**Figure 3. Ratio of AC enlisted to commissioned officers, by service, FY74–FY14**

Note: Data are from appendix tables D-11 and D-16.

The Marine Corps has the highest ratio of enlisted personnel to commissioned officers, ranging from 10.5 to 9.1 over nearly 40 years. The Air Force is at the other end of the spectrum; in FY73 there were only 5.0 enlisted personnel for every commissioned officer.
officer, and since about FY95 that ratio has been at 4.0. The Army and Navy have similar historical trends; both had highs of 8.0 enlisted personnel per commissioned officer in the late FY70s, but their ratios fell steadily to 5.1 and 5.0, respectively, in FY14. Over the 40 years of the AVF, in all services, enlisted forces have been reduced more than the commissioned officer corps. With warrant officers included, the Marine Corps still has the most and the Air Force the fewest enlisted personnel per officer.\textsuperscript{15}

Whether the current mix of commissioned officers to enlisted personnel or the very different mixes across the services will be sustained under current budgetary pressures is an open question. Even with the increase in enlisted compensation associated with the AVF, commissioned officers still are considerably more expensive than enlisted personnel.

**Enlisted accessions over time**

Additions to the enlisted force come entirely from accessions; there is no lateral entry. As suggested earlier, virtually all enlisted accessions are NPS. It was NPS accessions who were subject to the draft prior to the AVF. Figure 4 shows the number of NPS enlisted accessions from FY74 to FY14. Similar to enlisted endstrength, overall accessions declined between FY74 and FY14; however, unlike enlisted endstrength, which declined sharply during the 1990s, accessions fell more steadily between the late 1970s and early 1990s.

In FY14, Army, Air Force, and Navy NPS accessions were about one-third of their pre-AVF levels,\textsuperscript{16} while enlisted endstrengths for the three services were generally a larger proportion of their pre-AVF levels. Fewer accessions for a given endstrength contributed to a more senior enlisted force, especially in the Army, Air Force, and Navy. Marine Corps accessions fell by smaller percentages and, in recent years, Marine Corps accessions have been approximately equal to those of the Navy and Air Force despite the Marine Corps’ smaller size. By design, the Marine Corps has opted for a more junior force.

\textsuperscript{15} If we include warrant officers, the ratios of enlisted to commissioned officers in FY14 change as follows: the Marine Corps’ ratio of 9.1 goes to 8.0, the Army’s ratio of 5.2 goes to 4.2, the Navy’s ratio of 5.1 goes to 4.9, and the Air Force’s ratio of 4.0 stays at 4.0.

\textsuperscript{16} They were 33 percent, 26 percent, and 34 percent, respectively.
Figure 4. NPS AC enlisted accessions, by service, FY74–FY14

Note: Data are from appendix table D-4. Enlisted accessions include only NPS accessions. The data point for FY77 is unusually high because of an extra “transition quarter” when the end of the fiscal year was changed from June 30 to September 30.

Applicants and NPS accessions

We now turn to enlisted applicants and NPS accessions across all DOD services for the FY81–FY14 period. Both the number of applicants and the number of accessions have fallen, although, in the last few years, the number of applicants processed by the Military Entrance Processing Stations (MEPS) has fallen more rapidly than accessions. The enlisted accession-to-applicant ratio has grown, albeit with much fluctuation, from 38 percent of applicants accessed in FY81 to 64 percent of applicants accessed in FY14 (see figure 5). For most years, however, it has been between 50 and 60 percent. In FY14, the MEPS processed 216,182 applicants, 138,902 of whom were accessed as NPS accessions into the four services.

17 DMDC applicant data come from the MEPS. Applicants cannot go directly to the MEPS; they must be sent by recruiters. Given the paperwork associated with sending applicants to the MEPS, not all those who want to enlist will be sent to the MEPS and counted as applicants. In fact, when recruiting is relatively easy, if the recruiter believes the applicant is marginally qualified, the recruiter will probably decide not to put together an applicant package and, instead, will look for more qualified applicants. In tough recruiting environments, however, the recruiter is willing to put in the time, on the chance that the marginally qualified applicant will qualify for service. This behavior leads to the phenomenon shown in figure 5: more applicants in FY07-FY08 when recruiting was tougher and fewer since FY09 when recruiting became easier.
There are a number of reasons why an applicant for enlisted service may not be accessed, including having a low aptitude test score, disqualifying medical or physical conditions, too many dependents, disqualifying tattoos, and a history of criminal activity or testing positive for disqualifying drugs. Some of these people may be allowed to serve if they are granted an enlistment waiver. Additionally, many applicants simply change their minds and decide not to enter military service.

**Characteristics of enlisted NPS accessions**

Next, we describe the characteristics of enlisted applicants and NPS accessions in the AC enlisted force. Specifically, we describe the quality of enlisted applicants and NPS accessions and the relationship between quality accessions and the health of the U.S. civilian labor market. We conclude with a discussion of age, geographic, and neighborhood household income distributions of NPS accessions.

**Quality of enlisted applicants and NPS accessions**

DOD sets quality standards for the aptitude and educational credentials of recruits. The Armed Forces Qualification Test (AFQT), a nationally normed aptitude test of math and
verbal skills, is used to predict training success and on-the-job performance. DOD requires that 60 percent of accessions score at the 50th percentile or higher on the AFQT. In FY14, 76 percent of accessions did so.

In addition, DOD requires that at least 90 percent of recruits be classified as Tier 1. Tier 1 recruits are primarily high school diploma graduates, but they also include people with educational backgrounds beyond high school, as well as those who have earned adult education diplomas, those with one semester of college, and those who have attended virtual or distance learning and adult or alternative schools. Other educational backgrounds include Tier 2 recruits (those with alternative high school credentials, primarily the General Educational Development (GED) certificates) and Tier 3 recruits (no secondary school credentials). Tier 1 recruits are sought after by the services because high school diploma graduates have been shown to be more likely than recruits with other credentials to complete their first term of service.

In figure 6, we show the percentage of FY14 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 above the 50th percentile. Both applicants and accessions scored considerably higher on the AFQT than did the 18- to 23-year-old civilian population (represented by the red dotted line).

**Figure 6. Percentages of AC NPS enlisted applicants and accessions scoring at or above the 50th percentile on the AFQT, by service, FY14**

Note. Data are from appendix tables A-4 and B-4. Civilian benchmark is from 1997 Profile of American Youth Study. See http://official-asvab.com/norming-res.htm
The Air Force had the highest percentages of applicants and accessions scoring at the 50th percentile or above (81 and 94 percent) on the AFQT, followed by the Navy (74 and 89 percent), the Marine Corps (68 and 73 percent), and the Army (51 and 61 percent). Overall, 76 percent of FY14 NPS AC accessions had AFQT scores at or above the 50th percentile—well above the 60-percent benchmark and the percentage observed in the civilian population. Across the DOD services, a slightly higher proportion of male than female accessions scored in the AFQT’s 50th percentile or above (see appendix table B-4).18

All services try to access as many high-quality recruits as possible. A recruit is considered high quality if he or she has a Tier 1 education credential and scores in the 50th percentile or above on the AFQT. Since 97 percent of DOD NPS FY14 accessions had Tier 1 educational credentials, the main delineation for becoming a high-quality applicant or accession is the AFQT score. When comparing the percentage of high-quality accessions since the beginning of the AVF, we observe some sharp quality changes, as well as an overall trend toward increasing percentages of high quality recruits (see figure 7).

**Figure 7. Percentages of high-quality AC NPS enlisted accessions, by service, FY74–FY14**

![Graph showing percentages of high-quality accessions by service from FY74 to FY14](image)

Note. Data are from appendix table D-9. Enlisted accessions include only NPS enlisted accessions.

18 In the civilian population, 52 percent of men and 50 percent of women scored at or above the 50th percentile.
There is a difference between actual and contemporaneously reported AFQT scores for the FY77–FY81 period because of a “misnorming” of the AFQT. Figure 7 reflects the actual percentages of high-quality accessions. In the late 1970s, however, the services were reporting higher percentages of high quality accessions than is shown in figure 7 because it took several years to realize the test scores were incorrect. The misnorming led to erroneous enlistment of many low-scoring recruits. After correcting the misnorming and increasing recruiting budgets, the percentage of high-quality recruits increased (between 20 and 30 percentage points in all services).

In the 1990s, we observe stability, and, despite unfortunate fluctuations in recruiting budgets resulting in short-term setbacks in recruit quality (particularly in the Army), the quality of accessions in all services has increased since the mid-2000s. The Air Force has had the highest percentage of high-quality recruits since FY74.

In FY14, the services had extraordinary success accessing high-quality personnel. The percentage of high-quality recruits was 93 percent in the Air Force, 87 percent in the Navy, 72 percent in the Marine Corps, and 58 percent in the Army.

**Relationship between accessions and the civilian labor market**

Recruiting is more difficult when the economy is robust and civilian unemployment low; it was less challenging in recent years when jobs were more difficult to find and the unemployment rate was high. The importance of the state of the civilian economy cannot be overemphasized. Even in FY14 after the unemployment rate had dropped considerably, the 13.4-percent rate of unemployment for 16- to-24-year-olds was higher than it had been in any year since FY93. Figure 8 illustrates the strong positive relationship between the unemployment rate and AC NPS recruit quality.

As youth unemployment rates improve, recruiting will become more difficult, and we should expect NPS recruit quality to fall. The challenge for the services will be to ensure that recruiting budgets are sufficient to implement the various policy levers available—enlistment bonuses, educational benefits, numbers of recruiters, funds for recruiting operations, and advertising—so that recruit quality does not fall below the minimum DOD benchmarks.

As noted, the overwhelming majority of AC accessions are NPS. For the past few years, however, with civilian unemployment rates high and recruiting less challenging, the number of PS AC enlisted accessions has been unusually low. In fact, in recent years there has been a noticeable negative relationship between the level of the unemployment rate and the percentage of AC PS accessions (see figure 9).
Figure 8. The unemployment rate and high-quality AC NPS recruits

![Graph showing the unemployment rate and high-quality AC NPS recruits from FY86 to FY14.](image)

Note. Data are from tables D-2 and D-9.

Figure 9. The unemployment rate and percentage of AC PS enlisted accessions, FY97-FY14

![Graph showing the unemployment rate and percentage of AC PS enlisted accessions from FY97 to FY14.](image)

Note. Data are from tables D-2, B-12 and similar tables in prior Population Representation reports.
Because PS recruits enlist with more years of experience and at higher grades than NPS recruits, they are more expensive. However, they can fill more senior billets, and they are already trained. Lower personnel costs are probably why the number of PS recruits falls when the civilian unemployment rate is high and the services find it relatively easy and less expensive to obtain high-quality NPS recruits. In contrast, in periods of relatively low unemployment (such as FY00–FY02 and FY06–FY08) when recruiting was more difficult, the percentage of PS accessions was highest.\footnote{In FY07, there were 19,713 PS accessions. In contrast, there were 2,042 PS accessions in FY14.}

**Age distribution of AC NPS enlisted accessions**

Figure 10 presents the age distribution of NPS enlisted accessions for the four services.

**Figure 10. AC NPS enlisted accessions, by age group, FY14**

We observe significant differences across the services in these age distributions. Air Force accessions are generally older and Marine Corps accessions are much younger than those in the other services. Nearly half of Marine Corps accessions are in the 17- to 18-year-old age group; virtually all of them are age 18.\footnote{Accessions cannot be younger than 17. Even then, a 17-year-old accession must have parental consent to enter military service. In appendix table B-1, we see that 2.3 percent of accessions were 17 years old. The maximum age is 42.} Those who are age 20 and...
younger made up 83 percent of Marine Corps NPS accessions, while the percentages in that age group are 66 in the Air Force, 64 in the Navy, and 62 in the Army. About 2 percent of Army accessions are in the oldest age group (31 to 42 years old).

**Geographic distribution of AC NPS enlisted accessions**

The Census Bureau divides the country into four regions:

- **Northeast** — includes New England and Middle Atlantic division states
- **Midwest** — 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.\(^{21}\)

Figure 11 shows the geographic distribution of AC NPS enlisted accessions.\(^{22}\) 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 the “Sunbelt” states in the South and West regions made up an increasingly larger share of the U.S. 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.

---

\(^{21}\) For completeness, accessions from U.S. territories, possessions, or “unknown” regions are grouped together in the “other” category.

\(^{22}\) We do not include data on the geographic representation of officer gains. Officers are primarily recruited from colleges and universities; geographic location would reflect the location of these universities and not necessarily the region in which the officers grew up.
Figure 11. Geographic distribution of NPS enlisted AC accessions, FY74–FY14

Note: Data are from appendix table D-10.

Figure 12 details the number of FY14 AC NPS enlisted accessions by state. Although the largest number of NPS accessions is drawn from the big states of California and Texas, smaller states like Georgia, Florida, and North Carolina also contribute large numbers of NPS accessions. Clearly, it is not just population but also propensity to join the military that plays a role.
Figure 12: AC NPS enlisted accessions, by state, FY14

Note: Data are from appendix table B-46.

Figure 13 offers a more interesting way of examining the geographic distribution of recruits. In it, we show the ratio of a state’s accession share to the state’s share of the U.S. 18- to 24-year-old population.

When reading the chart, these points should be kept in mind:

- A ratio of 1 implies that a state’s share of DOD accessions was equal to its share of 18- to 24-year-olds.
- A ratio greater than 1 implies that, relative to its proportion of the 18- to 24-year-old population, the state had a larger percentage of accessions.
- A ratio of less than 1 implies a smaller percentage of accessions relative to a state’s proportion of the 18- to 24-year-old population.

The FY14 ratios ranged from 0.23 to 1.54. Maryland, New Hampshire, Arkansas, and New Mexico all had ratios close to 1—meaning their share of AC NPS enlisted
accessions almost matched their share of the 18- to 24-year-old population. About half of the states can be considered overrepresented in accessions (ratios greater than 1), and about half of the states and the District of Columbia could be considered underrepresented (ratios less than 1). Georgia and Florida had the highest ratios, and the District of Columbia contributed the fewest accessions relative to its 18- to 24-year-old population. These ratios reflect differences in qualification rates, propensities, and recruiting resources.

Figure 13: Enlisted NPS accession-share to civilian-share ratios, by state, FY14

Note. The representation ratio is calculated by dividing a given state’s FY14 NPS accession share by the state’s 18- to 24-year-old population share. Data are from appendix table B-46.

Figure 14 shows the ratio of each region’s accession share to each region’s share of the U.S. 18- to 24-year-old population. As is clear from the figure, relative to its population of 18- to 24-year-olds, the South is overrepresented in NPS accessions and the Northeast is underrepresented.
Figure 14: AC NPS enlisted accession-share to civilian-share ratios, by region, FY14

Note: The representation ratio is calculated by dividing each region’s FY14 NPS accession share by the region’s 18- to 24-year-old population share. Data are from appendix table B-46.

Neighborhood median income of AC NPS enlisted accessions

At the advent of the AVF, there was concern about the representation of the force, particularly socioeconomic representation. Researchers found that accessions in the early years of the AVF were, for the most part, representative of the U.S. population in terms of their socioeconomic backgrounds. More recent studies report similar findings on socioeconomic characteristics, such as neighborhood income, for the 1990s and early years of this century.

Because household or family income is not collected from the families or households from which recruits come, these studies must identify a proxy for household income of recruits. For example, in a recent study, Lien, Lawler, and Shuford used the median income for recruits’ census tracts as a proxy for recruit household income. In short, they measured “neighborhood affluence” or how well-off (well-to-do) recruits’ neighborhoods were. Each neighborhood is synonymous with a census tract.

23 See, for example, Richard N. Cooper, Military Manpower and the All-Volunteer Force, RAND Publication, R-1450-ARPA, 1977.
24 See, for example, Shanea J. Watkins and James Sherk, Who Serves in the U.S. Military? Demographic Characteristics of Enlisted Troops and Officers, Heritage Foundation Center for Data Analysis Report CDA 08-05, Aug. 21, 2008.
We updated the Lien, Lawler, and Shuford study for FY14 AC NPS accessions, mapping each accession to his or her home-of-record census tract and computing neighborhood affluence (median household income) for each tract. We then divided neighborhood affluence income measures into income quintiles.

Figure 15 shows FY14 AC NPS enlisted accessions by the median income quintile of their home-of-record census tracts. The 20-percent line defines each income quintile based on census-tract-level median household income data. Relative to all households, FY14 NPS accessions are underrepresented in census tracts with the lowest and the highest median incomes, while those in the middle three quintiles are overrepresented. Lower-income neighborhoods tend to have fewer people qualified to serve. In FY14, for example, 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 probably due to higher college attendance rates among youth in these census tracts.

The findings depicted in figure 15 are important because they dispel the myth that the military obtains the majority of its recruits from the lower socioeconomic classes—those neighborhoods with the lowest income levels. Quite the opposite is true. The military actually gets the largest proportion of its recruits from the three middle quintiles.

---

26 In comparison to quintiles constructed from household income, quintiles constructed for median census tract income or “neighborhood affluence” will be attenuated toward the mean of household income.
27 The quintile ranges are based on all households in census tracts with non-missing median household incomes. FY14 AC NPS enlisted accession data were provided by DMDC and linked by census tract to median household income data from the Census Bureau’s 2009-2013 American Community Survey (ACS).
Figure 15. Neighborhood affluence (median census tract household income) for FY14 AC NPS enlisted accessions

Characteristics of the AC force

We turn to a discussion of enlisted separation and continuation rate patterns for the AC enlisted force and then to a look at the year-of-service distributions for the AC enlisted and commissioned officer forces. Pending changes to the military retirement system may change both separation and continuation behavior.

Enlisted separation and continuation rate patterns, by service

Enlisted separation and continuation rates in the first 10 years of service vary across the services for several reasons. Separation rates are highest when first-term contractual obligations end, which vary by service (see figure 16). For example, the Air Force uses only 4- or 6-year enlistment contracts, so we see a spike in separations at 4 and 6 years of service, but a reduction in separations at 5 years. In contrast, the Navy, Marine
Corps, and Army use 4-, 5-, and 6-year contracts and, thus, do not show a reduction in separations at 5 years of service.\(^{29}\)

After the first contract ends, continuing servicemembers are either on an extension or another contract.\(^{30}\) Military retirement eligibility starts at 20 years of service; those who leave before 20 years of service have no retirement provisions.\(^{31}\) The phenomenon of “cliff vesting” at 20 years of service is shown clearly in figure 16: as soon as members are vested and gain retirement eligibility, separation rates rise sharply.

**Figure 16. Average AC enlisted separation rates by service, FY14**

![Graph showing average AC enlisted separation rates by service, FY14](image)

Note: Data are from appendix table B-40. Yearly separation rates are defined as (1 - continuation rate), where continuation rates are those found in table B-40. Note that separation rates can be affected by various force-shaping actions, including selected early retirement boards.

Figure 17 shows AC enlisted continuation-rate profiles by service. We show the FY14 profile, as well as the average for FY11 through FY13. Continuation rate profiles differ

\(^{29}\) The Army also offers a small number of 2- and 3-year contracts.

\(^{30}\) Notice the spike in separation for the Marine Corps as first-enlistment contracts end. By design, the Marine Corps has chosen to have a small enlisted career force.

\(^{31}\) This is not true if they separate under periodic early-retirement provisions or with a disability retirement.
significantly by service. The profiles are influenced by long-term service practices, as well as any current force-shaping activities.

**Figure 17. Continuation rate profiles, FY14 and FY12-FY13**

![Continuation rate profiles, FY14 and FY12-FY13](image)

Note: FY14 data are from table B-40. FY11-FY13 data are from the FY11, FY12, FY13 Population Representation reports.

From these continuation profiles for AC enlisted personnel, we can infer current retirement probabilities for FY14 and the average for FY11 to FY13. The percentages remaining until their 20th year of service (with FY11-FY13 averages shown in parentheses) follow:

- 5 percent (9 percent) for the Army
- 18 percent (12 percent) for the Navy
- 2 percent (6 percent) for the Marine Corps
- 10 percent (26 percent) for the Air Force

Among enlisted personnel, Airmen and Sailors have the highest retirement probabilities. Marines have the lowest retirement probability because approximately 1 in 50 (1 in 16) would continue to 20 years of service given current continuation rates.\(^\text{32}\)

**Trends in years of completed service**

At the onset of the AVF, over 60 percent of the enlisted force had fewer than four completed years of service. Although draft calls had fallen to 50,000 by 1972, there were still substantial numbers of draftees in the early years of service. In the Army and

---

\(^{32}\) These retirement probabilities use current continuation rates. Thus, they do not represent actual retirement probabilities for any cohort of servicemembers.
Marine Corps—the services that most depended on draftees—the percentages of enlisted personnel with fewer than four years of completed service were slightly higher. Forty years later, in FY14, the percentage had fallen from over 60 percent to 46 percent, as junior personnel were replaced by personnel with four or more years of completed service (see figure 18).

Figure 18. Years of completed service for AC enlisted personnel and commissioned officers, FY74–FY14

The distribution of years of completed service for commissioned officers differs in at least two important ways from that for enlisted personnel. First, since officers were never drafted, those with fewer than four years of completed service were never the dominant group. The dominant group for officers consists of those with 11 or more years of completed service—42 percent of officers at the beginning of the AVF and 45 percent of officers in FY14. Second, there has been less change in the distribution of completed years of service for officers than there has been for enlisted personnel.

It is interesting to see how years of service (fewer than 4 for enlisted personnel and 11 or more for officers) differ by service and how they have changed over time. Figure 19 shows large differences by service in the proportion of the AC enlisted force that has completed fewer than four years of service. The differences among the services have been remarkably stable over time: the Marine Corps has the largest percentage of young enlisted personnel, followed by the Army, the Navy, and the Air Force.

As seen in figure 18, the dominant year-of-service group for the officer corps is those who have completed 11 or more years of service. Surprisingly, and unlike the patterns found for the enlisted force, for officers there are few differences by service in the proportion of AC officers in the modal year-of-service proportion, although the percentage grows somewhat over the years (see figure 19).
Figure 19. Percentage of AC officers and enlisted personnel in their respective dominant years of completed year-of-service category, by service, FY74–FY14

Note: Enlisted data are from table D-12 and commissioned officer data are from table D-18.
Section III: Diversity in the AC

In this section, we focus on gender, racial, and ethnic diversity in the AC. Additionally, we analyze married rates, as well as paygrade and occupational distributions. Where possible, we compare the AC military with civilian benchmarks. While some of this information has been reported in earlier Population Representation reports, we believe this is the first time that the report has included detailed examinations of racial and ethnic diversity by gender.

Female shares of AC personnel

Figure 20 displays the changes in the percentage of female enlisted NPS accessions and commissioned officer gains across DOD, as well as their respective strength percentages over the last 40 years. At the onset of the AVF, women represented less than 10 percent of NPS enlisted accessions and less than 5 percent of enlisted strength. Female enlisted strength grew steadily through FY03, peaking at 15.0 percent of the enlisted force. However, even though the percentage of female NPS accessions has consistently been greater than strength, it is interesting to note that the percentage of women in the enlisted force has been either flat or decreasing slightly over the past decade; in FY14 it was 14.8 percent. This would imply that female retention rates are lower than male retention rates.

Figure 20. Female share, Enlisted and Officer, FY74–FY14

Note: Data are from appendix tables D-5, D-13, and D-19; enlisted accession data include only AC NPS accessions.

33 Secretary of Defense Ash Carter announced in December that the Defense Department will lift all gender-based restrictions on military service starting in January 2016. This historic change will clear the way for women to serve alongside men in combat arms and special forces units.
In FY14, female representation among enlisted accessions/commissioned officer gains were as follows:

- Army – 16.2 percent enlisted and 21.3 percent officer
- Navy – 23.1 percent enlisted and 22.3 percent officer
- Marine Corps – 10.7 percent enlisted and 11.3 percent officer
- Air Force – 19.8 percent enlisted and 27.3 percent officer

Female representation in the commissioned officer corps has increased steadily since FY74, reaching 17.4 percent in FY14. The Air Force leads the other services in both female officer and enlisted representation, but the Army and Navy are not far behind.

In FY14, female representation in the AC force was as follows:

- Army – 13.2 percent enlisted and 17.9 percent commissioned officer
- Navy – 18.0 percent enlisted and 17.3 percent commissioned officer
- Marine Corps – 7.7 percent enlisted and 6.9 percent commissioned officer
- Air Force – 18.7 percent enlisted and 19.9 percent commissioned officer

The Marine Corps has the smallest percentages of women in both the enlisted force and the commissioned officer corps. In the Navy, Marine Corps, and Air Force, the percentage of female commissioned officers is similar to the percentage of enlisted women. In the Army, however, the percentage of female commissioned officers (17.9 percent) is considerably higher than the percentage of female enlisted (13.2 percent).

**Racial and ethnic diversity in NPS enlisted accessions**

Before FY03, self-identified race and ethnicity was reported in combined categories (e.g., non-Hispanic white or non-Hispanic black). Since FY03, race and ethnicity have been officially reported separately, and the ethnic category is either Hispanic or non-Hispanic. Although Hispanic accessions can be of any race, the vast majority self-identify themselves as white.

**Black accessions over time**

In the early years of the AVF and until the first Gulf War, the percentage of non-Hispanic blacks was considerably larger among DOD accessions than in the comparably aged civilian population. There was a decline in non-Hispanic black

---

34 This difference has widened in the last decade. In FY02, women made up 15.5 percent of the enlisted force and 16.0 percent of the officer corps. While female representation in the Army’s commissioned officer corps has increased slowly, female representation in the Army’s enlisted force has fallen.
accessions after the first Gulf War in 1990 and again in the mid-2000s, but the percentage of black accessions has since increased. They now account for 19.3 percent of AC NPS enlisted accessions—a greater percentage than in the 18- to 24-year-old civilian population (15.5 percent).

There are substantial differences by service in the percentages of non-Hispanic black enlisted accessions; this was particularly true in the early years of the AVF (see figure 21). At the start of the AVF, percentages in the Army and the Marine Corps considerably exceeded civilian percentages; however, in the mid-1980s, percentages in the Navy began to rise, while they began to fall in the Marine Corps and the Air Force. In FY14, in all services except the Marine Corps, the percentage of non-Hispanic black enlisted accessions exceeded the comparable civilian percentages, with the Army having the highest percentage and the Marine Corps the lowest percentage of black NPS accessions.

**Figure 21. Percentages of black AC NPS enlisted accessions, by service, FY74–FY14**

Note: Data for FY74 to FY02 for NPS non-Hispanic black accessions and 18- to 24-year-old non-Hispanic black civilians are from appendix table D-23. Data for FY03 to FY14 NPS black accessions and 18- to 24-year-old black civilians are from appendix table D-26.

**Racial diversity in FY14**

Since 1997, the Office of Management and Budget (OMB) has required federal agencies to use a minimum of five racial categories—white, black or African American, American Indian or Alaska Native, Asian, and Native Hawaiian or Other Pacific Islander—when categorizing a person’s race. DOD uses these five racial categories—separately and in combination—as codes to characterize recruits’ racial backgrounds. Those in the last four racial categories (or those choosing more than one racial category) can be termed racially diverse. We focus on racial diversity, rather than each of the
separate racial groups. Asians are the fastest growing racial group in the U.S., but they are still too small a percentage to analyze separately.

Recruits from racially diverse backgrounds constituted 28 percent of DOD AC NPS accessions in FY14. In comparison, racially diverse people represented 26.1 percent of the civilian benchmark population—the 18- to 24-year-old civilian noninstitutional population. Thus, AC NPS accessions were only slightly more racially diverse than the benchmark population. DOD’s overall statistic, however, hides interesting differences by service and gender. The Army and the Navy are the most racially diverse, while the Marine Corps is the least racially diverse. As shown in figure 22, however, in every service, male accessions (represented by the darker-shaded left stovepipe for each service) are less racially diverse than female accessions (represented by the lighter-shaded right stovepipe for each service).

**Figure 22. FY 14 AC NPS racially diverse accessions: Percentages of minority races, by gender, service, and civilian benchmark**

Source: Table B-10. The civilian benchmark is the 18- to 24-year-old population.

---

35 To explore diversity in the enlisted force, we needed to adjust for the small number of unknown races. 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 have an unknown racial background (2.4 percent in the Navy). The percentage of enlisted recruits selecting two or more races is highest in the Navy (8.3 percent).
For example, racially diverse women represented 46 percent of female Army accessions in FY14, while racially diverse men represented 28 percent of male Army accessions. These service findings are in contrast to the civilian benchmark, which shows only small gender differences.

**Ethnic diversity in FY14**

OMB requires federal agencies to use two ethnic categories: (1) Hispanic or Latino and (2) Not Hispanic or Latino. Since ethnicity and race are separate Census fields, a single person can be defined as a minority in both fields. Realizing that there is some overlap, it is still interesting to examine gender differences in the ethnic identifications for AC NPS accessions in each service. Although we observe that the percentage of Hispanics represents a larger proportion of female accessions than male accessions in each service, the differences—except in the Marine Corps—are not large (see figure 23).

**Figure 23. FY14 AC NPS accessions: Percentages of Hispanics by gender, service, and civilian benchmark**

![Figure 23](image)

Source: Table B-10. The civilian benchmark is the 18- to 24-year-old population.

**Racial and ethnic minorities in FY14**

As suggested earlier, a Hispanic black male is both a racial and an ethnic minority. In FY14, the overlap between the racial and ethnic minority categories for NPS AC
accessions was 10 percent, with about half of the overlap being black recruits who also identify as being Hispanic. However, we can calculate what percentage of FY14 AC NPS military accessions were minority (whether a Hispanic minority, a racial minority, or a Hispanic and racial minority) without double counting. This is the context in which the term is often used in the popular press. We show this in figure 24.36

It is interesting to examine gender representation in the 18- to 24-year-old population (the civilian benchmark) for these different definitions of diversity. While the civilian benchmark in figure 22 (racial diversity) showed a higher percentage of minority women than men, the civilian benchmark in figure 23 (ethnic diversity) showed a higher percentage of minority men than women. However, the civilian benchmark for our more inclusive definition of minority representation for AC NPS accessions is 45 percent for both men and women. In contrast to the civilian benchmark population, the percentage of minority AC NPS accessions is higher for women than men in all services. For DOD as a whole, 40.0 percent of male NPS AC accessions and 53.8 percent of female AC NPS accessions are either Hispanic or from racial minorities. Thus, for racial and ethnic diversity, male NPS accessions are less diverse than the civilian population and female NPS accessions are more diverse.

Figure 24. FY14 AC NPS accessions: Percentages of Hispanics or racial minorities by gender, service, and civilian benchmark

Source: Table B-10. The civilian benchmark is the 18- to 24-year-old population.

36 See table B-10. We summed the number of racial minorities and added the number of white Hispanics to that total. As explained earlier, we also adjusted for unknown racial and ethnic observations. These adjustments assume that missing data are distributed similarly to available data.
Racial and ethnic diversity in the enlisted force

We now examine AC enlisted force racial diversity.37

Racial diversity in FY14

Although racial minorities make up 23.4 percent of the civilian benchmark (the civilian labor force age 18 to 44), 32.9 percent of DOD’s enlisted forces in FY14 are racial minorities. There are gender differences in racial representation in the civilian labor force, with 21.9 percent of men and 25.1 percent of women categorized as racial minorities. Figure 25 shows these percentages by service.

Figure 25. FY14 AC enlisted force: Percentages of minority races, by gender and civilian benchmark

![Graph showing percentages of minority races by gender and service for FY14 AC enlisted force.]

These gender differences in the civilian labor market are small, however, relative to racial differences in representation in the AC enlisted force. In each service, the

37 As with our earlier analyses, we assume that the distribution of servicemembers with unknown race follows their service’s racial distribution, and we assign those selecting two or more racial groups to the minority category. Servicemembers with unknown racial backgrounds represent only a small minority of enlisted endstrength (3 to 4 percent) in each service. Only in the Navy are there substantial percentages (10 percent) of enlisted personnel who select two or more races.
percentage of female racial minorities is larger than the percentage of male racial minorities. This is especially true in the Army, where the percentage of enlisted racial minority women is almost double the percentage of enlisted racial minority men. The overrepresentation of racial minority women in the enlisted force is related to their higher representation in AC NPS accessions discussed earlier, as well as higher minority female retention rates. In any case, these high minority female representation rates illustrate that minority women have found jobs in the military that they like and in which they can succeed.

In summary, women in the AC enlisted force are considerably more racially diverse than comparable men.

**Ethnic diversity in FY14**

Servicewomen were considerably more likely to be racial minorities than servicemen, and the same pattern holds for Hispanic representation, though gender differences are smaller than for racial minorities. However, the civilian benchmark for the enlisted force—the 18- to 44-year-old labor force—shows the opposite pattern: Hispanic men are a larger proportion of the male civilian benchmark population than Hispanic women are of the female civilian benchmark population. Assuming that any missing ethnic observations follow each service’s overall distribution, we find that Hispanics compose:

- 13.2% of DOD’s male enlisted force versus 21.8% of the civilian labor force
- 14.6% of DOD’s female enlisted force versus 17.9% of the civilian labor force

Hispanics are underrepresented in the AC enlisted force. The Marine Corps has the highest Hispanic representation; Hispanics constitute 17.9 percent of the male enlisted force and 25.4 percent of the female enlisted force. Thus, relative to the civilian benchmark, Hispanic women are overrepresented in the Marine Corps’ enlisted force. Overall, however, Hispanics are underrepresented in the AC enlisted force, just as they were in FY14 NPS enlisted accessions.

**Racial and ethnic diversity in commissioned officer gains**

**Racial diversity in FY14**

The civilian benchmark for AC commissioned officer gains is the 18- to 39-year-old college graduate population, in which 23.3 percent of men and 24.1 percent of women are racial minorities.\(^{38}\) Although women in the civilian population are slightly more likely than men to be racial minorities, female commissioned officer gains in each of the

---

\(^{38}\) Women in these age groups are slightly more likely than men to be college graduates.
services are much more likely to be racial minorities (see figure 26).\textsuperscript{39} And, although racial minorities are somewhat underrepresented in commissioned officer gains, this underrepresentation is entirely due to the minority underrepresentation of men. In fact, female commissioned officer gains in the Navy are overrepresented in terms of their minority racial distribution relative to the civilian benchmark.

**Figure 26 FY14 AC commissioned officer gains: Percentages of minority races, by gender, service, and civilian benchmark**

![Figure 26](image_url)

Source: Table B-25. The civilian benchmark is the 21- to 39-year-old college graduate population.

**Ethnic diversity in FY14**

Following the patterns we found in the enlisted force, female commissioned officer gains are more likely to be Hispanic than are male commissioned officer gains, though the gender differences are generally smaller than those for racial minorities. The Hispanic percentages for FY14 AC commissioned officer gains were:

- 5.9 percent of DOD’s male commissioned officer gains versus 9.2 percent of the civilian labor force
- 6.6 percent of DOD’s female commissioned officer gains versus 9.6 percent of the civilian labor force

\textsuperscript{39} We use the same methodology for commissioned officers that we used for enlisted personnel. We assume 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 racial minorities. For both men and women, the largest racial minority in the college-educated benchmark population is Asians.
Racial and ethnic diversity in the commissioned officer corps

Racial diversity in FY14

Figure 27 shows the racial minority percentages for AC commissioned officers in each of the services. The civilian benchmark, the 21- to 49-year-old college graduate civilian labor force, has a slightly larger proportion of racially diverse women than men. These differences in the civilian labor force, however, are tiny relative to the racial minority gender differences for commissioned officers in each of the four services. In the Army, male racially diverse commissioned officers represent 17.1 percent of the men in the officer corps, whereas female racially diverse commissioned officers represent 33.8 percent of the women in the officer corps.

Minority male college graduates are underrepresented in all four services relative to their representation in the civilian labor market. In contrast, female minority college graduates are overrepresented in the Army and well represented in the Navy and Air Force relative to their representation in the civilian labor force.

Figure 27. FY14 AC commissioned officer corps: Percentages of minority races, by gender, service, and civilian benchmark

Source: Table B-25. The civilian benchmark is the 21- to 49-year-old college graduate labor force.
Ethnic diversity in FY14

Figure 28 shows Hispanic representation in the commissioned officer corps for each service. The patterns are somewhat different from those found for commissioned officers who are racial minorities. That is, Hispanic women in the Marine Corps are overrepresented relative to their civilian benchmark, the 21- to 49-year-old college graduate labor force. In contrast, Hispanic men in all services are underrepresented relative to their civilian benchmark.

Figure 28. FY14 AC commissioned officer corps: Percentages of Hispanics, by gender, service, and civilian benchmark

Source: Table B-25. The civilian benchmark is the 21- to 49-year-old college graduate labor force.

Marital patterns

Servicemembers by age and gender

There are some interesting differences in married rates by age for enlisted personnel versus commissioned officers. Reasons for these differences stem from the following:

- Both officers and enlisted personnel are predominately single when they enter military service.
• Officers are generally older when they enter the military, since a college degree is required.
• Married percentages increase sharply with age.

Thus, comparing married rates by age for 25-, 30-, and 35-year-old servicemen, we find:

• 56, 76, and 83 percent of enlisted men are married.
• 34, 70, and 86 percent of male commissioned officers are married.

In short, until their mid-thirties, AC male enlisted personnel are more likely to be married than AC male commissioned officers. The findings are similar for women.

**Gender comparisons with civilian married rates**

In FY14, 7.9 percent of male AC NPS accessions and 9.7 percent of female AC NPS accessions were married when they entered service. Given the age distribution of NPS accessions and married rates in the benchmark civilian labor force, NPS accessions are only slightly more likely to be married than their civilian counterparts.\(^40\)

During the course of their military careers, however, enlisted servicemembers marry and very quickly are more likely to be married than are their civilian counterparts.\(^41\) Figure 29 shows male and female married rates for enlisted servicemembers, and figure 30 shows the same information for commissioned officers. Men in the AC force are more likely to be married than their civilian counterparts. These differences often exceed 20 percentage points, particularly in the enlisted force. The patterns for AC women are more complicated, but, until about age 30, AC enlisted women are more likely to be married than women in the civilian labor force. For commissioned officers and for enlisted women over the age of 30, married rates for AC women and their civilian counterparts are similar.

\(^{40}\) Using table B-2, we calculate what the married rate of accessions would have been if they had entered the military with the marital patterns of the civilian labor force. In short, we take the distribution of AC NPS accessions by age and, using that age distribution, calculate what the civilian married rate would be. (We ignore PS accessions since they are such a small proportion of accessions.)

\(^{41}\) One theory is that military benefits incentivize marriage; another is that those who value marriage are more likely to join the military.
Figure 29. FY14 married rates of AC enlisted personnel and civilian comparison groups, by gender and age

Source: Table B-16. Civilian comparison group is the civilian labor force, age 17 and over.

Figure 30. FY14 married rates of AC commissioned officers and civilian comparison groups, by gender and age

Source: Table B-24. Civilian comparison group is the civilian college-educated labor force.

Gender and race/ethnicity comparisons with civilian married rates

As shown above, AC enlisted men are much more likely to be married than are their civilian counterparts. Indeed, by age 25, the married rate for AC enlisted men is 53.1 percent, while the married rate for men in the civilian labor force is 20.1 percent. Next, we examine married rates by gender and race/ethnicity for those in the military and those in the civilian labor market. Probably the easiest way to look at this is by single years of age.
The married rates for 25-year-old men:

- In the AC enlisted force are 59.0 percent for Hispanics, 55.6 percent for whites, and 50.6 percent for blacks
- In the civilian labor force are 24.6 percent for Hispanics, 22.5 percent for whites, and 11.1 percent for blacks

The married rates for 35-year-old men:

- In the AC enlisted force are 85.3 percent for Hispanics, 84.6 percent for whites, and 78.0 percent for blacks
- In the civilian labor force are 65.2 percent for Hispanics, 65.8 percent for whites, and 48.9 percent for blacks

The married rates for AC enlisted women follow the same basic pattern; black enlisted women are less likely to marry than white or Hispanic enlisted women. And, while the married rates for white and Hispanic women in the civilian labor market are similar, married rates for black women in the civilian labor market are much lower.

The married rates for 25-year-old women:

- In the AC enlisted force are 50.6 percent for Hispanics, 50.4 percent for whites, and 39.4 percent for blacks
- In the civilian labor force are 26.4 percent for Hispanics, 24.6 percent for whites, and 10.8 percent for blacks

The married rates for 35-year-old women:

- In the AC enlisted force are 63.9 percent for Hispanics, 66.9 percent for whites, and 55.8 percent for blacks
- In the civilian labor force are 55.8 percent for Hispanics, 63.2 percent for whites, and 35.0 percent for blacks

In summary, there are only small differences by racial/ethnic background in the married rates for AC enlisted men. For men in the civilian labor force, however, married rates for black men are considerably below those for white or Hispanic men. For women, the married rate for black women is lower than for white or Hispanic women in both the AC military and in the civilian labor force. Figure 31 shows married rates by age for AC enlisted men and women.
Figure 31. FY14 AC enlisted married rates, by gender and racial/ethnic background

![Graph showing married rates by gender and racial/ethnic background](image)

Source: Table B-16.

Paygrade distributions of women and minorities

Women represent 14.8 percent of the enlisted force. Relative to this overall percentage and their representation in the civilian workforce, however, women are overrepresented in paygrades E1 to E5 and underrepresented in paygrades E6 to E9. Less than 8 percent of E9s are women. In contrast, racial minorities are underrepresented in grades E1 to E4 and slightly overrepresented in grades E5 to E9. The overrepresentation in the senior enlisted grades is particularly true for black servicemembers; they represent almost 25 percent of E9s and less than 20 percent of all enlisted personnel. Hispanics are underrepresented in paygrades E7 to E9.

Occupational differences in the enlisted force

By gender

Gender differences in the occupational distribution of the enlisted force are well known. Women are overrepresented in administrative and medical occupations, whereas men are overrepresented in warfighting and engineering occupations, which include infantry, gun crews, seamanship, and electrical occupations. The lack of women in warfighting occupations is due both to people’s preferences and restrictions on women in service in some of these occupations. Since all occupational restrictions for women have been lifted, it will be interesting to see how these occupational distributions change in future years. Figure 32 shows the enlisted force occupational distribution in FY14.

---

42 To calculate these percentages, we assume that unknown races are distributed as known races are.
Figure 32. FY14 occupational distribution of the AC enlisted force, by gender

Note: Source is Table B-20. Infantry plus includes infantry, gun crews, and seamanship occupations. Although women are not currently in the infantry, they do serve in gun and air crews.

**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 racial minorities), both because some racial groups are very small and because we wanted to illustrate broad differences.\(^{43}\) In table 3, we highlight the largest differences in grey. For men, the largest differences are:

- Administrative occupations (8.4 percent of white men and 17.2 percent of racially diverse men)
- Infantry, gun crews, and seamanship occupations, which represent 21.3 percent of white men and only 12.6 percent of racially diverse men

---

\(^{43}\) Primarily because most racial categories are very small, we decided to focus on broad differences between whites and racial minorities. The nonwhite category is dominated by blacks.
Table 3. Occupational distribution of the enlisted force, by gender and race

<table>
<thead>
<tr>
<th></th>
<th>White men</th>
<th>Racially diverse men</th>
<th>White women</th>
<th>Racially diverse women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronics</td>
<td>9.7%</td>
<td>9.8%</td>
<td>7.4%</td>
<td>6.5%</td>
</tr>
<tr>
<td>Medical</td>
<td>5.4%</td>
<td>8.2%</td>
<td>16.0%</td>
<td>14.3%</td>
</tr>
<tr>
<td>Electrical</td>
<td>21.8%</td>
<td>20.9%</td>
<td>14.2%</td>
<td>12.5%</td>
</tr>
<tr>
<td>Craftsmen</td>
<td>3.6%</td>
<td>3.7%</td>
<td>2.6%</td>
<td>2.5%</td>
</tr>
<tr>
<td>Supply</td>
<td>10.1%</td>
<td>13.2%</td>
<td>13.3%</td>
<td>13.7%</td>
</tr>
<tr>
<td>Communications</td>
<td>11.3%</td>
<td>8.6%</td>
<td>12.9%</td>
<td>7.6%</td>
</tr>
<tr>
<td>Other technical</td>
<td>3.4%</td>
<td>2.4%</td>
<td>3.5%</td>
<td>2.1%</td>
</tr>
<tr>
<td>Administrative</td>
<td>8.4%</td>
<td>17.2%</td>
<td>19.7%</td>
<td>34.2%</td>
</tr>
<tr>
<td>Infantry, Gun Crews, and Seamanship*</td>
<td>21.3%</td>
<td>12.6%</td>
<td>4.2%</td>
<td>3.3%</td>
</tr>
<tr>
<td>Nonoccupational**</td>
<td>5.0%</td>
<td>3.4%</td>
<td>6.3%</td>
<td>3.4%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

*The largest differences are highlighted in the table. Although women do not currently serve in infantry positions, they do serve on gun crews, air crews, and in seamanship specialties, which are part of this occupational group.
**Nonoccupational includes students, patients, those with unassigned duties, and unknowns.

There are smaller differences in medical (5.4 percent of white men and 8.2 percent of racially diverse men), in supply (10.1 percent of white men and 13.2 percent of racially diverse men) and in communications (11.3 percent of white men and 8.6 percent of racially diverse men).

Over a third of racially diverse women in the enlisted force are in administrative occupations compared with less than 20 percent of white women. In general, white women are more evenly spread across occupations than are racially diverse women; the only occupational field for which the difference is at least 5 percentage points is communications (12.9 percent of white women, 7.6 percent of racially diverse women).

By ethnicity

We also analyzed, by gender and ethnicity, differences in military occupational representation for the AC enlisted force. In contrast to the large differences in occupational distributions for white and racially diverse men (or women), the differences in occupational distributions for Hispanic and non-Hispanic men (or women) are very small (see table 4).

- For men, the largest difference is less than 2 percentage points (12.7 percent of Hispanic men are in administrative occupations versus 10.8 percent of non-Hispanic men).
- For women, non-Hispanic women are slightly more likely to be found in medical occupations, and Hispanic women are slightly more likely to be found in electrical occupations.
Again, these occupational differences by gender and ethnicity are small. All restrictions on women in combat occupations were lifted in January 2016, and we can expect to see changes in the gender composition of military occupations. It will take several years, however, to evaluate how fast these changes will occur and how extensive they will be.

Table 4. FY14 occupational distribution of the AC enlisted force, by gender and ethnicity

<table>
<thead>
<tr>
<th></th>
<th>Hispanic men</th>
<th>Non-Hispanic men</th>
<th>Hispanic women</th>
<th>Non-Hispanic women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronics</td>
<td>9.1%</td>
<td>9.8%</td>
<td>7.2%</td>
<td>6.9%</td>
</tr>
<tr>
<td>Medical</td>
<td>7.5%</td>
<td>6.1%</td>
<td>13.2%</td>
<td>15.5%</td>
</tr>
<tr>
<td>Electrical</td>
<td>21.1%</td>
<td>21.6%</td>
<td>16.2%</td>
<td>12.9%</td>
</tr>
<tr>
<td>Craftsmen</td>
<td>3.4%</td>
<td>3.7%</td>
<td>3.0%</td>
<td>2.4%</td>
</tr>
<tr>
<td>Supply</td>
<td>10.6%</td>
<td>11.1%</td>
<td>13.1%</td>
<td>13.6%</td>
</tr>
<tr>
<td>Communications</td>
<td>9.1%</td>
<td>10.7%</td>
<td>8.6%</td>
<td>10.6%</td>
</tr>
<tr>
<td>Other technical</td>
<td>2.2%</td>
<td>3.2%</td>
<td>2.4%</td>
<td>2.9%</td>
</tr>
<tr>
<td>Administrative</td>
<td>12.7%</td>
<td>10.8%</td>
<td>27.8%</td>
<td>26.5%</td>
</tr>
<tr>
<td>Infantry, Gun crews, and Seamanship*</td>
<td>19.8%</td>
<td>18.5%</td>
<td>4.1%</td>
<td>3.7%</td>
</tr>
<tr>
<td>Nonoccupational**</td>
<td>4.3%</td>
<td>4.6%</td>
<td>4.4%</td>
<td>5.0%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

* Source: Table B-21. The largest differences are shaded. Women do not currently serve in infantry positions, but they do serve as gun crews, air crews, and seamanship specialties, which are part of this occupational group.

**Nonoccupational includes students, patients, those with unassigned duties, and unknowns.
Section IV: DOD Reserve Component (RC)

The DOD RC consists of six elements: the Army National Guard (ARNG), the U.S. Army Reserve (USAR), the U.S. Navy Reserve (USNR), the U.S. Marine Corps Reserve (USMCR), the Air National Guard (ANG), and the U.S. Air Force Reserve (USAFR). In FY14, the RC was 62 percent the size of the AC. Total endstrength was 824,378, which can be divided as follows:

- 695,754 enlisted (84.4 percent of RC endstrength)
- 116,401 commissioned officers (14.1 percent of RC endstrength)
- 12,223 warrant officers (1.5 percent of RC endstrength)

Virtually all RC warrant officers are in the Army’s Guard and reserve components. There are none in the Air Force’s guard or reserve components and a few in the Navy or Marine Corps reserve.

Turnover in the RC is higher than in the AC. In FY14, gains relative to strength were 16 percent for the RC enlisted force (13 percent for the AC enlisted force) and 13 percent for the RC commissioned officer corps (7 percent for the AC).44 Although the AC has few prior-service (PS) enlisted accessions, many RC enlisted gains are PS personnel. In FY14, about 40 percent of the gains in the enlisted RC were PS personnel (see table 2).

Overview and comparisons of the RC and the AC

The RC can be described in at least three ways:

- By relative size
- By service
- By guard or selected RC

In terms of size, about two-thirds of RC endstrength reside in Army reserve components (ARNG and USAR). The Air Force, Navy, and Marine Corps make up the remaining one-third. More than half—about 56 percent—of RC endstrength is in guard units. The ARNG is by far the largest component, with 43 percent of RC personnel. The smallest component is the USMCR, with less than 5 percent of all RC personnel.45 Figure 33 shows the historical distribution of RC endstrength (enlisted personnel plus commissioned officers) across the six service elements.

44 RC data from DMDC are only available as gains. A gain is a transaction in the reserve database and reflects the addition of an SSN that was not in the previous file.
45 If one broadens the definition of RC to include the Coast Guard, the Coast Guard’s RC of 7,614 is the smallest component.
For most of the years since FY75, and consistently since FY93, the RC has had a higher ratio of enlisted to commissioned officers than the AC (see figure 34).

In the AC, the ratio of enlisted to commissioned officers varied by service, with the Marine Corps having the highest ratio and the Air Force the lowest. In FY14, the RC had 6.0 enlisted personnel for every commissioned officer (the comparable ratio in the AC was 5.0), but, as in the AC, these overall ratios mask large differences by service (see table 5).

In the RC, the ratio of enlisted to commissioned officers varies from 3.1 in the USNR to 8.9 in the USMCR. Adding warrant officers does not appreciably narrow the range of these ratios. Both the Air Force and the Army have a higher enlisted-to-officer ratio in their guards than in their reserves, effectively making the enlisted-to-officer ratios in their reserves closer to those in their active forces.
Figure 34. DOD AC and RC ratios of enlisted to commissioned officers, FY74–FY14

![Graph showing DOD AC and RC ratios of enlisted to commissioned officers, FY74–FY14]

Note: Data are from appendix tables D-11, D-18, D-20, and D-21. These ratios omit warrant officers.

Table 5. Enlisted-to-officer ratios, by RC service element, FY14

<table>
<thead>
<tr>
<th>Ratios</th>
<th>ARNG</th>
<th>USAR</th>
<th>USNR</th>
<th>USMCR</th>
<th>ANG</th>
<th>USAFR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enlisted to commissioned officers</td>
<td>8.3</td>
<td>5.0</td>
<td>3.1</td>
<td>8.9</td>
<td>6.1</td>
<td>4.1</td>
</tr>
<tr>
<td>Enlisted to commissioned officers plus warrant officers</td>
<td>6.8</td>
<td>4.5</td>
<td>3.1</td>
<td>8.4</td>
<td>6.1</td>
<td>4.1</td>
</tr>
</tbody>
</table>

Note: See appendix tables D-20, D-21, and D-41.

Age distributions

One stark difference between the civilian workforce and the military is the age distribution of personnel. Figure 35 shows these distributions. Over one-third of the enlisted force is aged 20 to 24; the percentage in that age group is much smaller in the civilian labor force. In contrast to the civilian labor force where one-third are age 50 or older, the AC military has no enlisted personnel and only a small number of officers age 50 and over.
Figure 35. DOD AC and civilian age distributions, FY14

Note: Data are from appendix tables B15 and B22. The civilian benchmark for enlisted personnel is the civilian labor force, age 17 and older. The civilian benchmark for commissioned officers is the civilian college graduate labor force, age 21 and older.

There are also some fairly large differences in the age distribution of the AC and RC (see figure 36). The first panel is for enlisted personnel, and the second is for commissioned officers. The left side of each panel illustrates 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: About 11 percent of enlisted reservists are 45 or older, while the percentage for the AC enlisted force is strikingly smaller — less than 2 percent. The differences for officers are equally dramatic; while 30 percent of RC officers are 45 or older, the comparable percentage in the AC is only 13 percent. Thus, although the civilian labor force is considerably older than either the RC or the AC, both officers and enlisted personnel in the RC are older than those in the AC.

Figure 36. DOD AC and RC age distributions, FY14

Data are from appendix tables B15, C11, B22, and C17.
Quality of RC NPS enlisted gains

As in the AC, RC recruits are mostly those with Tier 1 education credentials and AFQT scores at or above the 50th percentile. In FY14, the RC had a smaller proportion of Tier 1 enlisted gains than the AC; 87.9 percent of RC enlisted gains were Tier 1 (see appendix table C-6), compared with 98.2 percent of NPS AC enlisted accessions (see appendix table B-7). The USMCR and the USAFR had the highest percentages of Tier 1 enlisted gains, and there were some fairly large differences by service (see table 6).

Table 6. Quality of RC NPS gains, FY14

<table>
<thead>
<tr>
<th></th>
<th>ARNG</th>
<th>USAR</th>
<th>USNR</th>
<th>USMCR</th>
<th>ANG</th>
<th>USAFR</th>
<th>DOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier 1</td>
<td>83.2</td>
<td>88.7</td>
<td>97.2</td>
<td>98.8</td>
<td>97.3</td>
<td>100.0</td>
<td>87.9</td>
</tr>
<tr>
<td>AFQT 50+</td>
<td>61.2</td>
<td>60.7</td>
<td>88.2</td>
<td>75.1</td>
<td>75.3</td>
<td>76.5</td>
<td>65.1</td>
</tr>
</tbody>
</table>

Note: See appendix tables C-4 and C-6.

Gains for each reserve/guard component show that over 60 percent of NPS recruits scored at or above the 50th percentile on the AFQT. Overall, 65 percent of all NPS RC enlisted gains had AFQT scores at or above the 50th percentile in FY14, compared with 75 percent of NPS AC accessions (see appendix tables B-4 and C-4). Furthermore, as in the AC, the educational credentials and aptitude test scores of NPS reservists significantly exceed those of the civilian population.

RC married rates, gender, and racial/ethnic representation

There are some notable differences in married rates between AC personnel and reservists. Overall, even though RC personnel are generally older than their AC counterparts, RC personnel are less likely to be married than AC personnel, and their age-specific married rates are closer to those of civilians than to AC personnel (within age and gender groups in table 7, we bolded categories with the highest married rates).

Table 7. Percentage of married AC and RC enlisted personnel, with civilian comparisons by single years of age, FY14

<table>
<thead>
<tr>
<th>Age</th>
<th>Enlisted men</th>
<th>Enlisted women</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AC RC Civilian</td>
<td>AC RC Civilian</td>
</tr>
<tr>
<td>20</td>
<td>14.4 2.4 3.5</td>
<td>22.0 4.7 4.7</td>
</tr>
<tr>
<td>25</td>
<td>53.7 27.0 22.0</td>
<td>46.2 28.5 21.4</td>
</tr>
<tr>
<td>30</td>
<td>75.5 55.0 48.8</td>
<td>58.0 44.5 50.5</td>
</tr>
<tr>
<td>35</td>
<td>83.2 69.9 63.7</td>
<td>63.0 50.5 59.4</td>
</tr>
<tr>
<td>40</td>
<td>86.7 75.7 70.4</td>
<td>61.1 51.4 66.4</td>
</tr>
</tbody>
</table>

Note: See appendix tables B-16 and C-12. The civilian data are for the civilian labor force age 17 and older and are from the Bureau of Labor Statistics’ Current Population Survey, September 2013.
The most striking differences are at younger ages: for example, at age 20, both AC men and AC women are about 4 times more likely than reservists or civilians to be married. Even at older ages, AC men are more likely than RC men to be married, and RC men are more likely than comparable civilians to be married.

Although the ordering of male age-specific married rates from highest to lowest is always AC, RC, and civilians, the same is not true for women. At age 20, AC women are much more likely than RC or civilian women to be married. However, that pattern changes for older women. At age 40, civilian women are more likely than either AC or RC women to be married.

Thus, even though RC enlisted personnel are older than AC enlisted personnel, AC enlisted personnel are more likely than RC enlisted personnel to be married (52 percent vice 41 percent). In contrast, the married rates of AC and RC commissioned officers (not shown) are similar (69 and 68 percent, respectively).

Like the AC, the RC strives for a diverse force. In fact, both for enlisted personnel and officers, the RC has a higher percentage of female personnel than the AC. In FY14, while the RC enlisted force was 18.8 percent female, the AC enlisted force was 14.8 percent female. Within the RC’s enlisted forces, the percentage of women varied from 26.1 percent for the USAFR to 3.8 percent for the USMCR. For commissioned officers, the AC was 17.4 percent female, whereas the RC was 19.7 percent female. The percentages varied from 28.0 percent in the USAFR to 7.6 percent in the USMCR.46

Although the RC has more gender diversity than the AC, the comparisons are more complicated for racial and ethnic diversity. The AC enlisted force is more racially diverse than the RC enlisted force, but other comparisons must be made cautiously because both AC and RC data contain significant numbers of personnel of unknown race or ethnicity. Table 8 shows the data.

For the enlisted force, black servicemembers are overrepresented in the RC and AC relative to comparable civilians. Asians and Hispanics are underrepresented in both components. Since Asians and Hispanics are the fastest growing ethnic groups, the services are all working to increase their Asian and Hispanic representation.

The civilian comparison group for commissioned officers includes only college graduates in which minority percentages, except for Asians, are smaller than those in the broader civilian population. Both RC and AC commissioned officer percentages for blacks are close to the civilian benchmark, but Asians and Hispanics are underrepresented. Thus, in both the RC and the AC, Asians and Hispanics are underrepresented in the officer and enlisted ranks.

46 See appendix tables B-16 and C-11 for enlisted personnel and B-23 and C-18 for commissioned officers.
Table 8. AC and RC race and ethnicity percentage distributions for enlisted personnel and commissioned officers, FY14

<table>
<thead>
<tr>
<th>Race</th>
<th>Enlisted personnel</th>
<th>Commissioned officers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AC</td>
<td>RC</td>
</tr>
<tr>
<td>White</td>
<td>67.1</td>
<td>73.4</td>
</tr>
<tr>
<td>Black</td>
<td>18.9</td>
<td>17.4</td>
</tr>
<tr>
<td>Asian</td>
<td>3.9</td>
<td>3.4</td>
</tr>
<tr>
<td>Other</td>
<td>6.2</td>
<td>2.8</td>
</tr>
<tr>
<td>Unknown</td>
<td>3.9</td>
<td>3.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Enlisted personnel</th>
<th>Commissioned officers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AC</td>
<td>RC</td>
</tr>
<tr>
<td>Hispanic</td>
<td>13.2</td>
<td>11.5</td>
</tr>
<tr>
<td>Unknown</td>
<td>1.4</td>
<td>0.8</td>
</tr>
</tbody>
</table>

Notes: The racial category “other” includes American Indian/Alaska Native (AIAN), Native Hawaiian/ Pacific Islander, and two or more races. The civilian data are from (1) appendix tables C-13 for enlisted personnel and include the 18- to 49-year-old civilian labor force and (2) appendix table C-20 for commissioned officers and include 21- to 49-year-old civilian college graduates. Note that the civilian age comparison group for AC enlisted personnel in table B-17 is for a younger age group (18- to 44-year-olds) than the RC component comparison group that we use from table C-13. We believe that the 18- to 49-year-old civilian labor force comparison is more appropriate. Civilian data do not include unknowns. Data are from appendix tables C-13, C-20, B-17, and B-25.
Section V: U.S. Coast Guard

The U.S. Coast Guard is the smallest of the five armed services. Part of the Department of Homeland Security (DHS) in peacetime, the Coast Guard may be called in wartime to join the Navy and, therefore, would fall under DOD jurisdiction.47

Table 9 shows the breakdown of the Coast Guard’s AC and RC endstrength in FY14.

Table 9. Coast Guard endstrength in FY14

<table>
<thead>
<tr>
<th>Personnel category</th>
<th>AC</th>
<th>RC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enlisted personnel</td>
<td>31,130</td>
<td>6,383</td>
</tr>
<tr>
<td>Commissioned officers</td>
<td>6,626</td>
<td>1,098</td>
</tr>
<tr>
<td>Warrant officers</td>
<td>1,698</td>
<td>133</td>
</tr>
<tr>
<td>Total</td>
<td>39,454</td>
<td>7,614</td>
</tr>
</tbody>
</table>

Thus, the Coast Guard is between one-fifth and one-fourth the size of the Marine Corps, making it the smallest of the DOD services.

Quality of AC NPS enlisted accessions

More than the other services, the Coast Guard lets accessions fluctuate as budgetary concerns and retention dictate. NPS enlisted accessions were 3,332 in FY11, 2,368 in FY12, 1,424 in FY13, and 2,414 in FY14.48 In short, accessions fell by over 30 percent in FY12 and FY13, and then rose by over 60 percent in FY14.

Like the DOD services, the Coast Guard seeks high-quality recruits — those with AFQT scores at or above the 50th percentile and Tier 1 educational credentials. And like the other services, the Coast Guard had another successful recruiting year. Figure 37 illustrates this, comparing Coast Guard recruiting achievement with the DOD AC services. Slightly over 95 percent of Coast Guard recruits scored in the top half of the AFQT distribution, and almost 99 percent had Tier 1 educational credentials. The Coast Guard and the Air Force have the highest percentages of high-quality recruits.

47 Title 14 of the United States Code governs the process by which authority over the Coast Guard may be transferred to DOD in wartime.
48 Coast Guard PS accessions are about 1 percent of accessions.
Figure 37. Quality of AC NPS enlisted accessions, by service, FY14

Note: DOD NPS accession data are from appendix tables B-4, B-6, and B-8. U.S. Coast Guard NPS accession data are from appendix tables E-7, E-8, and E-9.

Gender, race, and ethnicity in the U.S. Coast Guard

Compared with the DOD AC military services, the AC Coast Guard has the highest percentages of female accessions in the enlisted force and gains in the officer corps—20.5 percent (versus 17.5 percent) and 29.8 percent (versus 22.3 percent). In terms of force percentages, the AC Coast Guard and the DOD military services have similar female enlisted percentages (14.5 percent and 14.8 percent, respectively). The percentage of AC Coast Guard female commissioned officers is 19.9 percent, which is higher than the comparable statistic (17.4 percent) in the DOD military services.

White non-Hispanics are overrepresented in the Coast Guard’s AC NPS enlisted accessions and commissioned officer gains, but all Coast Guard RC data and AC enlisted and officer strength data have too many unknowns to make meaningful racial and ethnic comparisons across years or with the other services or the U.S. population.

In the next section, we recap the highlights of the FY14 Population Representation in the Military Services.
Section VI: Concluding Highlights

Since 1974, DOD has provided an annual report on the demographic and service-related characteristics of U.S. military personnel. Since 1997, these reports have been available electronically, making them easily accessible to policy-makers, the media, and the public.

The U.S. military drew down its AC and RC forces by more than 44,000 and 10,000, respectively, from FY13 to FY14. The only service components that increased in strength during this period were the AC Navy and the ANG. Enlisted accessions and, to a lesser extent, officer gains also declined from FY13 to FY14. The only service component that increased enlisted accessions during the period was the USAR; the AC Marine Corps, AC Air Force, USAR, and ANG increased officer gains. One net effect of these strength and accession changes is that both AC and RC enlisted-to-commissioned-officer ratios declined or held constant from FY13 to FY14.

The U.S. military continued to markedly exceed DOD recruit quality benchmarks in FY14. All service AC and RC NPS accession cohorts exceeded 90 percent Tier 1 educational credentials and 60 percent from the top half of the AFQT score distribution, with the exception of the ARNG and USAR, which accessed 83.2 percent and 88.7 percent Tier 1s, respectively. The AC overall attained 97 percent Tier 1 and 75 percent AFQT category I-IIIA NPS accessions. Overall RC accessions were 87.9 percent Tier 1 and 65.2 percent AFQT category I-IIIA. These AFQT percentiles for scores at or above the 50th percentile compare very favorably with the civilian population in which only 51 percent score in the top half of the ability distribution.

Geographically, the military continues to obtain its proportional share of AC accessions from the West and Midwest, but accessions from the South are overrepresented, and accessions from the Northeast are underrepresented. The socioeconomic backgrounds (as measured by neighborhood affluence) of FY14 AC accessions generally reflect the U.S. population’s distributions, although enlisted recruits are somewhat underrepresented in neighborhoods in the lowest and highest household income quintiles.

The percentage of women in the AC enlisted force reached a high of 15 percent in FY03 but has been flat or slightly decreasing over the past decade; it was 14.8 percent in FY14. By contrast, female AC commissioned officer corps representation has steadily climbed throughout the AVF era, and it was 17.4 percent in FY14. Warrant officers have had a fairly constant percentage of females at just under 9 percent.

Black AC enlisted servicemembers are somewhat overrepresented relative to the civilian labor force; Hispanic representation, although growing in the enlisted military,
is somewhat behind overall Hispanic population growth. Asian representation also is lagging.

In terms of minority representation in the AC officer ranks, blacks are slightly underrepresented. Because commissioned officers must be college graduates, we compare the percentage of black officers with the percentage of blacks in the 21- to 49-year-old college graduate labor force. We find that 8.5 percent of officers are black, whereas 9.2 percent of college graduates are black. Hispanics are underrepresented — 5.9 percent versus 8.4 percent for 21- to 49-year-old college graduates in the civilian labor force. Finally, given the civilian benchmark of comparably aged college graduates in the civilian workplace, we find that Asians are the most underrepresented group, making up 10 percent of college graduates and only 4.7 percent of commissioned officers.

One notable diversity trend that heretofore has not been highlighted in this report is that, for both the enlisted and officer forces, women are considerably more racially and ethnically diverse than men. FY14 female enlisted accessions and officer gains also exhibit this trend.

The AC has greater racial and ethnic diversity than the RC, but the RC has a larger percentage of women. RC personnel are older than AC personnel, but personnel in both components are considerably younger than the civilian labor force. By age, military personnel are more likely than civilians to be married and, in general, AC male personnel are more likely than female personnel to be married.

Finally, given the pending legislative changes to the military retirement system, we want to highlight service differences in retirement probability (remaining through their 20th year of service) for FY14. These percentages follow:

- Army - 5 percent
- Navy - 18 percent
- Air Force - 10 percent
- Marine Corps - 2 percent