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Who Bears the Burden? Demographic Characteristics of U.S. Military Recruits Before and After 9/11

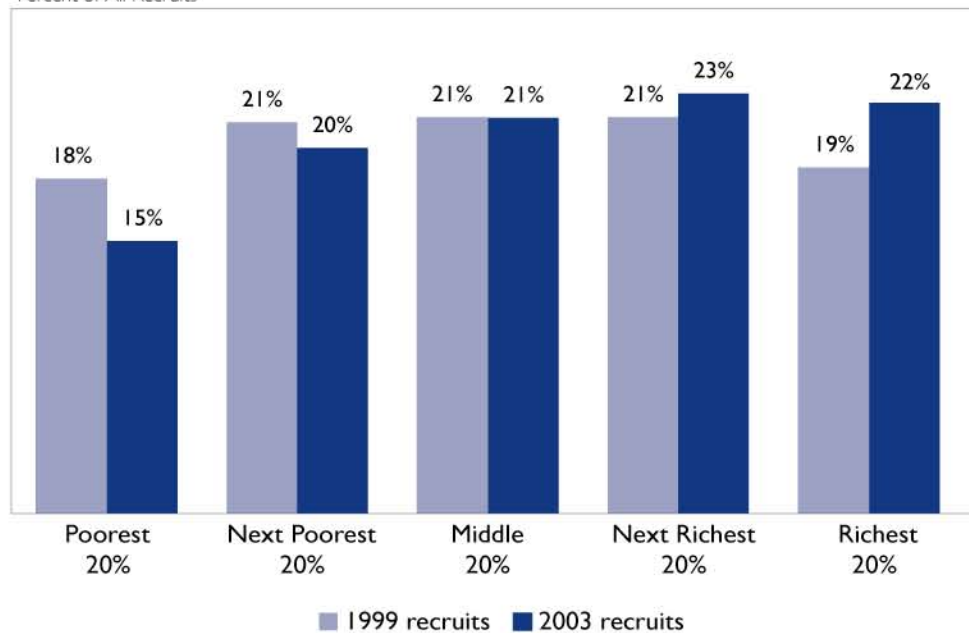
Tim Kane, Ph.D.

CDA05-08

November 7, 2005

Military Enlistees, by Neighborhood Income Levels

Percent of All Recruits



A REPORT OF THE HERITAGE CENTER FOR DATA ANALYSIS

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WHO BEARS THE BURDEN? DEMOGRAPHIC CHARACTERISTICS OF U.S. MILITARY RECRUITS BEFORE AND AFTER 9/11

TIM KANE, PH.D.

A few Members of Congress, motivated by American combat in the Middle East, have called for the reinstatement of a compulsory military draft. The case for coercing young citizens to join the military is supposedly based on social justice—that all should serve—and seems to be buttressed by reports of shortfalls in voluntary enlistment. In a *New York Times* op-ed on December 31, 2002, Representative Charles Rangel (D-NY) claimed, “A disproportionate number of the poor and members of minority groups make up the enlisted ranks of the military, while most privileged Americans are underrepresented or absent.”¹ This claim is frequently repeated by critics of the war in Iraq.² Aside from the logical fallacy that a draft is less offensive to justice than a voluntary policy, Rangel’s assertions about the demographic makeup of the enlisted military are not grounded in fact.

Although all branches of the armed services have been able to meet recruiting goals in recent years, the Army’s difficulty in meeting its goal of 80,000 new soldiers in 2005 has been widely reported, and some view it as a symbol of the need to reinstate the draft. However, this shortfall should be placed in the proper context. The Army is projected to fall just 7,000 (about 9 percent) short of its 2005 recruitment goal, which is less than 1 per-

cent of the overall military of over 1 million personnel. Furthermore, there is the unexpected rise in re-enlistment rates. In other words, the total force strength is about what it should be.

Since the draft was discontinued in 1973, all branches of the U.S. military have relied entirely on volunteers to fill their ranks. There are constant challenges in maintaining a balanced supply of recruits for force strength and composition, but three decades of experience confirms that the voluntary policy works well, despite widespread skepticism in the early 1970s. The same cannot be said of a conscripted force, as evidenced by the backlash among troops and the public during the Vietnam conflict. Despite the Pentagon’s strong preference for an all-volunteer force, some politicians and many voters favor a draft.

A June 2005 Associate Press/Ipsos poll found that 27 percent of respondents supported “the reinstatement of the military draft in the United States.” Reinstatement of the draft was far more popular immediately following the September 11, 2001, terrorist attacks, when 76 percent of Americans supported a renewed draft if “it becomes clear that more soldiers are needed in the war against terrorism.”³

Although Representative Rangel’s bill to reinstate the draft failed by a decisive vote of 402–2 in the

1. Charles B. Rangel, op-ed, “Bring Back the Draft,” *The New York Times*, December 31, 2002, p. A19.

2. See, for example, Bob Herbert, “Blood Runs Red, Not Blue,” *The New York Times*, August 18, 2005, p. A25.

3. PollingReport.com, “Foreign Affairs and Defense Issues,” at www.pollingreport.com/defense.htm#Military (September 7, 2005).

House of Representatives in 2004, the issue will likely be considered again, especially if there are more terrorist attacks on the U.S.

Some motivations for the draft are entirely patriotic in the sense that they aim to protect America from aggressors. Others see the draft as an instrument of equality, as well as an instrument of pacifism.

Representative Rangel's theory is that if all citizens faced equal prospects of dying in a conflict, support for that conflict would have to pass a higher standard. This theory assumes that the privileged classes would be less willing to commit the nation to war if that conflict involved personal, familial, or class bloodshed. It also assumes that the existing volunteers are either ignorant or lack other options—that is, they are involuntary participants. One way to test this thesis is to explore the demographic patterns of enlisted recruits before and after the initiation of the global war on terrorism on September 11, 2001.

This paper reports the results of summary research into the demographic composition of two groups of recruits: those who enlisted between October 1998 and September 1999 and those who enlisted between January 2003 and September 2003. These groups are referred to as the 1999 and 2003 recruit cohorts, respectively. Nationwide Census data for citizens ages 18–24 were used as a baseline for comparison. Comparisons of these three different groups highlight the differences not only between the general population and military volunteers, but also between recruits who volunteered for the military before 9/11 and those who volunteered after 9/11.

Our analysis of the demographic composition of enlisted recruits vis-à-vis the general population considers the following characteristics:

- Household income,
- Level of education,
- Race/ethnicity, and
- Region/rural origin.

This paper also reviews other evidence that is at odds with the image, painted by some supporters of the draft, that the military exploits poor, ignorant, young Americans by using slick advertising that promises technical careers in the military to dupe them into trading their feeble opportunities in the private sector for a meager role as cannon fodder.

The caricature of conscription—a harsh reality of European militaries in the 18th and 19th centuries—lives on in the popular imagination, but it does not accurately represent the all-volunteer U.S. military. Indeed, the U.S. military's qualitative superiority is what makes it the most efficient and lethal combat force in history. In economic terms, high-skill human capital among troops makes the military more productive overall. There may be legitimate equity concerns that outweigh national security, but they will undoubtedly come at a cost or trade-off in productivity.

However, our research shows that the volunteer force is already equitable. That is, it is highly likely that reinstating the draft would erode military effectiveness, increase American fatalities, destroy personal freedom, and even produce a less socio-economically “privileged” military in the process.

In summary, we found that, on average, 1999 recruits were more highly educated than the equivalent general population, more rural and less urban in origin, and of similar income status. We did not find evidence of minority racial exploitation (by race or by race-weighted ZIP code areas). We did find evidence of a “Southern military tradition” in that some states, notably in the South and West, provide a much higher proportion of enlisted troops by population.

The household income of recruits generally matches the income distribution of the American population. There are slightly higher proportions of recruits from the middle class and slightly lower proportions from low-income brackets. However, the proportion of high-income recruits rose to a disproportionately high level after the war on terrorism began, as did the proportion of highly educated enlistees. All of the demographic evidence that we analyzed contradicts the pro-draft case.

HOUSEHOLD INCOME OF RECRUITS

We found that recruits tend to come from middle-class areas, with disproportionately fewer from low-income areas. Overall, the income distribution of military enlistees is more similar to than different from the income distribution of the general population.

Income was compared on a household basis, not an individual basis, meaning that recruits' income was defined by their household of origin. This approach was used because youth are rarely pri-

Table 1

CDA 05-08

Summary of Findings: Demographics of U.S. Military Enlistment

	By Total Population	By ZCTA*	Change After 9/11	Comparison Group
Income	Recruits are not disproportionately poor: Mean household income for recruits in 1999 was \$41,141 (in 2000 dollars), compared to the general population median of \$41,994. Recruits in 2003 came from households with an average 1999 income of \$42,822.	Middle-income quintile ZIP code areas provided consistently higher proportions of recruits. Areas in the lowest-income quintile provided disproportionately low numbers of recruits in 1999 and 2003 (18.0 and 14.6 percent, respectively).	Areas in the highest-income quintile provided the greatest positive proportional increase of recruits after 9/11, from 18.6 to 22.0 percent.	Household incomes (in 1999 dollars) for the general population from Census 2000.
Education	98 percent of recruits have a high school education or higher; compared to 75 percent of non-recruits.	High school graduation rates were higher for recruits than the local population in every three-digit ZCTA in 2003. Of five quintiles based on graduation rates, the only one with disproportionately low enlistment was the highest quintile (15 percent compared to a proportional 20 percent).	The average education level of recruits increased after 9/11, with 2.8 percent more enlistees joining who already had some college experience or a college degree.	General population, ages 18-24, from Census 2000.
Race	Based on 2003 data, whites are proportionally represented in the military (and Army specifically). Blacks and native Americans are overrepresented, offsetting underrepresentation by Asians and individuals who decline to identify a race.	Recruiting is not disproportionately reliant on minority neighborhoods. The 100 three-digit ZIP codes with the highest concentrations of blacks represent 14.7 percent of the population, 16.6 percent of 1999 recruits, and 14.1 percent of recruits in 2003.	Not applicable: 1999 military data are not comparable to 2000 Census data.	General population, ages 18 and older; from Census 2000.
Region	Completely urbanized areas have 39.1 percent of the population, but accounted for 30.1 percent of recruits in 1999 and 28.9 percent in 2003. As urban concentration declines, the recruit-to-population ratio rises.	States have widely varying rates of military enlistment. Montana, Wyoming, Florida, Maine, and Texas provide disproportionately high numbers of recruits, whereas Massachusetts, Rhode Island, Utah, and especially the District of Columbia provide disproportionately low numbers.	States with large increases in the recruit-to-population ratio of greater than 10 percentage points were Iowa, Wisconsin, Kansas, Washington, Arizona, Indiana, Oregon, Nebraska, Colorado, Minnesota, and North Carolina.	General population, ages 18-24, from Census 2000.

* ZIP code tabulation area.

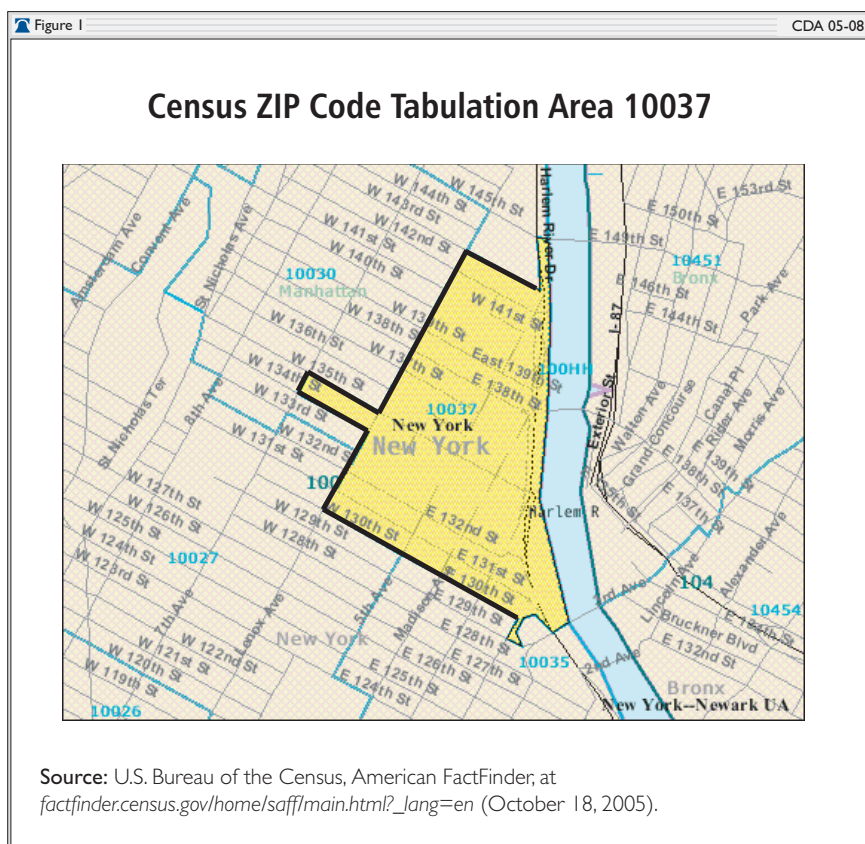
Source: Heritage Foundation calculations based on data from U.S. Department of Defense, Office of the Undersecretary of Defense, October 1998–September 1999 Non-Prior Service (NPS) Enlisted Accessions and January 2003–September 2003 NPS Enlisted Accessions, and U.S. Bureau of the Census, *United States Census 2000*, Summary File 1, at www.census.gov/Press-Release/www/2001/sumfile1.html (July 6, 2005), and Summary File 3, at www.census.gov/Press-Release/www/2002/sumfile3.html (July 6, 2005).

mary income earners, and many earn no income at all until after high school graduation. However, the household income of their area of origin does serve as a basis for assessing whether the military recruits come from disproportionately poor backgrounds.

Much of the analysis in this paper (including this section) uses five-digit Census ZIP code tabulation areas (ZCTAs) as the unit of analysis. The Census Bureau uses ZCTAs to approximate U.S. Postal Service ZIP codes. In most cases, ZCTAs correspond to postal ZIP codes. For example, Representative Rangel resides in the postal ZIP code 10037. The corresponding five-digit ZCTA 10037, shown in Figure 1, has a median household income of \$26,561. In 1999, four recruits originated from the area, in 2003, the total was six recruits.

According to the 2000 Census, the national median income per household in 1999 was \$41,994 in 1999 dollars. By assigning each recruit the median 1999 household income for his hometown ZIP code, we calculated that the mean 1999 income for 1999 recruits before entering the military was \$41,141 (in 1999 dollars). The mean 1999 income for 2003 recruits was \$42,822 (in 1999 dollars). In other words, on average, recruits in 2003 were from wealthier neighborhoods than were recruits in 1999.

Table 2 is a summary of ZCTA data ranked in order of population quintiles. In 1999 and 2003, the recruits generally mirror the percent distribution among the population, but the pattern shows clearly that there were fewer recruits from the poorest quintile of neighborhoods⁴ (18.0 percent) and fewer from the richest quintile (18.6 percent) in 1999. In 2003, however, only 14.6 percent of military recruits came from the poorest quintile, whereas the wealthiest quintile provided 22.0 percent. Enlistments from wealthier areas surged, resulting in a 3.4 percentage point upturn. The middle-class quintiles



(the third and fourth wealthiest areas) consistently provided disproportionately high numbers of soldiers in both year groups. (See Chart 1.)

Some ZCTAs had higher median incomes than the national median, and some had lower. Chart 2 shows a percent distribution of 1999 recruits by ZCTA income, revealing that the bulk of recruits came from middle-class areas. For instance, the largest percentage cohort of 1999 recruits (17.8 percent) came from neighborhoods with average household incomes of \$35,000 to \$40,000. Very few recruits—less than 5 percent—came from neighborhoods with average incomes below \$20,000 per household.

The plain fact is that the income distribution of recruits is nearly identical to the income distribution of the general population ages 18–24. Because we lack individualized household income data, our approach does not indicate whether or not the recruits came from the poorer households in their neighborhoods. Nevertheless, Chart 3 shows that the difference between the 1999 recruit distribution

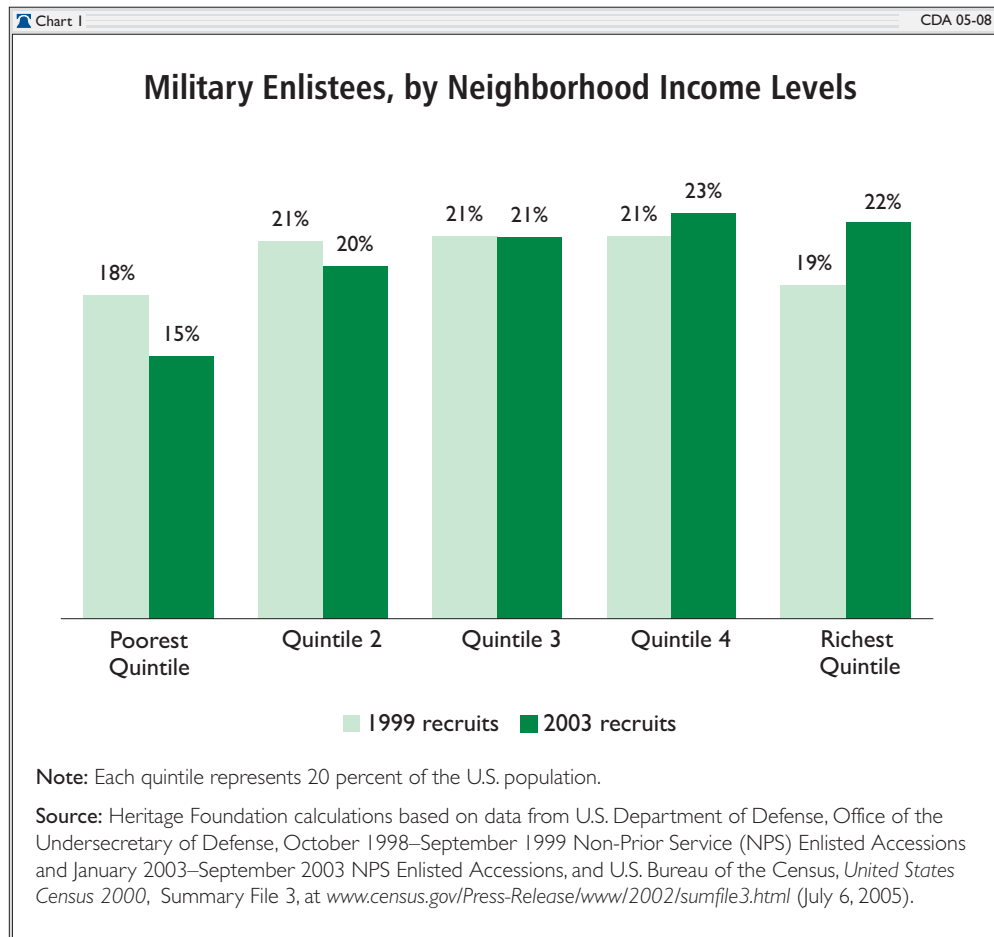
4. In this report, the term “neighborhoods” is used interchangeably with “ZCTA.”

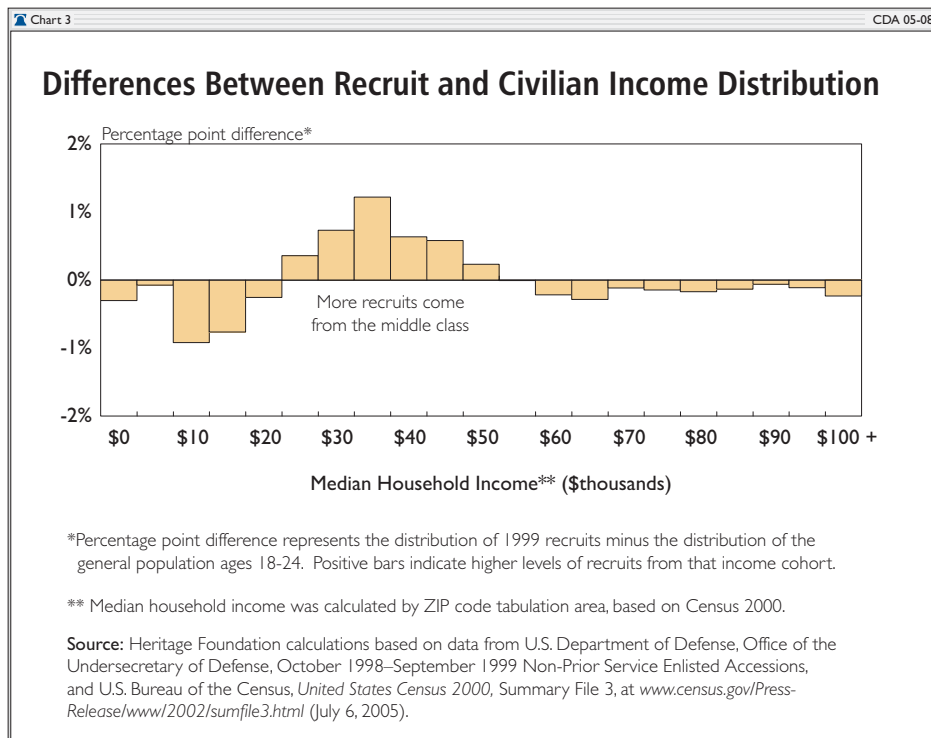
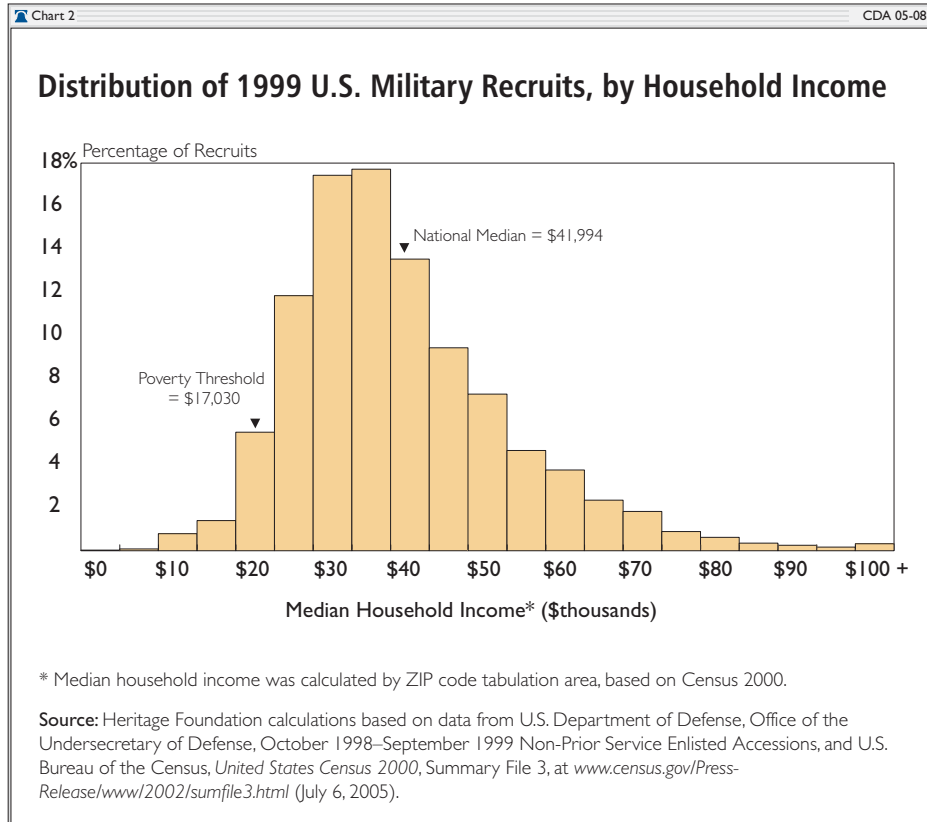
Table 2 CDA 05-08

U.S. Military Recruits by Household Income

Median Household Income Range	Population Percent, Ages 18–24	1999 Recruit Percent	2003 Recruit Percent	1999 Difference	2003 Difference
\$0–\$29,375	20%	18.0%	14.6%	-2.1%	-5.4%
\$29,382–\$35,462	20%	21.0%	19.6%	1.0%	-0.4%
\$35,463–\$41,685	20%	21.3%	21.2%	1.3%	1.2%
\$41,688–\$52,068	20%	21.3%	22.5%	1.2%	2.5%
\$52,071–\$200,001	20%	18.6%	22.0%	-1.4%	2.1%

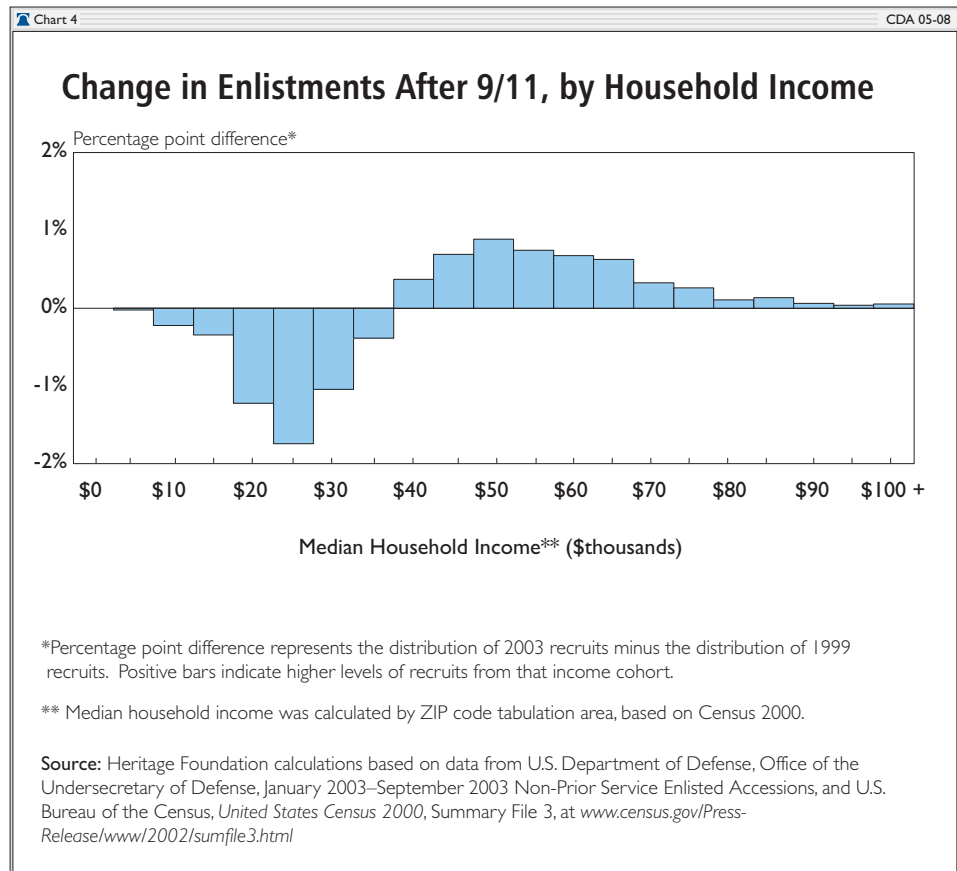
Source: Heritage Foundation calculations based on data from U.S. Department of Defense, Office of the Undersecretary of Defense, October 1998–September 1999 Non-Prior Service (NPS) Enlisted Accessions and January 2003–September 2003 NPS Enlisted Accessions, and U.S. Bureau of the Census, *United States Census 2000*, Summary File 3, at www.census.gov/Press-Release/www/2002/sumfile3.html (July 6, 2005).





of ZCTA income and the population distribution is below a single percentage point for 19 of the 20 income brackets. Yet even these slight differences show a subtle pattern: Proportionally, both poorer and richer areas provide slightly fewer recruits, and middle-income areas provide slightly more.

This evidence directly contradicts Representative Rangel's claim that underprivileged Americans are the source of military manpower and that the privileged are underrepresented. In fact, Chart 4 shows that every ZCTA income bracket below \$40,000 provided the same number or fewer recruits after 9/11, while all brackets above \$40,000 provided the same number or more.



EDUCATION LEVELS OF RECRUITS

We find that, on average, recruits tend to be much more highly educated than the general public and that this education disparity increased after the war on terrorism began. Comparable detailed education data from the Census classify the education level of individuals into one of seven categories (from less than high school up to graduate/professional degree). We generated a binary variable that assigns a 1 for individuals with a high school diploma or higher and a 0 for less than a high school diploma.

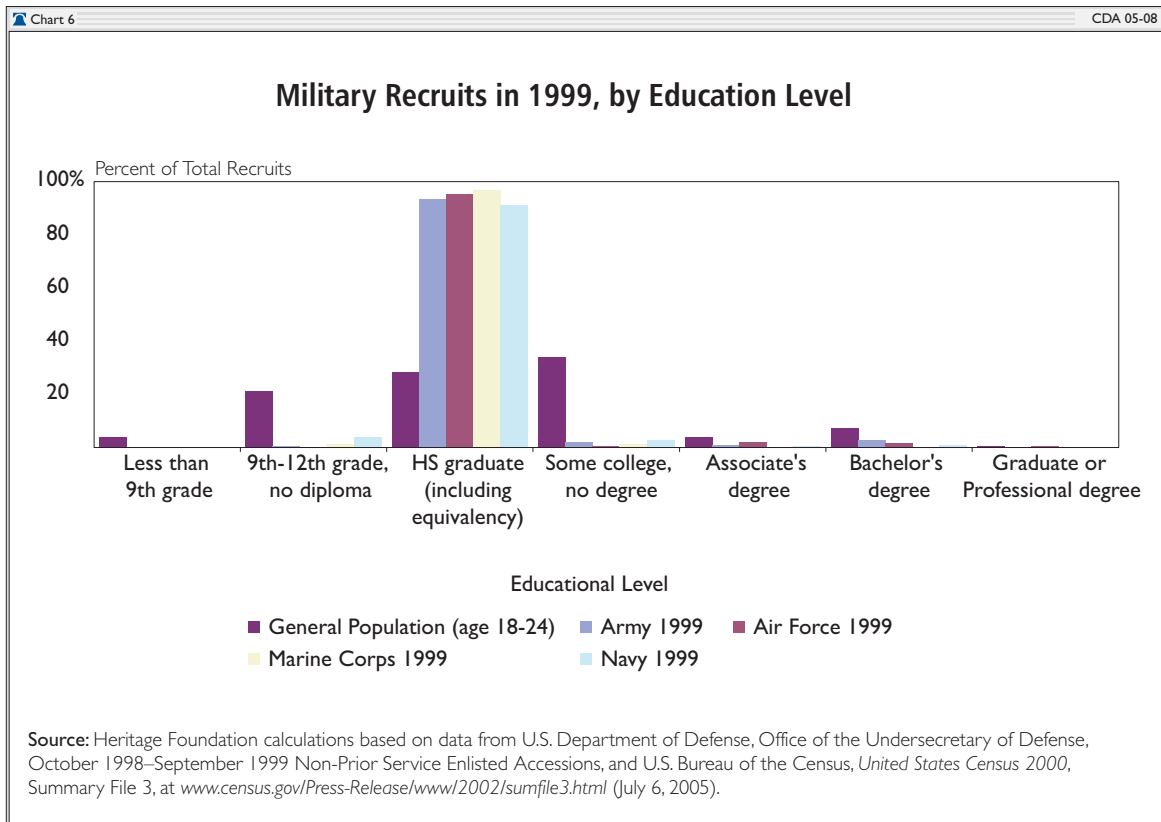
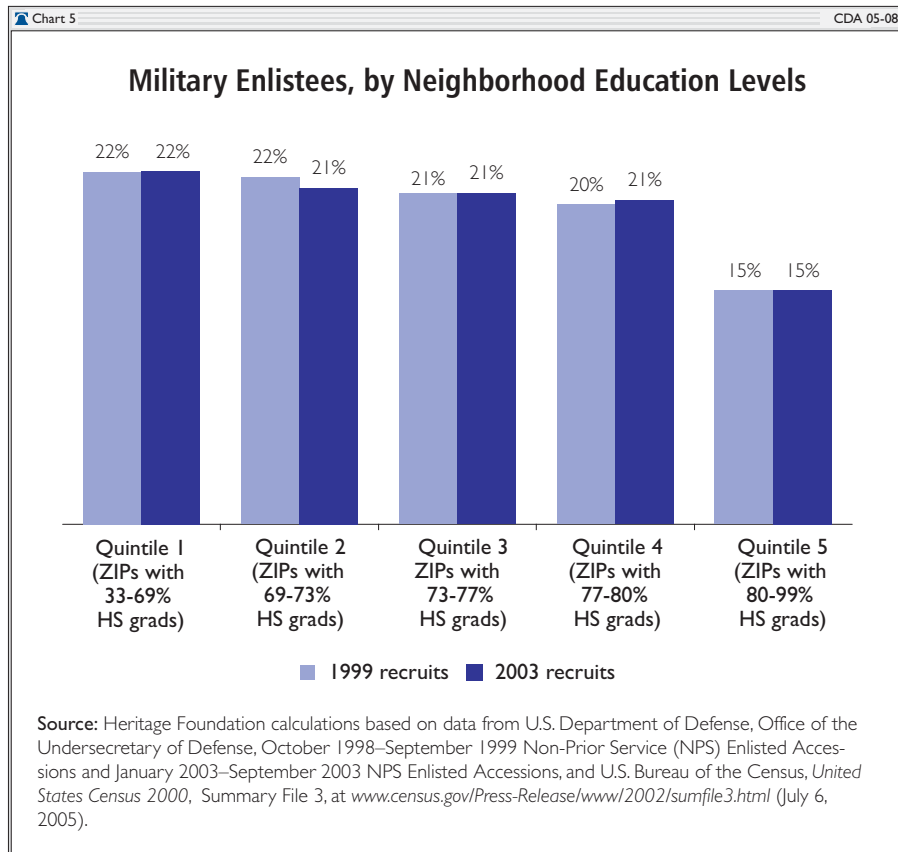
If one single statistic could settle this issue, it is this: 98 percent of all enlisted recruits who enter the military have an education level of high school graduate or higher, compared to the national average of 75 percent.⁵ In an education context, rather than attracting underprivileged young Americans, the military seems to be attracting above-average Americans. What remains to explore is whether this pattern of military enlistment is (1) consistent

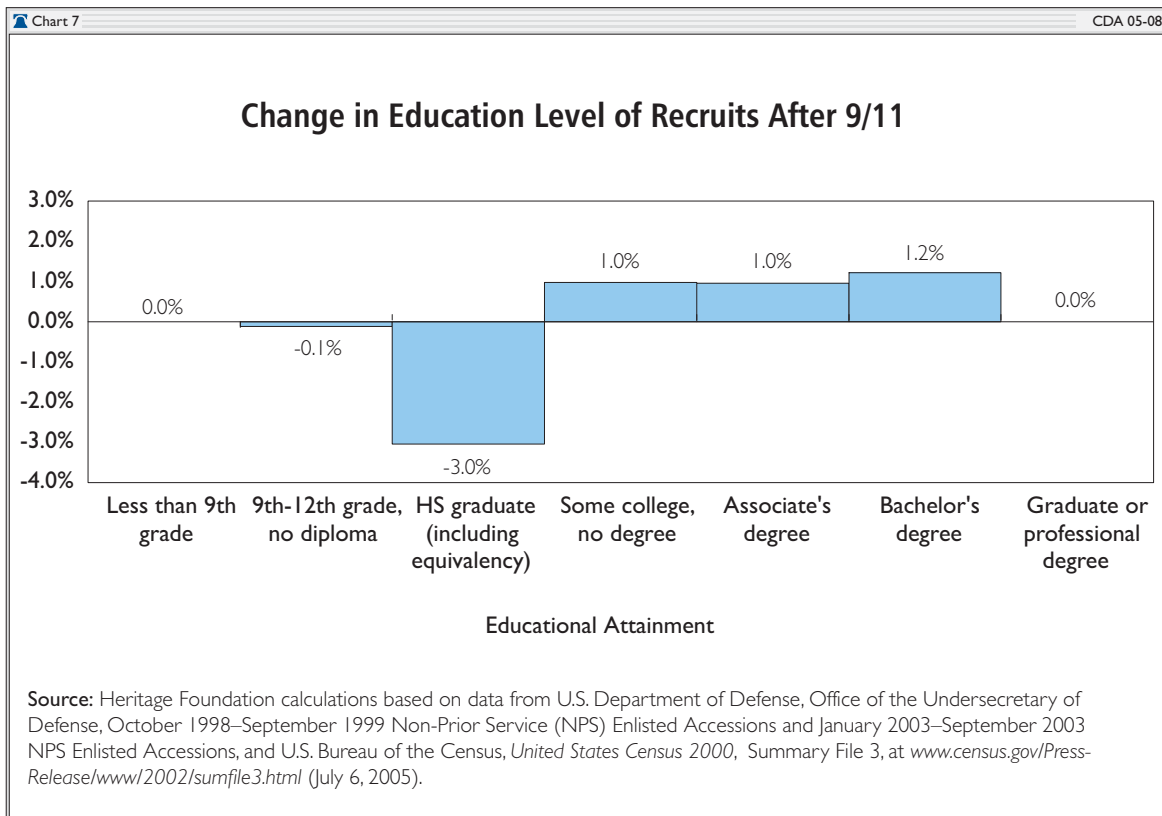
across ZIP codes, (2) consistent across all branches of service, and/or (3) consistent proportionally across all levels of education.

The claim could still be made that highly educated recruits are being pulled from underprivileged areas, marked by below-average high school graduation rates. Further analysis shows that any such claim would also be incorrect. We used the binary measure to make a ZIP code-level comparison. By comparing the records of 183,288 individual recruits from the 1999 cohort, using ZIP code of origin, against other Census populations by ZIP code, our analysis shows that roughly half (48.5 percent) of enlistees came from three-digit ZCTAs with above-average national graduation rates. The other half of enlistees came from areas with below-average high school graduation rates.

Regardless of ZIP code area, we also find that enlistees are almost universally better educated than the general population. In all but one of the 885 three-digit ZCTAs, the graduation rate for

5. U.S. Bureau of the Census, *United States Census 2000*, Summary File 3, at www.census.gov/Press-Release/www/2002/sumfile3.html (July 6, 2005). Alternative data from the Current Population Survey indicate that 79 percent of citizens ages 18–24 have achieved a level of education of a high school equivalent diploma or higher.





1999 recruits was higher than the graduation rate for non-recruits ages 18–24. In 2003, recruits had a higher graduation rate in every ZCTA. Figure 2, by using a gray scale to show the intensity of the educational gap, clearly shows that recruits are often better educated than the general population.

Given the nature of the military rank structure, most enlisted recruits do not have a college education or degree. Members of the armed forces with higher education are more often commissioned officers (i.e., lieutenant and above). Compared to the general population, a lower percentage of enlisted recruits have an educational level of 4 (some college/no degree) through 7 (graduate or professional degree), and a lower percentage of recruits are in the two lowest educational levels. Chart 6 shows the distributions for each branch of the military and the general population. The similarity among branches stands out, with the minor distinction that the Army has a slightly higher percentage (2.7 percent) of enlisted recruits with a bachelor's degree than the other branches.

After September 11, 2001, the educational quality of recruits rose slightly. Comparing 1999 enlisted recruits to 2003 recruits showed an increase in collegiate experience. In 2003, a higher proportion of

recruits had college experience and diplomas, and a lower percentage had only a high school diploma—a shift of about 3 percentage points. Furthermore, this figure is not subject to statistical significance tests because it measures the entire recruit population, not just a sample of it. Therefore, we can say definitively that enlistee quality actually increased between 1999 and 2003. (See Chart 7.)

RACIAL REPRESENTATION AMONG RECRUITS

We found that whites are one of the most proportionally represented groups—making up 77.4 percent of the population and 75.8 percent of all recruits—whereas other racial categories are often represented in noticeably higher and lower proportions than the general population.

This kind of racial analysis is complicated by the fact that race is a self-identified attribute that is not well defined genetically, and many citizens object to racial classification, which complicates government efforts to categorize racial and ethnic identity consistently. Specifically, race data for the population in 2000 are not compatible with the 1999 recruit cohort but are compatible with the 2003 cohort. The 1999 recruit data allow for only

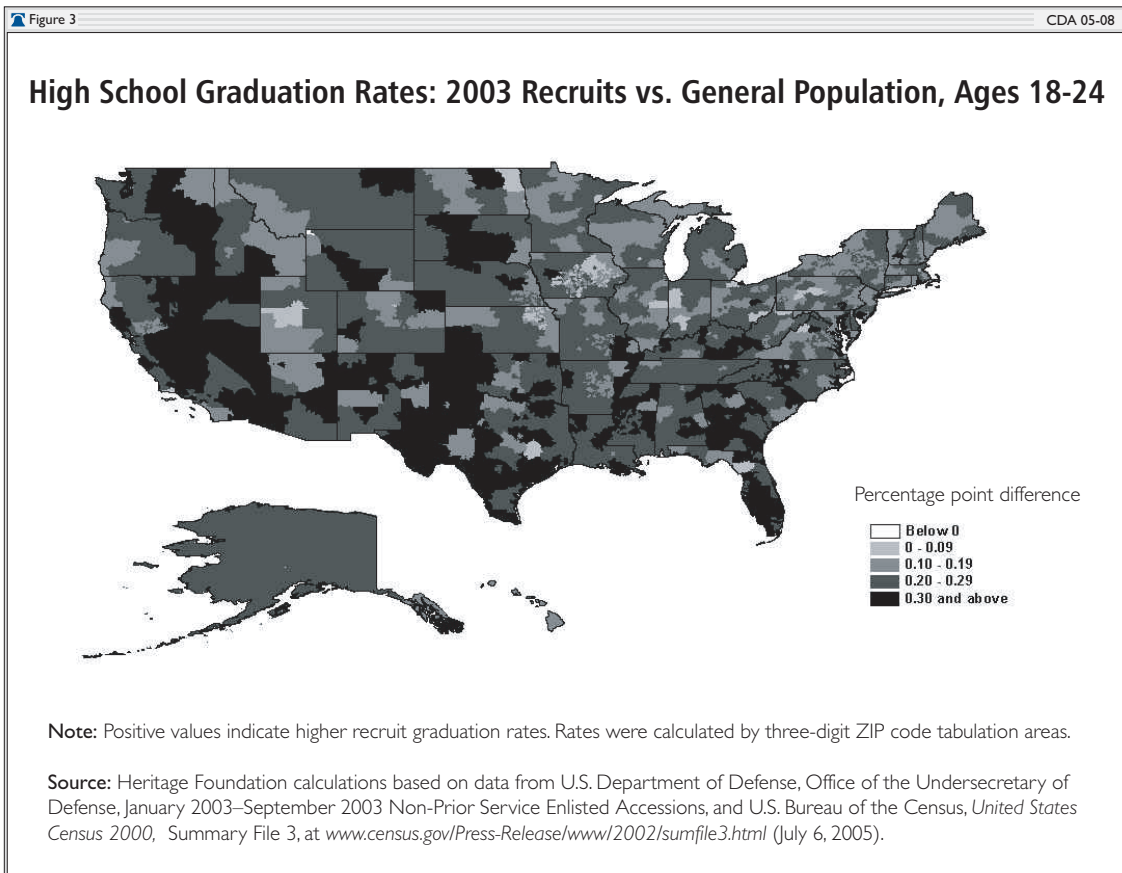
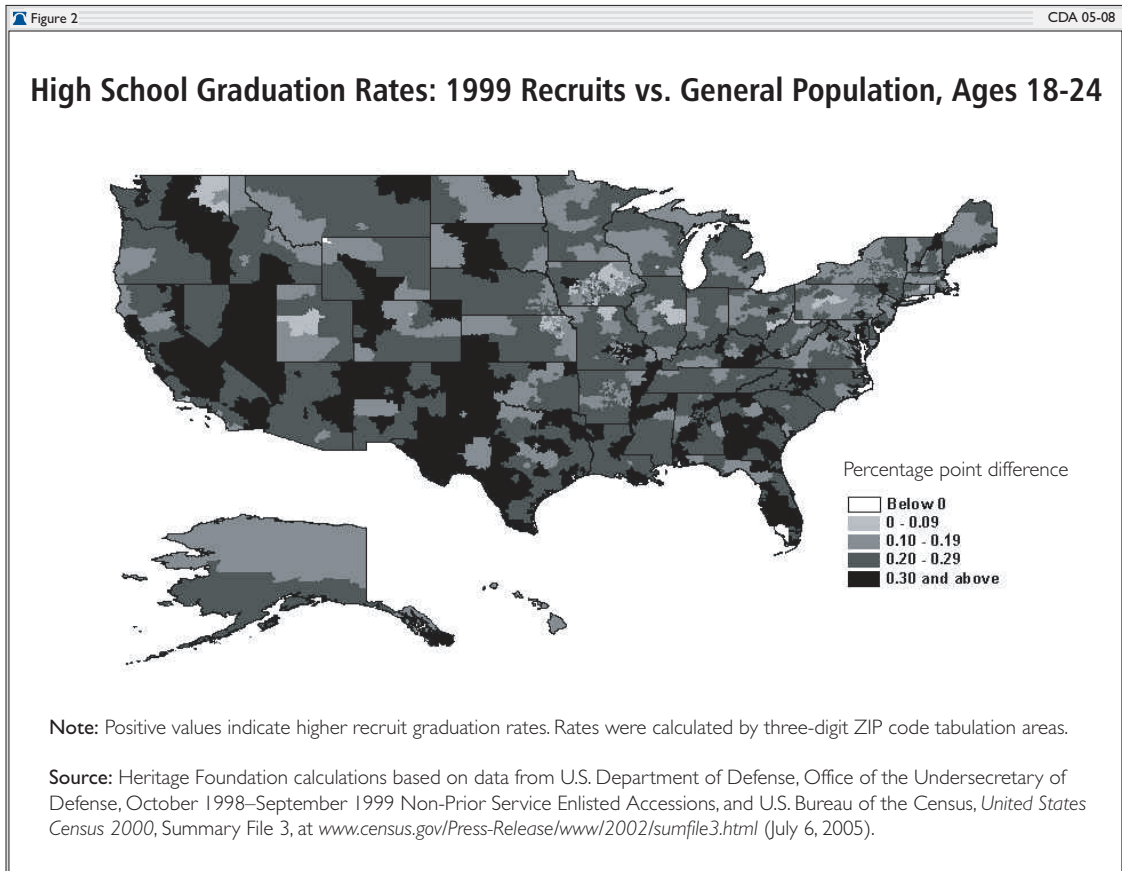


Table 3 CDA 05-08

U.S. Military Recruits by Race

Race	Population Percent	2003 Recruit Percent	2003 Army Percent	Recruit/Population Ratio	Army/Population Ratio
American Indian/Alaska Native	0.78%	1.82%	1.19%	2.35	1.54
Asian	3.67%	1.23%	1.14%	0.34	0.31
Black	11.33%	14.99%	16.25%	1.32	1.44
Native Hawaiian/Pacific Islander	0.13%	0.42%	0.45%	3.30	3.53
White	77.44%	75.79%	78.50%	0.98	1.01
Combination of two or more races	1.93%	2.67%	2.46%	1.38	1.28
Other	4.73%	—	—	—	—
Declined to respond	—	3.08%	2.18%	—	—
Hispanic	12.11%	11.50%	10.74%	0.95	0.89
Not Hispanic	87.89%	84.64%	82.65%	0.96	0.94
Declined to respond	—	3.87%	6.61%	—	—

Source: Heritage Foundation calculations based on data from U.S. Department of Defense, Office of the Undersecretary of Defense, October 1998–September 1999 Non-Prior Service (NPS) Enlisted Accessions and January 2003–September 2003 NPS Enlisted Accessions, and U.S. Bureau of the Census, *United States Census 2000*, Summary File 1, at www.census.gov/Press Release/www/2001/sumfile1.html (July 6, 2005).

one race category per person, whereas 2003 recruit and Census data follow a system that both allows each individual to self-identify any combination of six racial categories and includes an independent Hispanic indicator.

The following analysis of race is based on a comparison of the 2003 recruit data and Census population data for ages 18 and above (not just 18–24). Table 3 provides a summary of racial data, revealing that enlisted recruits are similar to the population with a few sharp differences. Table 3 also includes a breakout comparison of the 2003 Army recruits, since that branch bears a larger share of danger on the ground in Iraq and Afghanistan. For example, the data show that, proportionally, blacks make up 43 percent more of the Army recruits than does the general population, but this is not in place of whites, who make up 1 percent more (not less). Other racial categories—notably American Indians/Alaskan Natives (53 percent) and Native Hawaiian/Pacific Islanders (249 percent)—are even more overrepresented.

A military draft along the lines proposed by Representative Rangel would press thousands more Asian-Americans into service, as well as thousands of Americans who decline to be racially categorized. In contrast, a draft could deny blacks, whites, and others the freedom to enlist in the Army once their racial quotas were filled.

We next considered the “underprivileged source” hypothesis. We know from earlier analysis that recruiting is not concentrated in poor neighborhoods (ZCTAs), but perhaps it is disproportionately concentrated in black neighborhoods.

The 100 three-digit ZCTAs with the highest concentration of blacks (in any combination of other races) range from 24.05 percent up to 68.63 percent self-identified as black. These areas have 14.63 percent of the adult population but are the origin of only 16.58 percent of 1999 recruits and 14.09 percent of 2003 recruits. Moreover, 2003 recruits from these “black” areas included an almost equal number of white and black recruits (45.7 percent and 46 percent of the total, respectively). The group of ZCTAs with the highest concentration of whites had almost 46 times as many white recruits as black recruits. Among the ZCTAs that had the highest number of recruits, the ratio was almost 4:1. If the military were to draw disproportionately from minority groups by design, one would expect fewer white recruits from minority-concentrated areas and more minority recruits from the white-concentrated areas.

The demographic data on race reveal that military enlistees are not, in fact, more heavily recruited from black neighborhoods. The data also reveal that minorities serve in different proportions, but not because fewer whites are serving. In other

words, there is no “disproportionate share of minorities” serving in the military, as claimed by editorials around the nation in 2003.⁶ Some minorities participate more heavily than other minorities.

Race is often used as a proxy for class, but it is rarely, if ever, an appropriate substitute. Even if the military had a higher share of African-Americans, it does not follow that those recruits are poorer, from poorer areas, from more urbanized areas, less educated, or from less educated areas. Indeed, none of these other claims can be substantiated.

REGIONAL ANALYSIS

This section focuses on two questions of regional concentration of enlisted recruits. First, we asked whether recruits come predominately from urban areas. Second, we asked whether troops enlist predominately from Southern areas.

In April 2005, the *Chicago Tribune* cited a statistic that 35 percent of those who died in Iraq and Afghanistan were from small, rural towns, in contrast to 25 percent of the population.⁷ This point runs counter to the picture, painted by Rangel and others, of heavy enlistment reliance on poor, black urban neighborhoods. Indeed, recruits are disproportionately rural, not urban, and as *rural concentration*⁸ rises, so does military enlistment.

Specifically, 80 percent of recruits come from areas that have a rural concentration of less than 0.5, meaning that they come from areas where more than half of the population is urbanized. The overall population is slightly more urbanized, with 84 percent of Americans ages 18–24 in sim-

Rural Concentration	Population, Ages 18-24	1999 Recruits	2003 Recruits	1999 Recruits/ Population Ratio	2003 Recruits/ Population Ratio
0.0000 (all urban)	39.1%	30.1%	28.9%	0.77	0.74
0.0001–0.1999	33.2%	33.7%	33.6%	1.02	1.01
0.2000–0.4999	14.5%	16.8%	17.3%	1.16	1.19
0.5005–0.9997	5.6%	7.5%	8.0%	1.34	1.43
1.0000 (all rural)	7.7%	11.9%	12.2%	1.54	1.59

Source: Heritage Foundation calculations based on data from U.S. Department of Defense, Office of the Undersecretary of Defense, October 1998–September 1999 Non-Prior Service (NPS) Enlisted Accessions and January 2003–September 2003 NPS Enlisted Accessions, and U.S. Bureau of the Census, *United States Census 2000*, Summary File 1, at www.census.gov/Press-Release/www/2001/sumfile1.html (July 6, 2005), and Summary File 3, at www.census.gov/Press-Release/www/2002/sumfile3.html (July 6, 2005).

ilar areas. Table 4 shows the distribution of 32,243 five-digit ZCTAs. (Recruits who listed five-digit ZIP codes that are not listed as Census ZCTAs were excluded.)

The constant increase in the recruit/population ratio contradicts the assertion that military recruiting targets youth in inner cities. In fact, entirely urban areas are the area most underrepresented among recruits. Both suburban and rural areas are overrepresented.

Although this may not reflect Representative Rangel’s desire that military demographics precisely mirror the population, the overrepresentation of rural areas should be viewed as beneficial from an economic perspective. Rural areas generally offer a less flexible, thinner job market. The military extends job opportunities into these areas, with technical training that is usually unavailable otherwise.

THE SOUTHERN MILITARY TRADITION

The South is overrepresented among military recruits. It provided 42.2 percent of 1999 recruits and 41.0 percent of 2003 recruits but contained just 35.6 percent of the population ages 18–24. However, other regions also provide a higher proportion

6. See Lewis W. Diuguid, “Pushy Recruiters Descend on High Schools,” *The Kansas City Star*, January 29, 2003, p. B7.

7. Sean D. Hammil, “Small Towns Pay Big Price in Fighting Nation’s Wars,” *Chicago Tribune*, April 27, 2005, p. 6.

8. The Census Bureau classifies each ZCTA into population residing in urban areas, urban clusters, and rural areas. The formula we used defines rural concentration as the population residing in rural areas divided by the total population for that ZCTA. Areas that are entirely urban, such as Representative Rangel’s ZCTA 10037, have a rural concentration of 0.0000. Completely rural areas have a concentration of 1.0000. ZCTAs with zero population were excluded from this analysis.

of enlistees. The states with the highest enlistment proportional ratings by far are Montana (1.67), Alaska (1.42), Wyoming (1.40), and Maine (1.39). (A proportional rating of 1.00 means that a state's enlistee and general populations ages 18–24 are exactly proportional to their respective national populations.)

This section utilizes the “home-of-record” ZIP code of recruits to assess the regional origin of military members. The home-of-record ZIP code represents the area where individual recruits resided upon enlistment, not their location after enlistment. We calculated and analyzed a regional distribution of recruits by state and region for comparison to similar distributions of the general population.

In addition to confirming the strong Southern military tradition, we also found an exceptional tendency for lower than average military participation in New England. The West was underrepresented among 1999 recruits, but its 2003 proportion was equal to the population. For example, the East North Central Census region, conventionally known as the Great Lakes states, had a proportional rating of 0.86, which rose to 0.93 after September 11, 2001. This implies a lower than average interest in joining the military in the region compared to the nation, but it may reflect other variables as well (e.g., relative health and fitness of potential recruits). Table 5 shows the proportions for each region.

On the state level, 20 states and the District of Columbia and Puerto Rico were underrepresented with proportional ratios below 1.0. Table 6 provides complete state-level data. Of note, this table shows that certain states had a higher enlistment proportion after the terrorist attacks. One might expect the states where the attacks took place to respond with higher enlistment proportions. On the contrary, New York's enlistment proportion ratio was 0.86 in 1999 and 0.79 in 2003. In Virginia, the ratio dropped from 1.27 to 1.23.

Census Divisions	Population, Ages 18-24	1999 Enlisted Recruits	2003 Enlisted Recruits	1999 Recruit/Population Ratio	2003 Recruit/Population Ratio
Northeast					
Middle Atlantic	12.8%	11.7%	10.7%	0.86	0.93
New England	4.4%	3.4%	3.4%	0.77	0.76
North Central					
East North Central	15.8%	13.5%	14.6%	0.86	0.93
West North Central	6.9%	6.0%	6.8%	0.87	0.98
South					
East South Central	6.2%	6.4%	6.2%	1.04	1.01
South Atlantic	17.5%	20.7%	20.4%	1.18	1.16
West South Central	11.9%	15.1%	14.5%	1.26	1.21
West					
Mountain	6.9%	7.2%	7.5%	1.05	1.09
Pacific	16.0%	15.2%	15.4%	0.95	0.96
Puerto Rico	1.6%	0.8%	0.6%	0.51	0.40

Source: Heritage Foundation calculations based on data from U.S. Department of Defense, Office of the Undersecretary of Defense, October 1998–September 1999 Non-Prior Service (NPS) Enlisted Accessions and January 2003–September 2003 NPS Enlisted Accessions, and U.S. Bureau of the Census, *United States Census 2000*, Summary File 1, at www.census.gov/Press-Release/www/2001/sumfile1.html (July 6, 2005), and Summary File 3, at www.census.gov/Press-Release/www/2002/sumfile3.html (July 6, 2005).

Due to the lack of comparable data for other years, it is unclear whether this movement is significant or even suggestive of a pattern. However, states with the most positive upward movement in their enlistment ratios after the war on terrorism began were Iowa (+0.21), Wisconsin (+0.17), Kansas (+0.16), Washington (+0.15), and Arizona (+0.14).

The variation by state shows that the military is somewhat distinct from the young adult population in terms of geographic composition. However, there is very little variation in geographic origin between 1999 recruits and 2003 recruits, which suggests that the war on terrorism had little effect on the regional demographics of recruits.

CONCLUSION

A large shift in public opinion about the desirability of a military draft occurred in the aftermath of the September 11 terrorist attacks. Most Americans instinctively rallied to the flag and wanted to do everything to protect the nation. As a result, the draft became one of the issues that received renewed emotional support. Support eroded in succeeding polls, as evidenced by the fact that 70 percent of Americans currently oppose reinstatement.

Table 6		CDA 05-08			
U.S. Military Recruits by State					
State	Population, Ages 18-24 (% of total)	1999 Recruits (% of total)	2003 Recruits (% of total)	1999 Recruit/ Population Ratio	2003 Recruit/ Population Ratio
Alabama	1.6%	2.1%	1.9%	1.33	1.21
Alaska	0.2%	0.3%	0.3%	1.48	1.42
Arizona	1.9%	1.9%	2.2%	1.04	1.18
Arkansas	1.0%	1.2%	1.0%	1.26	1.05
California	12.2%	10.9%	10.9%	0.90	0.89
Colorado	1.6%	1.5%	1.6%	0.94	1.06
Connecticut	1.0%	0.7%	0.7%	0.73	0.72
Delaware	0.3%	0.3%	0.2%	0.93	0.83
Florida	4.8%	6.2%	6.6%	1.29	1.37
Georgia	3.0%	3.3%	3.2%	1.09	1.04
Hawaii	0.4%	0.5%	0.4%	1.22	1.05
Idaho	0.5%	0.6%	0.7%	1.26	1.30
Illinois	4.4%	3.8%	3.7%	0.87	0.84
Indiana	2.2%	1.8%	2.1%	0.83	0.96
Iowa	1.1%	0.8%	1.0%	0.74	0.95
Kansas	1.0%	0.9%	1.1%	0.89	1.05
Kentucky	1.5%	1.3%	1.4%	0.89	0.92
Louisiana	1.7%	2.2%	1.8%	1.25	1.07
Maine	0.4%	0.6%	0.5%	1.59	1.39
Maryland	1.6%	2.0%	1.9%	1.24	1.14
Massachusetts	2.1%	1.2%	1.3%	0.59	0.62
Michigan	3.4%	2.8%	3.0%	0.82	0.90
Minnesota	1.7%	1.1%	1.2%	0.62	0.73
Mississippi	1.1%	1.2%	1.0%	1.07	0.92
Missouri	1.9%	2.1%	2.3%	1.08	1.17
Montana	0.3%	0.6%	0.5%	1.83	1.67
Nebraska	0.6%	0.6%	0.7%	0.97	1.09
Nevada	0.6%	0.8%	0.7%	1.20	1.15
New Hampshire	0.4%	0.4%	0.4%	1.11	1.14
New Jersey	2.5%	2.2%	1.9%	0.88	0.77
New Mexico	0.6%	0.9%	0.8%	1.47	1.20
New York	6.4%	5.5%	5.1%	0.86	0.79
North Carolina	2.9%	2.8%	3.1%	0.95	1.05
North Dakota	0.3%	0.2%	0.2%	0.87	0.70
Ohio	3.8%	3.8%	4.1%	0.98	1.06
Oklahoma	1.3%	1.8%	1.7%	1.39	1.28
Oregon	1.2%	1.3%	1.5%	1.10	1.22
Pennsylvania	4.0%	4.0%	3.7%	0.99	0.93
Rhode Island	0.4%	0.3%	0.2%	0.72	0.60
South Carolina	1.5%	2.0%	1.7%	1.34	1.13
South Dakota	0.3%	0.3%	0.3%	1.15	1.16
Tennessee	2.0%	1.8%	1.9%	0.90	0.96
Texas	8.0%	9.9%	9.9%	1.24	1.25
Utah	1.2%	0.6%	0.7%	0.52	0.59
Vermont	0.2%	0.2%	0.2%	0.85	0.84
Virginia	2.5%	3.1%	3.0%	1.27	1.23
Washington	2.0%	2.1%	2.4%	1.06	1.21
West Virginia	0.6%	0.9%	0.7%	1.40	1.06
Wisconsin	1.9%	1.3%	1.7%	0.70	0.87
Wyoming	0.2%	0.3%	0.3%	1.58	1.40
District of Columbia	0.3%	0.1%	0.1%	0.52	0.36
Puerto Rico	1.6%	0.8%	0.6%	0.51	0.40

Source: Heritage Foundation calculations based on data from U.S. Department of Defense, Office of the Undersecretary of Defense, October 1998–September 1999 Non-Prior Service (NPS) Enlisted Accessions and January 2003–September 2003 NPS Enlisted Accessions, and U.S. Bureau of the Census, *United States Census 2000*, Summary File 1, at www.census.gov/Press-Release/www/2001/sumfile1.html (July 6, 2005), and Summary File 3, at www.census.gov/Press-Release/www/2002/sumfile3.html (July 6, 2005).

ment of the draft. This sentiment is especially strong among the young.

We know that the Pentagon strongly prefers a voluntary force. However, support for a draft will likely surge again if, or when, America suffers additional terrorist attacks. Emotion and reason agree on the necessity of defeating terrorism, but reason demands that the conflict be fought as effectively as possible, and that may require policymakers to resist popular calls for a draft.

This paper reviews the demographic status of the all-volunteer military and refutes the claim that enlisted troops are underprivileged and come from underprivileged areas. In terms of education, household income, race, and home origin, the troops are more similar than dissimilar to the general population.

Put simply, the current makeup of the all-voluntary military looks like America. Where they are different, the data show that the average soldier is slightly better educated and comes from a slightly wealthier, more rural area. We found that the military (and Army specifically) included a higher proportion of blacks and lower proportions of other minorities but a proportionate number of whites. More important, we found that recruiting was not drawing disproportionately from racially concentrated areas.

Perhaps more could be done to dismantle the claim that an all-volunteer military relies disproportionately on ignorant, black, poor, urban young

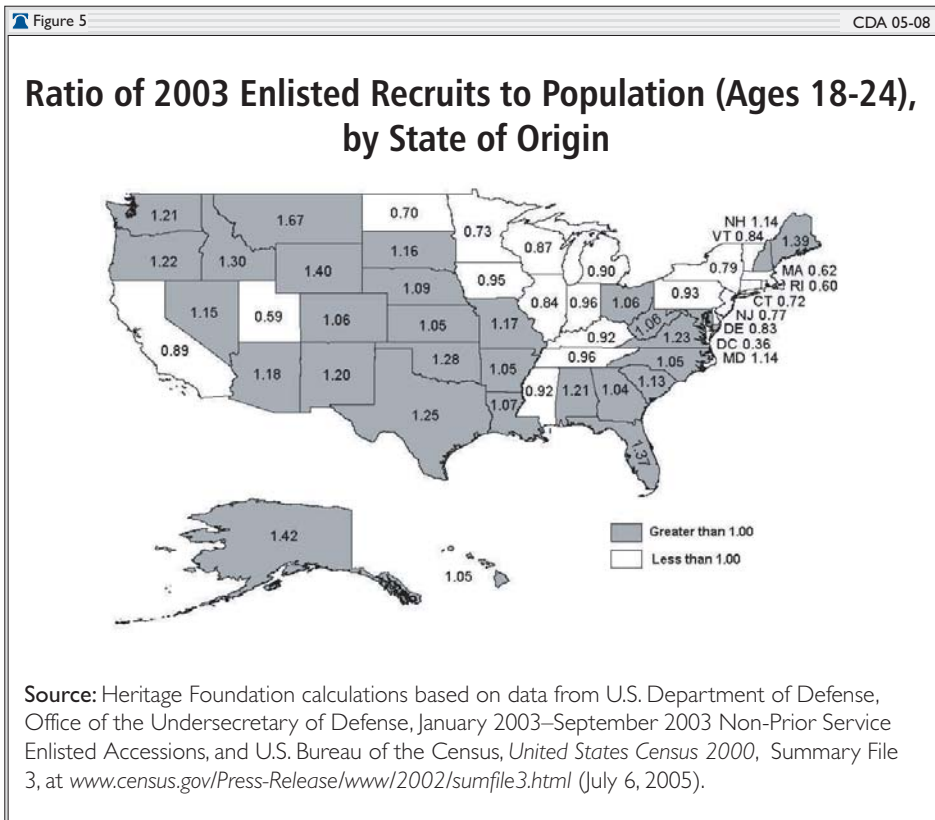
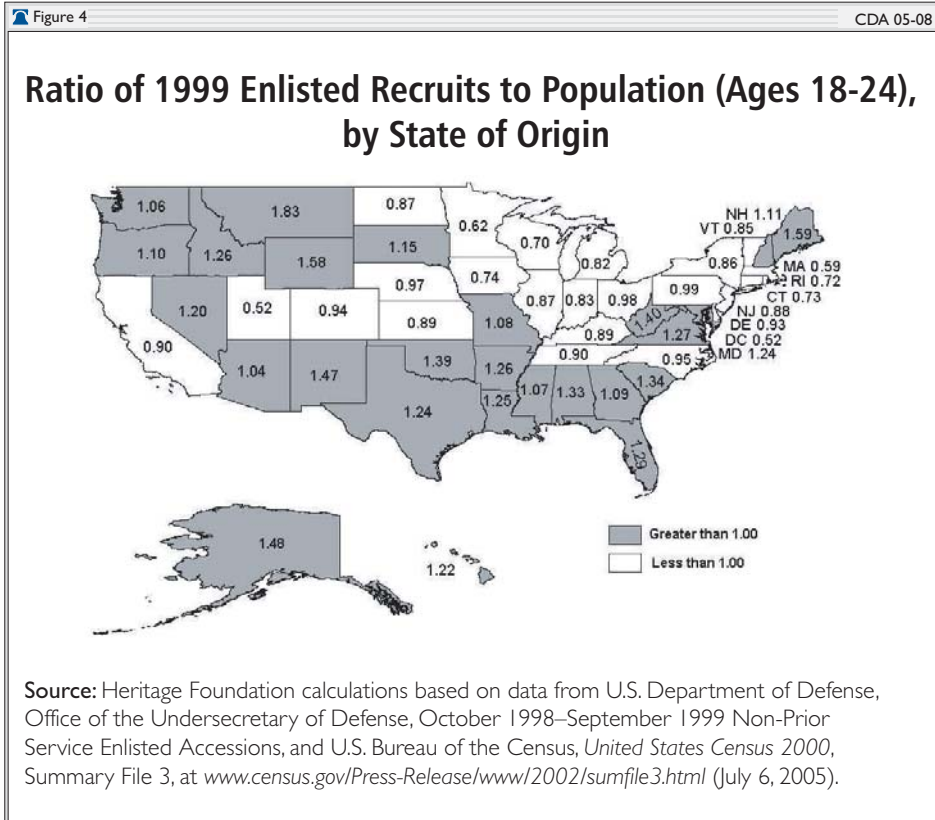
citizens in America, but the evidence already clearly shows this claim to be hollow.

Nevertheless, the Army is facing a shortage of new recruits for the recruiting year that ended in September. The shortage is minor—about 7,000 less than the goal of 80,000 new recruits—in a military with over 1 million members, but it will fuel ongoing calls for a military draft. Policymakers should remember that recruiting was also difficult in 1999 (when the economy was strong), but not so difficult in 2002–2004, in the immediate wake of the 2001 terrorist attacks on the United States. The Department of Defense reported 352,839 applicants for active component enlistment in fiscal year 2003, and it accepted 176,408.⁹

Logically, this suggests that if terrorists strike America again, young Americans will be more—not less—willing to volunteer for military service. We can also anticipate that successful terrorist attacks will result in a resurgence of popular support for a draft. All Americans hope that day will never come, but if it does, Congress needs to remain steadfast in opposing coerced conscription and expose the myths of racial and class exploitation in military recruiting.

—*Tim Kane, Ph.D., is Bradley Fellow in Labor Policy in the Center for Data Analysis at The Heritage Foundation. The quantitative research effort for this piece was largely the work of Alana Finley, who has the author's heartfelt thanks. Any mistakes in the analysis are entirely the author's.*

9. U.S. Department of Defense, Office of the Under Secretary of Defense, Personnel and Readiness, “Executive Summary of the 2003 Population Representation in the Military Services Population Representation,” at www.defenselink.mil/prhome/poprep2003 (September 7, 2005). The fiscal year for U.S. military services runs from October through September. The dataset for 2003 used in this analysis includes the 138,914 applicants accepted between January 2003 and September 2003.



Technical Appendix

This report was prepared by integrating two different sets of data. The recruitment data were provided by the Office of Accessions in the U.S. Department of Defense (DOD) at the request of The Heritage Foundation. Each recruit studied has a ZIP code for home-of-record, which we matched with U.S. Census 2000 data on that ZIP code. The two sets, and our integration methodology, are further described in this appendix. However, we do not provide analysis on troops serving in Iraq or Afghanistan, or on troop casualties, because those distinctions are not available in the data at our disposal. This study focuses exclusively on the demographics of the volunteers in the enlisted ranks of the military—specifically, those accessions who were never previously in the military.

DOD RECRUIT DATA

The DOD recruit data are divided into two sets: October 1998–September 1999 Non-Prior Service (NPS) Enlisted Accessions and January 2003–September 2003 NPS Enlisted Accessions. The 1999 data have 183,768 recruits, and 2003 data have 138,914 recruits. Each individual recruit record in the data includes hometown ZIP code, race/ethnicity code, and educational code. The data include accessions for the Army, Navy, Marine Corps, and Air Force.

Race Data. The 1999 data classify race as one of seven mutually exclusive categories (American Indian or Alaska Native, Asian or Pacific Islander, Black, Hispanic, White, Other, or Unknown). The 2003 data more closely match the 2000 U.S. Census categorization, which allows for any combination of six races (American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, Black or African–American, White, or Some Other Race). The 2003 data do not include an “other” classification. The 2003 data also include recruits who declined to respond. In both the 2003 data and the 2000 Census data, a Hispanic indicator is identified separate from race.

Invalid Recruit ZIP Codes. For some recruits, the home-of-record ZIP code either is invalid

(according to the U.S. Postal Service) or corresponds to an area that is not included in the Census. For example, recognition by the Postal Service but exclusion from the Census could indicate a military ZIP code or a U.S. territory. Puerto Rico is included in both the Census and the recruit data and was included in all analysis done for this paper.

Individual records that could not be sorted by ZIP code were not included in our analysis using ZIP codes. To reduce the number of invalid recruit ZIP codes when analyzing educational attainment, only the first three ZIP digits were used. These were matched with three-digit Census ZIP Code Tabulation Areas (ZCTAs).

The five-digit ZIP codes/ZCTAs were used for income and regional analysis. After excluding invalid five-digit ZIP codes, the 1999 dataset contains 180,883 recruits, and the 2003 dataset contains 136,462 recruits. When using three-digit ZCTAs, the 1999 dataset contains 183,288 recruits with valid entries, and the 2003 dataset contains 138,627 valid entries. There are 887 three-digit ZCTAs and 33,178 five-digit ZCTAs.¹⁰

CENSUS DATA

Data were taken from United States Census 2000, Summary File 1 and Summary File 3.¹¹

Income analysis used data from Summary File 3, Table P53 (Median Household Income). Educational analysis used data from Summary File 3, Table PCT25 (Sex by Age by Educational Attainment for the Population 18 Years and Over). These tables contain sample data. The Census Bureau does not compile these statistics for the entire population.

Race analysis used data from Summary File 1, Table P5 (Race for the Population 18 Years and Over) and Table P6 (Hispanic or Latino, and Not Hispanic or Latino by Race for the Population 18 Years and Over). Regional analysis used data from Summary File 1, Table P2 (Urban and Rural). These tables include information gathered from the entire population.

10. For more information on ZCTAs, see U.S. Bureau of the Census, “ZIP Code Tabulation Areas (ZCTAs),” July 8, 2005, at www.census.gov/geo/ZCTA/zcta.html (October 18, 2005).

11. U.S. Bureau of the Census, *United States Census 2000*, Summary File 1, at www.census.gov/Press-Release/www/2001/sumfile1.html (July 6, 2005), and Summary File 3, at www.census.gov/Press-Release/www/2002/sumfile3.html (July 6, 2005).

Census and Department of Defense (DOD) Education Level Categories	
Census Categories	DOD Categories
Less than 9th grade	None
9th–12th grade, no diploma	Currently in high school High school certificate of attendance High school graduate did not pass state equivalency test Less than high school diploma High school senior
High school graduate (includes equivalency)	Adult education diploma Army Graduate Challenge Program GED Home study diploma High school diploma Test based equivalency diploma
Some college, no degree	Completed one semester of college Correspondence school diploma Credential nearly completed
Associate's degree	AA degree Occupational program certificate Professional nursing diploma
Bachelor's degree	BA/BS
Graduate or professional degree	Doctorate degree First professional degree MA/MS Post doctorate degree Post master's degree
Excluded	Unknown

Source: U.S. Bureau of the Census and U.S. Department of Defense.

For recruit comparison to the population ages 18–24, population data by three-digit and five-digit ZCTAs was taken from Summary File 3, Table PCT25. Summary File 3 represents sample data, and the “population ages 18–24” refers to this sample of 27,498,362 individuals. According to Summary File 1, which is representative of the whole population, the total population 18 years and over is 211,844,603.

Summary level 850 (three-digit ZCTA) was used in the analysis of educational achievement and race to maximize the use of valid data from the recruit data sets. Summary level 860 (five-digit ZCTA) was used in income and regional analysis.

For geographical graphing, ArcView GIS shapefiles depicting the boundaries of three-digit and five-digit ZCTAs were obtained from the U.S. Census Bureau.¹²

INCOME ANALYSIS

Average Household Income of Recruits. Individual recruit income data are not available. In computing the average household income for recruits, each recruit was assigned the median household income for his or her ZCTA.

ZCTAs Excluded from Quintile Analysis. The Census classifies some ZCTAs only as three-digit ZCTAs followed by either XX (large undeveloped areas or sparsely settled areas) or HH (island and water features). The Census reports some of these as having population and median income. Of these ZCTAs, 932 had no median income and no population ages 18–24 and were excluded from the quintile analysis. (See Table 2.)

Statistical Significance of Proportion Differences. The difference between the 1999 enlisted recruits and the general population ages 18–24 for each income cohort (in increments of \$5,000) is significant at the 1 percent level. This means that there is a less than 1 percent probability that a random draw from the general population would be as different as the recruits, in fact, are. The difference between the 1999 enlisted recruits and the general population ages 18–24 for each ZCTA quintile is significant at the 1 percent level.

For 2003 enlisted recruits and the general population ages 18–24, the difference for each income

cohort is significant at the 1 percent level for all income cohorts except for the cohort \$5,000–\$9,999, which is significant at the 5 percent level. The difference between the 2003 enlisted recruits and the general population ages 18–24 for each ZCTA quintile is significant at the 1 percent level.

Educational Analysis. Recruits whose educational attainment was indicated as “unknown” were excluded from the educational analysis but not from the other categorical analyses. Therefore, the educational analysis excluded 34 recruits from the 1999 data set and 393 from the 2003 dataset.

Comparison to Population. Recruits were compared to a sample of the population ages 18–24, taken from Census Summary File 3, Table PCT25.

Recruit Educational Attainment. Recruit educational information is more detailed than data gathered by the Census Bureau for the population. Table 7 shows how specific recruit education levels were categorized into the corresponding Census Bureau classifications.

RACE ANALYSIS

All race analysis was conducted using three-digit ZIP code tabulation area.

Comparison to Population. Recruits were compared to the population over the age of 18, taken from Census Summary File 1, Table P5. The total population over the age of 18 is 211,844,603.

ZCTAs with the Highest Number of Recruits. The following ZCTAs have the highest numbers of recruits (ranging from 322 to 1283): 070, 080, 104, 112, 117, 191, 207, 212, 234, 236, 275, 283, 285, 294, 296, 300, 301, 302, 310, 317, 320, 322, 325, 327, 328, 329, 330, 331, 334, 335, 336, 370, 440, 441, 452, 463, 480, 481, 490, 600, 601, 604, 606, 630, 631, 640, 705, 730, 731, 740, 750, 751, 752, 760, 761, 765, 770, 773, 774, 775, 782, 785, 786, 799, 800, 809, 840, 850, 852, 853, 857, 891, 900, 902, 906, 913, 917, 919, 920, 921, 922, 923, 925, 928, 930, 932, 935, 945, 951, 953, 956, 958, 959, 967, 970, 974, 980, 982, 983.

ZCTAs with the Highest Concentration of Blacks. The concentration formula included any person who included black as a race in combination. The following ZCTAs have the highest concentrations of blacks (ranging from 24.10 percent

12. U.S. Bureau of the Census, Cartographic Boundary Files, revised June 27, 2005, at www.census.gov/geo/www/cob/z32000.html (October 18, 2005).

to 68.63 percent): 071, 072, 073, 075, 081, 084, 086, 104, 112, 114, 116, 191, 200, 203, 207, 209, 212, 232, 233, 235, 236, 237, 238, 239, 271, 274, 277, 278, 279, 282, 283, 290, 291, 292, 294, 295, 298, 299, 300, 302, 303, 304, 308, 309, 310, 312, 313, 314, 316, 317, 318, 319, 322, 323, 352, 354, 358, 360, 361, 364, 366, 367, 368, 369, 372, 374, 381, 386, 387, 389, 390, 391, 392, 393, 396, 397, 441, 464, 482, 485, 606, 631, 641, 661, 701, 705, 707, 708, 710, 711, 712, 713, 716, 717, 722, 723, 777, 903, 946, 948.

ZCTAs with the Highest Concentration of Whites. The concentration formula included any person who included white as a race in combination. The following ZCTAs have the highest concentrations of whites (ranging from 97.7 percent to 100.0 percent): 032, 034, 035, 036, 038, 039, 040, 042, 043, 044, 045, 047, 048, 049, 050, 051, 052, 053, 056, 057, 058, 059, 133, 156, 157, 158, 160,

162, 163, 169, 173, 182, 186, 188, 195, 242, 252, 255, 261, 262, 263, 264, 266, 267, 268, 407, 411, 412, 413, 415, 416, 417, 418, 425, 426, 438, 451, 461, 467, 470, 475, 476, 504, 506, 508, 510, 512, 513, 514, 515, 516, 520, 521, 523, 525, 538, 540, 542, 547, 564, 574, 580, 584, 586, 593, 646, 647, 650, 656, 657, 669, 677, 683, 684, 690, 725, 726, 821, 828, 831.

REGIONAL ANALYSIS

Comparison to Population. The total population in urban/rural areas of each ZCTA was taken from Census Summary File 1, Table P2. This was used only to compute the rural concentration of each ZCTA. When recruits were compared to the proportion of the national population in each ZCTA, they were compared to the population ages 18–24, taken from Census Summary File 3, Table PCT25.

Table 8 CDA 05-08

Census Regions, Census Divisions, and States

Region	Division	State
North Central	East North Central	Illinois Indiana Michigan Ohio Wisconsin
	West North Central	Iowa Kansas Minnesota Missouri North Dakota Nebraska South Dakota
Northeast	Middle Atlantic	New Jersey New York Pennsylvania Connecticut
	New England	Massachusetts Maine New Hampshire Rhode Island Vermont
South	East South Central	Alabama Kentucky Mississippi Tennessee
	South Atlantic	District of Columbia Delaware Florida Georgia Maryland North Carolina South Carolina Virginia West Virginia
	West South Central	Arkansas Louisiana Oklahoma Texas Arizona
West	Mountain	Colorado Idaho Montana New Mexico Nevada Utah Wyoming
	Pacific	Alaska California Hawaii Oregon Washington
Territory	Puerto Rico	Puerto Rico

Source: U.S. Bureau of the Census and U.S. Department of Defense.

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