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# **2010 Post-Election Voting Survey of the Active Duty Military**

## **Statistical Methodology Report**



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**2010 POST-ELECTION VOTING SURVEY OF THE  
ACTIVE DUTY MILITARY:  
STATISTICAL METHODOLOGY REPORT**

**Defense Manpower Data Center  
Human Resources Strategic Assessment Program  
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## Acknowledgments

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Policy officials from the Federal Voting Assistance Program (FVAP) contributed to the development of this survey include Bob Carey, Director, Paul Drugan, Deputy Director for Research, and Alan White, Survey Specialist.

DMDC's Personnel Survey Branch, under the guidance of David McGrath, Branch Chief is responsible for the data processing, sampling, and weighting methods used in the Status Of Forces and FVAP Surveys program. Fawzi al Nassir, SRA International, Inc., supervised the sampling and weighting processes, and provided consultations and overall process control. The lead statistician was Owen Hung, SRA International, Inc., who used the DMDC Sampling Tool to design the sample. He also developed weights for this survey. Susan Reinhold and Carole Massey, provided the data processing support. Fawzi Al Nassir and Owen Hung wrote this methodology report. Mary Padilla, SRA International, Inc., helped formatting the report.

# 2010 POST-ELECTION VOTING SURVEY OF THE ACTIVE DUTY MILITARY: STATISTICAL METHODOLOGY REPORT

## Executive Summary

The Uniformed and Overseas Citizens Absentee Voting Act of 1986 (UOCAVA), 42 USC 1973ff, permits members of the Uniformed Services and Merchant Marine, and their eligible family members and all citizens residing outside the United States who are absent from the United States and its territories to vote in the general election for federal offices. These groups include:

- Members of the Uniformed Services (including Army, Navy, Air Force, Marine Corps, Coast Guard)
- U.S. citizens employed by the federal government residing outside the U.S.
- All other private U.S. citizens residing outside the U.S.

The Federal Voting Assistance Program (FVAP), under the guidance of USD(P&R), is charged with implementing the UOCAVA and evaluating the effectiveness of its programs. The FVAP Office asked DMDC to design, administer, and analyze post-election surveys on military member's voter participation, overseas nonmilitary voter participation, and local election officials. Without such surveys, the Department will not be able to assess and improve voter access. In addition, such surveys fulfill the 1988 Executive Order 12642 that names the Secretary of Defense as the "Presidential designee" for administering the UOCAVA and requires surveys to evaluate the effectiveness of the program in presidential election years.

The objectives of the 2010 post-election surveys are: (1) to gauge participation in the electoral process by citizens covered by UOCAVA, (2) to assess the impact of the FVAP's efforts to simplify and ease the process of voting absentee, (3) to evaluate other progress made to facilitate voting participation, and (4) to identify any remaining obstacles to voting by these citizens. Surveys were done on military members, military member spouses, U.S. citizens residing overseas, voting assistance personnel, and local election officials in the U.S.

This report focuses on the *2010 Post-Election Voting Survey of the Active Duty Military (2010 PEV5)*, which was designed to capture the attitudes and behaviors of active duty military members throughout the world. This report describes the sampling and weighting methodologies used in the *2010 PEV5*. Calculation of response rates is described in the final section.

The population of interest for the *2010 PEV5* survey consisted of active duty members who are members of the Army, Navy, Marine Corps, Air Force, Coast Guard, and all Selected Reservists who were either activated or Active Guard Reserve (AGR) members. In addition, members of the population must: (1) have at least 6 months of service at the time the questionnaire is first fielded, (2) be U.S. citizens, (3) be at least 18 years old, and (4) be below flag rank at survey fielding.

The survey administration period lasted from January 10 to February 28, 2011. A sample of 40,815 active duty members and 32,429 Reserve component members was selected from the corresponding eligible populations of 1,413,530 active duty members, and 152,011 Reserve component members respectively. Based on updated personnel records and self-reported data, a total of 69,962 sample members (39,621 active duty members, 30,341 Reserve component members) were ultimately determined to be eligible for the survey. Usable questionnaires were returned by 8,546 members (5,613 active duty, and 2,933 Reserves).

The 2010 PEV5 used a single-stage stratified sample design. The sample allocation was nonproportional, with oversampling of small domains and population subgroups having low response rates. The total sample size was based on precision requirements for key reporting domains. The allocation was determined by an optimization algorithm that minimizes the cost of the survey while meeting the precision requirements.

Analytic weights were created in five steps to account for unequal selection probabilities and varying response rates among population subgroups. First, sample records were classified for weighting according to eligibility status (known or unknown eligibility) then the sampling weights (i.e., the inverse of the selection probabilities) were calculated. Second, the sampling weights were adjusted to account for sample members whose eligibility could not be determined. Third, the eligibility-adjusted weights were again adjusted to account for eligible sample members who did not return usable questionnaires. Fourth, the adjusted weights were poststratified to match population totals and to reduce bias unaccounted for by the previous weighting steps. Finally, sampling strata were collapsed to create strata for variance estimation by means of Taylor series linearization.

Location, completion, and response rates were calculated for the sample and for population subgroups after the field closed and data were received. These rates were computed according to the R3 recommendations of the American Association of Public Opinion Researchers (AAPOR, 2008). The overall location, completion, and response rates were 85%, 18%, and 15% respectively. For active duty members, these rates were 84%, 17%, and 14% respectively, while, Reserve component members' rates were 94%, 22%, and 21% respectively.

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# 2010 POST-ELECTION VOTING SURVEY OF THE ACTIVE DUTY MILITARY: STATISTICAL METHODOLOGY REPORT

## Introduction

The Uniformed and Overseas Citizens Absentee Voting Act of 1986 (UOCAVA), 42 USC 1973ff, permits members of the Uniformed Services and Merchant Marine, and their eligible family members and all citizens residing outside the United States who are absent from the United States and its territories to vote in the general election for federal offices. These groups include:

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The objectives of the 2010 post-election surveys are: (1) to gauge participation in the electoral process by citizens covered by UOCAVA, (2) to assess the impact of the FVAP’s efforts to simplify and ease the process of voting absentee, (3) to evaluate other progress made to facilitate voting participation, and (4) to identify any remaining obstacles to voting by these citizens. Surveys were done on military members, military member spouses, U.S. citizens residing overseas, voting assistance personnel, and local election officials in the U.S.

This report focuses on the *2010 Post-Election Voting Survey of the Active Duty Military (2010 PEV5)*, which was designed to capture the attitudes and behaviors of active duty military members throughout the world. This report describes the sampling and weighting methodologies used in the *2010 PEV5*. Calculation of response rates is described in the final section.

## ***Sample Design and Selection***

### ***Target Population***

The target population for the active duty members of the *2010 PEV5* was designed to represent individuals meeting all of the following criteria:

1. An active duty member of the Army, Navy, Marine Corps, Air Force, and Coast Guard, activated Selected Reservists, or an Active Guard Reserve (AGR) members;
2. At least 6 months of service by the beginning of the survey fielding period;
3. Up to and including paygrade O6;
4. U.S. citizen;
5. At least 18 years old;

Fielding of the *2010 PEV5* survey began January 10, 2011 and ended on February 28, 2011.

### ***Sampling Frame***

The 2010 PEV5 sampling frame was designed to contain active duty members and Selected Reservists who were either activated or Active Guard Reserve (AGR) members who were U.S. citizens and at least 18 years old at the time of frame development. Both active and Reserve Coast Guard members were included. Generals and Flag officers were excluded from the sampling frame.

For active duty members, the sampling frame was drawn from the June 2010 Active Duty Master Edit File (ADMF) consisting of 1,413,530 records. Auxiliary information used to develop the frame was obtained from the June 2010 Family Database, the April 2010 Basic Allowance for Housing Files and the July 2010 Contingency Tracking System (CTS) Deployment file. Additionally, to update a member's active duty status the July 2010 ADMF and the July 2010 Defense Enrollment Eligibility Reporting System (DEERS) Medical Point-in-Time Extracts (PITE) were used. Ineligible sample members were identified using the October 2010 DEERS PITE. Other individuals were identified as ineligible by self or proxy report due to separation, retirement, or incarceration, by the Survey Control System during the survey fielding period, January 10, through February 28, 2011.

For Selected Reservists, the sampling frame was developed using the May 2010 Reserve Components Common Personnel Data System (RCCPDS) file and the August 2010 CTS Activation File. Members' Selected Reserve status was updated using the August 2010 DEERS Medical PITE. The frame contained 152,011 members. Ineligible sample members were identified using the October 2010 RCCPDS file. In addition a sample member was identified as ineligible if he/she was in the Post-Election Deployment Voting Active Duty Spouse sample. Other individuals were identified as ineligible by self or proxy report due to separation, retirement, or incarceration, by the Survey Control System during the survey fielding period.

### ***Sample Design***

The *2010 PEV5* sample used a single-stage stratified design. Six population characteristics defined the stratification dimensions: Duty Location, Service or Reserve Component, Paygrade, Age, Gender, and Race/Ethnicity. These are the variables marked with an asterisk (\*) in Table 1. The frame was partitioned into 295 mutually exclusive strata. For

active duty members including Coast Guard the frame was partitioned into 225 strata produced by cross-classification of the stratification variables. All active Coast Guard members stationed overseas were grouped into one stratum. The Reserve component members frame was partitioned into 70 strata produced by cross-classification of the stratification variables. All Reserves component members' stationed overseas were grouped into one stratum.

Within each stratum, individuals were selected with equal probability and without replacement. Since the allocation of the sample was not proportional to the size of the strata, selection probabilities varied among strata (i.e., individuals were not selected with equal probability overall). Nonproportional allocation was used to achieve adequate sample sizes for small subpopulations of analytic interest (i.e., the survey reporting domains). These domains included subpopulations defined by the stratification characteristics, as well as other key reporting domains. Key reporting domain variables are shown in Table 1.

**Table 1.**  
**Variables for Stratification and Key Reporting Domains**

<b>Variable</b>	<b>Categories</b>
Active Duty Service Branch*	Army Navy Marine Corps Air Force Coast Guard
Reserve Service Branch*	Army National Guard Army Reserve Navy Reserve Marine Corps Reserve Air National Guard Air Force Reserve Coast Guard Reserve
Paygrade Group*	E1-E4 E5-E9 W1-W5 O1-O3 O4-O6
Gender*	Male Female
Race/Ethnic Category*	Non-minority Minority
Duty Location*	U.S. & U.S. Territories Overseas
Age*	18 to 24 years old Older than 25 years
Age	18 to 24 years old 25 to 29 years old 30 to 34 years old 35 to 44 years old Older than 45 years
Education	No college Some college 4 year degree Grad/professional degree
Race/Ethnic Code	Black (not Hispanic) White (not Hispanic) Hispanic Other
Active Duty & Reserve Flag	Active Duty Reserve
Paygrade Group	Enlisted Officer

*Note.* \* denotes stratification variable.

### **Sample Allocation**

The 2010 PEV5 total sample size consisted of 40,815 active duty members, and 32,429 Reserve component members. The Active Duty Military members sample was determined based

on precision requirements for key reporting domains. Of the 32,429 Reserve component members, there were 69 overseas individuals taken with certainty. The determination of the remaining 32,360 Reserve component members was based on precision requirements for key reporting domains.

Given estimated variable survey costs and anticipated eligibility and response rates, an optimization algorithm determined the minimum-cost allocation that simultaneously satisfied the domain precision requirements. Estimated eligibility and response rates for the *2010 PEV5* sample were based on the *2008 Post-Election Voting Survey of Uniformed Service Members*.

The allocation was accomplished by means of the DMDC Sample Planning Tool (SPT), Version 2.1 (Dever & Mason, 2003). This application is based on the method originally developed by J. R. Chromy (1987) and described in Mason, Wheelless, George, Dever, Riemer, and Elig (1995). The SPT defines domain variance equations in terms of unknown stratum sample sizes and user-specified precision constraints. A cost function is defined in terms of the unknown stratum sample sizes and the per-unit cost of data collection, editing, and processing. The variance equations are solved simultaneously, subject to the constraints imposed, for the sample size that minimizes the cost function. Eligibility rates modify the estimated prevalence rates used in the variance equations, thus affecting the allocation; response rates inflate the allocation, thus affecting the final sample size.

Although 93 domains were defined for the *2010 PEV5* allocation, precision constraints were imposed only on the domains of primary interest. Generally, the precision requirement was based on an estimated prevalence rate of 0.5 with a 95 percent confidence interval half-width no greater than 0.05. Constraints were manipulated to produce an allocation that achieved satisfactory precision for the domains of interest at an approximate sample size of 73,000.

Sample sizes by service component for the levels of the stratification dimensions for active duty members and Reserve component members are shown in Table 2 and Table 3, respectively. Table A-1 shows the sample allocation by strata. Allocation solutions by reporting domains for active duty members and Reserve component members are given in Table B-1. Unknowns are grouped with the largest category of the variable. For example, if the paygrade for enlisted member is unknown and the largest enlisted category in the paygrade variable is E4, then the unknown is added to E4.

**Table 2.**  
**Sample Size by Stratification Variables: Active Duty Members**

Stratification Variable	Total	Army	Navy	Marine Corps	Air Force	Coast Guard
Total	40,815	17,039	8,671	5,704	8,404	997
Duty Location						
US & US territories	30,841	12,961	6,843	4,735	5,310	992
Overseas	9,974	4,078	1,828	969	3,094	5
Paygrade Group						
E1-E4	14,993	5,303	3,118	3,888	2,364	320
E5-E9	17,882	8,027	3,859	1,338	4,190	468
W1-W5	1,155	902	111	79	0	63
O1-O3	2,015	848	497	105	495	70
O4-O6	4,770	1,959	1,086	294	1,355	76
Age						
18 - 24	14,827	4,284	3,512	4,208	2,561	262
25 +	25,988	12,755	5,159	1,496	5,843	735
Gender						
Male	35,722	14,988	7,477	5,410	6,960	887
Female	5,093	2,051	1,194	294	1,444	110
Race/Ethnicity						
Non-minority	26,157	10,418	4,753	4,153	6,079	754
Minority	14,658	6,621	3,918	1,551	2,325	243

**Table 3.****Sample Size by Stratification Variables: Reserve Component Members**

Stratification Variable	Total	Army National Guard	Army Reserve	Navy Reserve	Marine Corps Reserve	Air National Guard	Air Force Reserve	Coast Guard Reserve
Total	32,429	11,943	7,655	2,648	4,242	2,905	2,949	87
Duty Location								
US & US territories	32,360	11,943	7,655	2,619	4,238	2,899	2,919	87
Overseas	69	0	0	29	4	6	30	0
Paygrade Group								
E1-E4	12,195	5,554	3,521	307	1,696	649	439	29
E5-E9	14,508	5,036	2,797	804	1,971	1,917	1,931	52
W1-W5	483	250	161	8	62	0	0	2
O1-O3	2,032	659	521	451	132	118	150	1
O4-O6	3,211	444	655	1,078	381	221	429	3
Age								
18 - 24	10,301	4,494	3,135	243	1,413	666	338	12
25 +	22,128	7,449	4,520	2,405	2,829	2,239	2,611	75
Gender								
Male	28,211	10,755	6,250	2,253	3,968	2,487	2,421	77
Female	4,218	1,188	1,405	395	274	418	528	10
Race/Ethnicity								
Non-minority	24,494	9,604	4,943	2,033	3,111	2,491	2,236	76
Minority	7,935	2,339	2,712	615	1,131	414	713	11

**Weighting**

Analytical weights for the 2010 PEV5 were created to account for unequal probabilities of selection and varying response rates among population subgroups. Sampling weights were computed as the inverse of the selection probabilities. After determining case dispositions, the base weights were adjusted for eligibility which was adjusted for completion to primarily account for nonresponse. The adjusted weights were poststratified to match population totals and to reduce bias unaccounted for by the previous weighting steps.

## Case Dispositions

Case dispositions were assigned for weighting based on eligibility and completion of the survey. Execution of the weighting process and computation of response rates depend on this classification.

Final case dispositions for weighting were determined using information from personnel records, field operations (the Survey Control System or SCS), and returned surveys. No single source of information is both complete and correct; inconsistencies among sources were resolved according to the order of precedence shown in Table 4.

**Table 4.**  
**Case Dispositions for Weighting**

Case Disposition (Samp_DC)	Information Source	Conditions
1 Record ineligible	Personnel record	Sample ineligible—deceased or no address available in DEERS.
2 Ineligible by self- or proxy-report	Survey Control System (SCS)	“Retired,” “No longer employed by DoD,” or “Deceased.”
3 Ineligible by survey self-report	Survey questionnaire	Active duty member retired or separated from military; Reservist no longer member of a Reserve Component. Either Active duty or Reserve respondent is not a US citizen or less than 18 years old.
4 Eligible, complete response	Item response rate	Item response is at least 50% for respondents that were registered voters. All respondents self-identified as “not registered” were eligible and complete for the survey.
5 Eligible, incomplete response	Item response rate	Survey isn’t blank but item response is less than 50%.
6 Unknown eligibility, complete response	Personnel record, first survey question, item response rate	Incomplete personnel record and first survey item is missing and item response is at least 50%.
7 Unknown eligibility, incomplete response	Personnel record, first survey question, and item response rate	Incomplete personnel record AND first survey question is missing AND return is not blank AND item response is less than 50%.
8 Active refusal	SCS	Reason refused is any.
		Reason ineligible is “other.”
		Reason survey is blank is “refused-too long,” “refused-inappropriate/intrusive,” “refused-other,” “ineligible-other,” “unreachable at this address,” “refused by current resident,” “concerned about security/confidentiality.”
9 Blank return	SCS	No reason given.
10 PND	SCS	Postal non-deliverable or original non-locatable.
11 Nonrespondent	Remainder	Remainder

This order is critical to resolving case dispositions. For example, suppose a sample person refused the survey with the reason that it was too long; in the absence of any other

information the disposition would be “eligible nonrespondent.” If a proxy report also indicated that this person had been hospitalized and was unable to complete the survey, the disposition would be “ineligible.” Final case dispositions for the 2010 PEV5 are shown in Table 5. The total number of eligible complete responses by service and location is given in Table 6.

**Table 5.**  
*Sample Case Disposition Counts*

<b>Case Disposition (Samp_DC)</b>	<b>Active Duty Members</b>	<b>Reserve Component Members</b>
1 Record ineligible	1,114	228
<b>Known Eligibility</b>		
2 Ineligible by self- or proxy-report	15	15
3 Ineligible by survey self-report	35	1,785
4 Eligible – complete response	5,613	2,933
5 Eligible – incomplete response	445	202
<b>Unknown Eligibility</b>		
6 Unknown eligibility, complete response	0	0
7 Unknown eligibility, incomplete response	0	0
8 Active refusal – refused, deployed, other	254	409
9 Blank return	400	331
10 PND – postal non-deliverable	6,747	2,450
11 Non-respondents	26,162	24,016
Total	40,815	32,429

**Table 6.**  
**Complete Eligible Respondents by Service and Location**

Service	U.S./U.S. Territories	Overseas	Total
Active Duty			
Army	1,355	557	1,912
Navy	1,016	313	1,329
Marine Corps	395	133	528
Air Force	1,042	529	1,571
Coast Guard	271	2	273
Total	4,079	1,534	5,613
Reserve Component			
Army National Guard	820	0	820
US Army Reserve	698	0	698
US Naval Reserve	387	3	390
US Marine Corps	364	0	364
Air National Guard	386	2	388
US Air Force Reserve	252	4	256
US Coast Guard Reserve	17	0	17
Total	2,924	9	2,933

### **Nonresponse Adjustments and Poststratification**

After case dispositions were resolved, the sampling weights were adjusted for nonresponse. First, the sampling weights for cases of known eligibility (Samp\_DC = 2, 3, 4, or 5) were adjusted to account for cases of unknown eligibility (Samp\_DC = 8, 9, 10, or 11). Next, the eligibility-adjusted weights for eligible respondents (Samp\_DC = 4) were adjusted to account for eligible sample members who had not returned a completed survey (Samp\_DC = 5). Record ineligible (Samp\_DC = 1; sample members determined to be ineligible by the DEERS PITE match before survey administration) were excluded from nonresponse adjustments.

Weighting adjustment factors for eligibility and completion were computed as the inverse of model-predicted probabilities. First, a logistic regression model was used to predict the probability of eligibility for the survey (known eligibility versus unknown eligibility). A second logistic regression model was used to predict the probability of response among eligible sample members (complete response versus incomplete). Chi-squared Automatic Interaction Detector (CHAID) was used to determine the best predictors for each logistic model. Both logistic models were weighted. The first model was weighted by the sampling weight, and the second model was weighted by the eligibility-adjusted weight.

Finally, the weights were poststratified to match population totals and to reduce bias unaccounted for by the previous weighting adjustments. For active duty members,

poststratification cells were defined by the cross-classification of service branch, paygrade, age, region, race, and gender. Poststratification cells for Reserve component members were defined by the cross-classification of paygrade, age, region, race, and gender. Within each poststratification cell, the nonresponse-adjusted weights for eligible respondents (Samp\_DC = 4) were adjusted to match population counts. Final weights for Record ineligible (Samp\_DC = 1) and self-reported ineligible (Samp\_DC = 2, 3) were set to zero. Distributions of the sampling weights, intermediate weights, final weights, and adjustment factors by eligibility status are shown in Table 7. The sum of weights by eligibility status is presented in Table 8.

**Table 7.**  
*Distribution of Weights and Adjustment Factors by Eligibility Status*

Eligibility Status	Statistic	Sampling Weight	Eligibility Status Adjusted Weight	Complete Eligible Response Adjusted Weight	Final Weight With Nonresponse and Poststratification Factors	Eligibility Status Factor	Complete Eligible Response Factor	Post-stratification Factor
<b>Active Duty Members</b>								
Eligible Respondents	N	5,613	5,613	5,613	5,613	5,613	5,613	5,613
	MIN	5.10	12.34	12.73	11.85	2.42	1.03	0.12
	MAX	1,207.89	7,583.26	8,097.78	7074.00	20.46	1.25	6.12
	MEAN	34.01	221.81	243.01	251.83	5.99	1.07	1.10
	STD	45.29	345.96	378.59	427.64	4.35	0.05	0.40
	CV	1.33	1.56	1.56	1.70	0.73	0.04	0.36
Self/Proxy Ineligibles	N	50	50	50	50	50	0	0
	MIN	5.73	13.91	13.91	0.00	2.42		
	MAX	119.43	824.50	824.50	0.00	14.71		
	MEAN	33.14	245.91	245.91	0.00	7.73		
	STD	26.44	220.45	220.45	0.00	4.67		
	CV	0.80	0.90	0.90	0.00	0.60		
Non-Respondents	N	34,008	34,008	34,008	34,008	34,008	445	0
	MIN	5.10	0.00	0.00	0.00	0.00	0.00	
	MAX	1,207.89	2,284.33	0.00	0.00	14.71	0.00	
	MEAN	34.56	3.46	0.00	0.00	0.10	0.00	
	STD	38.16	44.09	0.00	0.00	1.03	0.00	
	CV	1.10	12.76	0.00	0.00	10.31	0.00	
Record Ineligibles	N	1,144	1,144	1,144	1,144			
	MIN	5.10	5.10	5.10	0.00			
	MAX	884.25	884.25	884.25	0.00			
	MEAN	39.93	39.93	39.93	0.00			
	STD	40.35	40.35	40.35	0.00			
	CV	1.01	1.01	1.01	0.00			

**Table 7. (continued)**

<b>EligFlgW</b>	<b>Statistic</b>	<b>Sampling Weight</b>	<b>Eligibility Status Adjusted Weight</b>	<b>Complete Eligible Response Adjusted Weight</b>	<b>Final Weight With Nonresponse and Poststratification Factors</b>	<b>Eligibility Status Factor</b>	<b>Complete Eligible Response Factor</b>	<b>Post-stratification Factor</b>
<b>Reserve Component Members</b>								
Eligible Respondents	N	2,933	2,933	2,933	2,933	2,933	2,933	2,933
	MIN	1.03	3.27	3.37	3.40	2.42	1.03	0.42
	MAX	70.82	965.88	1,181.92	1357.84	20.46	1.25	32.40
	MEAN	9.08	35.62	37.94	51.83	4.75	1.06	1.80
	STD	11.17	49.57	53.95	69.65	3.70	0.04	1.41
	CV	1.23	1.39	1.42	1.34	0.78	0.03	0.78
Self/Proxy Ineligibles	N	1,800	1,800	1,800	1,800	1,800	0	0
	MIN	1.03	3.27	3.27	0.00	2.42		
	MAX	69.55	800.09	800.09	0.00	20.46		
	MEAN	3.46	17.79	17.79	0.00	5.83		
	STD	4.89	28.91	28.91	0.00	4.59		
	CV	1.41	1.62	1.62	0.00	0.79		
Non-Respondents	N	27,408	27,408	27,408	27,408	27,408	202	0
	MIN	1.03	0.00	0.00	0.00	0.00	0.00	
	MAX	91.25	639.27	0.00	0.00	20.46	0.00	
	MEAN	4.29	0.25	0.00	0.00	0.05	0.00	
	STD	7.22	5.85	0.00	0.00	0.73	0.00	
	CV	1.68	23.21	0.00	0.00	14.19	0.00	
Record ineligible	N	288	288	288	288			
	MIN	1.03	1.03	1.03	0.00			
	MAX	37.68	37.68	37.68	0.00			
	MEAN	5.78	5.78	5.78	0.00			
	STD	8.96	8.96	8.96	0.00			
	CV	1.55	1.55	1.55	0.00			

**Table 8.**  
***Sum of Weights by Eligibility Status***

Eligibility Category	Sum of Sampling weights	Sum of Eligibility Status Adjusted Weights	Sum of Complete Eligible Response Adjusted Weights	Sum of Final Weights With Nonresponse and Poststratification Adjustments
<b>Active Duty Members</b>				
Eligible Respondents	190,902	1,244,997	1,364,033	1,413,530
Self/Proxy Report Ineligible	1,657	12,295	12,295	0
Nonrespondents	1,175,296	117,500	0	0
Record Ineligible	45,675	45,675	45,675	0
Total	1,413,530	1,420,467	1,422,004	1,413,530
<b>Reserve Component Members</b>				
Eligible Respondents	26,617	104,475	111,275	152,011
Self/Proxy Report Ineligible	6,228	32,025	32,025	0
Nonrespondents	117,502	6,911	0	0
Record Ineligible	1,663	1,663	1,663	0
Total	152,011	145,074	144,963	152,011

### ***Variance Estimation***

Analysis of the 2010 PEV5 data requires a variance estimation procedure that accounts for the complex sample design. The final step of the weighting process was to define strata for variance estimation by Taylor series linearization. The 2010 PEV5 variance estimation strata correspond closely to the design strata; however, it was necessary to collapse some sampling strata containing fewer than 25 cases with nonzero final weights into similar strata. A total of 82 variance estimation strata (54 active and 28 Reserve) were defined for the 2010 PEV5.

### ***Location, Completion, and Response Rates***

Location, completion, and response rates were calculated in accordance with guidelines established by the Council of American Survey Research Organizations (CASRO). The procedure is based on recommendations for Sample Type II response rates (CASRO, 1982). This definition corresponds to The American Association for Public Opinion Research (AAPOR) RR3 (AAPOR, 2008), which estimates the proportion of eligibles among cases of unknown eligibility.

Location, completion, and response rates were computed for the 2010 PEV5 as follows:

The location rate (LR) is defined as

$$LR = \frac{\text{adjusted located sample}}{\text{adjusted eligible sample}} = \frac{N_L}{N_E}$$

The completion rate (CR) is defined as

$$CR = \frac{\text{usable responses}}{\text{adjusted located sample}} = \frac{N_R}{N_L}.$$

The response rate (RR) is defined as

$$RR = \frac{\text{usable responses}}{\text{adjusted eligible sample}} = \frac{N_R}{N_E}.$$

where;

- $N_L$  = Adjusted located sample
- $N_E$  = Adjusted eligible sample
- $N_R$  = Usable responses.

To identify the cases that contribute to the components of LR, CR, and RR, the disposition codes were grouped as shown in Table 9. Record ineligible were excluded from calculation of the eligibility rate.

**Table 9.**  
***Disposition Codes for CASRO Response Rates***

<b>Response Category</b>	<b>SAMP_DC Values</b>
Eligible Sample	4, 5, 8, 9, 10, 11
Located Sample	4, 5, 8, 9, 11
Eligible Response	4
No Return	11
Eligibility Determined	2, 3, 4, 5, 8, 9
Self-Reported Ineligible	2, 3

### ***Ineligibility Rate***

The ineligibility rate (IR) is defined as

$$IR = \frac{\text{self - reported ineligible cases}}{\text{eligible determined cases}}.$$

### **Estimated Ineligible Postal Non-Deliverable/Not Located Rate**

The estimated ineligible postal non-deliverable not located rate (IPNDR) is defined as

$$IPNDR = (\text{Eligible Sample} - \text{Located Sample}) * IR.$$

### **Estimated Ineligible Nonresponse**

The estimated ineligible nonresponse (EINR) is defined as

$$EINR = (\text{Not returned}) * IR.$$

### **Adjusted Location Rate**

The adjusted location rate (ALR) is defined as

$$ALR = \frac{(\text{Located Sample} - EINR)}{(\text{Eligible Sample} - IPNDR - EINR)}.$$

### **Adjusted Completion Rate**

The adjusted completion rate (ACR) is defined as

$$ACR = \frac{(\text{Eligible response})}{(\text{Located Sample} - EINR)}.$$

### **Adjusted Response Rate**

The adjusted response rate (ARR) is defined as

$$ARR = \frac{(\text{Eligible response})}{(\text{Eligible Sample} - IPNDR - EINR)}.$$

Unweighted and weighted sample counts used to compute the overall response rates are shown in Table 10; weighted rates were computed using the sampling weights. The final response rate is the product of the location rate and the completion rate. Both weighted and unweighted location, completion, and response rates for the 2010 PEV5 survey are shown in Table 11. The final sample counts, usable response counts, sums of weights, eligibility adjusted rates, weighted location, weighted completion, and weighted response rates are shown in Table 12.

**Table 10.**  
*Comparison of the Final Sample Relative to the Drawn Sample*

Case Disposition Categories	Active Duty				Reserve Components			
	Sample Counts		Weighted Estimates		Sample Counts		Weighted Estimates	
	n	%	n	%	n	%	n	%
Drawn sample and population	40,815		1,413,530		32,429		152,011	
Total: Ineligible	-1,144	2.80%	-45,675	3.23%	-288	0.89%	-1,663	1.09%
Ineligible on master files	-50	0.12%	-1,657	0.12%	-1,800	5.55%	-6,228	4.10%
Self-reported ineligible	-1,194	2.93%	-47,332	3.35%	-2,088	6.44%	-7,891	5.19%
Eligible sample	39,621	97.07%	1,366,198	96.65%	30,341	93.56%	144,120	94.81%
Total: Not located	-50	0.12%	-1,630	0.12%	-777	2.40%	-1410	0.93%
Not located (est. ineligible)	-6,697	16.41%	-224,688	15.90%	-1,673	5.16%	-7,221	4.75%
Not located (est. eligible)	-6,747	16.53%	-226,318	16.01%	-2,450	7.55%	-8,631	5.68%
Located sample	32,874	80.54%	1,139,880	80.64%	27,891	86.01%	135,489	89.13%
Total: Nonresponse	-254	0.62%	-8,177	0.58%	-409	1.26%	-2,049	1.35%
Requested removal from mailings	-400	0.98%	-14,274	1.01%	-331	1.02%	-2,000	1.32%
Returned blank	-445	1.09%	-15,017	1.06%	-202	0.62%	-1,234	0.81%
Skipped key questions	-193	0.47%	-6,567	0.46%	-7617	23.49%	-16,920	11.13%
Did not return survey (est. ineligible)	-25,969	63.63%	-904,943	64.02%	-16,399	50.57%	-86,668	57.01%
Did not return survey (est. eligible)	-27,261	66.79%	-948,978	67.14%	-24,958	76.96%	-108,872	71.62%
Usable responses from sample	5,613	13.75%	190,902	13.51%	2,933	9.04%	26,617	17.51%

*Note* The observed counts of the various response categories are somewhat skewed by the oversampling employed in the sample design.

Consequently, weighted counts are also provided because they are more representative of response propensity in the entire population.

<sup>a</sup> The categories labeled “Not located ” and “Did not return a survey ” have been broken down into additional subcategories labeled “(estimated ineligible)” and “(estimated eligible).” The ineligible counts are based on an ineligible rate = Self-report ineligible/(Eligible Respondents + Unusable responses + Self-reported ineligibles). Unusable responses include sample members who requested removal, returned blank surveys, or skipped key questions. The eligible counts are the complement of the ineligible count.

**Table 11.**  
*Eligible Sample Location Rates, Response Rates, and Completion Rates*

Type of Rate	Computation	Active Duty		Reserve Components	
		Observed Rates	Weighted Rates	Observed Rates	Weighted Rates
Location	Adjusted located sample/Adjusted eligible sample	83.0%	83.5%	92.4%	94.3%
Completion	Usable responses/Adjusted located sample	17.2%	16.8%	14.5%	22.4%
Response	Usable responses/Adjusted eligible sample	14.3%	14.1%	13.4%	21.2%

**Table 12.**  
*Rates for Full Sample and Stratification Level*

Domain	Label	Sample	Usable Responses	Sum of Weights	Eligible Adjusted Responses	Location Rate	Completion Rate	Response Rate
<b>Active Duty Members</b>								
Sample	Sample	40,815	5,613	1,413,530	14.077 ± 0.553	83.5%	16.8%	14.1%
Service	Army	17,039	1,912	541,718	9.803 ± 0.556	78.6%	12.4%	9.8%
	Navy	8,671	1,329	312,014	15.393 ± 1.226	83.1%	18.5%	15.4%
	Marine Corps	5,704	528	191,455	12.103 ± 1.692	81.4%	14.8%	12.1%
	Air Force	8,404	1,571	326,736	19.290 ± 1.549	91.6%	21.0%	19.3%
	Coast Guard	997	273	41,607	27.557 ± 2.814	94.1%	29.3%	27.5%
Pay Group	E1-E4	14,993	726	606,776	6.477 ± 0.919	73.1%	8.8%	6.5%
	E5-E9	17,882	2,647	566,054	16.414 ± 0.703	90.4%	18.1%	16.4%
	W1-W5	1,155	262	20,820	25.585 ± 3.147	93.7%	27.3%	25.6%
	O1-O3	2,015	408	132,133	22.695 ± 2.562	90.8%	24.9%	22.7%
	O4-O6	4,770	1,570	87,746	35.389 ± 1.712	96.2%	36.8%	35.4%
Gender	Male	35,722	4,849	1,211,230	13.831 ± 0.598	83.0%	16.6%	13.8%
	Female	5,093	764	202,300	15.569 ± 1.464	86.0%	18.1%	15.6%
Race/ Ethnicity	Nonminority	26,157	3,816	947,039	14.851 ± 0.727	84.4%	17.6%	14.8%
	Minority	14,658	1,797	466,491	12.506 ± 0.791	81.5%	15.3%	12.5%
Region	U.S. & U.S. territories	30,841	4,079	1,255,113	14.253 ± 0.608	83.4%	17.1%	14.2%
	Overseas	9,974	1,534	158,417	12.691 ± 1.081	83.8%	15.1%	12.7%
Age	18-24	14,827	795	537,828	6.082 ± 0.421	72.5%	8.4%	6.1%
	25+	25,988	4,818	875,702	18.958 ± 0.853	90.2%	21.0%	18.9%

**Table 12. (continued)**

Domain	Label	Sample	Usable Responses	Sum of Weights	Eligible Adjusted Responses	Location Rate	Completion Rate	Response Rate
<b>Reserve Component Members</b>								
Sample	Sample	32,429	2,933	152,011	21.846 ± 0.875	94.3%	22.4%	21.2%
Region	U.S. & U.S. territories	32,360	2,924	151,845	21.845 ± 0.876	94.3%	22.4%	21.2%
	Overseas	69	9	166	22.727 ± 7.732	84.8%	25.7%	21.8%
Organization	Army National Guard	11,943	820	68,213	19.999 ± 1.432	93.9%	20.9%	19.6%
	US Army Reserve	7,655	698	41,134	22.163 ± 1.739	93.5%	23.1%	21.6%
	US Naval Reserve	2,648	390	4,233	22.064 ± 1.064	80.6%	26.3%	21.2%
	US Marine Corps Reserve	4,242	364	5,813	12.509 ± 0.645	94.8%	12.3%	11.7%
	Air National Guard	2,905	388	22,528	28.817 ± 2.344	98.1%	28.2%	27.7%
	US Air Force Reserve	2,949	256	9,432	22.363 ± 1.339	96.6%	19.9%	19.3%
	Coast Guard Reserve	87	17	658	28.287 ± 10.758	97.5%	28.4%	27.7%
	Age	18-24	10,301	221	22,239	4.353 ± 0.332	90.6%	3.8%
	25+	22,128	2,712	129,772	24.863 ± 1.025	94.9%	25.5%	24.2%
Pay Group	E1-E4	12,195	240	31,470	5.011 ± 0.830	90.5%	4.3%	3.9%
	E5-E9	14,508	1,579	89,363	24.252 ± 1.231	95.2%	24.8%	23.6%
	W1-W5	483	104	3,493	32.935 ± 6.618	97.5%	33.1%	32.3%
	O1-O3	2,032	241	10,066	23.925 ± 4.347	93.8%	24.6%	23.0%
	O4-O6	3,211	769	17,620	36.554 ± 2.839	95.6%	37.5%	35.9%
Race /Ethnicity	Non-minority	24,494	2,290	114,975	22.788 ± 1.029	95.3%	23.2%	22.1%
	Minority	7,935	643	37,036	18.927 ± 1.644	91.2%	20.1%	18.3%
Gender	Male	28,211	2,526	128,047	21.705 ± 0.944	94.2%	22.3%	21.0%
	Female	4,218	407	23,964	22.606 ± 2.327	94.4%	23.3%	22.0%

## References

- American Association for Public Opinion Research. (2008). *Standard definitions: Final dispositions of case codes and outcome rates for surveys*. Ann Arbor, MI: Author.
- Chromy, J. R. (1987). Design optimization with multiple objectives. In *Proceedings of the Section on Survey Research Methods, presented at the annual meeting of the American Statistical Association, San Francisco, CA, August 17-20, 1987* (pp. 194-199). Alexandria, VA: The Association.
- Council of American Survey Research Organizations. (1982). *On the definition of response rates: A special report of the CASRO Task Force on Completion Rates*, (Lester R Frankel, Chair). Port Jefferson, NY: Author.
- Dever, J. A., and Mason, R. E. (2003). *DMDC sample planning tool: Version 2.1*. Arlington, VA: DMDC.
- DMDC. (2009). *November 2008 Post-Election Voting Survey of Uniformed Service Members: Tabulations of responses* (Report No. 2009-044). Arlington, VA: Author.
- DMDC. (2009) *November 2008 Post-Election Voting Survey of Uniformed Service Members: Administration, datasets, and codebook* (Report No. 2009-045). Arlington, VA: Author.
- Mason, R. E., Wheelless, S. C., George, B. J., Dever, J. A., Riemer, R. A., and Elig, T. W. (1995). Sample allocation for the Status of the Armed Forces Surveys. In *Proceedings of the Section on Survey Research Methods, Volume II, American Statistical Association* (pp. 769–774). Alexandria, VA: The Association.



**Appendix A.  
Sample Allocation**



**Table A1.**  
*Sample Allocation by Strata*

Stratum Size	Allocation	Sample Size	Percent Sampled	Label
66715	214	1705	2.555647	001 US+TER_Army_E1-E4_18-24YO_Male__Non
27089	84	754	2.783418	002 US+TER_Army_E1-E4_18-24YO_Male__Min
8158	29	192	2.353518	003 US+TER_Army_E1-E4_18-24YO_Female_Non
8319	29	216	2.596466	004 US+TER_Army_E1-E4_18-24YO_Female_Min
32704	50	273	0.83476	005 US+TER_Army_E1-E4_25++ YO_Male__Non
15371	25	176	1.145013	006 US+TER_Army_E1-E4_25++ YO_Male__Min
3907	8	37	0.947018	007 US+TER_Army_E1-E4_25++ YO_Female_Non
4374	7	37	0.845908	008 US+TER_Army_E1-E4_25++ YO_Female_Min
8127	38	157	1.931832	009 US+TER_Army_E5-E9_18-24YO_Male__Non
3145	14	66	2.098569	010 US+TER_Army_E5-E9_18-24YO_Male__Min
811	4	15	1.849568	011 US+TER_Army_E5-E9_18-24YO_Female_Non
968	5	21	2.169421	012 US+TER_Army_E5-E9_18-24YO_Female_Min
70616	455	1298	1.83811	013 US+TER_Army_E5-E9_25++ YO_Male__Non
44045	313	1008	2.288568	014 US+TER_Army_E5-E9_25++ YO_Male__Min
5365	40	103	1.919851	015 US+TER_Army_E5-E9_25++ YO_Female_Non
10570	80	231	2.185431	016 US+TER_Army_E5-E9_25++ YO_Female_Min
172	2	5	2.906977	017 US+TER_Army_W1-W5_18-24YO_AllGen_All
6852	95	189	2.758319	018 US+TER_Army_W1-W5_25++ YO_Male__Non
2326	32	71	3.052451	019 US+TER_Army_W1-W5_25++ YO_Male__Min
409	7	13	3.178484	020 US+TER_Army_W1-W5_25++ YO_Female_Non
557	8	16	2.872531	021 US+TER_Army_W1-W5_25++ YO_Female_Min
4290	22	71	1.655012	022 US+TER_Army_O1-O3_18-24YO_Male__Non
853	5	18	2.110199	023 US+TER_Army_O1-O3_18-24YO_Male__Min
868	5	14	1.612903	024 US+TER_Army_O1-O3_18-24YO_Female_Non
314	2	7	2.229299	025 US+TER_Army_O1-O3_18-24YO_Female_Min
17317	73	158	0.912398	026 US+TER_Army_O1-O3_25++ YO_Male__Non
5189	21	54	1.040663	027 US+TER_Army_O1-O3_25++ YO_Male__Min
3623	21	44	1.214463	028 US+TER_Army_O1-O3_25++ YO_Female_Non
2393	12	28	1.170079	029 US+TER_Army_O1-O3_25++ YO_Female_Min
16480	312	514	3.118932	030 US+TER_Army_O4-O6_25++ YO_Male__Non

**Table A1. (continued)**

<b>Stratum Size</b>	<b>Allocation</b>	<b>Sample Size</b>	<b>Percent Sampled</b>	<b>Label</b>
3729	64	128	3.432556	031 US+TER_Army_O4-O6_25++ YO_Male__Min
2145	42	71	3.310023	032 US+TER_Army_O4-O6_25++ YO_Female_Non
1211	22	40	3.303055	033 US+TER_Army_O4-O6_25++ YO_Female_Min
31969	141	865	2.705746	034 US+TER_Navy_E1-E4_18-24YO_Male__Non
30786	130	900	2.923407	035 US+TER_Navy_E1-E4_18-24YO_Male__Min
6006	29	159	2.647353	036 US+TER_Navy_E1-E4_18-24YO_Female_Non
9350	42	261	2.791444	037 US+TER_Navy_E1-E4_18-24YO_Female_Min
8452	5	22	0.260293	038 US+TER_Navy_E1-E4_25++ YO_Male__Non
9542	8	41	0.429679	039 US+TER_Navy_E1-E4_25++ YO_Male__Min
1443	2	8	0.554401	040 US+TER_Navy_E1-E4_25++ YO_Female_Non
2547	3	13	0.510404	041 US+TER_Navy_E1-E4_25++ YO_Female_Min
6759	41	142	2.100903	042 US+TER_Navy_E5-E9_18-24YO_Male__Non
4664	28	108	2.315609	043 US+TER_Navy_E5-E9_18-24YO_Male__Min
928	6	18	1.939655	044 US+TER_Navy_E5-E9_18-24YO_Female_Non
1130	7	24	2.123894	045 US+TER_Navy_E5-E9_18-24YO_Female_Min
51938	335	800	1.540298	046 US+TER_Navy_E5-E9_25++ YO_Male__Non
35579	223	597	1.677956	047 US+TER_Navy_E5-E9_25++ YO_Male__Min
5200	36	78	1.5	048 US+TER_Navy_E5-E9_25++ YO_Female_Non
7564	42	101	1.335272	049 US+TER_Navy_E5-E9_25++ YO_Female_Min
1323	30	53	4.006047	050 US+TER_Navy_W1-W5_25++ YO_AllGen_All
3011	20	54	1.793424	051 US+TER_Navy_O1-O3_18-24YO_Male__Non
612	4	12	1.960784	052 US+TER_Navy_O1-O3_18-24YO_Male__Min
824	6	15	1.820388	053 US+TER_Navy_O1-O3_18-24YO_Female_Non
192	2	5	2.604167	054 US+TER_Navy_O1-O3_18-24YO_Female_Min
13560	66	125	0.921829	055 US+TER_Navy_O1-O3_25++ YO_Male__Non
3661	19	53	1.447692	056 US+TER_Navy_O1-O3_25++ YO_Male__Min
2450	11	20	0.816327	057 US+TER_Navy_O1-O3_25++ YO_Female_Non
1132	7	14	1.236749	058 US+TER_Navy_O1-O3_25++ YO_Female_Min
12171	246	393	3.228987	059 US+TER_Navy_O4-O6_25++ YO_Male__Non
2261	42	73	3.22866	060 US+TER_Navy_O4-O6_25++ YO_Male__Min
1654	36	54	3.264812	061 US+TER_Navy_O4-O6_25++ YO_Female_Non
521	11	18	3.454895	062 US+TER_Navy_O4-O6_25++ YO_Female_Min

**Table A1. (continued)**

Stratum Size	Allocation	Sample Size	Percent Sampled	Label
55634	259	2017	3.625481	063 US+TER_USMC_E1-E4_18-24YO_Male__Non
16200	76	600	3.703704	064 US+TER_USMC_E1-E4_18-24YO_Male__Min
3818	20	126	3.300157	065 US+TER_USMC_E1-E4_18-24YO_Female_Non
2010	10	71	3.532338	066 US+TER_USMC_E1-E4_18-24YO_Female_Min
7074	3	15	0.212044	067 US+TER_USMC_E1-E4_25++ YO_Male__Non
2375	2	11	0.463158	068 US+TER_USMC_E1-E4_25++ YO_Male__Min
412	2	9	2.184466	069 US+TER_USMC_E1-E4_25++ YO_Female_Non
208	2	10	4.807693	070 US+TER_USMC_E1-E4_25++ YO_Female_Min
5825	40	157	2.695279	071 US+TER_USMC_E5-E9_18-24YO_Male__Non
2069	14	62	2.996617	072 US+TER_USMC_E5-E9_18-24YO_Male__Min
400	3	10	2.5	073 US+TER_USMC_E5-E9_18-24YO_Female_Non
304	3	12	3.947368	074 US+TER_USMC_E5-E9_18-24YO_Female_Min
23632	105	286	1.210223	075 US+TER_USMC_E5-E9_25++ YO_Male__Non
12892	64	197	1.528079	076 US+TER_USMC_E5-E9_25++ YO_Male__Min
1182	5	12	1.015228	077 US+TER_USMC_E5-E9_25++ YO_Female_Non
1198	5	14	1.168614	078 US+TER_USMC_E5-E9_25++ YO_Female_Min
1604	21	41	2.55611	079 US+TER_USMC_W1-W5_25++ YO_AllGen_All
1806	14	43	2.380952	080 US+TER_USMC_O1-O3_18-24YO_Male__Non
207	2	7	3.381643	081 US+TER_USMC_O1-O3_18-24YO_Male__Min
204	2	6	2.941176	082 US+TER_USMC_O1-O3_18-24YO_Female_All
6428	11	24	0.373367	083 US+TER_USMC_O1-O3_25++ YO_Male__Non
1249	3	7	0.560448	084 US+TER_USMC_O1-O3_25++ YO_Male__Min
561	2	4	0.713012	085 US+TER_USMC_O1-O3_25++ YO_Female_All
4143	62	109	2.630944	086 US+TER_USMC_O4-O6_25++ YO_Male__Non
750	10	19	2.533333	087 US+TER_USMC_O4-O6_25++ YO_Male__Min
183	3	5	2.73224	088 US+TER_USMC_O4-O6_25++ YO_Female_All
44232	237	926	2.093507	089 US+TER_USAF_E1-E4_18-24YO_Male__Non
13331	68	302	2.265396	090 US+TER_USAF_E1-E4_18-24YO_Male__Min
10022	52	227	2.265017	091 US+TER_USAF_E1-E4_18-24YO_Female_Non
5358	26	129	2.407615	092 US+TER_USAF_E1-E4_18-24YO_Female_Min
10871	5	17	0.156379	093 US+TER_USAF_E1-E4_25++ YO_Male__Non
3451	4	15	0.434657	094 US+TER_USAF_E1-E4_25++ YO_Male__Min

**Table A1. (continued)**

<b>Stratum Size</b>	<b>Allocation</b>	<b>Sample Size</b>	<b>Percent Sampled</b>	<b>Label</b>
2181	2	6	0.275103	095 US+TER_USAF_E1-E4_25++ YO_Female_Non
1195	2	7	0.585774	096 US+TER_USAF_E1-E4_25++ YO_Female_Min
3499	24	65	1.857674	097 US+TER_USAF_E5-E9_18-24YO_Male__Non
849	6	18	2.120141	098 US+TER_USAF_E5-E9_18-24YO_Male__Min
790	6	15	1.898734	099 US+TER_USAF_E5-E9_18-24YO_Female_Non
419	3	8	1.909308	100 US+TER_USAF_E5-E9_18-24YO_Female_Min
61090	484	957	1.566541	101 US+TER_USAF_E5-E9_25++ YO_Male__Non
20877	168	368	1.762705	102 US+TER_USAF_E5-E9_25++ YO_Male__Min
11356	73	133	1.171187	103 US+TER_USAF_E5-E9_25++ YO_Female_Non
8546	58	116	1.35736	104 US+TER_USAF_E5-E9_25++ YO_Female_Min
4078	29	64	1.569397	105 US+TER_USAF_O1-O3_18-24YO_Male__Non
588	4	10	1.70068	106 US+TER_USAF_O1-O3_18-24YO_Male__Min
1025	8	16	1.560976	107 US+TER_USAF_O1-O3_18-24YO_Female_Non
258	2	4	1.550388	108 US+TER_USAF_O1-O3_18-24YO_Female_Min
17235	55	98	0.56861	109 US+TER_USAF_O1-O3_25++ YO_Male__Non
2686	14	25	0.930752	110 US+TER_USAF_O1-O3_25++ YO_Male__Min
4241	25	39	0.919594	111 US+TER_USAF_O1-O3_25++ YO_Female_Non
1144	9	15	1.311189	112 US+TER_USAF_O1-O3_25++ YO_Female_Min
17170	325	468	2.725684	113 US+TER_USAF_O4-O6_25++ YO_Male__Non
2219	40	60	2.703921	114 US+TER_USAF_O4-O6_25++ YO_Male__Min
2667	56	75	2.812149	115 US+TER_USAF_O4-O6_25++ YO_Female_Non
773	16	23	2.97542	116 US+TER_USAF_O4-O6_25++ YO_Female_Min
5241	38	140	2.671246	117 US+TER_USCG_E1-E4_18-24YO_Male__Non
2286	16	67	2.930884	118 US+TER_USCG_E1-E4_18-24YO_Male__Min
1119	9	30	2.680965	119 US+TER_USCG_E1-E4_18-24YO_Female_Non
416	4	15	3.605769	120 US+TER_USCG_E1-E4_18-24YO_Female_Min
2633	23	59	2.24079	121 US+TER_USCG_E1-E4_25++ YO_Male__Non
1372	12	35	2.55102	122 US+TER_USCG_E1-E4_25++ YO_Male__Min
475	5	12	2.526316	123 US+TER_USCG_E1-E4_25++ YO_Female_Non
207	2	5	2.415459	124 US+TER_USCG_E1-E4_25++ YO_Female_Min
794	8	17	2.141058	125 US+TER_USCG_E5-E9_18-24YO_Male__Non
279	3	7	2.50896	126 US+TER_USCG_E5-E9_18-24YO_Male__Min

**Table A1. (continued)**

Stratum Size	Allocation	Sample Size	Percent Sampled	Label
222	3	6	2.702703	127 US+TER_USCG_E5-E9_18-24YO_Female_All
12614	193	313	2.48137	128 US+TER_USCG_E5-E9_25++ YO_Male__Non
3589	52	92	2.563388	129 US+TER_USCG_E5-E9_25++ YO_Male__Min
1245	19	29	2.329317	130 US+TER_USCG_E5-E9_25++ YO_Female_Non
471	8	13	2.760085	131 US+TER_USCG_E5-E9_25++ YO_Female_Min
1700	49	64	3.764706	132 US+TER_USCG_W1-W5_25++ YO_AllGen_All
512	6	11	2.148438	133 US+TER_USCG_O1-O3_18-24YO_Male__All
211	3	5	2.369668	134 US+TER_USCG_O1-O3_18-24YO_Female_All
2172	31	44	2.025783	135 US+TER_USCG_O1-O3_25++ YO_Male__Non
507	7	11	2.169625	136 US+TER_USCG_O1-O3_25++ YO_Male__Min
691	9	12	1.736614	137 US+TER_USCG_O1-O3_25++ YO_Female_All
1888	48	60	3.177966	138 US+TER_USCG_O4-O6_25++ YO_Male__Non
330	8	10	3.030303	139 US+TER_USCG_O4-O6_25++ YO_Male__Min
299	7	8	2.675585	140 US+TER_USCG_O4-O6_25++ YO_Female_All
33508	101	793	2.366599	141 OVRs__Army_E1-E4_18-24YO_Male__NonM
13205	40	333	2.521772	142 OVRs__Army_E1-E4_18-24YO_Male__Min_
2750	9	60	2.181818	143 OVRs__Army_E1-E4_18-24YO_Female_NonM
3100	10	75	2.419355	144 OVRs__Army_E1-E4_18-24YO_Female_Min_
15469	121	634	4.09852	145 OVRs__Army_E1-E4_25++ YO_Male__NonM
7431	60	356	4.790741	146 OVRs__Army_E1-E4_25++ YO_Male__Min_
1276	8	37	2.899687	147 OVRs__Army_E1-E4_25++ YO_Female_NonM
1532	14	74	4.830287	148 OVRs__Army_E1-E4_25++ YO_Female_Min_
4902	21	88	1.795186	149 OVRs__Army_E5-E9_18-24YO_Male__NonM
1861	8	38	2.041913	150 OVRs__Army_E5-E9_18-24YO_Male__Min_
774	4	16	2.067183	151 OVRs__Army_E5-E9_18-24YO_Female_All_
28123	872	2519	8.957082	152 OVRs__Army_E5-E9_25++ YO_Male__NonM
18753	654	2134	11.37951	153 OVRs__Army_E5-E9_25++ YO_Male__Min_
1693	64	166	9.805079	154 OVRs__Army_E5-E9_25++ YO_Female_NonM
3694	148	432	11.69464	155 OVRs__Army_E5-E9_25++ YO_Female_Min_
3590	215	434	12.08914	156 OVRs__Army_W1-W5_AllAge_AllGen__NonM
1264	79	176	13.92405	157 OVRs__Army_W1-W5_AllAge_Male__Min_
242	15	30	12.39669	158 OVRs__Army_W1-W5_25++ YO_Female_All_

**Table A1. (continued)**

Stratum Size	Allocation	Sample Size	Percent Sampled	Label
1845	9	30	1.626016	159 OVRs__Army_O1-O3_18-24YO_AllGen_All_
6648	123	285	4.287004	160 OVRs__Army_O1-O3_25++ YO_Male__NonM
2154	44	114	5.292479	161 OVRs__Army_O1-O3_25++ YO_Male__Min_
1070	26	55	5.140187	162 OVRs__Army_O1-O3_25++ YO_Female_NonM
699	20	47	6.723891	163 OVRs__Army_O1-O3_25++ YO_Female_Min_
5128	482	885	17.25819	164 OVRs__Army_O4-O6_25++ YO_Male__NonM
1192	105	212	17.78523	165 OVRs__Army_O4-O6_25++ YO_Male__Min_
803	82	143	17.80822	166 OVRs__Army_O4-O6_25++ YO_Female_All_
6294	61	379	6.021608	167 OVRs__Navy_E1-E4_18-24YO_Male__NonM
6969	63	441	6.328024	168 OVRs__Navy_E1-E4_18-24YO_Male__Min_
1000	11	61	6.1	169 OVRs__Navy_E1-E4_18-24YO_Female_NonM
1915	19	119	6.214099	170 OVRs__Navy_E1-E4_18-24YO_Female_Min_
1699	6	26	1.530312	171 OVRs__Navy_E1-E4_25++ YO_Male__NonM
2071	6	29	1.40029	172 OVRs__Navy_E1-E4_25++ YO_Male__Min_
734	2	8	1.089918	173 OVRs__Navy_E1-E4_25++ YO_Female_All_
1670	23	79	4.730539	174 OVRs__Navy_E5-E9_18-24YO_Male__NonM
1224	16	62	5.06536	175 OVRs__Navy_E5-E9_18-24YO_Male__Min_
485	7	21	4.329897	176 OVRs__Navy_E5-E9_18-24YO_Female_All_
10565	368	890	8.424042	177 OVRs__Navy_E5-E9_25++ YO_Male__NonM
9137	328	889	9.729671	178 OVRs__Navy_E5-E9_25++ YO_Male__Min_
899	38	83	9.232481	179 OVRs__Navy_E5-E9_25++ YO_Female_NonM
1617	53	129	7.977736	180 OVRs__Navy_E5-E9_25++ YO_Female_Min_
316	37	65	20.56962	181 OVRs__Navy_W1-W5_25++ YO_AllGen_All_
369	6	17	4.607046	182 OVRs__Navy_O1-O3_18-24YO_AllGen_All_
2843	74	146	5.13542	183 OVRs__Navy_O1-O3_25++ YO_Male__NonM
849	25	55	6.478209	184 OVRs__Navy_O1-O3_25++ YO_Male__Min_
693	21	39	5.627706	185 OVRs__Navy_O1-O3_25++ YO_Female_All_
2511	254	409	16.28833	186 OVRs__Navy_O4-O6_25++ YO_Male__NonM
569	47	103	18.10193	187 OVRs__Navy_O4-O6_25++ YO_Male__Min_
356	39	63	17.69663	188 OVRs__Navy_O4-O6_25++ YO_Female_All_
15004	123	876	5.838443	189 OVRs__USMC_E1-E4_18-24YO_Male__NonM
4946	39	311	6.28791	190 OVRs__USMC_E1-E4_18-24YO_Male__Min_

**Table A1. (continued)**

<b>Stratum Size</b>	<b>Allocation</b>	<b>Sample Size</b>	<b>Percent Sampled</b>	<b>Label</b>
681	6	38	5.580029	191 OVRS__USMC_E1-E4_18-24YO_Female_NonM
442	4	29	6.561086	192 OVRS__USMC_E1-E4_18-24YO_Female_Min_
2544	2	10	0.393082	193 OVRS__USMC_E1-E4_25++ YO_AllGen_All_
1560	18	71	4.551282	194 OVRS__USMC_E5-E9_18-24YO_AllGen_NonM
598	7	32	5.351171	195 OVRS__USMC_E5-E9_18-24YO_AllGen_Min_
5318	122	336	6.318165	196 OVRS__USMC_E5-E9_25++ YO_Male___NonM
3450	74	230	6.666667	197 OVRS__USMC_E5-E9_25++ YO_Male___Min_
443	9	25	5.643341	198 OVRS__USMC_E5-E9_25++ YO_Female_All_
445	23	46	10.33708	199 OVRS__USMC_W1-W5_25++ YO_AllGen_All_
2398	18	42	1.75146	200 OVRS__USMC_O1-O3_AllAge_AllGen_All_
1258	97	175	13.91097	201 OVRS__USMC_O4-O6_25++ YO_AllGen_All_
11864	106	525	4.425152	202 OVRS__USAF_E1-E4_18-24YO_Male___NonM
4128	35	197	4.772287	203 OVRS__USAF_E1-E4_18-24YO_Male___Min_
2265	22	97	4.282561	204 OVRS__USAF_E1-E4_18-24YO_Female_NonM
1294	12	60	4.636785	205 OVRS__USAF_E1-E4_18-24YO_Female_Min_
3525	3	10	0.283688	206 OVRS__USAF_E1-E4_25++ YO_Male___NonM
1377	2	8	0.580973	207 OVRS__USAF_E1-E4_25++ YO_Male___Min_
538	2	6	1.115242	208 OVRS__USAF_E1-E4_25++ YO_Female_NonM
322	2	7	2.173913	209 OVRS__USAF_E1-E4_25++ YO_Female_Min_
1367	17	47	3.438186	210 OVRS__USAF_E5-E9_18-24YO_Male___NonM
460	6	19	4.130435	211 OVRS__USAF_E5-E9_18-24YO_Male___Min_
427	6	16	3.747073	212 OVRS__USAF_E5-E9_18-24YO_Female_All_
20229	746	1490	7.365663	213 OVRS__USAF_E5-E9_25++ YO_Male___NonM
9085	331	733	8.068244	214 OVRS__USAF_E5-E9_25++ YO_Male___Min_
3138	103	189	6.022944	215 OVRS__USAF_E5-E9_25++ YO_Female_NonM
2829	88	177	6.256628	216 OVRS__USAF_E5-E9_25++ YO_Female_Min_
383	6	13	3.394256	217 OVRS__USAF_O1-O3_18-24YO_AllGen_All_
4093	87	146	3.567066	218 OVRS__USAF_O1-O3_25++ YO_Male___NonM
709	21	38	5.359662	219 OVRS__USAF_O1-O3_25++ YO_Male___Min_
958	36	56	5.845511	220 OVRS__USAF_O1-O3_25++ YO_Female_NonM
310	14	24	7.741935	221 OVRS__USAF_O1-O3_25++ YO_Female_Min_
3952	401	568	14.37247	222 OVRS__USAF_O4-O6_25++ YO_Male___NonM

**Table A1. (continued)**

Stratum Size	Allocation	Sample Size	Percent Sampled	Label
581	51	77	13.25301	223 OVRS__USAF_O4-O6_25++ YO_Male__Min_
751	85	114	15.17976	224 OVRS__USAF_O4-O6_25++ YO_Female_All_
334	26	36	10.77844	225 OVRS__ALLCoastGuard
3034	113	1122	36.98088	226 US+TER_ANG__E1-E4_18-24YO_Male__NonM
1011	34	413	40.85064	227 US+TER_ANG__E1-E4_18-24YO_AllGen_Min_
338	13	128	37.86982	228 US+TER_ANG__E1-E4_18-24YO_Female_NonM
2237	9	54	2.413947	229 US+TER_ANG__E1-E4_25++ YO_Male__NonM
942	5	42	4.458599	230 US+TER_ANG__E1-E4_25++ YO_Male__Min_
442	2	14	3.167421	231 US+TER_ANG__E1-E4_25++ YO_Female_All_
905	47	254	28.0663	232 US+TER_ANG__E5-E9_18-24YO_Male__All_
249	13	71	28.51406	233 US+TER_ANG__E5-E9_18-24YO_Female_All_
20105	259	681	3.387217	234 US+TER_ANG__E5-E9_25++ YO_Male__NonM
5281	66	235	4.449915	235 US+TER_ANG__E5-E9_25++ YO_Male__Min_
2704	33	87	3.217456	236 US+TER_ANG__E5-E9_25++ YO_Female_NonM
1577	19	67	4.248573	237 US+TER_ANG__E5-E9_25++ YO_Female_Min_
1568	39	76	4.846939	238 US+TER_ANG__W1-W5_All__Male__All_
288	6	13	4.513889	239 US+TER_ANG__W1-W5_All__Female_All_
61	4	20	32.78688	240 US+TER_ANG__O1-O3_18-24YO_AllGen_All
2295	14	39	1.699346	241 US+TER_ANG__O1-O3_25++ YO_Male__All_
365	2	6	1.643836	242 US+TER_ANG__O1-O3_25++ YO_Female_All_
3602	74	147	4.081066	243 US+TER_ANG__O4-O6_25++ YO_Male__All_
377	8	16	4.244032	244 US+TER_ANG__O4-O6_25++ YO_Female_All_
1454	125	1198	82.39339	245 US+TER_AR__E1-E4_18-24YO_Male__All_
427	38	337	78.92271	246 US+TER_AR__E1-E4_18-24YO_Female_All_
1204	5	29	2.408638	247 US+TER_AR__E1-E4_25++ YO_Male__All_
352	2	11	3.125	248 US+TER_AR__E1-E4_25++ YO_Female_All_
358	48	207	57.82123	249 US+TER_AR__E5-E9_18-24YO_Male__All_
141	17	88	62.41135	250 US+TER_AR__E5-E9_18-24YO_Female_All_
7337	122	262	3.570942	251 US+TER_AR__E5-E9_25++ YO_Male__NonM
9153	138	380	4.151644	252 US+TER_AR__E5-E9_25++ YO_AllGen_Min_
1229	21	45	3.661513	253 US+TER_AR__E5-E9_25++ YO_Female_NonM
647	17	32	4.945904	254 US+TER_AR__W1-W5_All__Male__All_

**Table A1. (continued)**

Stratum Size	Allocation	Sample Size	Percent Sampled	Label
131	4	7	5.343512	255 US+TER_AR__W1-W5_25++ YO_Female_All_
2535	77	186	7.337278	256 US+TER_AR__O1-O3_All__AllGen_All_
3634	91	151	4.155201	257 US+TER_AR__O4-O6_25++ YO_Male__All_
1004	26	45	4.482072	258 US+TER_AR__O4-O6_25++ YO_Female_All_
324	39	324	100	259 US+TER_NR__E1-E4_All__AllGen_All_
1046	213	779	74.47419	260 US+TER_NR__E5~W5_All__AllGen_All_
492	107	356	72.35773	261 US+TER_NR__O1-O3_All__AllGen_All_
1097	294	633	57.70283	262 US+TER_NR__O4-O6_25++ YO_Male__NonM
176	41	115	65.34091	263 US+TER_NR__O4-O6_25++ YO_Male__Min_
190	48	115	60.52632	264 US+TER_NR__O4-O6_25++ YO_Female_All_
1125	90	1125	100	265 US+TER_MCR__E1-E4_18-24YO_AllGen_All
377	33	377	100	266 US+TER_MCR__E1-E4_25++ YO_AllGen_All
138	14	138	100	267 US+TER_MCR__E5-E9_18-24YO_AllGen_All
1954	218	1568	80.24565	268 US+TER_MCR__E5-E9_25++ YO_Male__All_
205	24	166	80.97561	269 US+TER_MCR__E5-E9_25++ YO_Female_All_
228	30	169	74.12281	270 US+TER_MCR__W1~O3_All__AllGen_All_
555	90	310	55.85585	271 US+TER_MCR__O4-O6_25++ YO_AllGen_All_
619	22	215	34.73344	272 US+TER_AFNG_E1-E4_18-24YO_Male__All_
148	6	59	39.86486	273 US+TER_AFNG_E1-E4_18-24YO_Female_All_
552	6	37	6.702899	274 US+TER_AFNG_E1-E4_25++ YO_AllGen_All_
336	17	91	27.08333	275 US+TER_AFNG_E5-E9_18-24YO_AllGen_All_
8709	190	471	5.408198	276 US+TER_AFNG_E5-E9_25++ YO_Male__NonM
1709	32	106	6.202457	277 US+TER_AFNG_E5-E9_25++ YO_Male__Min_
2268	49	119	5.246913	278 US+TER_AFNG_E5-E9_25++ YO_Female_NonM
833	16	52	6.242497	279 US+TER_AFNG_E5-E9_25++ YO_Female_Min_
131	3	7	5.343512	280 US+TER_AFNG_O1-O3_All__Female_All_
697	11	28	4.017217	281 US+TER_AFNG_O1-O3_25++ YO_Male__All_
2177	62	110	5.052825	282 US+TER_AFNG_O4-O6_25++ YO_Male__All_
245	7	13	5.306122	283 US+TER_AFNG_O4-O6_25++ YO_Female_All_
343	18	209	60.93295	284 US+TER_AFR__E1-E4_18-24YO_AllGen_All
282	14	107	37.94326	285 US+TER_AFR__E1-E4_25++ YO_AllGen_All_
115	9	58	50.43478	286 US+TER_AFR__E5-E9_18-24YO_AllGen_All_

**Table A1. (continued)**

<b>Stratum Size</b>	<b>Allocation</b>	<b>Sample Size</b>	<b>Percent Sampled</b>	<b>Label</b>
3494	257	948	27.13223	287 US+TER_AFR__E5-E9_25++ YO_Male___All_
850	63	226	26.58824	288 US+TER_AFR__E5-E9_25++ YO_Female_All_
324	26	87	26.85185	289 US+TER_AFR__O1-O3_25++ YO_AllGen_All_
1197	115	261	21.80451	290 US+TER_AFR__O4-O6_25++ YO_Male___All_
199	20	43	21.60804	291 US+TER_AFR__O4-O6_25++ YO_Female_All_
145	4	46	31.72414	292 US+TER_CGR__E1-E4_All___AllGen_All_
350	11	31	8.857142	293 US+TER_CGR__E5-E9_All___AllGen_All_
79	2	5	6.329114	294 US+TER_CGR__W1~O6_All___AllGen_All_
41315	2595	17223	41.68704	295 All Overseas Reserves

**Appendix B.**  
**Allocation Solution for Reporting Domains**



**Table B1.**  
*Allocation Solution for Reporting Domains*

Domain	Label	Population Count	HWCI-In	Allocation	Estimated n	Percent Sampled	Design Effect
1	All Domains	1,565,541	0.05	20,700	68,859	4.87	3.5
2	DoD	1,523,203		20,084	67,782	4.92	3.5
3	Army	541,718	0.05	5,474	16,351	3.30	2.7
4	Navy	312,014	0.05	3,082	8,278	2.93	2.8
5	Marine Corps	191,455	0.05	1,285	5,650	3.18	2.3
6	Air Force	326,736	0.05	3,983	7,798	2.70	3.5
7	Enlisted	1,293,695		14,375	55,873	4.80	3.2
8	Officer	271,846		6,325	13,002	5.22	3.3
9	E1-E4/Unk Enlisted	639,119		4,222	26,843	4.54	2.9
10	E5-E9	654,576	0.05	10,152	28,953	5.05	2.3
11	W1-W5	24,368		743	1,520	7.14	1.9
12	O1-O3/Unk Officers	142,343		1,526	4,048	3.08	2.4
13	O4-O6	105,135		4,057	7,396	7.66	1.9
14	Male	1,339,488		17,756	59,760	4.93	3.6
15	Female	226,053		2,944	9,106	4.49	2.9
16	Non-minority	1,056,624		14,430	46,650	4.88	3.7
17	Minority	508,917		6,270	22,210	4.85	3.1
18	Black	250,170		3,226	11,034	4.92	4.4
19	Hispanic	157,601		1,915	7,331	5.16	4.8
20	All Other	101,487		1,136	3,865	4.22	4.9
21	No College	1,105,046		11,534	46,283	4.63	3.4
22	Some College	170,277		2,879	8,733	5.84	5.5
23	4-Year Degree	186,109		3,198	8,276	4.90	5.6
24	Grad/Prof Degree	104,109		3,066	5,535	5.80	4.6
25	Coast Guard	41,607	0.05	589	970	2.65	1.5
26	ARNG	69,579	0.05	2,154	11,321	18.31	2.4
27	USAR	41,160	0.05	1,457	6,861	18.94	2.2
28	USNR	4,149	0.05	794	2,300	64.24	2.1
29	USMCR	5,979	0.05	587	4,083	74.18	1.6
30	ANG	21,777	0.05	632	2,333	12.42	1.6
31	USAFR	8,636		637	2,161	31.30	1.6
32	USCGR	731		27	114	20.17	1.9
33	18-24 years old	560,789		4,147	24,918	4.80	1.8
34	25-29 years old	370,058		4,125	12,657	3.83	6.2
35	30-34 years old	233,685		3,515	9,379	4.52	5.4
36	35-44 years old	318,164		6,584	15,981	5.65	4.5
37	45 years or more	82,845		2,313	5,895	7.99	4.1

**Table B-1. (continued)**

Domain	Label	Population Count	HWCI-In	Allocation	Estimated n	Percent Sampled	Design Effect
38	US & US Territories	1,192,729		10,517	34,258	3.17	2.6
39	Overseas	372,812	0.05	10,183	34,470	10.29	3.9
40	18-24 years old*Army	191,811	0.05	657	4,364	2.44	1.2
41	18-24 years old*Navy	116,157	0.05	662	3,464	3.22	1.3
42	18-24 years old*Marine Corps	111,964	0.05	642	4,200	3.99	1.2
43	18-24 years old*Air Force	106,637	0.05	675	2,513	2.59	1.3
44	18-24 years old*Coast Guard	11,154	0.05	96	279	2.74	1.3
45	18-24 years old*ARNG	12,644	0.05	666	4,384	39.08	1.6
46	18-24 years old*USAR	5,819	0.05	443	2,866	55.88	1.9
47	18-24 years old*USNR	274		39	224	91.21	2.0
48	18-24 years old*USMCR	1,843	0.05	140	1,389	81.68	1.6
49	18-24 years old*ANG	1,728	0.05	84	552	36.18	1.5
50	18-24 years old*USAFR	636		38	286	53.65	1.6
51	18-24 years old*USCGR	122		5	28	28.47	2.7
52	Active Duty	1,413,530	0.05	14,413	39,002	3.05	2.9
53	Reserve/Guard Component	152,011		6,287	29,127	21.83	2.5
54	18-24 years old*Active Duty	537,723	0.05	2,732	14,805	2.97	1.3
55	18-24 years old*Reserve/Guard Component	23,066		1,415	9,708	47.47	1.7
56	US & US Territories*18-24 years old	421,280		2,578	15,782	4.04	1.6
57	US & US Territories*25-29 years old	277,507		1,703	4,819	1.94	4.1
58	US & US Territories*30-34 years old	178,446		1,584	3,904	2.46	3.9
59	US & US Territories*35-44 years old	248,529		3,320	7,179	3.25	3.5
60	US & US Territories*45 years or more	66,967		1,320	2,698	4.51	3.4
61	Overseas*18-24 years old	139,509	0.05	1,569	9,110	7.10	2.5
62	Overseas*25-29 years old	92,551	0.05	2,422	7,805	9.49	5.3
63	Overseas*30-34 years old	55,239	0.05	1,931	5,449	11.18	3.7
64	Overseas*35-44 years old	69,635	0.05	3,264	8,762	14.25	2.8

**Table B1. (continued)**

Domain	Label	Population Count	HWCI-In	Allocation	Estimated n	Percent Sampled	Design Effect
65	Overseas*45 years or more	15,878	0.05	993	3,171	22.66	2.6
66	US & US Territories*18-24 years old*Active Duty	410,066		1,907	10,208	2.68	1.2
67	US & US Territories*18-24 years old*Reserve/Guard Component	11,214		671	5,546	53.58	1.4
68	Overseas*18-24 years old*Active Duty	127,657		825	4,595	3.89	1.5
69	Overseas*18-24 years old*Reserve/Guard Component	11,852		744	4,210	41.69	1.9
70	US & US Territories*18-24 years old*Army	129,829		453	3,026	2.50	1.2
71	US & US Territories*18-24 years old*Navy	96,231		456	2,374	2.66	1.2
72	US & US Territories*18-24 years old*Marine Corps	88,477		443	2,923	3.52	1.1
73	US & US Territories*18-24 years old*Air Force	84,449		465	1,627	2.11	1.2
74	US & US Territories*18-24 years old*Coast Guard	11,080		90	271	2.69	1.2
75	US & US Territories*18-24 years old*ARNG	5,610		224	1,870	35.80	1.1
76	US & US Territories*18-24 years old*USAR	2,415		229	1,691	75.88	1.2
77	US & US Territories*18-24 years old*USNR	267		39	222	92.50	2.0
78	US & US Territories*18-24 years old*USMCR	1,265		104	1,208	99.96	1.2
79	US & US Territories*18-24 years old*ANG	1,104		45	329	33.07	1.2
80	US & US Territories*18-24 years old*USAFR	458		27	223	58.30	1.4
81	US & US Territories*18-24 years old*USCGR	95		3	19	24.72	2.4
82	Overseas*18-24 years old*Army	61,982		204	1,338	2.32	1.2
83	Overseas*18-24 years old*Navy	19,926		206	1,088	5.92	1.2
84	Overseas*18-24 years old*Marine Corps	23,487		199	1,276	5.80	1.1

**Table B1. (continued)**

<b>Domain</b>	<b>Label</b>	<b>Population Count</b>	<b>HWCI-In</b>	<b>Allocation</b>	<b>Estimated n</b>	<b>Percent Sampled</b>	<b>Design Effect</b>
85	Overseas*18-24 years old*Air Force	22,188		210	883	4.39	1.2
86	Overseas*18-24 years old*Coast Guard	74		6	7	10.78	2.0
87	Overseas*18-24 years old*ARNG	7,034		442	2,499	41.69	2.0
88	Overseas*18-24 years old*USAR	3,404		214	1,209	41.69	2.1
89	Overseas*18-24 years old*USNR	7		0	3	41.69	
90	Overseas*18-24 years old*USMCR	578		36	206	41.69	2.2
91	Overseas*18-24 years old*ANG	624		39	222	41.69	2.2
92	Overseas*18-24 years old*USAFR	178		11	63	41.69	2.2
93	Overseas*18-24 years old*USCGR	27		2	10	41.69	2.6

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