

Introduction

The *Uniformed and Overseas Citizens Absentee Voting Act of 1986 (UOCAVA)*, 42 USC 1973ff, covers the voting rights of absent uniformed services members (including the Coast Guard, the Commissioned Corps of the Public Health Service, and the National Oceanic and Atmospheric Administration), and the Merchant Marine, their dependents of voting age, and all other U.S. citizens residing outside the United States. *UOCAVA* requires the states and territories to allow these citizens to register and vote in elections for federal office using absentee voting procedures and provides the authority for the administration of federal voting assistance responsibilities. The Act covers more than 6 million citizens, including approximately 3.7 million overseas citizens not affiliated with the government, 1.4 million military service members, 1.3 million military dependents, and 45,000 federal employees overseas. Management of the program requires coordination with Executive Branch departments and agencies, the Congress, state and local governments, political parties, U.S. corporations, and national and international organizations.

The Secretary of Defense is the presidential designee for administration of the federal functions of the Act. The Director, Federal Voting Assistance Program (FVAP) carries out the program on behalf of the Secretary and is required by *UOCAVA* Sec 101(b)(1) to report on the following:

- Effectiveness of assistance provided by FVAP to military and overseas citizens
- Separate statistical analysis of uniformed services voter participation
- Separate statistical analysis of overseas nonmilitary voter participation
- Description of state-federal cooperation

In order to report on these topics, FVAP, in coordination with the Defense Manpower Data Center (DMDC), administered the 2008 Post-Election Survey. FVAP conducted post-election surveys of military members, federal civilian employees overseas, other U.S. citizens overseas, voting assistance personnel, and local election officials in the U.S. The report to the President and Congress analyzes the data collected in the Post-Election Survey. The information is used to gauge the absentee voting experience for local election officials and military and overseas citizens, and assists the Program in improving this experience.

Previous FVAP surveys have suffered from statistical and methodological flaws, as detailed in the Defense Manpower Data Center (DMDC) Survey Note 2009-020. The collection of quality data is essential for proper evaluation of the administration of the absentee voting process. To obtain reliable results, rigorous, peer-reviewed, statistically sound methodologies must be applied when collecting the *UOCAVA* voting data and preparing the summary information. FVAP believes the methodology used in the DMDC's Status of Forces Survey (SOFS), represents a well-respected, widely accepted

survey methodology and marks a substantial improvement used for FVAP's voting survey. The early release of this section of the final report is made to allow the *UOCAVA* voting community, other government agencies, and interested professionals review the survey's methodology in advance of the final survey analysis and report writing. It is FVAP's hope that this cycle of surveys will set a new benchmark for analyzing military voting participation.

To address the data quality issue, FVAP opted to work with DMDC to design and conduct surveys of the six *UOCAVA* populations and also to analyze the data produced. Due to the differences from the 2004 survey to the 2008 surveys, no direct comparisons can be made at this point between the results from the 2004 and 2008 surveys on military and overseas civilian voter participation. However, FVAP is working with DMDC and outside experts to determine how we may be able to revise the previous analysis of the 1996, 2000, and 2004 FVAP surveys to compensate for previous statistical and methodological errors. The hope is to sufficiently revise the previous analysis so that the data can be presented comparatively for trend analysis.

Methodology

The Federal Voting Assistance Program (FVAP) surveyed six *UOCAVA* populations in preparation for this report.¹ This section presents a breakdown of the methods used to sample the populations and conduct the surveys. The Defense Manpower Data Center (DMDC) used industry standards in developing and administering the six surveys. Each *UOCAVA* population received pre-notification letters and/or emails which also helped clean the frames;² notification letters and/or emails; and several follow up thank you/reminder letters. Research shows that the best way to improve response rate is to contact the respondent multiple times.³

The complete DMDC statistical methodology reports for each population can be found in the attached appendices and on the FVAP website (www.fvap.gov). Table 1 shows the mode of administration, approximate sample size, and response rate for the Active Duty Military, Unit Voting Assistance Officers (UVAOs), Federal civilians overseas, non-Federally employed citizens overseas, Department of State VAOs (DoS VAO), and Local Election Officials (LEO) surveys.

The response rates for many of these surveys are not much higher than the response rates for the 2004 Survey, which the General Accounting Office (GAO) criticized as being too low. Although historically response rates have been used as a

¹ The six populations include the following: Local Election Officials, Voting Assistance Officers (State and Military), Active Duty Military, and all Overseas Citizens (Federal employees and non-federal)

² Frame: the sampling frame is the list of individuals (or other entities) from which the sample is drawn.

³ Other sources include: Dillman 1972, 1978, 2000; Kanuk and Berenson 1975; Linsky 1975; Heberlein and Baumgartner 1978; Brennan 2004 and 2009

primary indicator of survey quality, recent research shows no strong relationship between a survey's nonresponse rate and the nonresponse biases of its estimates.⁴ DMDC's statistically advanced weighting methods reduce much of the potential bias in survey estimates that may result from survey nonresponse. Therefore, response rates by themselves are not sufficient rationale to accept or reject the results of a survey. Furthermore, on the survey for which FVAP draws its greatest reliance for making assessments of the voting assistance programs and the voting experience for *UOCAVA* voters (the Active Duty Military Survey and the Local Election Official Survey), FVAP has demographic data for the entire populations studied. Therefore, it is able to extrapolate its survey findings to the broader population, even with these lower response rates.

Table 1.
Survey Mode, Sample Size, and Response Rate by Population

Population	Mode of Administration	Approximate Sample Size	Response Rate
Uniformed Service Members	Web-only	55,700	31%
Unit Voting Assistance Officers	Web-only	9,500	30%
Oversees Federal Civilian Employees	Web/paper	9,150	21%
Non-Federally Employed Overseas Citizens	Web/paper	10,700	5.4%*
DoS Voting Assistance Officers	Web-only	240	84%
Local Election Officials	Web/paper	2,600	55%

*response rate for non-federally employed overseas citizens is not weighted. The 5.4 % is an observed response rate.

⁴ Groves, Robert M (2006) "Nonresponse Rates and Nonresponse Bias in Household Surveys" *Public Opinion Quarterly*. Vol 70, number 5, pp 646-675

Uniformed Service Members

The 2008 survey of U.S. military was designed to represent all active and reserve military.

Sample Design

The DMDC *Status of Forces Surveys* use scientifically accepted methods for survey development (e.g., ensure reliable, valid results and maintain internal consistency of reported scales at not less than .70), and statistical design (e.g., stratified random sample designs and weighting that results in acceptable margins of error). The *Status of Forces Surveys* (SOFS) is a series of Web-based surveys of the total force that allows the Department of Defense to (1) evaluate existing programs/policies, (2) establish baselines before implementing new programs/policies, and (3) monitor progress of programs/policies and their effects on the total force. To take advantage of the established SOFS methodology, post-election survey items were administered to Uniformed Service members as a separate module on both the November 2008 active duty and Reserve SOFS. For data collection purposes only, the populations included active duty, active reserve and inactive reserve. Results will be reported for active duty and active reserve because they are UOCAVA citizens; inactive reservists are not covered by the law.

The target population for all active duty SOFS was designed to represent individuals who meet the following criteria:

1. Active duty members of the Army, Navy, Marine Corps, Coast Guard and Air Force, excluding National Guard and Reserve members;
2. Who have at least 6 months of service at the time the questionnaire is first fielded; and
3. Up to and including paygrade O6;
4. US citizen.

The target population for all Reserve component SOFS was designed to represent individuals meeting the following criteria:

1. Selected Reserve in Reserve Unit, Active Guard/Reserve (AGR/FTS/AR; Title 10 and Title 32), and Individual Mobilization Augmentee (IMA) programs from the Army National Guard (ARNG), U.S. Army Reserve (USAR), U.S. Navy Reserve (USNR), U.S. Marine Corps Reserve (USMCR), Air National Guard (ANG), and U.S. Air Force Reserve (USAFR);

2. Have at least 6 months of service at the time the questionnaire is first fielded;
3. Up to and including paygrade O6;
4. US citizens.

DMDC used single-stage, non-proportional stratified random sampling procedures. The samples were drawn from the sample frames constructed from DMDC's *Active Duty Master Edit File* and *Reserve Components Common Personnel Data System*. Members of the sample become ineligible if they indicated in the survey or by other contact (such as telephone calls or e-mails) that they are not in a military component as of the first day of the Web survey (usually 4-5% of the sample). The survey samples are optimized to obtain the fewest number of respondents necessary to achieve a half-width confidence interval of plus or minus five percent.

Notification and Survey Administration

The purpose of the SOFS is to provide key metrics to meet the requirement of the USD(P&R) Human Resources Strategic Plan. Results of this and subsequent surveys constitute the Human Resources Strategic Assessment Program, used to provide direct feedback on key strategic indicators such as satisfaction and retention. Content for both the active duty and Reserve SOFS are determined by long-term, cyclical content plans approved by the Under Secretary of Defense for Personnel and Readiness. To accommodate both the regularly scheduled SOFS content and post-election voting items in support of the UOCAVA requirement, the November 2008 active duty and Reserve SOFS questionnaires were divided into modules. For both the active and Reserve SOFS, Module A consisted of core items to be answered by everyone in the sample. Active duty members were then administered either the regularly scheduled SOFS content in Module B or post-election voting items in Module C. Because of survey length, Reserve members were divided into one of three modules: either the regularly scheduled SOFS content in Module B or Module C, or post-election voting items in Module D.

The survey was available by web only. Fielding of the post election survey began November 5, 2008 and ended on December 19, 2008. All survey participants received a notification letter and/or email which explained why the survey was being conducted, how the survey information would be used, and why participation is important. Throughout the administration period, additional e-mail and postal reminders were sent to encourage survey participation. All communications included the Web address for the survey, the date the survey was available, and a unique ticket number for each sample member.

Unit Voting Assistance Officers (UVAO)

Sample Design

The Unit Voting Assistance Officer (UVAO) component of the election surveys was a census of all active units with 25 or more employees from the Unit Identification Code (UIC) Address File (approximately 9,500 UICs). Because it was a complete census of units, and therefore their corresponding UVAOs, there is no sample design. To account for the possibility of UVAOs working with multiple units, the survey included a question that asked for an estimate of how many people the VAO represents.

Notification and Survey Administration

The UVAO survey was available by web only. The administration period was from November 7, 2008 through February 5, 2009. The fielding period was longer for the UVAO population because there were difficulties in reaching UVAOs by UIC addresses. Extending the deadline allowed us to reach an acceptable response rate for all branches of the military, especially the Army UVAOs. We mailed pre-notification letters to UIC postal addresses for all active units with 25 or more members. These letters included ticket numbers necessary for accessing the Web questionnaire. The mailing protocol for advance letters were similar to the SOFS program, and included an initial advance letter followed by either two or three postal reminder letters. In addition to postal mailings, we emailed advance letters directly to the UVAOs if we could obtain a reasonably accurate list of UVAOs in time for the mailing.

Federal Civilian Employees Overseas

The 2008 survey of federal civilian employees overseas was designed to represent all American citizen federal civilian employees living and working overseas. In contrast the 2004 survey represented only Department of Defense federal civilian employees living overseas.

Sample Design

The sample for overseas Federal civilian employees is a one-stage selection design with differential selection probabilities among three groups of overseas Federal civilian employees. These groups are overseas civilian employees of the DoD, DoS, and all other Federal agencies. Consequently, three sample frames were assembled for sample selection.

The design for sampling overseas Federal civilian employees is a stratified one-stage selection design. The population of overseas Federal civilian employees is first divided into three agency strata (DoD, DoS, and all other agencies) then, within agency strata, they were further subdivided into 5 strata by geographic region. There were a total of fifteen selection strata. The total sample size was 9,500.

The total number of Federal agencies with overseas employees (minus DoD and DoS) is 27. Table 2 arrays these agencies and their count of overseas employees. The total number of overseas non-DoD employees as of March 2008 is 3,946.

Table 2.

Overseas Federal Civilian Employees by Agency (Excludes DoD and DoS)

Agency	Count
AB-AMERICAN BATTLE MONUMENTS COMMISSION	37
AG-DEPARTMENT OF AGRICULTURE	186
AM-AGENCY FOR INTERNATIONAL DEVELOPMENT	909
AN-AFRICAN DEVELOPMENT FOUNDATION	1
CM-DEPARTMENT OF COMMERCE	198
DJ-DEPARTMENT OF JUSTICE	986
DN-DEPARTMENT OF ENERGY	13
ED-DEPARTMENT OF EDUCATION	1
GS-GENERAL SERVICES ADMINISTRATION	23
GY-INTERNATIONAL JOINT CMSN: U.S. & CANADA	1
HE-DEPARTMENT OF HEALTH AND HUMAN SERVICES	141
HS-DEPARTMENT OF HOMELAND SECURITY	987
IB-BROADCASTING BOARD OF GOVERNORS	40
IN-DEPARTMENT OF INTERIOR	8
MA-MARINE MAMMAL COMMISSION	1
MI-MILLENNIUM CHALLENGE CORPORATION	25
NF-NATIONAL SCIENCE FOUNDATION	4
NN-NAT AERONAUTICS AND SPACE ADMINISTRATION	13
NU-NUCLEAR REGULATORY COMMISSION	1
PU-PEACE CORPS	208
SM-SMITHSONIAN INSTITUTION	16
SZ-SOCIAL SECURITY ADMINISTRATION	1
TD-DEPARTMENT OF TRANSPORTATION	67
TN-OFFICE OF THE U.S. TRADE REPRESENTATIVE	13
TR-DEPARTMENT OF TREASURY	48
UJ-JAPAN-UNITED STATES FRIENDSHIP CMSN	1
VA-DEPARTMENT OF VETERANS AFFAIRS	17
Total	3,946

These are the agencies for which the sample frame was assembled using OPM's CPDF. OPM's personnel file did not contain email addresses for employees, therefore, any employees selected from an agency required a DoD request to that agency to provide the email address of the selected individual (DMDC and DoS will be able to supply email addresses for their employees). To reduce the total agency burden in providing emails, we restricted the sample frame for agencies to those having 20 or more overseas employees. This reduced the total number of potential agencies receiving a request for email addresses from 27 to 13. The impact of this proposal was to reduce the frame of overseas Federal employees (minus DoD and DoS) by 91 employees or 2.3%. If the total frame of overseas Federal civilian employees is considered (43,206), the frame reduction is 0.2%.

Sample allocation among the three agency strata (DoD, DoS, and all other Federal agencies) was also an issue. As Table 3 illustrates, there are great differences in agency strata size.

Table 3.
Agency Strata Sizes for Overseas Federal Employees

Agency	Count	Percentage
Department of Defense	31,561	73.0%
Department of State	7,790	18.0%
All Other Federal Agencies	3,855	8.9%
Total	43,206	

The great majority of overseas Federal civilian employees are DoD employees. If a proportionate allocation strategy were adopted there would be very little survey input from agencies other than DoD and DoS. If an equal allocation were implemented across agency strata, then significant design effects would be introduced requiring a substantial increase in the sample required. For these reasons we adopted a square root sample allocation strategy which reduced design effects that would have been realized using an equal allocation.

Notification and Survey Administration

OPM's CPDF, used for frame construction and sample selection, does not contain e-mail addresses for Federal employees. Consequently, the Under Secretary of Defense for Personnel and Readiness requested e-mail addresses from sampled agencies. All notifications sent to participants included contact information for a representative to answer questions and report technical or logistical difficulties.

Data was collected on the Web and using paper-and-pencil questionnaires from November 5, 2008 through January 8, 2009. Pre-notification alerted sampled individuals that they had been selected for participation in the survey and provided background on

the purpose and sponsor of the survey. The survey invitation contained the paper survey for postal recipients or a link to the survey for web recipients. Thank you/reminder letters and/or emails were sent with the main purpose of reminding sampled individuals of the survey and ask them to please complete the survey. All communication included the URL for the survey as well as the participant's unique ticket number for accessing the survey. Once a sample member accessed the survey, the ticket number was frozen thus helping reduce the possibility of multiple surveys in the same ticket number.

Non-Federally Employed Overseas Citizens

The 2008 non-federally employed overseas citizens survey was designed to represent adult American citizens residing outside the U.S., excluding Federal civilian employees and members of the Armed Forces.

Sample Design

The sample design for overseas citizens was implemented in two stages. In the first, embassies and consulates, or Posts, were selected from each of five geographic regions from the list of Posts world-wide provided by the Department of State (DoS). The five geographic regions are Africa, East Asia/Pacific, Europe, Near East & South Central Asia, and Western Hemisphere. The information provided by the Department of State for sample selection is a listing of overseas Posts which identifies their geographic region, the Human Development Index (HDI) score for each country, and the size (as measured by the number of registered citizens) of the Post. Size has four categories: Small, Medium, Large, and Very Large.

Once Posts were selected, the second stage was implemented. This is the selection of overseas citizens from lists of registered citizens maintained by Posts. The strategy for fielding the survey limits the target population to overseas citizens registered at Posts. It is known that registration coverage varies by geographic region (relatively complete coverage in Africa and less complete coverage in Europe, for example). However, focusing upon lists of registered overseas citizen allows the drawing of a probability sample of registered overseas Americans and therefore projection of survey results to that population. Selection at both stages will be implemented using a systematic random selection procedure.

The sample size by geographic region of 2,100 to obtain 408 completed surveys. The total sample size for overseas citizens in the five geographic regions, then, is set at 10,500. DoS drew the actual sample and supplied DMDC with frame and sample counts by Embassy/Post and by region.

Notification and Survey Administration

DoS assembled e-mail lists suitable for mail merging into e-mails for transmission to sampled individuals. Individuals without e-mail addresses had mailing labels prepared that contained the name, address, and ticket number of the selected individual. Two weeks before the pre-notification e-mail was sent, a postal pre-notification letter was sent (from Washington, DC) to sampled American citizens without an e-mail address. All notifications sent to participants included contact information for a DoS representative to answer questions and report technical or logistical difficulties. All communication included the URL for the survey as well as the participant's unique ticket number for accessing the survey. Once a sample member accessed the survey, the ticket number was frozen thus helping reduce the possibility of multiple surveys in the same ticket number.

Data was collected on the Web and using paper-and-pencil questionnaires from November 5, 2008 through January 30, 2009.

Department of State (DoS) Voting Assistance Officers

The DoS VAO survey was a census of all posts where State Voting Assistance Officers are assigned to U.S. embassies and consulates throughout the world. The total size was 239 State Voting Assistance Officers.

Sample Design

There is no sample design for Department of State Voting Assistance Officers (VAOs) because a census was administered. The census included approximately 239 VAOs.

Notification and Survey Administration

All DoS VAOs were notified of the survey by e-mail. DoS sent pre-notifications to VAOs at the end of the third week in October. Survey invitations were sent to VAOs at the end of the first full week in November. Thank you/reminder notices were sent at the end of the third full week in November. All notifications sent to VAOs included contact information for a DoS representative to answer questions and report technical or logistical difficulties.

Each survey invitation and reminder e-mail notification included a direct hyperlink to the survey web site and a unique ticket number for accessing the survey. Once a sample member accessed the survey, the ticket number was frozen thus helping reduce the possibility of multiple surveys in the same ticket number. Data was collected on the Web from November 5, 2008 through the first full week in January 2009.

Local Election Officials

The 2008 Local Election Official survey was designed to represent all local election officials from the voting jurisdictions in the United States and the four territories. The 2004 survey sampled about 1,000 local election officials compared to 2,596 for the 2008 survey.

Sample Design

The sample design for the survey of the local election officials is a stratified single-stage random sample. The sample units were voting jurisdictions. The two strata with jurisdictions with more than 200,001 registered voters were included in the sample with certainty. For states or territories with only jurisdictions with less than 200,001 registered voters, the largest jurisdiction from that state or territory was included in the sample with certainty. So the sample included at least one jurisdiction from the 50 states, the District of Columbia, and the four territories. Samples were drawn from each stratum using simple random sampling.

A frame provided by Election Data Services, Washington DC, has 10,729 voting jurisdiction level records including the 50 states, the District of Columbia, and the territories Puerto Rico, Virgin Islands, Guam, and American Samoa. The frame contained the contact information for the jurisdictions. The frame was cleaned to update incorrect contact information, repeated jurisdictions, and changes due to anomalies in defining levels of jurisdiction. The final frame size was 7,886 voting jurisdictions.

The frame was stratified by two jurisdiction types and seven size categories using the number of registered voters. The jurisdiction types are counties or independent cities and minor civil divisions. Most minor civil divisions are designated by towns, townships, and villages. The categories for the number of registered voters represent small to very large number of registered voters.

The remaining jurisdictions were independently and randomly selected within each stratum. Approximately 80 percent of the registered voters in the remaining jurisdictions reside in counties or independent cities. Jurisdictions representing more registered voters were allocated sample at a higher rate than jurisdictions with fewer registered voters. The allocation was in proportion to the frequency by the number of registered voters. The final probability of selection were adjusted to account for anticipated response rates and to control precision.

Notification and Survey Administration

Survey pre-administration activities began on January 22, 2008, with survey administration for the Local Election Official survey beginning on November 5, 2008,

and continuing through January 9, 2009. The survey was administered in mixed modes – in both web and paper formats.

The pre-notification included a letter accompanying a data collection sheet which was sent to the sample of local election officials. This letter specified that the items listed on the data collection sheet are based on items on the survey and thus may be used to facilitate data collection. The letter stated the data collection sheet is for the local election officials' convenience only and no information is to be returned until after the election. Following the November election, sample participants received a notification letter accompanying the surveys, and later thank you/reminder notifications. All communications included the URL for accessing the web survey, a unique ticket number for accessing the web version, instructions, and contact information for help in completing the survey. Once a sample member accessed the survey, the ticket number was frozen thus helping reduce the possibility of multiple surveys in the same ticket number.

Weighting of Results

All data was weighted using the industry standard three-stage process with the exception of the overseas citizens because of the low response rate. This form of weighting produces survey estimates of population totals, proportions, and means (as well as other statistics) that are representative of their respective populations. Unweighted survey data, in contrast, are likely to produce biased estimates of population statistics.