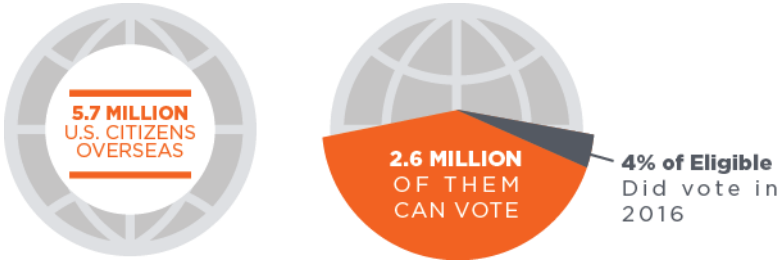
Executive Summary

The Federal Voting Assistance Program (FVAP) works to ensure Service members, their eligible family members, and overseas citizens are aware of their right to vote and have the tools and resources to successfully do so—from anywhere in the world. In order to achieve its mission, FVAP must understand the populations it serves—and the overseas citizen population has historically been difficult to study.

The Overseas Citizen Population Analysis (OCPA) prototype was a comprehensive effort by FVAP to estimate the size of the eligible overseas citizen population in an effort to calculate and track a voting rate. It applied sophisticated modeling techniques to a wide variety of data, including foreign government estimates of U.S. citizens living in country; administrative data on overseas citizens from the Internal Revenue Service (IRS) and the Social Security Administration (SSA); and country-level characteristics associated with the decision to live in a given country (e.g., trade, distance). This prototype assessed the feasibility of better estimating the size and distribution of the overseas citizen population by using new data and statistical modeling and was combined with vote history data collected at the State level.

Based on these models, the estimated participation rate in the 2014 General Election was 4 percent, with 92,633 votes attributed to an overseas address out of an estimated eligible overseas population of 2,563,226.

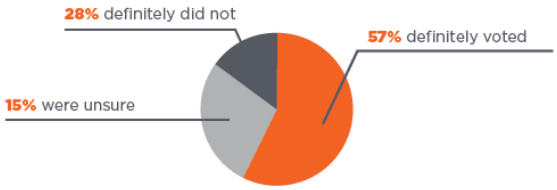


These estimates allow FVAP to identify how geographic differences (such as living in an urban or rural location) affect registration and voting among overseas citizens. Canadian cities make up four of the top 10 locations for eligible U.S. citizens living abroad.

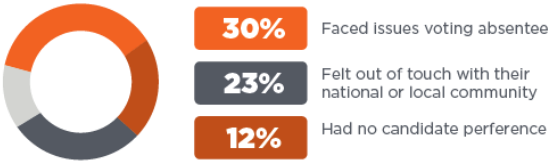
A critical element of the OCPA was the 2014 Overseas Citizen Population Survey (OCPS). This survey of 36,000 individuals who requested an absentee ballot for the 2014 General Election provided an unprecedented level of detail regarding the voting experiences of overseas citizens. The survey asked questions regarding why overseas citizens live abroad and how they learn about information about U.S. elections and voting procedures. It also obtained voter demographic characteristics. The data provided the first portrait of this diverse group and reveals factors affecting their voting behaviors.

Although overseas voters vary widely, most hold a bachelor's degree (or more) and are working. They last lived in the United States an average of 13.6 years ago. Many have ties of time and family to their current home. Twenty-seven percent have been located there for five years or fewer, 23 percent for more than five to 13 years; 26 percent for 13+ to 25 years; and 22 percent for more than 25 years.

How Many Ballot Requesters Voted?



Top 3 Reasons for Not Voting



According to the survey, more than half of respondents reported they definitely voted in 2014. One-fourth said they definitely did not vote and nearly one-fifth were unsure whether they voted. Of those who did not vote, 30 percent reported a difficulty with voting; 23 percent felt out of touch; and 12 percent had no candidate preference.

This OCPA is the most comprehensive effort ever executed to gather data on the overseas citizen population. It included estimating the size and distribution of the overseas citizen population and the eligible voter subpopulation, as well as calculating voting rates for the overall population and subset of ballot requesters. In total, continuing the OCPA will allow FVAP to improve tracking of the size and voting behavior of this important, yet hard to reach, population and use those results to increase outreach and assistance.

Federal Voting Assistance Program

Overseas Citizen Population Analysis

Volume 1: Participation and Voting Rates Estimation Prototype

February 2016

FORS|MARSH GROUP

Table of Contents

1 Introduction

The Federal Voting Assistance Program (FVAP) works to make sure Service members, their eligible family members and overseas citizens are aware of their right to vote and have the tools and resources to successfully do so—from anywhere in the world. FVAP was created to administer the *Uniformed and Overseas Citizens Absentee Voting Act* (*UOCAVA*). To achieve this goal, FVAP has to understand the populations that it serves. FVAP studies the active duty military (ADM) by conducting a post-election voting survey of the ADM population every two years. FVAP also studies the families of Service members through military spousal surveys.

The most difficult population for FVAP to study is the overseas citizen population. Over time, attempts have been made to estimate the size and characteristics of this population using various methods, including census,[1] surveying[2] and model estimation.[3] In each case, the primary difficulty with these efforts has been identifying overseas citizens so that some method of contacting them could be developed (there is currently no comprehensive registry of overseas citizens).

In response to these difficulties, Fors Marsh Group and Lightbox Analytics (the FMG Team) developed an Overseas Citizen Population Analysis (OCPA) prototype for studying the overseas citizen population. This prototype assesses the feasibility of better estimating the size and distribution of the overseas citizen population by using new data and statistical modeling. It also attempts to better understand the registration and voting experiences of the *UOCAVA* population.

FVAP had previously developed an Overseas Citizen Estimation (OCE) that provided valuable information about the size and distribution of the overseas citizen population.[4] However, the OCE did not allow FVAP to examine rates of registration and voting among this population. The OCPA prototype expands upon the methodology developed for the OCE by estimating the number of overseas citizens who are eligible to vote and the number who have a propensity (i.e., a natural tendency) to vote. Using these estimates, the OCPA addresses the question of whether the registration and voting propensity of the overseas citizen population differs from comparable domestic citizen or ADM populations. Drawing comparisons

1 Government Accountability Office. (2004). *2010 Census: Counting Americans overseas as part of the census would not be feasible*. Washington, DC: U.S. Government Accountability Office. Retrieved from http://www.gao.gov/new.items/d041077t.pdf
2 Federal Voting Assistance Program. (2005). *The federal voting assistance program: Seventeenth report*. Washington, DC: Department of Defense. Retrieved from https://www.fvap.gov/uploads/FVAP/Reports/17threport.pdf
3 Federal Voting Assistance Program. (2013). *A model for developing estimates of U.S. citizens abroad: Final technical report*. Retrieved from https://www.fvap.gov/uploads/FVAP/Reports/OCE_Technical_Report.pdf
4 Federal Voting Assistance Program, 2013.

between eligible overseas voters and both domestic citizens and ADM members requires the following:

- Obtaining estimates of the voting rates for the overseas citizen population
- Identifying the demographic composition of the larger overseas citizen population
- Comparing participation and voting among overseas citizens to the participation and voting among both domestic citizens and ADM with similar demographic characteristics.

Population Definition

The *UOCAVA* serves two populations of U.S. citizens:

1. Active duty members of the Uniformed Services, their spouses and their dependents absent from their voting jurisdiction; and
2. Overseas citizens.

The Uniformed Services are the Military Services—Air Force, Army, Marine Corps and Navy—as well as the Commissioned Corps of the U.S. Public Health Service and the National Oceanic and Atmospheric Administration (NOAA), and the U.S. Merchant Marine. Uniformed Service members, their spouses, and their dependents are, together, referred to as Uniformed Services voters.

This report focuses solely on U.S. citizens living overseas who are *not* Uniformed Services voters. In this report, members of the study population are referred to as ***overseas citizens***.

Although these comparisons can be made using a statistical modeling process, the lack of data available for the entire overseas citizen population—both registered and unregistered—presents challenges and limitations for interpretation. Any conclusions must be based on estimates since specific, detailed demographic data on this population is unavailable. Therefore, the present research also includes a secondary analysis of registered voters, comparing the participation rates of registered domestic citizens and ADM to a known population of registered overseas citizens: individuals who are registered to vote at an address overseas or asked for an absentee ballot be sent to an address overseas. A complete data set of overseas citizens who asked for an absentee ballot in the 2014 General Election was obtained from State voter files and from State absentee voter files. These absentee voter data provided specific information about the size and location of the registered overseas citizen population. To obtain key demographic and experiential information about this population, the FMG Team conducted a survey using a sampling frame created from the population of overseas citizens who asked for an absentee ballot in the 2014 General Election. The FMG Team's analysis of the survey data largely supports the previous analyses estimating the

relative voting rate of the overseas citizen population, conducted using aggregated administrative data.

FVAP conducted this research as a prototype to determine whether the current methodology would produce meaningful estimates. Because past research and practice has struggled to make much headway on the study of overseas citizens, FVAP understood that its research effort might also struggle with an immediate breakthrough. The methodological prototype developed in this research allows FVAP to assess the voting behaviors of overseas citizens, examine potential sources of these behavioral differences, and make appropriate policy decisions based on that information. Furthermore, this prototype allows certain subnational (i.e., regional, State, or city) estimates of both the registered and larger overseas citizen population in a given country to be produced. These estimates allow FVAP to identify how geographic differences (such as living in an urban or rural location) affect registration and voting among overseas citizens. The FMG Team has also assessed the prototype for sustainability. Continuing this survey effort will ensure that FVAP can fulfill its reporting requirements to Congress in subsequent elections.

To develop this methodological prototype that could be sustained for future election cycles, the FMG Team implemented a research plan that used a range of data and methods. In brief, this research plan involved:

- Obtaining vote history data for registered overseas citizens for the 2012 and 2014 General Elections and, using those data, as well as other appropriate data sets, to extend the population estimates, create overseas voting-age estimates and demographic profiles through the 2014 General Election, as well as estimates of the voting rate of the overseas voting-age population for the 2012 and 2014 General Elections;
- Developing and administering the 2014 Overseas Citizen Population Survey (OCPS) to collect demographic and voting experience data, which are otherwise unavailable, from registered overseas citizens; and
- Using survey data to produce a final report that analyzes overseas citizen registration and participation rates, along with those of the domestic citizen population and the ADM population.

Table 1.1: Overseas Citizen Subpopulations of Interest	
Subpopulation	Definition
Overseas Citizens	U.S. citizens living overseas who are not uniformed services voters.
Eligible Overseas Voters	Overseas citizens who are 18+ years old.[5]
Registered Overseas Voters	Eligible overseas voters who are registered to vote at an overseas address or who requested an absentee ballot sent to an overseas address.
Overseas Voters	Registered overseas citizens who participated in an election—i.e., they were able to successfully submit a ballot that was received and counted.

After developing population, voting, and participation rate estimates, the FMG Team conducted several analyses. First, the FMG Team drew comparisons between participation rates of the eligible overseas voters with the ADM and domestic citizen populations. Understanding these differences allows FVAP to more effectively and efficiently allocate its resources and target its voter assistance outreach to the greatest number of eligible overseas voters.

Second, using the absentee voter data, the FMG Team compared the actual number of individuals who were registered and voted from a particular country to the "expected" number of voters from that country (based on the estimates of eligible overseas voters living in that country). The FMG Team used regression models to examine the possible reasons for any differences across countries in the voting and participation rates.

Third, the FMG Team developed subnational estimates of registration and voting. This subnational modeling allows FVAP to better understand within-country variation in the population of overseas citizens and target its resources accordingly.

Fourth, using the 2014 OCPS data, the FMG Team compared the voting behavior of registered overseas voters, registered ADM voters and registered domestic voters. This analysis provides an understanding of the behavior of this more specific population of voters who have expressed an interest in voting through the act of registering.

5 The laws governing eligibility to participate in elections vary by State. For example, some individuals are not eligible because of past criminal history. The Election Assistance Commission (EAC) has links to all States and their eligibility requirements. See http://www.eac.gov/voter_resources/contact_your_state.aspx.

2 Estimates of the Overseas Citizen Population and Voting Rates, 2010–2014

As part of the development of the OCPA prototype, the FMG Team estimated the size of the population of overseas citizens and their voting rates in the 2012 and 2014 General Elections. The complete estimation methodology is described in detail in Appendix A, and an overview of the results is given here. The FMG Team developed the population estimates by analyzing the average of the results of a range of statistical models that used foreign government estimates of overseas citizens living in their country, U.S. administrative data from the Internal Revenue Service (IRS) and the Social Security Administration (SSA) on overseas citizens, and additional country-level data that have been found to predict the decision to live in a given overseas country. The estimates of voting are based on ballot request and submission data obtained at the State level. Because the estimates were produced using a model-averaging methodology, it is not possible to produce a confidence interval around each estimate (summarized below).[6]

Participation Rates and Voting Rates

In this report, a differentiation is made between participation rates and voting rates. A voting rate was calculated using vote history data from State voter files. A participation rate was calculated based on individual responses to a survey question concerning whether the respondent voted.

Summary of Estimates

Based on the updated estimates, there were 5,598,513 overseas citizens in 2012 and 5,738,948 in 2014. Canada, Mexico, the United Kingdom, France and China have the largest populations of overseas American citizens. The eligible overseas voter population is estimated to have been 2,547,823 in 2012 and 2,563,226 in 2014. Canada, the United Kingdom, France, Israel and Japan have the largest eligible overseas voter populations. Because the average age of an American overseas citizen population in Mexico tends to be young, it has a relatively low number of eligible overseas voters. The estimated number of overseas voters in

6 Obtaining valid standard errors would entail replicating the entire analysis on a large number of subsamples of the data (e.g., bootstrapping or jackknifing), which would result in prohibitive computation times and an unknown value.

2012 was 136,280 and 92,633 in 2014. The countries from where the most ballots were cast by overseas citizens in 2014 elections were Canada, the United Kingdom, France, Israel and Japan.

At a Glance: 2014	
Estimated Number of Overseas Citizens	5,738,948
Estimated Number of Eligible Overseas Citizens	2,563,226
Estimated Number of Overseas Voters	92,633
Estimated Voting Rate for Overseas Citizens	4%

Estimated Total Overseas Citizen Population for the Years 2010–2014

The estimates were produced for even years so that voting rates could be calculated for federal elections. Based on the updated estimates, there were 5,598,513 overseas citizens in 2012 and 5,738,948 in 2014. Table 2.1 presents these data by region for 2010, 2012 and 2014. Not surprisingly, the overseas citizen population is largest in the Western Hemisphere, followed by Europe and East Asia.

Table 2.1: Overseas Citizen Population by Region

Region	2010	2012	2014
Africa	124,776	152,229	172,561
East Asia and Pacific	811,454	952,189	1,001,548
Europe	1,376,270	1,491,439	1,479,827
Near East	236,709	263,533	273,283
South-Central Asia	131,284	138,235	138,260
Western Hemisphere	2,289,296	2,600,889	2,673,470

Figure 2.1 displays the geographic distribution of the overseas citizen population in 2014. Countries are sorted into quartiles based on the estimated number of resident overseas citizens, with darker shading indicating more overseas citizens. This figure is largely consistent with previous FVAP estimates published in 2013 that also estimated large numbers of overseas citizens residing in Europe, the Western Hemisphere and parts of East Asia.

Figure 2.1: 2014 Overseas Citizen Population by Country

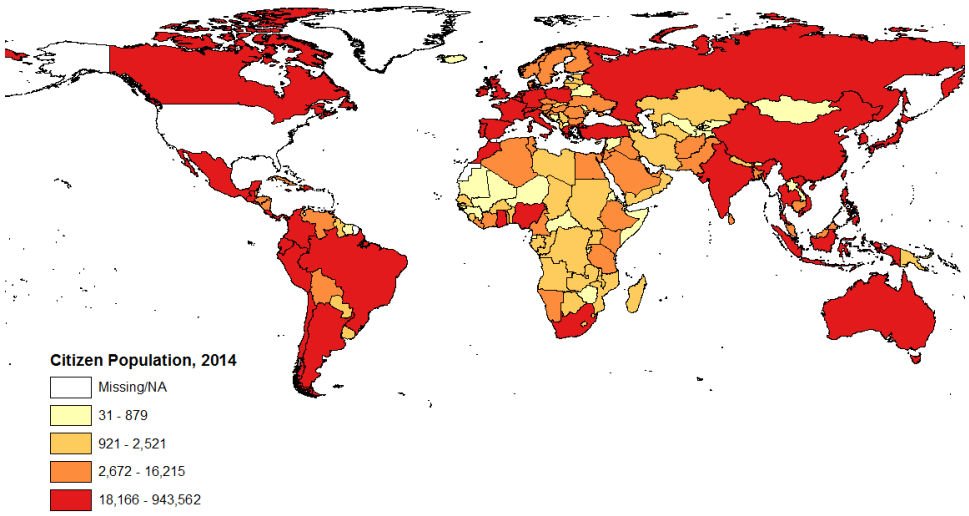
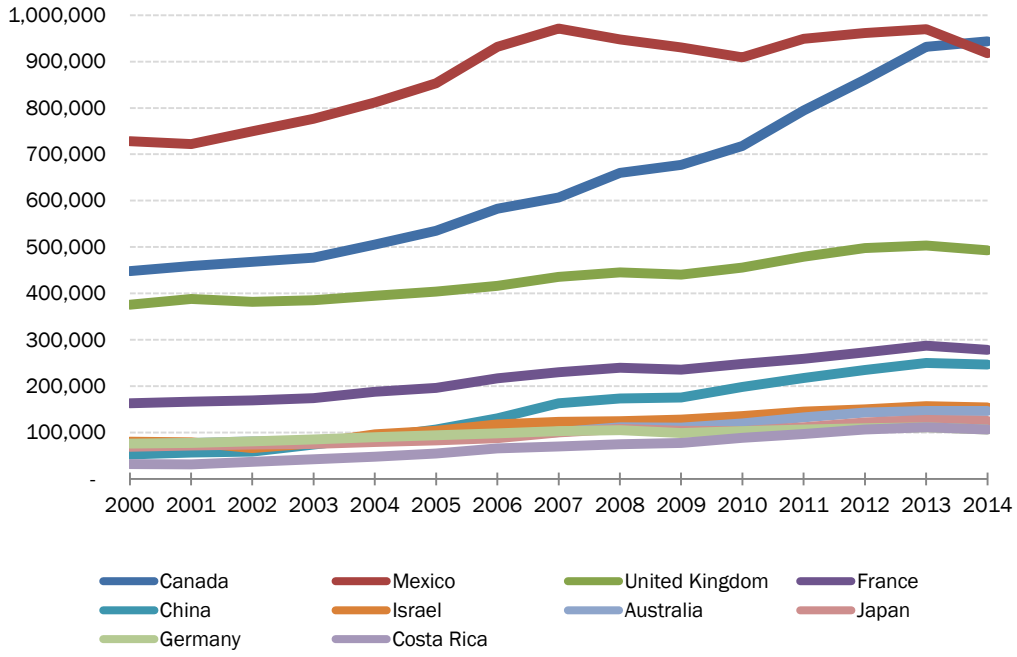


Figure 2.2 shows the change in estimated overseas citizen population for the countries with the largest such population in 2014. There has been a marked growth in the number of overseas citizens moving to Canada; for other countries, the change since 2007 has been rather slight.

Figure 2.2: Growth Trends, Countries with Largest Overseas Citizen Populations in 2014



Estimated 2012 and 2014 Eligible Overseas Voter Populations

The estimates of the population of overseas citizens provide the basis for determining the percentage of those individuals who are eligible voters. The details of this estimation procedure are included in Appendix A. The eligible overseas voter calculation required excluding those individuals who were under 18 years of age from the total number of overseas citizens residing in each country. After making this adjustment to the total population of overseas citizens, the FMG Team estimated the eligible overseas voter population as 2,547,823 in 2012 and 2,563,226 in 2014. Table 2.2 shows this population by region. Note that the Western Hemisphere, which had a relatively large overseas citizen population in 2012 and 2014, had a much smaller eligible overseas voter population because a large percentage of overseas citizens in this region were under age 18. Although the Western Hemisphere has a significantly larger overseas citizen population than Europe, the eligible overseas voter populations in the Western Hemisphere and Europe are quite comparable.

Table 2.2: Eligible Overseas Voter Population by Region			
Region	2010	2012	2014
Africa	30,473	39,328	47,400
East Asia and Pacific	372,315	443,562	459,397
Europe	841,702	904,704	865,252
Near East	167,224	190,776	197,115
South-Central Asia	28,880	23,303	17,934
Western Hemisphere	802,534	946,150	976,128

Figure 2.3 displays a map of the eligible overseas voter population by country; those countries that are more darkly shaded had a higher population of eligible overseas voters in 2014. Countries are sorted into quartiles based on the estimated number of eligible voters, with darker shading indicating more eligible overseas voters. Most of the eligible overseas voter population is concentrated in Western Europe, Central America, and East Asia and the Pacific.

Figure 2.3: 2014 Eligible Overseas Voter Population by Country

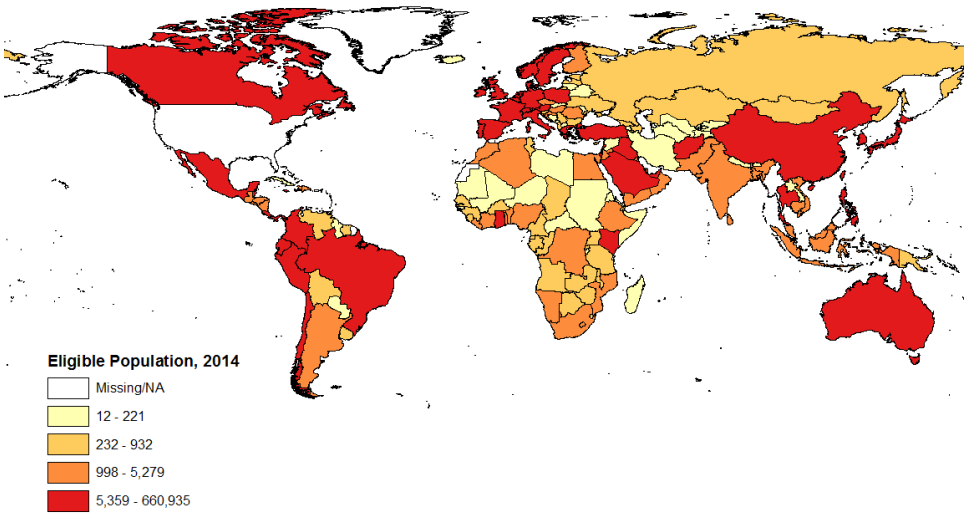
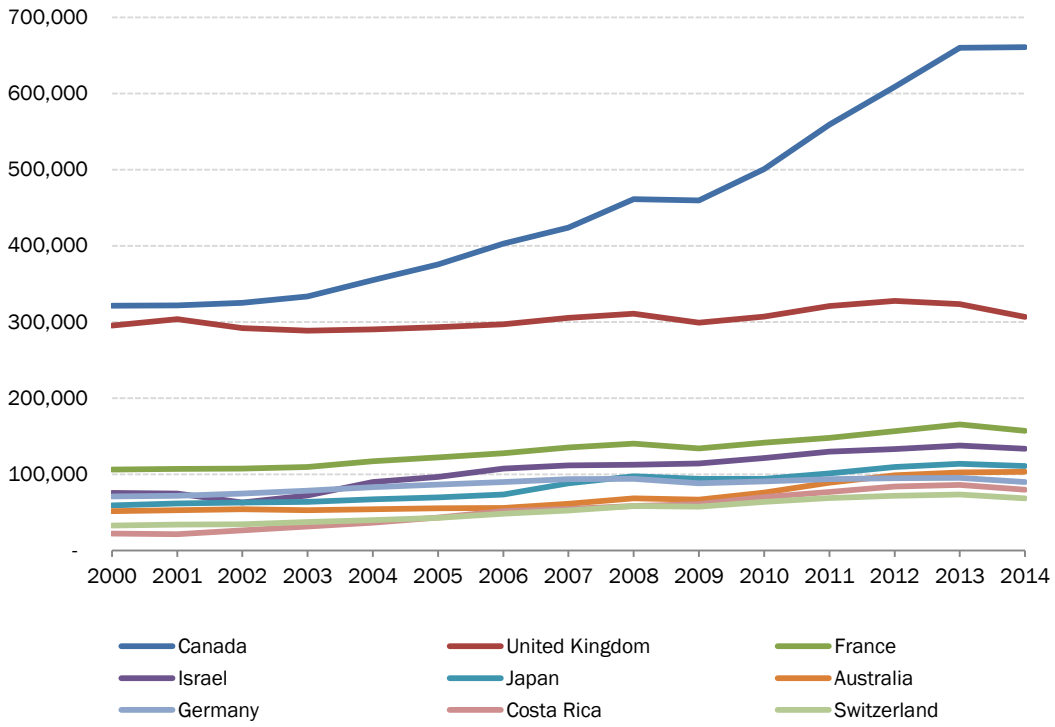


Figure 2.4 shows the growth rates in eligible overseas voters among countries with the largest eligible overseas voter populations. The growth rate in the eligible voter population in Canada has been very strong since 2009, whereas the growth rates in the United Kingdom, France, Israel, Japan, Australia, Germany, Costa Rica and Switzerland have been relatively flat.

Figure 2.4: Growth Trends, Countries with Largest Eligible Overseas Voter Populations in 2014



Estimated 2010, 2012 and 2014 Eligible Overseas Citizen Voting Rates

Creating estimates of overseas citizen voting by country required data on the number of voters who either asked for an absentee ballot be sent to an overseas address or were listed in the voter file as living overseas during the 2010, 2012 or 2014 General Election. The FMG Team contracted with Aristotle, Inc., to identify overseas voters for these three general elections. This information came from two different sources: State voter files and absentee ballot requests. Some States allow overseas citizens to register with an international address, which becomes part of the permanent voter file. Other States only collect international addresses as part of an absentee ballot request for a specific election. Both types of information were used in these analyses.

This appears to be the first time that the population of registered overseas voters has been collected and consolidated into one source. Contact was made with each State and, when necessary, with each local voting jurisdiction, to ask for a file containing the voting records of each registered voter

who requested an absentee ballot that was sent to an international address during the 2012 and 2014 General Elections. There was variation in data quality across States. For example, some States have a voter file that accommodates overseas mailing addresses and other States have to put these addresses in a note field in the file. Although every effort was made to obtain a complete list of absentee overseas voters, it is likely that the final absentee voter data are incomplete. The FMG Team developed and implemented a detailed protocol for validating these data for internal and external consistency.[7]

The voting rate is defined as the estimated total number of overseas votes in each country divided by total number of eligible overseas voters in that same country. In 2012, there were 112,047 votes cast by overseas voters identified in the State voter file data as residing in one of the 186 countries of interest.[8] However, there were 24,233 votes cast by individuals whose voter or ballot request file did not include an international mailing address. This discrepancy occurred because either a voter's State would not release the address for privacy reasons or the ballots were delivered electronically and the State did not require a mailing address for the voter. In calculating the overseas citizen voting rate by country, it was assumed that these individuals were randomly distributed across the total overseas voter population, and so they were assigned to each country in proportion to the country's observed vote share.[9]

This procedure results in a total of 136,280 votes being attributed to overseas voters, and a 2012 voting rate of 5 percent. For 2014, the vote total was 92,633, resulting in a voting rate of 4 percent. It is important to note that one source of this low voting rate is that these analyses were based on administrative data, rather than self-reported survey data, the latter of which can be an exaggeration of the true voting rate. As shown in Table 2.3, voting rates were highest in Europe, South Asia and Central Asia. Africa had a relatively high voting rate, but it also has a small total eligible overseas voter population. The high voting rate in Africa could be the result of either a smaller population having a higher estimation error or its population being somehow different compared to the populations in Europe or the Western Hemisphere.

7 States and localities vary in how they maintain absentee ballot request data. There was variation in how these files were collected and maintained, the length of time they were kept, and the applicable laws surrounding disclosure and delivery of the information. This, as well as differences in coverage across jurisdictions, explains why these numbers differ from those reported by the EAC.

8 A number of entries in the consolidated voter file did not include international addresses. To obtain a conservative estimate of the overseas voting rate, votes from these ballot requesters without an international address were treated as living overseas, despite the fact that many likely were not.

9 Variation in reported overseas address is more likely to be a function of variation in bureaucratic procedure than country of residence. This then assumes that non-reported overseas addresses are proportionally distributed across in-sample countries.

Table 2.3: Eligible Overseas Citizen Voting Rates in the 2010, 2012 and 2014 Elections by Region			
Region	2010	2012	2014
Africa	2.4%	8.6%	3.5%
East Asia and Pacific	1.9%	6.1%	3.5%
Europe	1.9%	6.7%	5.2%
Near East	1.2%	4.3%	2.7%
South-Central Asia	1.5%	9.8%	6.6%
Western Hemisphere	1.3%	3.7%	2.4%

Voting rates for 2012 and 2014 by country are displayed graphically in Figures 2.5 and 2.6, respectively. As with the maps of the overseas citizen and eligible overseas voter populations, countries are sorted into four quartiles, with darker shades indicating higher voting rates. Countries shown in white have no data. The highest voting rates are clustered in East Africa, Eastern Europe and Asia.

Figure 2.5: 2012 Eligible Overseas Citizen Voting Rates by Country

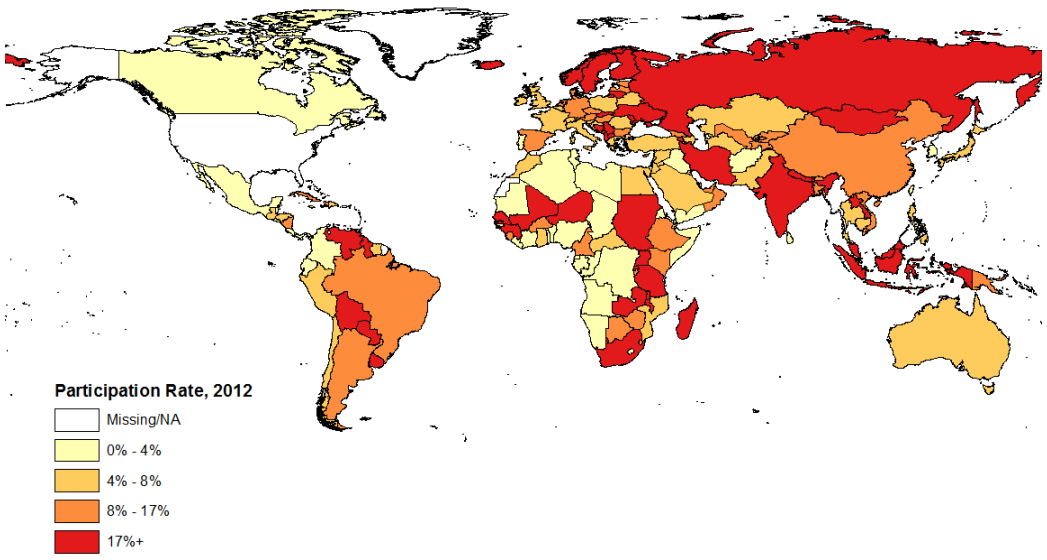
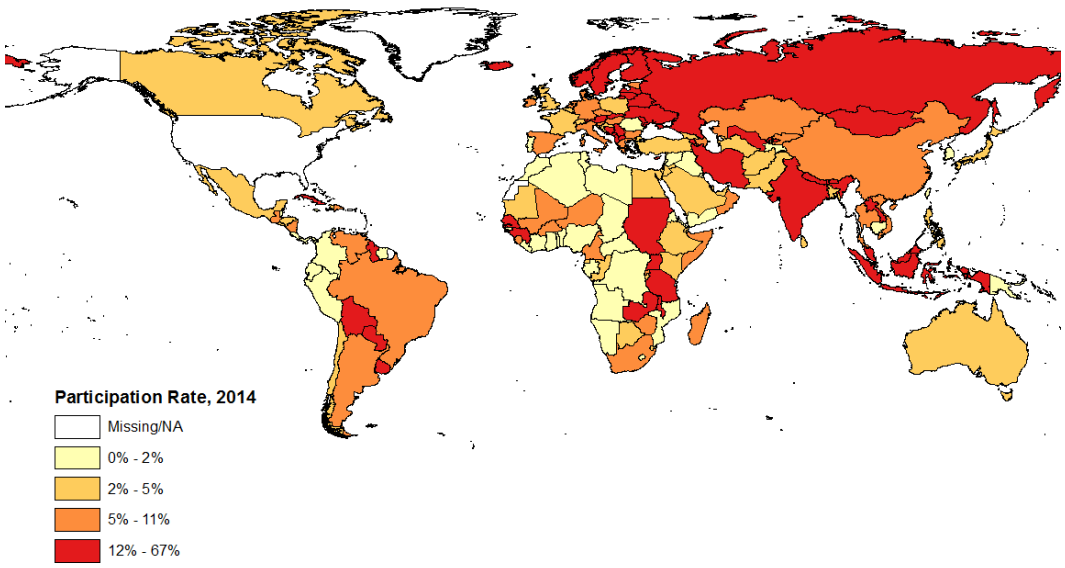


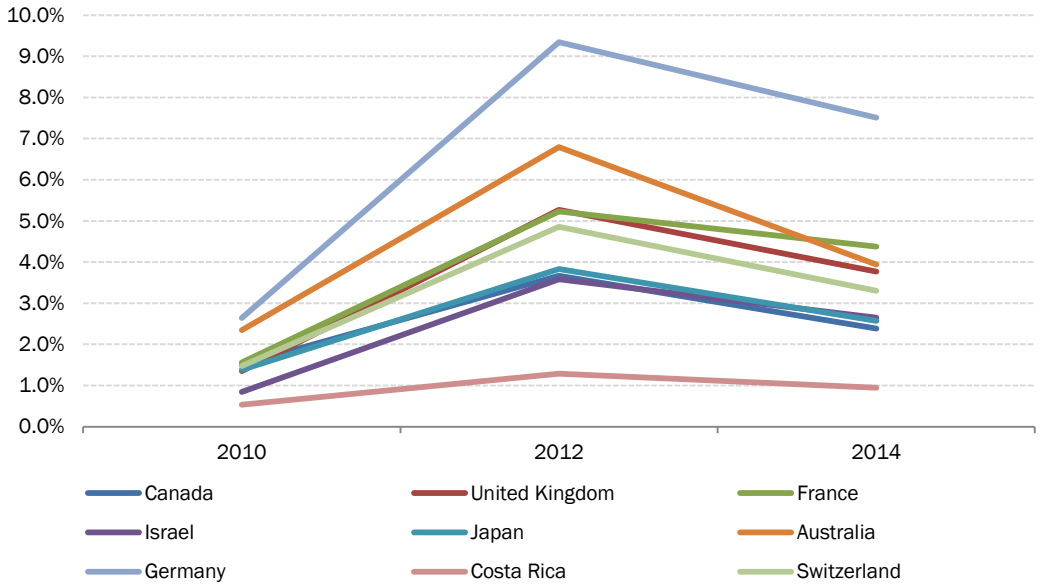
Figure 2.6: 2014 Eligible Overseas Citizen Voting Rates by Country



Although the voting rates are highest in parts of Africa and Asia, the countries with the largest estimated numbers of overseas voters are in Canada, Western European countries, Israel, Japan, Australia and Costa Rica. These countries have the largest numbers of overseas citizens, so it is not surprising that they also have largest numbers of overseas voters.

Figure 2.7 presents the trends in the voting rates for general elections in the period 2010–2014 for eligible overseas voters. The results are consistent with cyclical voting rates, with the two midterm elections having lower voting rates than the 2012 presidential election. However, the 2014 midterm voting rates are noticeably higher for most countries relative to the equivalent rates for 2010. This discrepancy may reflect jurisdictional under representation the 2010 voter file rather than an actual increase in voting rates between 2010 and 2014. Because of this potential underrepresentation, the analysis in the remainder of this report is limited to the 2012 and 2014 General Elections.

Figure 2.7: Trends in Voting Rates, Countries with Largest Estimated Eligible Overseas Voter Populations in 2014



Subnational Estimates

One concern with modeling voting rates at the country level is that the level of aggregation obscures subnational differences in the size of the eligible overseas voter population and voting rates. Particularly in geographically large countries, eligible overseas voters may be highly concentrated in certain urban areas rather than evenly distributed across the country. Given that FVAP outreach efforts are likely to be more efficient when targeted at more geographically concentrated eligible overseas voter populations, it is valuable to generate subnational eligible overseas voter population and voting rate estimates where possible. These estimates can be developed using country-specific census data that have been geocoded and are available through the Integrated Public Use Microdata Series (IPUMS).[10]

Using these data, the FMG Team generated predictions for relative eligible overseas voter population density. The population density predictions were turned into absolute counts of eligible overseas voters for subnational areas using the country-level estimates for 2014. City-level estimates of the eligible overseas voter population were obtained using the set of large and capital cities listed in the United Nations' (UN) World Urbanization Prospects.[11] Individuals were assigned to the nearest city using the latitude and longitude coordinates for the address from where their ballots were mailed.

10 To obtain city-level estimates of the eligible overseas voter population, IPUMS foreign government census microdata were geocoded and used to estimate models of the percentile difference between a region's eligible overseas voter population density (eligible overseas voter population/land area) and that of the region's country.
11 United Nations. (2014). World Urbanization Prospects: The 2014 Revision. Retrieved from

The population of overseas citizens is estimated for age, gender, and educational strata by city, so expected voting rates can also be estimated by city. This estimation is done by using 2014 CPS Voting and Registration Supplement data to predict what a given foreign city's voting rate would be if a population with the same demographic characteristics of the city's overseas citizens resided in the United States.[12] The estimated eligible overseas voter population as well as the actual and expected voting rates for the cities with the 10 largest eligible overseas voter populations is presented in Table 2.4.

Table 2.4: Ten Foreign Cities with Largest Estimated Overseas Citizen Populations in 2014

City Name	Country	Estimated Eligible Overseas Voter Population	Voting Rate, Actual	Voting Rate, Expected
Vancouver	Canada	183,155	2%	54%
Tel Aviv	Israel	102,442	3%	50%
Toronto	Canada	78,371	5%	58%
London	United Kingdom	61,490	11%	55%
Montreal	Canada	44,597	4%	57%
San Jose	Costa Rica	44,191	2%	49%
Quebec	Canada	37,002	<1%	54%
Tokyo	Japan	34,302	4%	56%
Hong Kong	Hong Kong	34,042	3%	51%
Melbourne	Australia	27,709	3%	54%

Both national and subnational imputations of the eligible overseas voter population suffer from an unquantified degree of uncertainty, which should be kept in mind when interpreting these estimates. Appendix C contains an analysis of country-level estimates of expected voting rates versus actual voting rates, as well as potential explanations for the large gap between the two metrics.

http://esa.un.org/unpd/wup/highlights/wup2014-highlights.pdf

12 The prediction is generated using a logistic model of voting fitted to data from the 2014 CPS. Predictive variables include age category (18–24, 25–64, 65+), and gender and educational attainment (Less than Secondary, Secondary, Post-Secondary).

3 Analysis and Comparisons of Overseas Citizen Voting Behavior

Ideally, instead of estimating the various aspects of the overseas citizen population, the FMG Team would have done an analysis using a census of overseas citizens, the number of registered overseas voters, and the number of overseas voters, as tabulated using data from State voter files. These registration data and voting data could be divided into the total number of eligible overseas citizens to determine an overseas voting rate.[13] Instead, the number of eligible overseas voters is an estimate, subject to some measurement error, which introduces an unknown level of error into the voting rate. Additionally, it is not possible to identify subsets of the domestic citizen and ADM populations that can act as comparison populations for estimating the effect of living overseas on voting. It is difficult to identify a population demographically similar to the overseas citizen population and also account for other differences between the populations. For example, if individuals with less interest in politics are more likely to migrate overseas, then it would be incorrect to attribute a lower voting rate among overseas voters to barriers caused by living overseas.

The FMG Team used data from the OCPS, the CPS, and the 2014 Post-Election Voting (PEV) Survey of the ADM to compare voting behavior across the three groups. The OCPS provided the FMG Team with the data necessary to understand the demographics of overseas citizens who asked for a ballot in the 2014 General Election. This population could then be compared to a similar population of domestic citizens and ADM.

Using statistical modeling, the FMG Team can make comparisons between the 2014 General Election participation rates of registered overseas voters in the OCPS sample and those of the domestic citizen and ADM populations that have been adjusted demographically to better reflect the demographics of the registered overseas voter population. The OCPS collected data on self-reported voting that are comparable to data gathered using survey questions in the CPS and PEV Survey. The surveys also include variables that can be used to control for differences between registered overseas voters and domestic citizen and ADM populations. It should be noted that registered overseas voters sampled in the OCPS asked for an absentee ballot after moving overseas, and thus are not representative of all overseas citizens.

13 It is important to note here that there is variation across States and localities in the factors that result in an absentee voter being given credit for voting in an election. In some States, voters would have to return their ballots and have them included in the final count to be given credit for voting. However, in many States, voters who return ballots after the deadline for having their ballot counted, who fail to sign their ballots, or otherwise have a ballot that is not included in the final tabulation are still given credit for voting, which serves to keep voters listed as active voters in the voter file.

Analysis Comparing Voting Behavior

This analysis compares participation among the following groups for the 2014 General Election:

- Overseas citizens, using data from the 2014 OCPS
- The domestic citizen population, represented in the November Voting and Registration supplement of the CPS
- The ADM population, as measured by FVAP's PEV Survey

The Effect of Living Overseas on Voting: Theoretical Considerations

Political scientists have found that people do not participate in democratic elections for three reasons: because they can't, because nobody asked, or because they don't want to.[14] Wanting to participate in politics is based on a psychological engagement with politics. Some people care about politics and political issues and think that belonging to groups helps them better engage the political system, and some people do not. People who do and do not care about politics exist in both the domestic citizen population and the overseas citizen population.[15]

The first two reasons are much more important when considering why overseas citizens might not participate in politics. People who live in the United States, especially those who are registered voters, are likely to be asked directly to participate in politics. For people who live in highly competitive electoral States (so-called "battleground States"), these requests may include receiving items in the mail almost daily asking them to vote a specific way in the election, campaign television and radio ads, campaign banner ads on social media targeted to their geographical area, and people coming to their door asking them to vote. Even people in less competitive States still receive news and information about national elections, and State and local campaigns are also likely to contact people to encourage them to vote. The volume of news surrounding an election also means that elections will be a likely subject of conversations at work and in social settings. In short, people living in the United States are likely to receive a high volume of both personal and general appeals to vote in an election.

14 Brady, H. E., Verba, S., and Schlozman, K. L. (1995). Beyond SES: A resource model of political participation. *American Political Science Review, 89*(2), 271–294.

15 It is important to remember that some overseas citizens are dual citizens, so they can vote in the country where they are living. A limited number of foreign countries also allow foreign nationals who meet specific eligibility requirements (generally having resided in the country for a fixed period of time) to vote. Additionally, some overseas citizens may participate in politics in other ways in their foreign home, by working for a nongovernmental organization (NGO) or helping a political party in their new country.

By comparison, overseas citizens are in a different news environment in which news is less likely to be focused on the United States and there is less election-related advertising aimed at them. Although campaigns may target some overseas citizens on social media as part of overall messaging strategies, overseas citizens are unlikely to receive the same direct mail, telephone calls, or door-to-door visits that are common in the United States.

Likewise, people living in the United States receive information about when to vote, where to vote, and how to vote from a variety of sources. Campaigns, election officials, NGOs, and the media all provide information about the mechanics of elections to potential voters. In States that allow a form of early voting, campaigns often encourage people to vote before the election either in person using early voting or by asking for an absentee ballot to vote in their State of permanent residence. As part of this outreach, voters are often informed how to ask for an absentee ballot or how to become a permanent absentee voter and are then reminded to vote using their absentee ballot. Unregistered voters are often targeted as well, with nongovernmental groups or campaigns targeting unregistered voters and assisting them in navigating the registration process.[16]

For an overseas citizen, the process of obtaining an absentee ballot at an overseas address is more complicated than asking for an absentee ballot in the United States. Unless an overseas citizen is registered as a permanent absentee voter in a State that allows this and is permanently registered at a foreign address, he or she may have to ask for an absentee ballot for each year or each election. Once overseas citizens receive their ballots, they have to determine whether they want to vote and what the costs are for learning about the differences in candidates, especially for State and local races.[17] One can even imagine that these complications would be greater, not lesser, for people who have previously voted within the United States. These individuals may be experienced with voting absentee in the United States and assume that the process is similar when they want to vote from overseas. For example, they may not realize that the law in their State does not allow forwarding of ballots from their home address, or that it requires them to re-request to be an overseas voter in subsequent elections.

As Brady et al. (1995) note, socioeconomic status is a good predictor of the likelihood to vote but it does not explain the mechanisms by which people vote. The mechanism component is based on what they refer to as resources, which include civic skills in addition to time and money. They use the term civic skills to describe "skill-acts" that include attending decision-making meetings, planning meetings, writing letters, or giving a speech.[18] There are many overseas citizens who want to register to vote and who are motivated to participate in the electoral process from overseas. Figuring out how to do this activity successfully requires completing several "skill-acts." Those

16 Issenberg, S. (2012). *The Victory Lab: The Secret Science of Winning Campaigns*. Ann Arbor: University of Michigan Press; Green, D. P., & Gerber, A. S. (2008). *Get out the vote: How to increase voter turnout*. Brookings Institution Press.
17 For individuals with a strong party identification, this information acquisition process is simpler because they can simply vote for candidates of their preferred party. For other individuals, this process can require extensive information seeking.
18 Brady, Verba, & Schlozman, 1995 (274–276).

individuals who are "resourced" will navigate the process successfully and those with fewer resources are more likely to make a mistake at some point in the process.[19]

The population that successfully registered to vote from overseas can be considered "resourced." This distinction differentiates them from individuals who are overseas who wanted to register to vote but who were either deterred from registering by the complexity of the process or tried to register vote but were unable to do so successfully.

Methodology

The simplest strategy for estimating the effect that living overseas has on the voting behavior of the overseas citizen population would be to compare the participation rates of the overseas citizen population to the participation rates of the domestic citizen and ADM populations. Such a comparison rests on several assumptions, most critically that the individuals in the overseas citizen population are not systematically different demographically and attitudinally from the domestic citizen and ADM populations. This assumption may not be true; the OCPS findings suggest that the overseas citizen population differs from the domestic citizen and ADM populations with respect to motivation, ability to vote, and demographic characteristics such as gender, age, education and geography (i.e., the distribution of legal voting residences).

In this analysis, the average effect of living overseas is estimated. An average effect can be thought of as the change in participation rates that would result if an overseas voter had been in the United States on Election Day, holding all other variables constant. Generating an estimate of the average effect of living overseas on participation among the overseas citizen population does not require assuming that the overseas citizen population is demographically and attitudinally the same as the domestic citizen population. Instead, observable voting-relevant characteristics of both the overseas and domestic citizen populations can be used to identify a subset of domestic citizens with characteristics that match those of the overseas citizen population. The Blinder–Oaxaca method was used to make an adjusted comparison between the overseas and domestic citizen participation rates. The basic methodology is summarized in the following steps:

1. A simulated subset of the domestic citizen and ADM populations, whose voting-relevant characteristics match those of the registered overseas voter population, was created using the CPS and PEV Survey.
2. The probability of voting was calculated for these simulated domestic citizen and ADM populations. In practice, this was accomplished by modeling the probability of voting using data from the CPS or PEV Survey. These models generated predictions of the participation rate

19 All absentee voters—both overseas and domestic voters—have to overcome barriers to voting that include ballot delivery deadlines, signing ballot envelopes correctly and similar mechanical aspects of the voting process. See Alvarez, R. M., Hall, T. E., & Sinclair, B. (2008). Whose absentee votes are returned and counted: The variety and use of absentee ballots in California. *Electoral Studies, 27*(4), 673–683.

for these simulated domestic citizen and ADM populations that had the voting-relevant demographic characteristics of the overseas citizen population.[20]

3. An estimate of the effect of living overseas on voting was obtained by taking the difference between the observed participation rate of the overseas citizen population and the participation rates of the modeled domestic citizen and ADM populations.

This analysis assumes that all characteristics that both influence voting and differ systematically between the overseas citizen and domestic citizen and ADM populations are observed. If this assumption is valid, then this methodology yields a valid estimate of the effect of being an overseas citizen on voting compared to being a domestic citizen or ADM.[21] However, if certain relevant characteristics for which data were unavailable systematically differ between the populations being compared, then the estimated effect of living overseas on the participation rate of overseas citizen population will potentially have some margin of error.

The Blinder-Oaxaca method allows for a decomposition of the difference between the domestic and overseas citizen participation rates, showing the portion which is "explained" by observed individual characteristics, such as educational attainment or age, and the remaining portion which is "unexplained" and thus attributed to unobserved individual characteristics or to differences in voting behavior caused by living overseas. For instance, if the decomposition were applied to the difference between the overseas citizen population and domestic citizen population, the decomposition could be written as follows:

$$1)\ Total\ Difference\ in\ Participation\ Rates\ = Observed\ Overseas\ Citizen\ Participation\ Rate - Observed\ Domestic\ Citizen\ Participation\ Rate$$

20 The outcome variable in this model is dichotomous and the Blinder-Oaxaca method is an Ordinary Least Squares (OLS)-based matching estimator. See Kline, P. (2011). Oaxaca-Blinder as a reweighting estimator. *American Economic Review: Papers & Proceedings 101*, 532–537. However, the use of the linear Blinder-Oaxaca method is preferred to nonlinear models and alternative matching estimates because it allows for straightforward decomposition of the explained and unexplained differences based on observable characteristics. This allows one to examine how the effect of living overseas differs across different demographic subgroups. Results of these more detailed decompositions are provided in Appendix D. Alternative voting models based on a logit regression—in which coefficients on control variables were allowed to vary based on which population the respondent was a member of—were also estimated and used to generate estimates of the average marginal effect of living overseas on the overseas citizen population and are available upon request. These estimated effects were of similar sign and magnitude to those estimated using linear regression.

21 This report's implementation of the Blinder-Oaxaca estimator involves the estimation of separate linear voting models using OLS for the overseas citizen and domestic Citizen Voting Age Population (CVAP) or ADM population. See Jann, B. (2008*). The Blinder-Oaxaca decomposition for linear regression models*. The Stata Journal, 8(4), 453–479.
Blinder-Oaxaca provides more accurate estimates of treatment (living overseas) effects on the treated (overseas citizens) than single equation OLS when the effect of the treatment differs based on observable characteristics, and thus is likely to differ between the treated and untreated populations. See Kline, 2011; Słoczyński, T. (2014). New evidence on linear regression and treatment effect heterogeneity. (Working Paper No. 9491). Institute for the Study of Labor. Retrieved from http://ftp.iza.org/dp9491.pdf.

2) $Explained\ Difference\ in\ Participation\ Rates\ =$
$Adjusted\ Domestic\ Citizen\ Participation\ Rate\ -$
$Observed\ Domestic\ Citizen\ Participation\ Rate$

3) $Unexplained\ Difference\ in\ Participation\ Rates\ =$
$Observed\ Overseas\ Citizen\ Participation\ Rate\ -$
$Adjusted\ Domestic\ Citizen\ Participation\ Rate$

In this model, the adjusted domestic citizen participation rate is generated by making the demographic characteristics of the domestic citizen population match those of the overseas citizen population.

In the baseline analysis, two different decomposition analyses are performed. The first analysis compares the overseas citizen population to the domestic citizen population. The second analysis compares the overseas citizen population to the ADM population. The overseas citizen sample is obtained from the OCPS, the domestic citizen sample uses the 2014 CPS, and the ADM sample comes from the 2014 PEV Survey. It is important to note that although all previous analyses in this report used administrative voting records, these comparisons across surveys use self-reported voting data. These three data sets contain several demographic characteristics in common that are known to be associated with voting, such as voter registration status, age and education.[22] There are several other characteristics associated with likelihood of voting that are not observed in the data sets used, and these characteristics might be a source of unexplained differences in the participation rates of the populations of interest. For example, domestic citizens and overseas citizens are likely to experience elections differently—overseas citizens are less likely to be subjected to the same level of campaign advertising as domestic citizens, and this difference should affect their motivation to vote.

Motivational effects are not likely to be captured by the standard set of demographic and geographic variables contained in the three surveys. In addition, these demographic and geographic variables cannot measure the differences in how resourced these voters are, although the general assumption would be that overseas voters would require a higher level of resources compared to domestic citizens to complete the same actions: register to vote and vote using an absentee ballot. However, it is possible to use the absentee voter data to compare whether OCPS respondents voted in 2010, when some were living overseas and some were still living in the United States. All members of the population used in this analysis were living overseas in 2014, but a portion of this group was living in the United States in 2010. Research suggests that a given individual's motivation to vote is unlikely

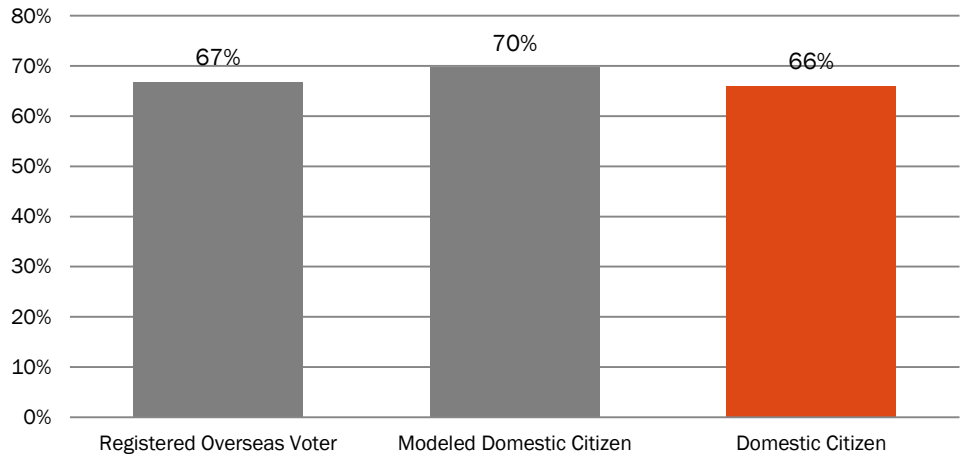
22 This analysis would be strengthened by adding variables regarding key motivational attributes known to influence voting, such as the strength of the individual's partisanship, proxies for the strength of local political mobilization efforts, etc. However, none of the data sets used contained these types of variables, so the analysis does not use any motivational variables. It is possible that this resulted in a less accurate estimate of the effect of living overseas on the motivated overseas citizen population than would have been possible if these were available.

to change radically over a short period of time[23]. Therefore, differences in the participation rates between individuals who were also overseas in 2010 and those of individuals who were overseas in 2014 but living in the United States in 2010 likely represent a resource effect caused by moving overseas requiring new information and skills for voting.

Comparing 2014 Participation Rates: Registered Overseas Voters and Registered Domestic Voters

Figure 3.1 presents estimates of the 2014 election participation rate for three populations: registered overseas voters, the registered domestic citizen population, and the modeled registered domestic citizen population. The latter has been simulated by making the domestic citizen population reflect the demographic characteristics of the registered overseas citizen population. The registered domestic participation rate was approximately equal to that of the registered overseas voter population. By contrast, the modeled registered domestic voter populations reported participating at roughly 3 percentage points higher than the registered overseas participation rate in the 2014 General Election. Although the participation rate similarity between the registered overseas voters and modeled registered domestic citizen population may seem obvious, it does not necessarily need to be the case. The similarity in participation rates between the two means that, even after differences in the demographics in the two populations are accounted for, the two populations vote at similar rates.

Figure 3.1: 2014 Participation Rate, Registered Overseas Voter Versus Registered Domestic Voter



23 Voting has been found to be highly persistent. For a recent discussion of potential mechanisms for and evidence of persistence in voting, see Coppock, A., & Green, D. P. (2015). Is Voting Habit Forming? New Evidence from Experiments and Regression Discontinuities. *American Journal of Political Science*. Forthcoming.

The analyses show that the gap in participation rates largely results from the registered overseas voter population being more educated than the registered domestic voter population.[24] The roughly equal participation rates of the registered overseas citizen and modeled registered domestic voter populations would suggest that living overseas is not a barrier to voting. However, there are important variations in the participation rate across the registered overseas voters and modeled registered domestic voter demographic subpopulations that are important to explain. Specifically, for the younger and less educated components of the registered overseas voter population, the demographic variables are not as effective in explaining the differences in the participation rates.[25] In the registered domestic voter population, as people get older and more educated, they are more likely to vote—but this trend does not hold true for registered overseas voters. The implications of this can be seen in Figure 3.2, which presents predicted probabilities of voting by age for a baseline demographic group: a single white female with children, who has at least a high school education, whose State of legal residence is in New England, and who has not moved in the last 12 months. Because of the difference in the relationship between age and voting between the two groups, the unexplained gap in participation rates is much larger for younger age groups than for older ones.

In short, overseas citizens in this study behave differently than their domestic counterparts because the survey respondents were selected based on the fact that they had requested an absentee ballot. The overseas citizen survey likely overestimates voting among the overseas citizens, especially younger overseas citizens, because the total overseas citizen population is unknown.

24 The results of these analyses can be seen in Appendix D, Table D.2 (the results of the decomposition analysis for the comparison between overseas citizen population and registered domestic citizen population) and Table D.4 (the OLS-estimated models of voting for the employed overseas citizen population and ADM population, which is used in the decomposition analysis).

25 The effects of education on the explained and unexplained differences in turnout between the overseas citizen and domestic citizen population can be seen in the regression results in Appendix D, Table D.3, which indicates that education has a stronger conditional positive association with voting for the domestic citizen population than the overseas citizen population. Because education has a positive conditional relationship with voting in the domestic citizen population, when the domestic citizen population is modeled to match the education levels of the overseas citizen population, the modeled domestic citizen voting rate will be larger than the rate for the domestic citizen population. This implies that some of the difference between the overseas citizen and domestic citizen voting rates can be explained by the fact that the overseas citizen is better educated than the domestic citizen population. However, because the positive relationship between education and voting is smaller for the overseas citizen population, the unexplained gap in voting between the two populations will be larger among the less educated groups. Thus, the unexplained difference, or that part of the difference explained by differences in the constraints or behavior of similar demographic and geographic groups in the two populations, rather than differences in the relative sizes of the demographic and geographic groups, is explained to a significant degree by differences in constraints or behavior between less educated groups in the two populations.

Figure 3.2: Predicted 2014 Participation Rate for Baseline Individual, Registered Overseas Voter Versus Registered Domestic Voter by Age

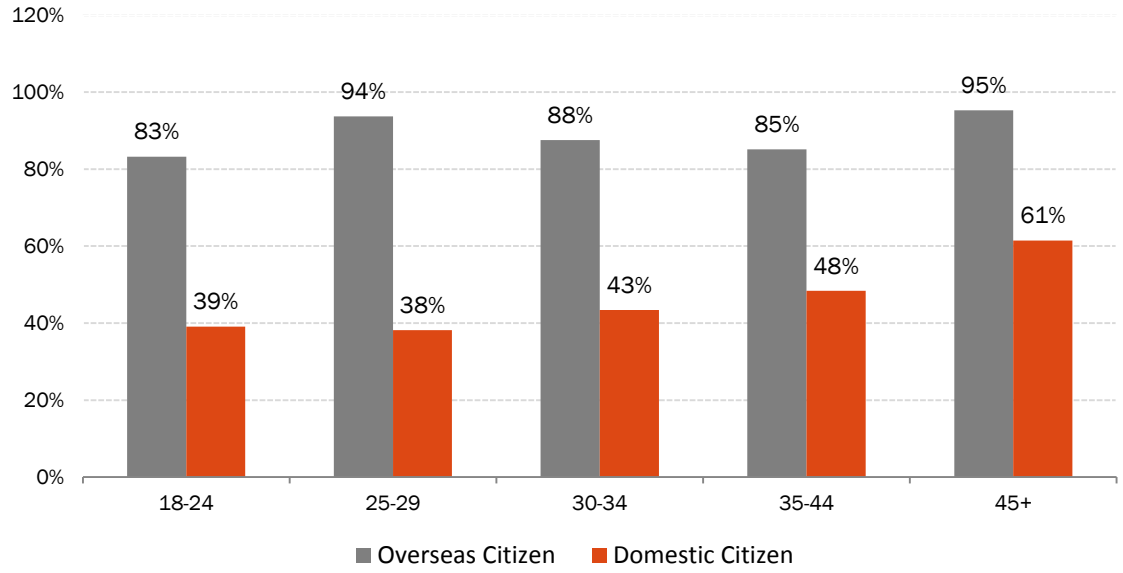
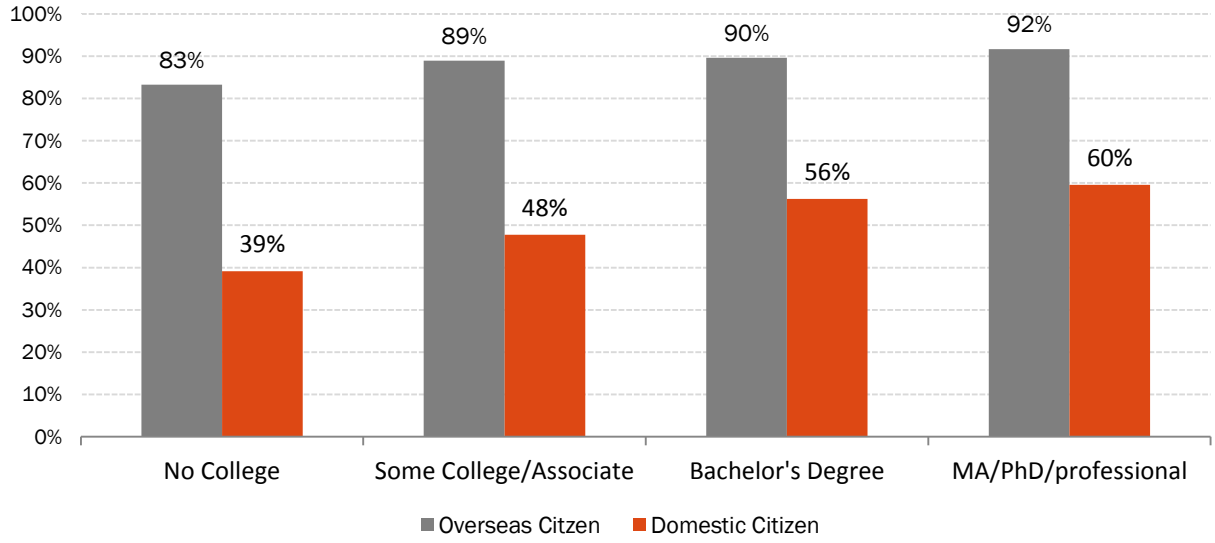


Figure 3.3 shows a similar pattern with respect to education. Again, overseas citizens behave differently than their domestic counterparts because the survey selected on having requested an absentee ballot. The overseas citizen survey likely overestimates voting among the overseas citizens, especially those with some college or no college, because the total overseas citizen population is unknown.[26]

Figure 3.3: Predicted 2014 Participation Rate for Baseline Individual, Registered Overseas Voter Versus Registered Domestic Voter by Education



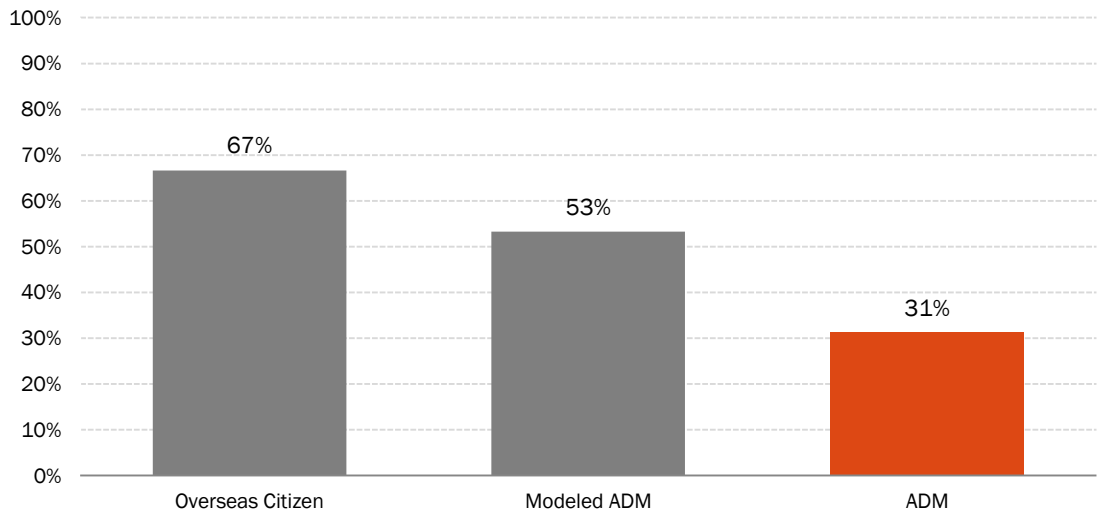
26 The baseline individual for Figures 3.2 and 3.3 is a single white female with children, age 18–24, whose State of legal residence is in New England, and who has not moved in the last 12 months. These values were chosen for comparability with previous research.

Comparing 2014 Participation Rates: Registered Overseas Citizens and Registered ADM

Because all members of the ADM are employed, it is important to compare the ADM population only with the employed segment of the registered overseas voter population. Therefore, the modeled ADM population matches the employed registered overseas voter population demographically and geographically. Estimates of the 2014 participation rates for the ADM population, the employed registered overseas voter population and the modeled ADM populations are presented in Figure 3.4.[27]

The gap in participation rates between the employed registered overseas voter population and the actual and modeled ADM populations is substantial and statistically significant. There is a 38-percentage-point difference between the registered overseas voter population participation rate and the ADM participation rate. This difference can largely be explained by the fact that the ADM population is younger, less educated and more mobile than the employed registered overseas voter population.

Figure 3.4: 2014 Participation Rate, Employed Registered Overseas Voter Versus Registered ADM Voter



As seen in Figure 3.5, the difference between the participation rates of the employed registered overseas voter population and those of the modeled ADM population indicates that the higher participation rate among registered overseas voters is larger for the younger and less educated segments of the population. As was the case with the registered domestic voter comparison,

27 The difference between the overseas citizen voting rate in Figures 3.1 and 3.4 is explained by the fact that Figure 3.4 reports the voting rate of the employed subset of the overseas citizen population.

younger overseas citizens behave differently than their domestic counterparts because the survey selected on having requested an absentee ballot. The overseas citizen survey likely overestimates voting among the overseas citizens, especially younger overseas citizens, because the total overseas citizen population is unknown.

Figure 3.5: Predicted 2014 Participation Rate for Baseline Individual, Employed Registered Overseas Voter Versus Registered ADM Voter by Age

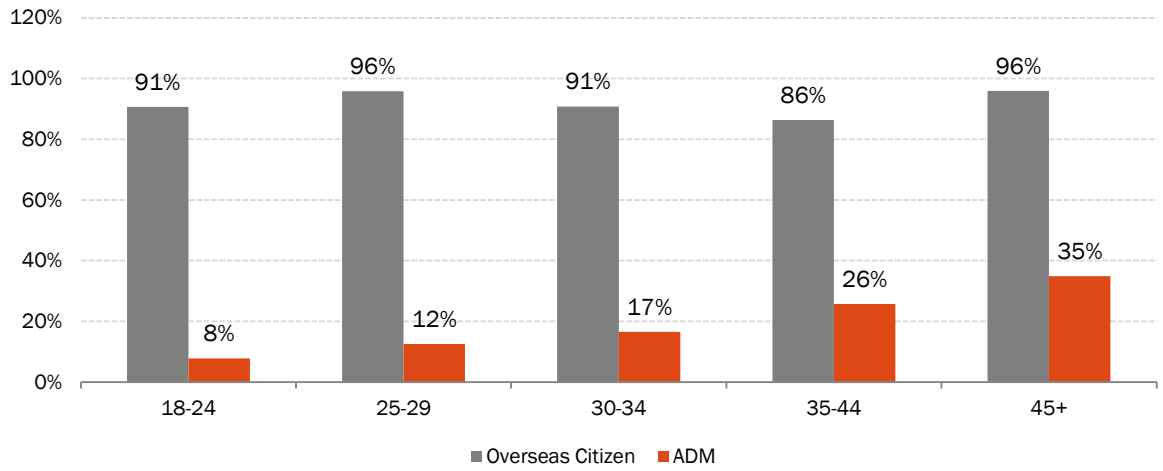
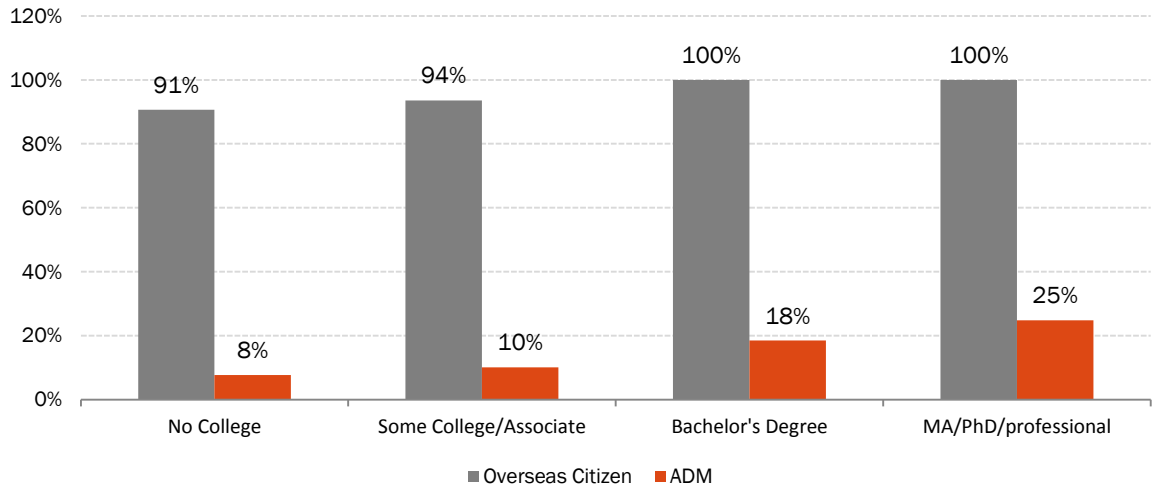


Figure 3.6 shows a similar pattern with respect to education, particularly when comparing the gap for those with post-graduate degrees to those with lower levels of educational attainment.[28] In short, younger overseas citizens in this study behave differently than their domestic counterparts because the survey selected on having requested an absentee ballot. The overseas citizen survey likely overestimates voting among the overseas citizens, especially younger overseas citizens, because the total overseas citizen population is unknown.

[28] Predictions are capped at 100 percent.

Figure 3.6: Predicted 2014 Participation Rate for Baseline Individual, Employed Registered Overseas Voter Versus Registered ADM Voter by Education



Comparing Participation and Voting Rates Among Overseas Voters Over Time

The primary advantage of comparing the participation rates of the registered overseas voter population to those of the registered domestic and ADM voter populations is that it provides information about the effect of living overseas on the ability to vote. However, the registered overseas voter population examined here is likely different from the registered domestic voter and ADM populations in its level of motivation to vote because all of its members asked for an absentee ballot to vote from overseas. The individuals who successfully asked for ballots from overseas in 2014 are more resourced: they have acquired the skills necessary to navigate the *UOCAVA* process.

The population of registered overseas voters in the survey was motivated to vote in the 2014 General Election, as demonstrated by the fact that they asked for a ballot. There is not a similar ballot request proxy for members of the registered domestic voter and ADM populations, so in some respects, comparing the participation rate of registered overseas voters to the participation rate of either the registered domestic voter population or the ADM population is not ideal.

The registered overseas voter population in the OCPS population all asked for an absentee ballot in the 2014 General Election. There is very likely a population of less resourced overseas citizens who attempted to ask for an overseas ballot but were unsuccessful in their efforts and were not included in the survey. Because these less resourced, unsuccessful requesters could not be identified and so were not included in the analysis, the participation rate reported for the registered overseas voter population in the previous analyses is higher than it would be if the analysis included all overseas citizens who desired to vote. Ideally, these analyses would include all overseas citizens who attempted to ask for an absentee ballot.

One way to examine the effect of living overseas on the overseas citizen population is to examine the vote history of the overseas citizen population who asked for ballots in 2014. The vote histories of the registered overseas voter population fall into three categories:

1. Those who asked for a ballot in 2014 who have a vote history for 2010 and who were living overseas in 2010;
2. Those who asked for a ballot in 2014 who have a vote history for 2010 and who were living in the United States in 2010; and
3. Those who do not have a vote history for 2010.

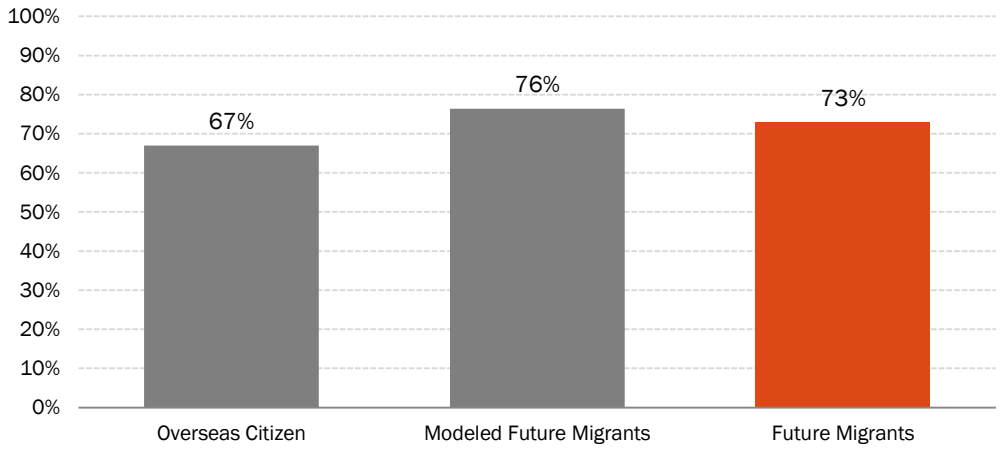
The first group—referred to here as "2010 overseas citizens"—can be compared to the second group—referred to here as "future migrants"—to determine whether living overseas in 2010 affected the likelihood of participating in the 2010 General Election. Both of these populations were well-resourced voters in 2014 and, assuming no change in motivation to vote, the primary difference between them is that in 2010 one set of voters lived overseas. If voting from overseas requires a person to have a specific level of resources and skills, then the overseas citizen population in 2010 should be expected to participate at a lower rate because this population likely includes individuals who were not yet skilled in voting from overseas. The well-resourced people living overseas were likely successful asking for an absentee ballot and the less resourced were not as successful. This variation would make the 2010 overseas population more representative than the 2014 population, since it includes both successful and unsuccessful ballot requesters.

Figure 3.7 presents estimates of the 2010 participation rates for the 2010 overseas citizen population, the future migrant population, and the modeled future migrant population.[29] The modeled future migrant population is the simulated population of future migrants whose demographics match those of the 2010 overseas citizen population.

The 2010 overseas citizen population had a statistically significant six-percentage-point-lower voting rate in 2010 compared to the future migrant population. This gap increases to approximately nine percentage points when comparing the modeled future migrant population to the 2010 overseas citizen population. The detailed decomposition in Appendix D, Table D.6, indicates that this increase largely reflects the fact that the future migrant population was younger than the 2010 overseas citizen population. After adjusting for age, 2010 overseas citizens participate at a lower rate than future migrants, as would be expected. This outcome is consistent with there being barriers to voting based on living overseas that require a person develop a new resource skill set to overcome these obstacles.

29 The difference between the Overseas Citizen Participation Rate in Figures 3.1 and 3.7 is explained by the fact that Figure 3.7 reports the 2010 (as opposed to the 2014) voting rate, and the Figure 3.7 sample is restricted to the subset of the overseas citizen population that was overseas in 2010.

Figure 3.7: 2010 Participation Rate, 2010 Overseas Citizen Versus Future Migrants



Another benefit of comparing respondents to the OCPS who were and were not living overseas in 2010 is that vote history information derived from the same State voter files is available for both groups. Consequently, self-reported[30] participation rates and voting rates reported in vote history files can be compared.[31] Estimates of the 2010 voting rates for the 2010 overseas citizen, future migrant, and modeled future migrant populations are presented in Figure 3.8. All three voting rates are lower than the respective self-reported participation rates. This finding could reflect respondents claiming to vote when they really did not vote (because they think reporting that they voted is the socially desirable response). It could also reflect the resource acquisition problem: those who reported voting actually did attempt to vote but their ballots were not counted because they did not navigate the process successfully.[32] Consistent with the idea that resource acquisition is critical for being a successful overseas voter, the difference between the voting rates is largest for the 2010 overseas citizen population, for which the obstacles to voting were expected to be largest.[33] However, differences in relative voting rates across the three groups are similar to the results for self-reported participation rates. The voting rate for the 2010 overseas citizen population is 15 percentage points lower than the rate for the future migrant population. The gap increases to approximately 17 percentage points once the 2010 overseas citizen sample is adjusted so that its observed characteristics match those of the future migrant population. The comparison of voting rates has similar results as the comparison of voting rates in that it shows the existence of a negative effect on voting resulting from living overseas.

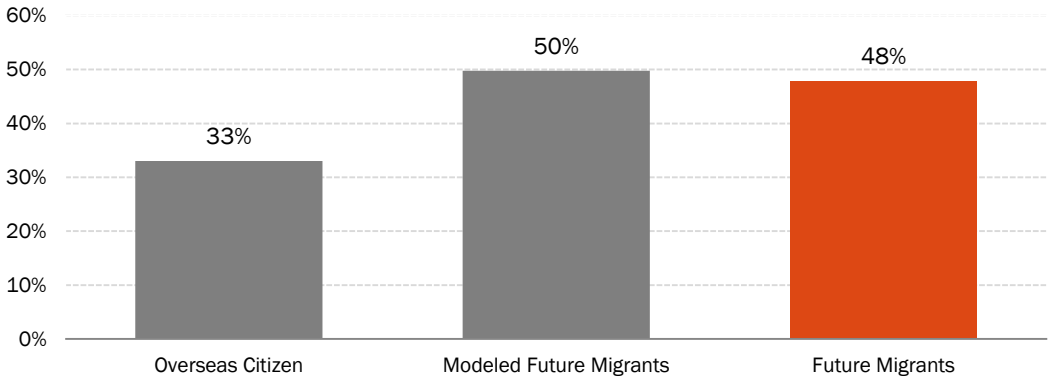
30 This variable is derived from a question in the OCPS that asks respondents whether they voted in 2010.

31 Vote history files report those who successfully vote. In some States and local jurisdictions, it will also include individuals who returned a ballot but made an error in the process, so that their ballot was not counted but they were given "credit for voting" because they made a good faith attempt to try to vote. Many jurisdictions do not count such good faith attempts as having voted in their voter files.

32 For recent evidence on the correlates of discrepancies between self-reported and actual voting, see Ansolabehere, S., & Hersh, E. (2012). Validation: What big data reveal about survey misreporting and the real electorate. *Political Analysis*, *20*(4): 437–459.

33 Another explanation is that differences in the voting and voting rates reflect differences in the sample that result from the exclusion of individuals who did not provide a valid response to the 2010 voting question (i.e., definitely voted/did not vote). However, these differences largely persist when the sample excludes those who did not provide a valid response to the relevant voting question.

Figure 3.8: 2010 Voting Rate, 2010 Overseas Citizen Versus Future Migrants



4 Sustainability of the Research Prototype

The FMG Team recommends that FVAP continue its efforts to collect meaningful data regarding the voting experiences of overseas citizens. The size and geographic distribution of the total overseas citizen population and the eligible voter component of this population had not been estimated consistently and effectively before these efforts. The FMG Team accomplished this task by supplementing the population estimations with primary data collection on all registered overseas voters who either requested an absentee ballot be sent to an overseas address or were listed in voter files as being *UOCAVA* voters. Although there were gaps in the data set—caused by variations in data collection and data sharing laws, rules, and processes across States—this is the most comprehensive effort ever executed to gather data on the entire population of registered overseas voters who participate in the electoral process. This exploratory effort to survey a population, which has been difficult to quantify and describe, was quite successful.

Going forward, the estimates of the size and geographic distribution of the overseas citizen population and the eligible voter component of this population can be produced as long as countries continue to produce foreign government estimates and the appropriate U.S. government agencies produce the requisite tax and SSA data. Likewise, the survey data collected in 2014 can be compared to the data collected for the 2016 General Election and subsequent elections. Given that the 2014 General Election had the lowest turnout since World War II, the population of registered overseas voters requesting a ballot be sent to an overseas address was expected to be small. In the 2016 General Election, which will have a highly competitive open-seat presidential race, ballot requests for overseas citizens should be much higher. Understanding the population of registered overseas citizens that successfully request ballots in 2016 but which did not successfully request them in 2014 will help shed light on who participates in elections while living at an overseas address and how these populations vary between midterm and presidential elections.

Sustainability Moving Forward

This research prototype is sustainable moving forward. In this prototype stage, the FMG Team successfully:

- Estimated the size and distribution of the overseas citizen population and the eligible voter subpopulation of this population;
- Identified individuals in all 50 States and Washington, D.C., who (1) were listed in State voter files as being registered to vote at an overseas address and (2) specifically asked for a ballot to vote in the 2014 election;
- Estimated the participation rate for the overseas citizen population;
- Developed specific protocols for cleaning and formatting addresses for mailing around the world; and
- Developed a survey instrument, which was improved through cognitive testing, pilot tested, modified based on the pilot results, and fielded in a large survey effort.

In a second implementation, the FMG Team already has the survey instrument developed and would be able to reuse or modify the protocols developed for data cleaning. The FMG Team also understands the intricacies of the State voter files and absentee voter files, which will make any future implementation easier.

The most costly and difficult parts of this effort and any similar future efforts will be collecting data from the States of absentee ballot requesters and voters in the voter file listed as living at an overseas address as well as collecting proper addresses for those living at an overseas address. If this process can be streamlined, future surveys may be sent out sooner after Election Day and at a lower cost. The population in question responds at high rates, even without the use of survey incentives.

Data Collection Prototype

There are no databases of overseas citizens kept by any government agencies, and the creation of one is unlikely. It would be ideal to create a database that contains the contact information for the population of registered overseas voters across all 50 States and Washington, D.C. However, because of variations in the way voter registration data for overseas citizens are handled, this effort is not viable. In response to this lack of data, the FMG Team was able to obtain contact information for registered overseas voters who had asked that a ballot be sent to an overseas address in the 2014 General Election. A subset of these registered overseas voters was subsequently surveyed about its experiences in the 2014 General Election, and this survey had a high response rate.

The primary difficulties associated with this research prototype related to the collection of uniform data. States vary in how they administer and process voter registrations and in how they record ballot requests from registered overseas voters. In addition, international addresses are not always formatted the same as U.S. addresses. Cleaning and validating the ballot request data and reformatting addresses to accommodate international variations was a time-consuming and complex process.

Future projects will benefit from ongoing efforts by FVAP to develop uniform standards for data related to *UOCAVA* voters by working with the Council of State Governments (CSG), the EAC, and other groups. In addition, FVAP can help aid this data collection by informing States about the effort before the 2016 General Election so that data can be formatted more uniformly at the time of collection. The data-gathering process could be expedited by standardizing data formats across States and counties and encouraging States to centralize their voting administration records. This standardization could be accomplished by creating agreements directly between FVAP and election officials to arrange for the transfer of data soon after a general election.

A potential way to streamline and reduce cost of future efforts is to use a limited subset of the voter data used for the 2015 iteration of the survey. For example, using international addresses from voter files instead of collecting lists of absentee request files from each State would decrease the cost and the amount of time necessary to construct a survey frame. The survey sampled 4,000 individuals who were only listed on their State's voter file, and they were found to have only a slightly lower response rate than those whose information was obtained from an absentee ballot request file. Another option would be limiting the research effort to a smaller number of representative States that have exemplary data handling procedures, which would shorten the time between the completion of an election and the fielding of a survey. It would reduce the cost associated with gathering an exhaustive list of overseas absentee ballot requesters; however, this cost reduction would increase sample bias since respondents would be limited to a few States of residence. The result would be decreased generalizability for a cost and time efficiency benefit. If States collected email addresses for every voter who asked for a ballot sent to an overseas address, the survey could also be expedited and the costs lowered because fewer letters and paper surveys would have to be printed. This collection is potentially important given the fraction of individuals in the absentee voter data for whom even the country of residence was unknown, and who therefore were likely sent a ballot via email, increased from 16 percent to 34 percent between 2012 and 2014.[34] It is anticipated that future surveys could be completed at a lower cost and in a more timely manner if these recommendations are taken into account.

34 Note, however, that this increase was likely due in part to a change in jurisdictional coverage between 2012 and 2014.

Use of Incentives

Current survey best practices indicate that the use of prepaid incentives is an effective way to increase survey response. However, for this survey, the use of traditional monetary incentives was impractical. When the FMG Team conducted an experiment using a non-monetary incentive in the pilot survey, the incentive did not have a discernable effect on the response rate or the quality of responses. Both the pilot and main surveys found little evidence that incentives were necessary to encourage survey participation among the population of registered overseas voters asking for absentee ballots. This population was very eager for its opinions to be heard and to provide information regarding overseas voting experiences. Around one-fourth of the sample returned a survey questionnaire by completing it online or returning a paper copy of the survey. This response rate is remarkably high considering the complications associated with sending mail internationally and taking into account that the survey occurred almost a full year after the election for which addresses were originally collected. Although the 2015 survey effort was not hindered by the lack of an incentive, it is recommended that future implementations of the survey continue to explore the use of other types of non-monetary incentives or ways to provide a monetary equivalent that would be able to be redeemed worldwide.

Future Value

The population estimation, overseas citizen participation and voting rate estimations; the compilation of the survey frame; and the survey effort provide FVAP with information that is crucial to its mission. The estimation of the geographic and demographic distribution of the overseas citizen population provides FVAP with key information about the total overseas citizen population. The survey frame contains critical information about the location of each individual asking for an absentee ballot to be sent overseas. The survey responses contain in-depth data about the voting behaviors, obstacles, media usage, and demographic characteristics of this population. Together, these data paint a more complete picture of the registered overseas voter population than has previously been available.

The absentee ballot request and overseas voter file lists have allowed the FMG Team to tabulate absentee ballot requests and successful absentee votes by country. Although there is some uncertainty as to the completeness of the data, this is the first time FVAP has been able to analyze overseas votes at any level of geographic specificity. When combined with the country-level population estimates of eligible overseas voters, these data have enabled the creation of country-level and subnational-level estimates of eligible overseas citizen voting. These baseline overseas citizens' voting rates provide FVAP with previously unavailable information about one of its major demographic constituencies.

Building on this prototype effort, future research can use data from the 2015 survey and future surveys to compare voting behavior across time for specific groups and individuals. These data can

also be used to continue to make comparisons between registered overseas voter behavior and the voting behavior of registered domestic voters and ADM. Surveys can be targeted toward specific geographic areas or demographic segments, and FVAP can use the survey frame to test specific outreach and marketing programs by contacting a subset of voters and observing the effect on their voting behavior.

Although the initial purpose of the overseas survey was to collect demographic information and basic information about whether a respondent voted in the last election, the survey responses provided an unprecedented level of detail regarding the voting experiences of overseas citizens. The results of the survey will allow FVAP to determine some of the main obstacles to voting among this population and to target its resources more effectively. The FMG Team believes that future survey efforts will be able to gather more detail about how to help this population stay engaged in the election process and alleviate difficulties related to voting. Future surveys can be more specifically targeted to certain segments of the overseas citizen population to provide greater detail about typical experiences for these groups.

Bibliography

Adsera, A., & Pytlikova, M. (2012). The role of language in shaping international migration (Discussion Paper No. 6333). Institute for the Study of Labor. Retrieved from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2003666

Alesina, A., & Dollar, D. (2000). Who gives foreign aid to whom and why? *Journal of Economic Growth*, *5*(1), 33–66.

Alvarez, R. M., Hall, T. E., & Sinclair, B. (2008). Whose absentee votes are returned and counted: The variety and use of absentee ballots in California. *Electoral Studies*, *27*(4), 673-683.

Ansolabehere, S., & Hersh, E. (2012). Validation: What big data reveal about survey misreporting and the real electorate. *Political Analysis*, *20*(4): 437–459

Arslan, C., Dumont, J. C., Kone, Z., Moullan, Y., Ozden, C., Parsons, C., & Xenogiani, T. (2014). A new profile of migrants in the aftermath of the recent economic crisis. Retrieved from http://dx.doi.org/10.1787/5jxt2t3nnjr5-en

Artuc, E., Docquier F., Ozden C., & Parsons, C. (2015). A global assessment of human capital mobility: The role of non-OECD destinations. *World Development*, *65*, 6–26.

Berthelemy, J., Beuran, M., & Maurel, M. (2009). Aid and migration: substitutes or complements? *World Development*, *37*(10), 1589–1599.

Blinder, A. S. (1973). Wage discrimination: Reduced form and structural estimates. *The Journal of Human Resources, 8*(4), 436–455.

Brady, H. E., Verba, S., and Schlozman, K. L. (1995). Beyond SES: A resource model of political participation. *American Political Science Review, 89*(2), 271–294.

Coppock, A., & Green, D. P. (2015). Is Voting Habit Forming? New Evidence from Experiments and Regression Discontinuities. *American Journal of Political Science*. Forthcoming.

Federal Voting Assistance Program. (2005). *The federal voting assistance program: Seventeenth report*. Washington, DC: Department of Defense. Retrieved from https://www.fvap.gov/uploads/FVAP/Reports/17threport.pdf

Federal Voting Assistance Program. (2013). *A model for developing estimates of U.S. citizens abroad: Final technical report*. Retrieved from https://www.fvap.gov/uploads/FVAP/Reports/OCE_Technical_Report.pdf

Felbermayr, G. J., & Toubal, F. (2012). Revisiting the trade-migration nexus: Evidence from new OECD data. *World Development*, *40*(5), 928–937.

Government Accountability Office. (2004). *2010 Census: Counting Americans overseas as part of the census would not be feasible*. Washington, DC: U.S. Government Accountability Office. Retrieved from http://www.gao.gov/new.items/d041077t.pdf

Green, D. P., & Gerber, A. S. (2008). *Get out the vote: How to increase voter turnout*. Washington, D.C.: Brookings Institution Press.

Heston, A., Summers, R., & Aten, B. (2012). *Penn world table version 7.1*. Center for International Comparisons of Production, Income and Prices at the University of Pennsylvania. Retrieved from https://pwt.sas.upenn.edu/

Hollenbeck, S., & Kahr, M. K. (2009). *Individual foreign-earned income and foreign tax credit, 2006* (Statistics of Income Bulletin, Spring). Washington, DC: Internal Revenue Service. Retrieved from http://www.irs.gov/pub/irs-soi/09sprbulinforincometc.pdf

Hur, A., & Achen, C. H. (2013). Coding voter turnout responses in the Current Population Survey. *Public Opinion Quarterly*, *73*(4), 641–678.

Institute of International Education (2012). *Host regions and destinations of U.S. study abroad students, 2009/10–2010/11*. Available from Open Doors Report.

Issenberg, S. (2012). *The Victory Lab: The Secret Science of Winning Campaigns.* Ann Arbor: University of Michigan Press.

Jann, B. (2008). The Blinder-Oaxaca decomposition for linear regression models. *The Stata Journal, 8*(4), 453–479.

Kline, P. (2011). Oaxaca-Blinder as a reweighting estimator. *American Economic Review: Papers & Proceedings, 101*, 532–537.

Lewer, J., & Van den Berg, H. (2008). A gravity model of immigration. *Economic Letters*, *99*(1), 164–167.

Lewis, M. P., Grimes, B. F., Simons G. F., & Huttar, G. (2009). *Ethnologue: Languages of the world (Vol. 9)*. Dallas, TX: SIL International.

Minnesota Population Center. (2014). *Integrated public use microdata series, international: Version 6.3 [machine-readable database]*. Minneapolis: University of Minnesota.

Montgomery, J. M., Hollenbach, F. M., & Ward, M. D. (2012). Improving predictions using ensemble Bayesian model averaging. *Political Analysis*, *20*(3), 271–291.

Oaxaca, R. (1973). Male-female wage differentials in urban labor markets. *International Economic Review, 14*(3), 693–709.

Organisation for Economic Co-operation and Development. (2013). *Glossary of statistical terms: Imputation*. Retrieved from https://stats.oecd.org/glossary/detail.asp?ID=3462

Sangita, S. (2013). The effect of diasporic business networks on international trade flows. *Review of International Economics*, *21*(2), 266–280.

Schachter, J. (2008). Estimating native emigration from the United States [memorandum]. Washington, DC: U.S. Census Bureau.

Scheuren, F. (2012). *Overseas citizens count OCC report review: Review and recommendations.* Report prepared for Federal Voting Assistance Program.

Słoczyński, T. (2014). *New evidence on linear regression and treatment effect heterogeneity* (Working Paper No. 9491). Institute for the Study of Labor. Retrieved from http://ftp.iza.org/dp9491.pdf

Tollefsen, A. F., Strand, H., & Buhaug, H. (2012). PRIO-GRID: A unified spatial data structure. *Journal of Peace Research, 49*(2): 363–374.

U.S. Census Bureau. (2015). *Foreign trade: U.S. trade in goods by country*. Retrieved from http://www.census.gov/foreign-trade/balance/

U.S. Department of the Treasury, Internal Revenue Service. *Table 2. Individual income tax returns with form 2555: Foreign-earned income, exclusion before deductions, housing exclusion, and housing deduction, by country or region, tax year 2011*. 2011 IRS Statistics of Income. Retrieved from http://www.irs.gov/file_source/pub/irs-soi/11in02ic.xlsx

United Nations. (2014). World Urbanization Prospects: The 2014 Revision. Retrieved from http://esa.un.org/unpd/wup/highlights/wup2014-highlights.pdf

Ziesemer, T. H. W. (2010). Developing countries' net-migration: The impact of economic opportunities, disasters, conflicts, and political instability. *International Economic Journal*, *25*(3), 373–386.

A Appendix A: Data and Methodology for Developing Country-Level Estimates

The U.S. government does not keep track of where U.S. citizens travel overseas, or where they might be living, working, or studying while overseas. For some nations, it is likely that data on the number of U.S. citizens currently in their country does exist; countries with visa requirements for entry and exit, such as China, should be able to provide information on the number of U.S. citizens in their country at any given time. However, it is not always possible to gain access to these data. For many other countries, including Canada, Mexico, Western Europe, much of South America, and much of Southeast Asia (including India), there is no requirement for U.S. citizens to obtain a visa before their arrival and they can typically travel to adjoining countries easily. U.S. citizens can fly to Paris and be anywhere in Europe the next day without having their passport scanned as they cross borders. Thus, there is no exact count of the total number of overseas citizens; nor do many other nations produce a consistent enumeration of the number of overseas citizens who live within their borders.

Because of these issues and others discussed below, the Fors Marsh Group (FMG) Team had to estimate the number of overseas citizens in any given country. These estimates were generated using three primary data sources: foreign country data on the number of U.S. citizens living in their borders, U.S. government administrative data on overseas citizens, and data from academic studies that have examined factors that affect the number of U.S. citizens living in any given country around the world.

Foreign Government Estimates (FGE) of their U.S. Citizen Population

Foreign Government Estimates

The term "foreign government estimate" (FGE) will be used throughout this appendix. These estimates refer to two different concepts, depending on the context. First, FGEs are the data foreign governments have, through registries and census, on the number of U.S. citizens living in their country. Second, the term FGE is used to describe the updated estimates we generate for all countries—for those that have FGE data and those for which we have to fully estimate the U.S. citizen population living in their country.

There are several sources for FGEs of the U.S. citizens living in each country. The FGEs used in the analyses come from several sources: (1) the Organisation for Economic Co-operation and Development (OECD) International Migration Database, which provides data on the number of U.S. citizens during the years 2000 to 2010 for most OECD countries; (2) countries' national statistical agencies;[35] and (3) a U.S. Census Bureau internal document, "Estimating Native Emigration from the United States",[36] which was compiled as part of a project to estimate U.S. net emigration.[37] For this report, the 2013 FGEs were used as a baseline and then updated when possible.

Census Versus Registry

A census is a country-wide, periodic data collection that tallies all residents.

A registry is a compilation of administrative records from numerous sources.

Registries may provide more complete counts if they are updated often and if they are drawn from several different sources (such as tax records, visas, school forms, etc.). One major disadvantage of registries is that U.S. citizens may continue to appear on a foreign registry for several years after they no longer reside in that country.

The primary methods that foreign governments use to track the population of U.S. citizens in their country are censuses and registries. The FMG Team used both census and registry data, and used an indicator variable to account for the difference in collection method. Countries vary in who they

35 Links to foreign government statistics office (FGSO) websites were identified using the U.S. Census Bureau webpage, "International Collection of the U.S. Census Bureau Library." Estimates obtained from countries' websites were usually from their most recent censuses. Immigration registries and population surveys were also common sources. In other cases, estimates were obtained from specific reports on migration commissioned by the national government. These estimates were obtained from foreign government censuses and immigrant registries.

36 Schachter, J. (2008). Estimating native emigration from the United States [memorandum]. Washington, DC: U.S. Census Bureau.

37 For more information concerning the collection of FGEs in the previous round of research, see Federal Voting Assistance Program, 2013.

consider to be a U.S. citizen for purposes of a census or registry. Some countries count only U.S. citizens and others count only individuals born in the U.S. The groups defined by these two criteria have significant overlap, but a small proportion of individuals belong to only one of those groups.[38] The FMG Team accounted for this discrepancy by having an indicator variable for whether the country uses U.S. citizens or U.S.-born individuals. Because countries that allow dual citizenship may undercount resident U.S. citizens by counting dual citizens as their own, a variable was created to indicate countries that allow their citizens to maintain dual citizenship with the United States.

U.S. Administrative Records on Overseas Citizens

Several federal agencies collect data on overseas citizens and release statistics about subsets of that population. The FMG Team used these data in the estimations of the total number of U.S. citizens in a given country. The key administrative data used were:

Number of U.S. Exchange Students, 2000–2014: This is the total number of U.S. exchange students attending foreign universities in each country for each year during the period 2000–2014.[39]

Number of Social Security Beneficiaries, 2000–2014*:* This is the number of overseas Social Security beneficiaries, as reported annually by the United States Social Security Administration (SSA). Counts were available for each year during the period 2000–2014.

Number of Foreign Earned Income Returns, 2000–2014: This is the estimated number of Internal Revenue Service (IRS) Form 2555 returns (used to declare foreign income) filed by U.S. citizens living in country in a given year.[40] Each form represents at least one U.S. citizen residing in the country. Data were not available for some countries, and for the subset of countries with estimates, they were only available for 1996, 2001, 2006 and 2011. Data were available on either a by-country or by-region basis.

Number of Civilian U.S. Federal Government Employees, 2000–2010: The number of civilian U.S. Federal Government employees residing in a country in a given year, as reported to Federal Voting Assistance Program (FVAP) by the Office of Personnel Management (OPM) on April 3, 2013.

There are additional administrative records in existence, such as deaths overseas, consulate registrations, and counts of the number of military personnel. However, these data sources were not incorporated into this analysis for several reasons. Some of these data are classified, sensitive or otherwise not available to the general public; including them in the analysis would have precluded other researchers from reproducing the results and thus undermined the transparency of these

38 For instance, person can be American-born but renounce his or her U.S. citizenship. In a small number of cases, such individuals would be counted as a U.S. citizen in a registry or census even though the person cannot vote.

39 Institute of International Education (2012). *Host regions and destinations of U.S. study abroad students, 2009/10–2010/11*. Available from Open Doors Report.

40 Hollenbeck, S., & Kahr, M. K. (2009). *Individual foreign-earned income and foreign tax credit, 2006* (Statistics of Income Bulletin, Spring). Washington, DC: Internal Revenue Service. Retrieved from http://www.irs.gov/pub/irs-soi/09sprbulinforincometc.pdf

analyses. Another concern is that these additional sources of data are likely to be quite strongly associated with tourism or military presence, rather than resident citizens, and that including them would add error by overestimating the number of U.S. citizens in countries with a military presence or a high volume of tourists from the United States.

Filling the Data Gap—Imputation and Estimation

For many countries—especially countries in the OECD—FGEs and U.S. administrative data are available. In other countries, especially countries with low government capacity and with smaller populations, FGEs may be incomplete or nonexistent. Data from smaller countries may not be available because, as a rule, the U.S. government does not report data in which too few people meet a certain criteria. For example, there may be such a small number of U.S. tax filers living in East Timor that the government does not release records for East Timor because of privacy considerations.

For countries with incomplete data, the FMG Team addressed this problem using imputation and estimation. For instance, for countries missing U.S. administrative data, a value was imputed for that country for the missing years. As the OECD explains, "Imputation is the process used to determine and assign replacement values for missing, invalid or inconsistent data [...] This is done by changing some of the responses or assigning values when they are missing [...] to ensure that estimates are of high quality and that a plausible, internally consistent record is created."[41]

The FMG Team imputed missing U.S. administrative data by creating a predictive model that relies on variables known to be associated with higher levels of migration between countries.[42] These variables include:

The Difference Between Foreign Country Gross Domestic Product (GDP) per Capita and U.S. GDP per Capita: The difference between the purchasing power parity (PPP)–converted[43] GDP per capita of the foreign country in a given year in constant 2005 prices and the GDP per capita of the United States in the same year, as reported by Penn World Table Version 7.1.[44] Research shows that countries with more favorable economic conditions are more attractive to U.S. citizens and thus have larger U.S. citizen populations.

41 Organisation for Economic Co-operation and Development. (2013). *Glossary of statistical terms: Imputation*. Retrieved from https://stats.oecd.org/glossary/detail.asp?ID=3462

42 A more detailed discussion of these variables can be found in the 2013 OCE Report.

43 The U.S. dollar value of GDP per capita without a PPP adjustment is a problematic proxy for a country's level of development because it does not reflect differences in prices across countries. By contrast, PPP-converted GDP attempts to represent the actual amount of goods and services that the country's residents can obtain given their income. The imputation model uses the log of this variable and other values to account for outliers in the data and the fact that there may be diminishing marginal returns in the effects of the predictors on the (logged) number of U.S. citizens in a country.

44 Heston, A., Summers, R., & Aten, B. (2012). *Penn world table version 7.1*. Center for International Comparisons of Production, Income and Prices at the University of Pennsylvania. Retrieved from https://pwt.sas.upenn.edu/

Population: The population of the foreign country, as reported in the Penn World Table Version 7.1.[45] The literature on international migration has typically found that countries with larger populations and economies tend to attract more migrants.[46]

Distance From the United States: The distance between the closest foreign city and U.S. city that both have a population over 750,000. For countries that do not have a city with a population over 750,000, the distance between the capital city of the foreign country and the closest U.S. city with a population of at least 750,000 was used. Distance has typically been found to be associated with lower levels of migration between two countries[47], likely because of the fact that larger distance is related to higher costs of migration (e.g., owing to travel and moving expenses).

Trade With the United States: The mean end-of-year product trade (imports plus exports) between the United States and the foreign country, limited to the years 2000–2013, as reported by the Census Bureau.[48] Trade has been linked to migration between trading countries.[49]

Institutional Quality: The average of the six World Bank's World Governance Indicators (WGI)—Voice and Accountability, Political Stability and Absence of Violence, Government Effectiveness, Regulatory Quality, Rule of Law, and Control of Corruption—averaged across the years 1996–2011. This variable serves two purposes: First, research has found that institutional quality, and particularly the degree of political stability, is a determinant of net migration to countries.[50] Countries with good institutional quality are expected to have higher numbers of U.S. citizens. Second, countries with low governance quality are also likely to have poor FGEs, because they are unlikely to invest in the human capital of their bureaucracy.

Number of Immigrants in the United States: The number of immigrants from the foreign country ages 25 and up in the United States in the year 2000 as reported by Artuc et al. (2013). One type of potential out-migrant from the United States is an immigrant from a foreign country (or his or her offspring) who then decides to return to his or her country of origin.[51] A more general justification for the inclusion of this variable is that it may proxy for factors that promote or inhibit migration both to and from the United States, such as transportation costs. Consequently, countries with larger numbers of immigrants in the United States would be expected to have larger numbers of U.S. citizens. On the other hand, the number of immigrants in the United States from the country may

45 See Heston, Summers, & Aten (2012).
46 Lewer, J., & Van den Berg, H. (2008). A gravity model of immigration. *Economic Letters*, *99*(1), 164–167.
47 See Lewer & Van den Berg, 2008.
48 U.S. Census Bureau. (2015). *Foreign trade: U.S. trade in goods by country*. Retrieved from http://www.census.gov/foreign-trade/balance/
49 Felbermayr, G. J., & Toubal, F. (2012). Revisiting the trade-migration nexus: Evidence from new OECD data. *World Development*, *40*(5), 928–937.; Sangita, S. (2013). The effect of diasporic business networks on international trade flows. *Review of International Economics*, *21*(2), 266–280.
50 Ziesemer, T. H. W. (2010). Developing countries' net-migration: The impact of economic opportunities, disasters, conflicts, and political instability. *International Economic Journal*, *25*(3), 373–386.
51 Scheuren, F. (2012). *Overseas citizens count OCC report review: Review and recommendations.* Report prepared for Federal Voting Assistance Program.

also be negatively associated with the number of U.S. citizens in that country, if factors that affect migration flows asymmetrically (such as political instability) are salient. The uncertainty regarding relationship direction is not a limitation for this predictor because the estimation strategy does not require an assumption of a positive or negative relationship.

U.S. Military Aid: The total amount of military assistance in constant dollars made by the United States to the foreign country between 1946 and 2011 as reported by United States Agency for International Development (USAID). Aid to foreign countries by the U.S. Government, and the associated interaction between those governments, may promote migration from the United States to the foreign beneficiary countries by facilitating the transfer of information about the foreign country to potential U.S. migrants.[52] In addition, aid may be a proxy for general diplomatic ties associated with foreign government policies that are advantageous to U.S. migrants, leading to increased U.S. migration to the country.[53]

English or Spanish: A variable regarding whether English or Spanish is spoken in the foreign country. The information is taken from *Ethnologue: Languages of the World*.[54] These variables may proxy for cultural distance between the United States and the foreign country as well as the ability to succeed in the host country's labor market.[55] Given that English and Spanish are the two most widely spoken languages in the United States, countries where these languages are commonly spoken are expected to attract more U.S. citizens.

Trend: A linear trend variable that controls for trends in the size of the overseas U.S. citizen population common to all countries and not explained by other theoretical variables. It accounts for variation in factors that affect migration to all other countries, such as advances in communication technology, changes in transportation costs, or general geopolitical factors. These factors may include population growth through births of U.S. citizens, whether overseas or within the United States, which would be expected to affect the total number of overseas U.S. citizens. In addition, this variable may also capture changes in transportation costs over the 2000–2010 period of study, which would also be expected to affect the tendency of U.S. citizens to migrate.

To impute data on exchange students, (log-linear) interpolation and extrapolation methods were used to determine values for missing years, as needed. Countries without a count for any year were assigned a value of zero.

For the SSA and IRS data, the FMG Team imputed the missing data for countries for which there were no data. For the SSA data, there were very reliable administrative counts most years on the

52 Berthelemy, J., Beuran, M., & Maurel, M. (2009). Aid and migration: substitutes or complements? *World Development*, *37*(10), 1589–1599.
53 Alesina, A., & Dollar, D. (2000). Who gives foreign aid to whom and why? *Journal of Economic Growth*, *5*(1), 33–66.
54 Lewis, M. P., Grimes, B. F., Simons G. F., & Huttar, G. (2009). *Ethnologue: Languages of the world (Vol. 9)*. Dallas, TX: SIL International.
55 Adsera, A., & Pytlikova, M. (2012). The role of language in shaping international migration (Discussion Paper No. 6333). Institute for the Study of Labor. Retrieved from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2003666.

total number of beneficiaries from a region (e.g., Africa) and by country. To impute the number of beneficiaries for African countries without counts, the number of beneficiaries from those countries that had a country count from the SSA was subtracted from the region total. For example, if there were 10,000 beneficiaries for Africa, only South Africa was provided with a count, and 500 beneficiaries were listed from South Africa, 500 were subtracted from the 10,000 regional total. There would remain 9,500 beneficiaries to allocate to the countries without specific counts. To allocate the remaining beneficiaries, a model was created using the variables listed above.

The FMG Team used this model to generate predicted numbers for those countries without estimates and distributed the unassigned beneficiaries of a region in proportion to that prediction. For example, a highly populated African country where English is the primary language that has a relatively high GDP will have more beneficiaries allocated to it compared to a highly populated French-speaking country in Africa with a relatively low GDP. A similar methodology was employed to generate estimates for the number of IRS returns for those countries for which the IRS does not already provide estimates. Once all countries had an estimate for the years for which data were available, estimates for the remaining years were produced using (log-linear) interpolation or extrapolation.

The collected and imputed data yield the final set of variables that will be used to model the foreign country population estimates. As noted, FGEs are only available for some countries for some years, and counts of demographic subgroups are available for an even smaller number of countries and years. In addition, some countries with complete data—foreign government data on U.S. citizens in their country, U.S. administrative data, and all other variables—will still have errors in their FGEs because of the differences between registries and censuses. Therefore, the FMG Team estimated models to generate FGEs for all countries— those with complete data including FGEs and those without an FGE.

Averaging Across Models

Estimating the overseas citizen population was complicated because it is unclear which variables—and which combination of variables—should be used to model this population. To address this uncertainty, a variant of a method called ensemble Bayesian model averaging (EBMA) was used. EBMA has been found to yield more accurate predictions than using a single model when predicting armed conflicts or the outcome of presidential campaigns.[56] The general approach of EBMA is to take predictions from multiple models (i.e., ensembles) and create an average of all the estimates weighted by the model's fit to the data in combination with each model's correlation or redundancy with predictions derived from other models. The resulting estimate is designed to be more accurate than the estimates derived from any single model by minimizing the effects of overfitting the data

56 Montgomery, J. M., Hollenbach, F. M., & Ward, M. D. (2012). Improving predictions using ensemble Bayesian model averaging. *Political Analysis, 20*(3), 271–291.

resulting from individual model specifications. At the same time, this method allows the final estimate to incorporate as much information as possible from the predictor variables.

Models

For the estimates of the overseas citizen population, the baseline model includes: (1) all U.S. government administrative data, (2) data about whether the country has a registry or census, (3) how the country counts a U.S. citizen, and (4) if the country allows dual U.S. citizenship. Additional models that include every combination of the migration research variables are also

Estimating the Eligible Voter Population

The procedure for estimating the eligible voter population is similar to the procedure used for the overall country-level estimations. The FMG Team started the estimation process by using data from the Database on Immigrants in OECD Countries (DIOC).[57] This data set provides counts of international migrants 15 years of age and older in OECD and some non-OECD countries by country of origin, divided into demographic groups defined by age, education, and gender. There are three age categories (15–24, 25–64, 65 and older), three education categories (No Education/Primary Education, Secondary Education, Post-Secondary Education), and two gender categories, for a total of 18 demographic groups.[58] The population of U.S. citizens under the age of 15 was estimated for a subset of the DIOC country-years by subtracting the total population aged 15 and older from an available FGE to get the population under age 15, resulting in a total of 19 demographic groups encompassing the entire U.S. citizen population in a country.

The model-averaging methodology was used to obtain predictions for both the aggregate population as well as the sizes of each age-gender-education group for all countries in the frame for the years 2012 and 2014.[59] The size of each stratum was then rescaled so that the total number of U.S. citizens in each country across all groups was equal to the total number of U.S. citizens in each country as estimated in the updated 2012 and 2014 populations. In practice, after allocating the population across groups for each country, the under-15 age group was first removed, as were a proportion of the 15–24 age group who are under age 18. This was done by removing a proportion of those who do not have a high school education, equivalent to the proportion of the relevant

57 Arslan, C., Dumont, J. C., Kone, Z., Moullan, Y., Ozden, C., Parsons, C., & Xenogiani, T. (2014). A new profile of migrants in the aftermath of the recent economic crisis. Retrieved from http://dx.doi.org/10.1787/5jxt2t3nnjr5-en.

58 Some parts of the population in the DIOC were not assigned to a particular age-gender-education strata on account of an inability to identify some or all of their relevant demographic characteristics. Because of the existence of these cases, the FMG Team only used data for countries that had assigned at least some individuals to all age-gender-education strata. For the parts of a given overseas citizen population who could not be assigned to a stratum, the FMG Team assigned them proportionately to the relevant strata. For example, if there were 50 individuals in the 15–24/Secondary Education/Male strata, 50 individuals in the 15–24/Secondary Education/Female strata, and 50 individuals in the 15–24/Secondary Education/Unknown strata, the FMG Team would assign 25 individuals in the latter strata to the 15–24/Secondary Education/Male strata and 25 individuals to the 15–24/Secondary Education/Female strata.

domestic U.S. population who are ages 15–17. The estimated counts by demographic strata were then used to obtain an estimate of the size of the eligible population.

Validation and Comparison With Prior Estimates

For the overseas citizen population estimates, two validation tests were conducted. First, the degree to which a country's U.S. citizen population varies with country characteristics consistent with standard migration theory was examined. Second, the FVAP estimates were compared to estimates produced by the World Bank. Together, these tests helped determine whether the estimated geographic distribution of the overseas citizen population was reasonable.

If the FGEs used to generate the FVAP estimates were subject to substantial measurement error, then the estimates themselves would be less accurate due to overfitting. This measurement error would be unlikely to be correlated with the predictors in a manner consistent with theory. One way of testing the validity of estimates was to examine the correlation between the FVAP estimates and the migration predictors. If the estimates were correlated in the correct direction with the predictors, then it would indicate that the estimates were not heavily influenced by measurement error in the FGEs. Consequently, the estimates are likely to be correlated with the "true" size of the overseas citizen population.

As discussed in Section I, the estimates are expected to be:

- Positively correlated with the population of the foreign country
- Negatively correlated with the distance of that country from the United States
- Positively correlated with the level of GDP per capita in the foreign country relative to the United States
- Positively correlated with the quality of a country's institutions, as proxied by the WGI
- Positively correlated with the degree of political affinity of the country with the United States, as proxied by the historical level of military aid
- Positively correlated with trade flows, and
- Positively correlated to English or Spanish being spoken in the country.

These are tested using a Poisson regression in which the estimates are modeled as a function of the theoretical variables. As shown in Table A.1, the coefficients all take the expected signs, and most are also statistically significant. This first validity test suggests that the estimates are consistent with the predictions of migration theory.

Table A.1: Determinants of FVAP Estimates, 2000–2014	
Region	2010
Ln(GDP per Capita, Country/GDP per Capita, U.S.)	0.314 (0.184)
Ln(Country Population)	0.207 (0.105)*
World Governance Indicators	0.277 (0.172)
Ln(Military Aid from U.S. to Country)	0.277 (0.172)
Ln(Migration from Country to U.S.)	0.011 (0.016)
Ln(Distance of Country to U.S.)	0.286 (0.076)***
Ln(Distance of Country to U.S.)	-0.090 (0.041)*
Ln(GDP per Capita, Country/GDP per Capita, U.S.)	0.314 (0.184)
Ln(Country Population)	0.207 (0.105)*
World Governance Indicators	0.277 (0.172)
Ln(Military Aid from U.S. to Country)	0.011 (0.016)
Ln(Migration from Country to U.S.)	0.286 (0.076)***
Ln(Distance of Country to U.S.)	-0.090 (0.041)*
Ln(Trade with the U.S.)	0.332 (0.087)***
English	0.650 (0.200)**
Spanish	0.785 (0.200)***
Year	0.025 (0.007)***
Constant	-48.943 (14.948)**
N	2,790

* $p<0.05$; ** $p<0.01$; *** $p<0.001$ Model estimated using Poisson regression. Standard errors clustered on country in parentheses.

Testing Against World Bank and State Department Data

The second validity test compares these estimates with those produced by the World Bank, which uses a different methodology. The differences in estimation methodologies may yield somewhat different results. Because the World Bank methodology does not account for differences across countries in who is counted as a migrant from the United States and how each is counted, there could be a significant undercount of U.S. citizens in cases in which the country allows individuals to hold dual citizenship. For countries that do not update their estimates frequently (something more likely to occur in less developed, poorly governed countries), the 2013 World Bank estimates may have a lower estimate.

The way in which the World Bank imputes estimates for countries without an FGE may have implications for the size and geographic distribution of the U.S. population. The estimates produced here are expected to be larger relative to the World Bank estimates in regions with historically small numbers of U.S. citizens.

Table A.2 compares the FVAP estimates with the World Bank estimates and the number of consulate registrations by U.S. citizens in 2013 as reported by the State Department. The total size of the overseas citizen population is approximately two times larger according to the FVAP estimates than the World Bank estimates. FVAP's relatively larger estimates are consistent with the expectation that the World Bank estimates would undercount overseas citizens. The FVAP estimates are also closer in total size to the number of consulate registrations by U.S. citizens in 2013 as reported by the State Department. However, when comparing the implied shares of the overseas citizen population residing in a given region, there is much greater agreement between FVAP and World Bank estimates. The FVAP estimates are closer in size to the State Department estimates but closer in distribution to the World Bank's, suggesting that the estimation technique used here is addressing both undercounting problems that exist in the World Bank model but also overestimation possibilities in the State Department's counts.[60]

Figure A.1 examines the correlation between the FVAP and World Bank estimates at the country level. The initial correlation between the two sets of estimates is 0.89, but there is reason to think that a small number of countries with particularly large U.S. citizen population might be responsible for this high correlation. When both sets of estimates are log transformed, the correlation coefficient drops to 0.65. However, this may be the result of how the log transformation affects the World Bank data, which set the overseas citizen population of many countries to zero. When these countries are excluded, the correlation coefficient rises to 0.85. This high correlation coefficient is consistent with the similarity in the population shares across regions reported earlier. This country-level analysis confirms the robustness of the imputed geographic distribution to a change in methodology.

60 The State Department likely overestimates the overseas citizen population because of the way they count temporary travelers and because of a failure to remove duplicate counts across consulates.

Table A.2: Overseas Citizen Population by Region in 2013			
Region	FVAP	World Bank	State Department
Africa	165,848	48,685	197,986
East Asia and Pacific	1,006,676	453,145	1,089,897
Europe	1,525,633	785,556	1,622,226
Near East	277,261	159,153	989,428
South-Central Asia	142,865	48,641	285,745
Western Hemisphere	2,725,609	1,422,111	3,307,895

Figure A.1: Correlation Between FVAP and World Bank Estimates of Overseas Citizen Population, Logged

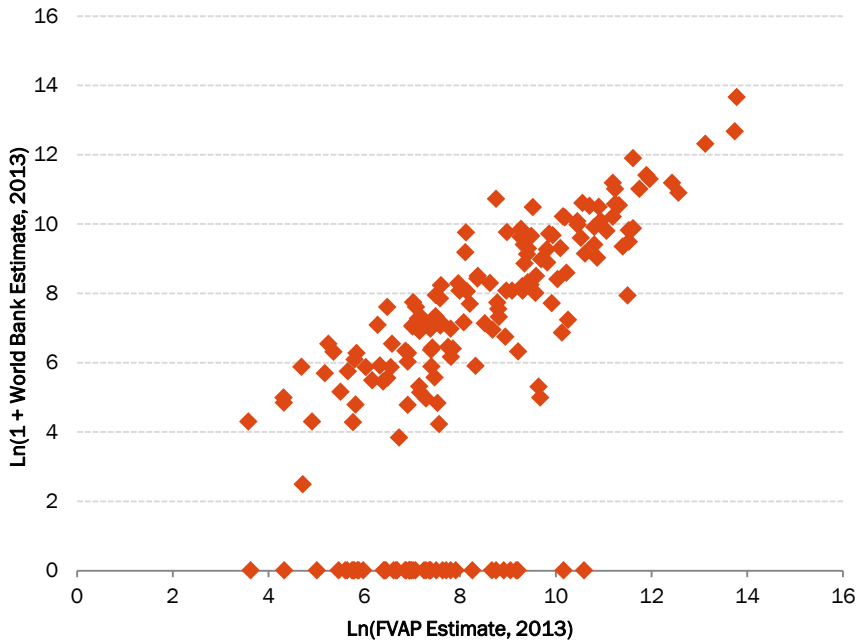


Table A.3 examines the correlates of the differences in estimates across countries, modeled as a function of various combinations of the country characteristics used to generate the FVAP estimates. Specifically, the discrepancy is operationalized as follows:

$$\%\ Difference = \frac{(World\ Bank\ Estimate - FVAP\ Estimate)}{FVAP\ Estimate} * 100$$

Across specifications, the association between whether a country allows dual citizenship with the United States is statistically significant and negatively associated with the size of the World Bank estimate relative to the FVAP estimate. This is consistent with the expectation that the measurement error adjustments made to the FVAP estimates are partially driving the larger FVAP estimated populations. Another robust predictor of the discrepancies is the WGI, which indicates that countries with better institutions or more effective governance have larger relative FVAP estimates. One interpretation of this coefficient is that the World Bank estimates for countries with poor governance are drawing on older FGEs, which are more downwardly biased as compared to estimates of the overseas citizen population in 2013. Another interpretation is that regions with large concentrations of countries with poor governance have traditionally not enumerated their U.S. populations, and are thus more likely to show up as having a zero U.S. populations. Finally, coefficients on the indicator variables for region suggest a robustly smaller relative FVAP population for countries in Africa relative to countries in the rest of the world. Again, this may reflect the lower propensity of African countries to enumerate their U.S. populations.

Table A.3: Determinants of Percentage Difference Between World Bank 2013 FVAP 2013 Estimates

Variable	Model 1	Model 2	Model 3	Model 4
Dual Citizenship	-47.041	-41.401	-51.106	-50.435
	(12.376)***	(11.136)***	(12.940)***	(12.057)***
Ln(Students)	-2.513			
	(3.323)			
Ln(Government Employment)	4.982			
	(3.971)			
Ln(Social Security Beneficiaries)	-2.749			
	(4.631)			
Ln(IRS Form 2555 Returns)	-24.232			
	(8.547)**			
Ln(GDP per Capita, Country/GDP per Capita, U.S.)	-6.673		-15.256	-4.600
	(11.726)		(12.023)	(9.867)
Ln(Population)	9.738		4.340	1.083
	(7.127)		(6.827)	(6.136)
World Governance Indicators	42.348		38.291	30.711
	(16.237)**		(12.277)**	(11.628)**
Ln(Military Aid)	-2.585		-2.260	-1.844
	(1.445)		(1.363)	(1.401)
Ln(Migration to U.S.)	-6.572		-5.929	-3.896
	(3.597)		(3.428)	(2.904)
Ln(Distance to U.S.)	-5.364		-1.664	-7.097
	(6.808)		(7.634)	(5.703)
Ln(Trade)	12.553		0.849	1.323
	(7.903)		(5.163)	(4.667)
English	16.635		-2.349	-5.239
	(15.622)		(15.156)	(12.995)
Spanish	-6.656		-9.059	2.769
	(16.679)		(15.261)	(15.011)
East Asia and Pacific	53.380	44.468	45.809	
	(18.421)**	(18.720)*	(18.022)*	
Europe	41.236	38.020	43.182	
	(19.998)*	(16.355)*	(19.594)*	
Near East	71.914	29.036	57.092	
	(25.385)**	(22.966)	(21.903)**	
South-Central Asia	59.687	36.454	52.251	
	(59.670)	(54.705)	(58.538)	
Western Hemisphere	58.683	39.617	69.141	
	(25.599)*	(17.770)*	(27.252)*	
Constant	57.516	-54.525	-20.500	80.553
	(79.452)	(12.760)***	(88.541)	(71.305)
R^2	0.20	0.07	0.17	0.13
N	185	185	185	185

*p<0.05; ** p<0.01; *** p<0.001 Model estimated using ordinary least squares (OLS) regression. Robust standard errors are in parentheses.

On the whole, the results of the comparison between the FVAP and World Bank estimates indicate that the geographic distribution of the overseas citizen population implied by the FVAP estimates is likely to be unaffected by changes in methodology. There were much greater discrepancies with respect to the size of the overseas citizen population. The correlates of these discrepancies and the observed closer correspondence between the FVAP estimates and the State Department's consulate registrations relative to the World Bank estimates are consistent with the discrepancies being the result of systematic biases in the World Bank estimates. This comparison consequently increases confidence in the validity of the FVAP estimates.

Comparison of Results Between 2013 and 2015 Estimation Models

Since the release of *A Model for Developing Estimates of U.S. Citizens Abroad: Final Technical Report* (known as the *2013 Technical Report)*, several additional data sources have become available. The first step in creating 2012 and 2014 estimates—reported in *U.S. Citizens Abroad: 2015 Population and Participation Estimates Final Technical Report* (known as the *2015 Technical Report*)—was updating the FGEs used to create the estimation model. The FGEs collected in the *2013 Technical Report* were identified using several different sources of data. The original list of countries and sources was used to update the FGEs, but a few changes in collection methodology used for this report were made. As noted in the *2015 Technical Report*:

> For the *2013 Technical Report*, the timeframe spanned the years 2000 to 2010; in this report, the timeframe was expanded to cover the years 2000 to 2013.
>
> For this report, estimates from outside the 2000–2013 timeframe were not included; for the *2013 Technical Report*, some estimates for the years 1999 and 2011 were substituted for 2000 and 2010 estimates, respectively. Earlier estimates were not included in either study because of the large number of border changes that occurred in the 1990s.
>
> Previously, only one source was used per country; however, for this study, multiple sources were used per country to gather data for as many years as possible. This primarily meant a much heavier emphasis on foreign government statistical offices (FGSO). Previously, FGSOs had only been consulted when no other sources were found for a country, but in this effort they were consulted to fill in missing country-years as well. Because the OECD data (the only source aside from FGSOs to include multiple years per country) had only been updated to 2011, FGSO websites for each country were visited.
>
> The most significant update to the model's predictor variables was the addition of estimated counts of income tax returns filed from countries for the year 2011;[61] the *2013 Technical*

61 U.S. Department of the Treasury, Internal Revenue Service. *Table 2. Individual income tax returns with form 2555: Foreign-earned income, exclusion before deductions, housing exclusion, and housing deduction, by country or region, tax year 2011. 2011 IRS Statistics of Income*. Retrieved from http://www.irs.gov/file_source/pub/irs-soi/11in02ic.xlsx.

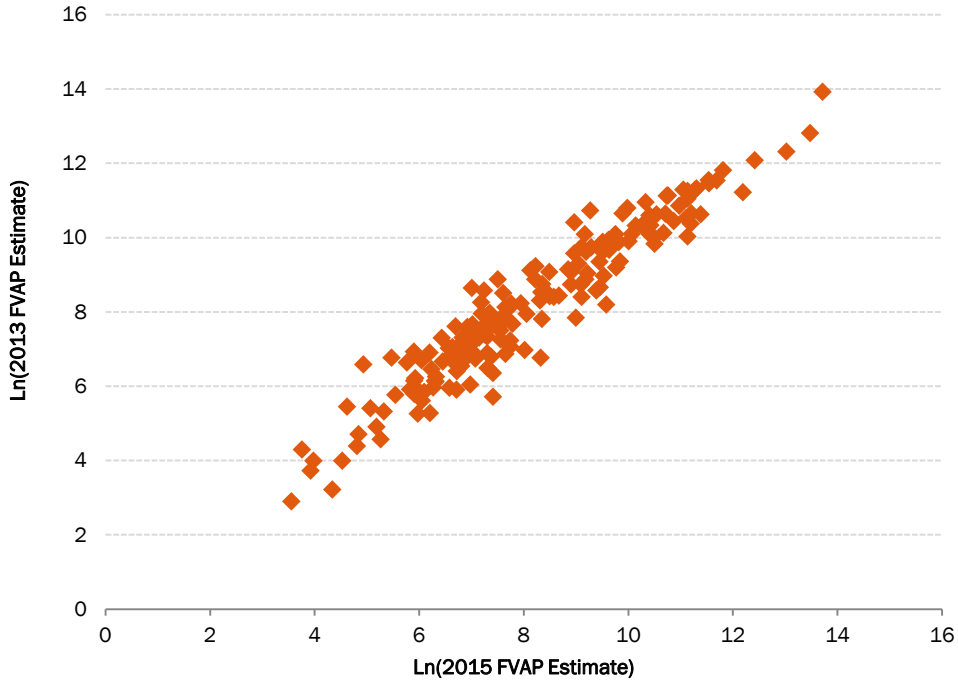
Report only used these counts through 2006. Estimates for countries without IRS-reported counts for any of the years in which this report was released (1996, 2001, 2006, and 2011) were imputed using the methodology described on page 22 of the *2013 Technical Report*. To obtain an estimate of IRS returns filed from each country in 2012 and 2014, linear extrapolation was used in a manner such that the estimate for the annual growth rate for the years 2011–2014 for a given country is equal to that country's average annual growth in returns from 2006 to 2011. Similar interpolation and extrapolation procedures were applied to all other variables for which 2012 or 2014 data was missing. Note that the presence of additional data for the post-2010 period for many of the predictor variables means that the 2000–2010 estimates produced by this methodology will not necessarily match those reported in the *2013 Technical Report*.

In Table A.4, the 2013 and 2015 Overseas Citizen Population Analysis (OCPA) estimates of total overseas citizens by region for the year 2010 (the latest common year for which estimates are available) are compared. Both the size and geographic distribution of the overseas citizen population are similar for both the 2013 and 2015 estimates, though the regional totals for the 2015 estimates are somewhat larger. The similar geographic distribution implied by the regional percentages is reflected at the country level, with a high 0.96 correlation between the 2013 and 2015 (logged) estimates. This high correlation is reflected when the set of countries is disaggregated by region, implying that the estimated geographic distribution of the overseas citizen population within a given region is similar between the first and updated sets of estimates. Figure A.2 shows that the country-level correlations between the 2013 Overseas Citizen Estimation (OCE) estimates and the 2015 OCPA estimates for 2010 are strongly correlated.

Table A.4: Comparison Between 2013 and 2015 Overseas Citizen Population Estimates for 2010

	FVAP, 2013		FVAP, 2015	
	Count	Percentage	Count	Percentage
Africa	100,052	2.3%	124,776	2.5%
East Asia and Pacific	626,189	14.5%	811,456	16.3%
Europe	1,071,890	24.8%	1,376,270	27.7%
Near East	234,552	5.4%	236,709	4.8%
South-Central Asia	107,731	2.5%	131,284	2.6%
Western Hemisphere	2,189,973	50.6%	2,289,296	46.1%

Figure A.2: Correlation Between 2013 and 2015 Overseas Citizen Population Estimates for 2010



Discussion of Estimates

In support of FVAP's purpose to provide voting assistance to overseas citizens, this report estimates the size and distribution of the overseas citizen population for each year from 2000 to 2014. It also estimates the voting rates of these citizens for the 2012 and 2014 General Elections. These estimates have been confirmed using a variety of different methods.

The population estimates draw from data gathered from foreign and U.S. government agencies and from country-level variables found in the academic literature. The models described in this report use these data to create robust estimates of the size of the population of overseas citizens residing in each foreign nation. These estimates are further refined to predict the number of eligible overseas voters residing in each foreign nation. In 2012, it is estimated that there were 5,598,513 overseas citizens and that 2,547,823 of these were over the age of 18 and thus eligible overseas voters. In 2014, it is estimated that there were 5,738,948 overseas citizens and that 2,563,226 of these were eligible overseas voters.

It should be kept in mind that there are significant limitations to producing estimates of voting rates either globally or by country that are valid and comparable across elections. In particular, geographic coverage of the absentee vote data has varied across elections and there are many absentee ballot requesters whose overseas status cannot be confirmed. Future research on the voting of overseas citizens would benefit from efforts to lessen these measurement issues.

B Appendix B: Creating Subnational Estimates of Overseas Voting

One concern with modeling voting rates at the country level is that the level of aggregation obscures subnational differences in the size of the eligible overseas voter population and voting rates, particularly in the case of geographically large countries. Given that FVAP outreach efforts are likely to be more efficient when targeted toward more geographically concentrated eligible overseas voter populations, it is valuable to estimate subnational eligible population totals and voting rates where possible.

To obtain city-level estimates of the eligible overseas voter population, Integrated Public Use Microdata Series (IPUMS) foreign government census microdata were used to estimate models of the percentile difference between a subnational area's eligible overseas voter population density (eligible overseas voter population/land area) and the average eligible overseas voter population density of the country. Specifically, the following model was estimated for each age-gender-education strata for which there are national estimates:

$$\mathrm{Ln}\left(\frac{\mathrm{EligiblePop}_{\mathrm{Area}}}{\mathrm{Land\ Area}_{\mathrm{Area}}}\right) - \mathrm{Ln}\left(\frac{\mathrm{EligiblePop}_{\mathrm{Country}}}{\mathrm{Land\ Area}_{\mathrm{Country}}}\right) = \beta \mathrm{Ln}\left(\mathrm{X}_{\mathrm{Area}}/\mathrm{X}_{\mathrm{Country}}\right)$$

$\mathrm{EligiblePop}_{\mathrm{Area}}$ and $\mathrm{EligiblePop}_{\mathrm{Country}}$ are totals of a given U.S.-born, eligible, subnational area demographic subpopulation and total demographic subpopulation for the country as a whole, respectively, obtained from IPUMS.[62] These models incorporate a number of proxies for the amenities of the subnational area relative to the country as a whole (X). Descriptions of the predictors of eligible overseas voter population density and the source of the geographic data are provided in Table B.1.

62 Minnesota Population Center. (2014). *Integrated Public Use Microdata Series, International: Version 6.3 [Machine-readable database].* Minneapolis: University of Minnesota.

Table B.1: Predictors of Area-Level Eligible Population Density

Area-Level Predictor	Data Source(s)
Population Density, 2005	PRIO GRID, IPUMS
Distance to Capital	PRIO GRID, IPUMS
Distance to Nearest Embassy	PRIO GRID, IPUMS, FMG Team's geocoding based on State Department embassy list.
Distance to Nearest Large City	PRIO GRID, IPUMS, United Nations Urbanization Prospects
Population of Nearest Large City, 2014	PRIO GRID, IPUMS, United Nations Urbanization Prospects
Distance to Nearest Coast	PRIO GRID, IPUMS, Natural Earth
Area's Distance to Nearest River	PRIO GRID, IPUMS, Natural Earth
Area's Distance to Nearest Airport	PRIO GRID, IPUMS, www.sharegeo.ac.uk
Area's Gross Value Added per Capita, 2005	PRIO GRID, IPUMS

Although IPUMS geocodes individuals based on the largest type of subnational administrative unit in the country (e.g., provinces/States), the frame of subnational areas is composed of arbitrary grid cells obtained from a data set used by political scientists to study subnational correlates of violent conflict called PRIO Grid[63]. Most of these cells are smaller than the borders of locally defined cities or towns. Consequently, data for PRIO Grid cells were aggregated up to the level of the local city or town.

63 Tollefsen, A. F., Strand, H., & Buhaug, H. (2012). PRIO-GRID: A unified spatial data structure. *Journal of Peace Research, 49*(2): 363–374. Retrieved from http://file.prio.no/ReplicationData/PRIO-GRID/PRIO-GRID_codebook_v1_01.pdf

Table B.2: Number of IPUMS Regions by Country

Country	Regions	Years	Country	Regions	Years
Argentina	24	2001, 2010	Mexico	32	2000, 2010
Austria	9	2001	Mongolia	6	2000
Armenia	9	2011	Mozambique	7	2007
Bolivia	9	2001	Nicaragua	13	2005
Brazil	23	2000, 2010	Panama	6	2000, 2010
Cambodia	11	2008	Paraguay	10	2002
Canada	6	2001	Peru	21	2007
Chile	8	2002	Philippines	13	2000
Colombia	19	2005	Portugal	21	2001, 2011
Costa Rica	7	2000, 2011	Romania	22	2002
Cuba	10	2002	Sierra Leone	5	2004
Dominican Republic	24	2002, 2010	South Africa	4	2001
Ecuador	13	2010	Spain	18	2001, 2011
El Salvador	14	2007	Thailand	10	2000
Fiji	8	2007	Uganda	12	2002
Greece	51	2001	Ukraine	21	2001
Indonesia	19	2010	Tanzania	21	2002
Ireland	8	2002, 2006, 2011	Uruguay	19	2011
Jamaica	14	2001	Venezuela	18	2001
Kenya	8	2009	Zambia	7	2000, 2010
Malawi	6	2008			

Using these models, predictions were generated for relative eligible overseas voter population density for each PRIO grid cell.[64] Using the country-level estimates of the eligible overseas voter population for 2014, and the grid cell land area, these relative eligible overseas voter population density predictions were turned into absolute counts. Finally, the country-level eligible overseas voter population (by strata) was assigned to the individual grid cells proportionately to this initial count. This results in the total of the eligible overseas voter strata population estimates across grid cells for a given country equaling the country-level eligible overseas voter population estimates.

To confirm the estimated eligible overseas voter population counts by grid cell, the estimate can be compared to responses from the Overseas Citizen Population Survey (OCPS) concerning the number of U.S. citizen acquaintances the respondent had in his or her country of residence. If the grid cell estimates were accurate and respondents correctly reported their number of acquaintances, then respondents who reported having relatively large numbers of U.S. acquaintances would be more likely to be located in grid cells with a high density of eligible overseas voters, as the number of potential acquaintances increases with the number of local overseas citizens.

Figure B.1: Regional Eligible Overseas Voter Population Density by Number of U.S. Citizen Acquaintances

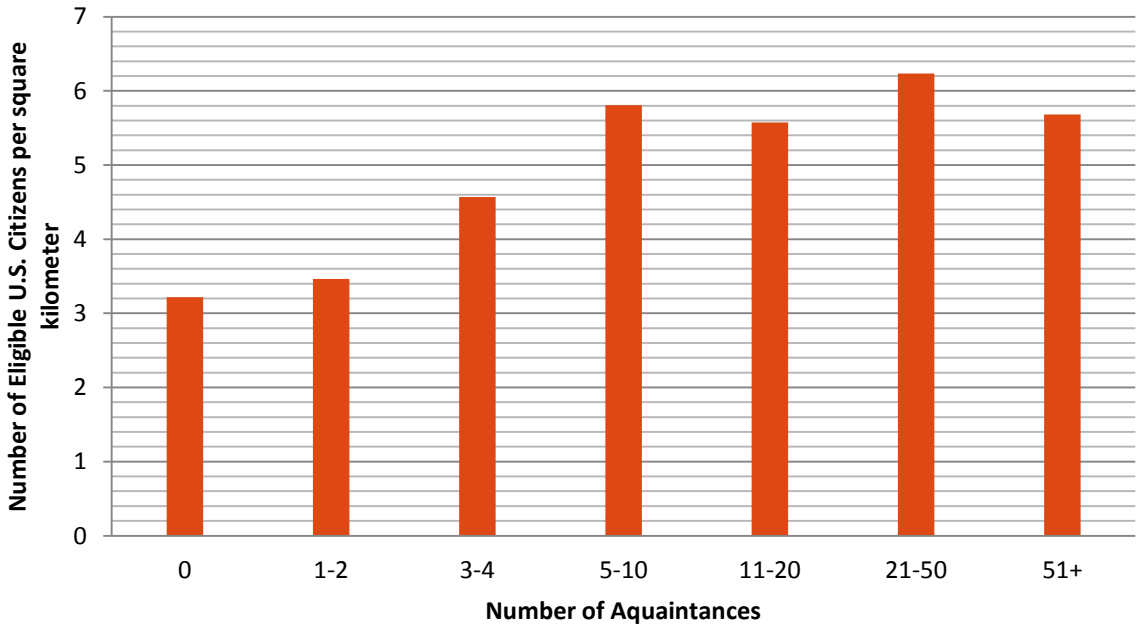


Figure B.1 provides the mean imputed eligible overseas voter population per square kilometer for respondent grid cells by reported number of U.S. acquaintances[65] and shows a positive relationship between local eligible overseas voter population density and the number of respondent acquaintances. The average adult overseas citizen density in the respondent's grid cell for those

64 Because IPUMS microdata represent random sample of the population, OLS regressions are weighted by the number of a given strata in a region-year to lessen sampling-related measurement error in strata size in regions with small number of U.S. born.
65 Note that the table is based on respondents whose latitude and coordinates were precise to the city-level or lower. There were 6,025 respondents used in this comparison, and results are unweighted.

who report having no local U.S. acquaintances is three per square kilometer, and it increases to six U.S. citizens per square kilometer for respondents who report having five or more U.S. acquaintances in the country.[66] The correlation between the survey responses and regional eligible overseas voter population estimates serve to validate the latter.

To obtain city-level estimates from the grid-cell estimates of the eligible population, the set of large/capital cities listed in the United Nations' (UN) World Urbanization Prospects[67] were used as a frame. Each grid cell was assigned to the nearest city (latitude and longitude coordinates were taken from the UN). The city was defined as the nearest nine grid cells assigned to it.

To obtain city-level voting rates, the 2014 voter file was used. Using each voter's latitude and longitude coordinates, registered overseas voters were assigned to a grid cell and the number of registered overseas voters was aggregated across grid cells using the city definitions described above. One complication with this procedure was that many of the locations were imprecisely geocoded: the latitude and longitude coordinates represented the center of the voter's postal code, city-region or country rather than the coordinates of their exact address. To account for this imprecision, counts were generated for each city in two stages. First, votes were assigned to cities if the latitude and longitude coordinates were those of the voter's address, postal code, or city-region and the coordinates fell within the nearest nine grid cells. In the second stage, those votes for which the country was known but no information about the location within the country were available were assigned to grid cells proportionate the counts generated in the first stage. The final voting rate is:

$$\text{Voting Rate}_{\text{City}} = \frac{\widehat{\text{Votes Counted}}_{\text{City}}}{\widehat{\text{EligiblePop}}_{\text{City}}}$$

Finally, using the imputed total by age-gender-education strata by city, expected voting rates can be estimated by country. This is discussed fully in Appendix C.

66 Note, however, that after five acquaintances, there is no further increase in the eligible overseas voter population density of the respondent's local area/grid cell as the number of acquaintances increases. This may reflect the fact that, although large numbers of U.S. citizens may be in close proximity to the respondent, the respondent does not necessarily become acquainted with all of them, perhaps due to limitations in time and attention that constrain the size of the respondent's social network or other idiosyncratic preferences. If respondents with different preferences in number of acquaintances do not migrate to local areas with different eligible overseas voter population densities, those who live in areas with fewer U.S. citizens may be more likely to have fewer potential acquaintances than they would prefer, leading to a positive correlation between eligible overseas voter population density and number of acquaintances in areas with low eligible density or among respondents with low reported numbers of acquaintances. By contrast, in areas with high density (> 6 U.S. citizens per square kilometer), the number of potential acquaintances may exceed the preferred number of acquaintances (including those whose preferred number of acquaintances is greater than 51). Among such high-density areas, the fraction of potential local acquaintances who become actual acquaintances declines as the number of potential acquaintances increases, reducing the correlation between eligible overseas voter population density and number of acquaintances.

67 United Nations, 2014.

C Appendix C: Estimating Expected Versus Actual Voting by Country

Differences in voting rates between the overseas citizen population and the domestic citizen population as well as differences across countries for the overseas citizen population may be explained by differences in motivation to vote, opportunity to vote and resources required to vote. Given that the Federal Voting Assistance Program (FVAP) is primarily concerned with the degree to which opportunity affects registration and voting by the eligible overseas voter population, the FMG Team analyzed differences across countries in voting rates, controlling for factors that may influence the motivation to vote. The vote history files allow a comparison of the actual number of individuals who registered and voted in a particular country with estimates for the number of "expected" voters estimated based on the imputed age, gender and education characteristics of the country's eligible population. The estimated fraction of a country's overseas citizen population that votes is the population-weighted average of the estimated voting propensity for each age–gender-education group. The estimate of the number of "expected" voters can be defined as the product of the country-level estimate of voting propensity and the country's total estimated overseas citizen population. Differences across countries in voting rates can be analyzed through regression models that explain the differences in actual and expected voting rates using country-level characteristics that may influence the opportunity to vote. Geographic patterns may suggest potential correlates of differences between overseas citizen and domestic citizen voting behavior not explained by the influence of demographic factors that affect the motivation to vote in the domestic citizen population. To the degree that the influence of these country-level characteristics on overseas citizen voting rates can be interpreted as the differences in the opportunity to vote or the resources needed to vote, this analysis might aid the optimal allocation of voting assistance resources by FVAP and other interested organizations.

In this analysis, respondents to the 2012 and 2014 Current Population Survey (CPS) are sorted into the age, gender and education strata that correspond to the strata used to define the eligible overseas voter population by country. The following voting models for 2012 and 2014 CPS respondents are then estimated:

$$\mathrm{P(Voted)}_{i,Counterfactual} = \frac{\exp(\beta_1 \mathrm{Age} + \beta_2 \mathrm{Gender} + \beta_3 \mathrm{Education})}{1 + \exp(\beta_1 \mathrm{Age} + \beta_2 \mathrm{Gender} + \beta_3 \mathrm{Education})}$$

In this model, age, gender and education are sets of categorical variables. The estimated parameters for the voting models for 2012 and 2014 are presented in Table C.1. The signs of the coefficients are consistent with past research examining the determinants of turnout. Specifically, among the domestic citizen population, men are less likely to vote than women, and age and education are positively associated with the probability of voting.

Table C.1: Voting for Domestic Citizens, Logit Regression

	2012	2014
Male	-0.036	-0.160
	(0.017)**	(0.019)***
Age 25–64	1.002	0.684
	(0.033)***	(0.028)***
Age 65+	2.032	1.426
	(0.037)***	(0.035)***
Secondary Education	0.938	0.996
	(0.033)***	(0.030)***
Post-Secondary Education	1.721	1.984
	(0.034)***	(0.033)***
Constant	-2.276	-0.963
	(0.045)***	(0.038)***
N	82,047	82,820

* $p<0.1$; ** $p<0.05$; *** $p<0.01$. Robust standard errors are in parentheses. Omitted age category is 18–24. Omitted education category is Less Than Secondary Education (no education or primary education only).

The fitted model is used to predict a counterfactual voting rate for the age, gender, and education strata. A weighted average of these predicted probabilities, where the weights are the imputed size of these strata, is calculated for each country. Figures C.1 and C.2 present the country-level voting rates predicted by the models. Generally, countries with the highest expected voting rates are concentrated in Europe and the Middle East, though Canada, Japan, Australia and southwest Africa also have high expected voting rates.

The expected voting rates for the eligible overseas voter population as a whole were 74 percent in the 2012 General Election and approximately 50 percent in the 2014 General Election. Estimated voting rates for those two years were approximately 4 percent and 5 percent in the 2012 and 2014 General Elections, respectively. In addition to whatever part of the gap can be explained by the fact that the expected voting rate is based on self-reported voting (i.e., participation) whereas the actual voting rate is based on administrative records of votes actually having been counted, the large gap between the expected and actual voting rates may be due to systematic differences in the two populations not accounted for by observable demographics. For example, this gap may be due to individuals who are generally less motivated to vote being more likely to migrate overseas. Alternatively, living overseas may make the choice between candidates less salient to a given voter, resulting in the motivation to vote dropping after the individual migrates overseas. Finally, the

obstacles or costs of voting may increase after one moves overseas, lowering the voting rate of the overseas citizen population relative to a demographically similar domestic citizen population.

Figure C.1: Expected Voting Rates by Country, 2012

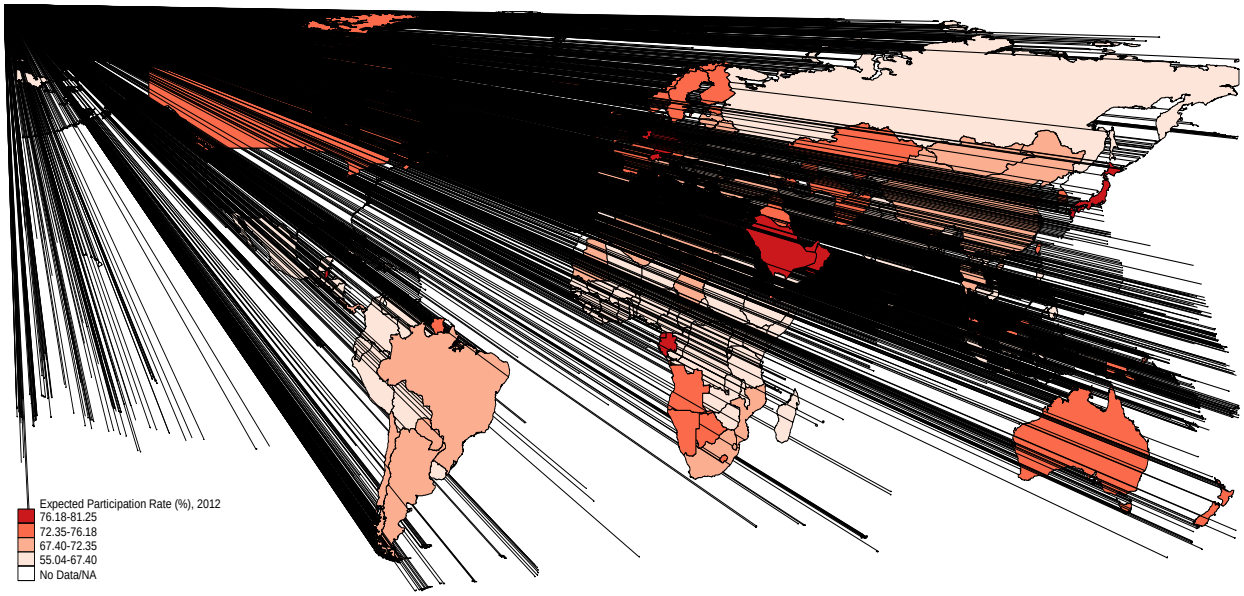
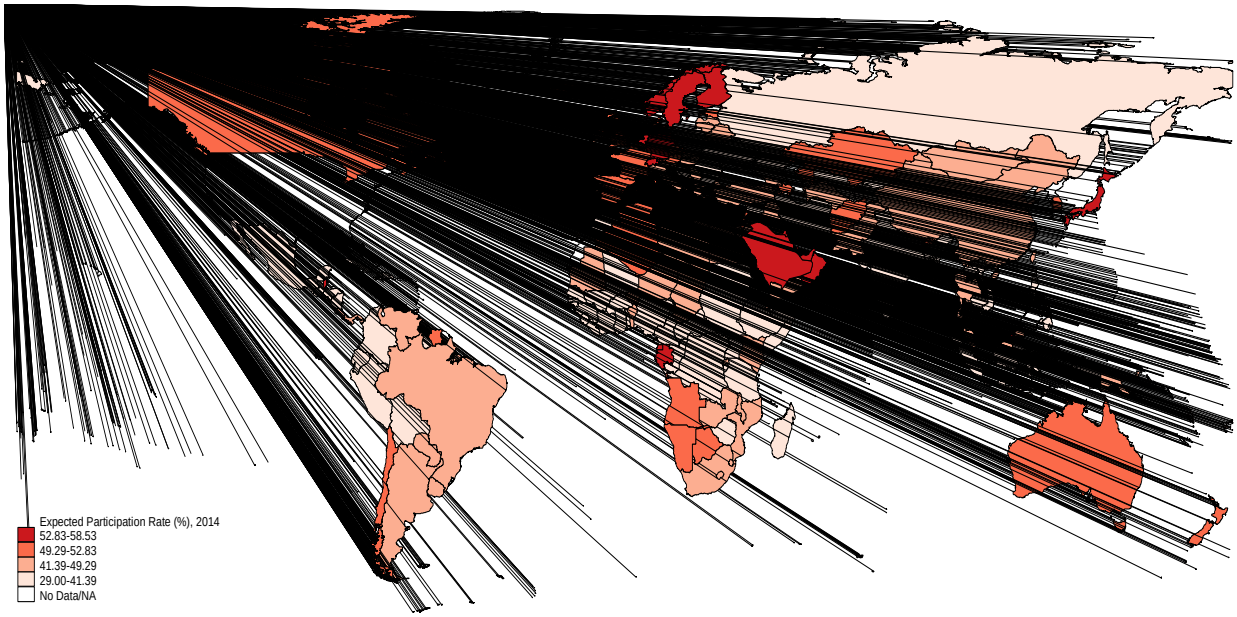


Figure C.2: Expected Voting Rates by Country, 2014



The parameters of the following model are then estimated to infer which factors drive the deviance of a country's estimated voting rate from its counterfactual expected voting rate:

$$\mathrm{P(Voted)}_{i,\mathrm{Observed}} - \mathrm{P(Voted)}_{i,\mathrm{Counterfactual}} = \beta_1 \mathrm{Age}_i + \beta_2 \mathrm{Gender}_i + \beta_3 \mathrm{Education}_i + \beta_4 \mathrm{Geography}_i$$

In other words, the voting rate of country *i*'s eligible overseas voter population relative to a demographically similar population residing in the United States is estimated as a function of its imputed demographics (proportion of the population in each age-gender-education category) and a set of geographic covariates. These geographic variables include distance of the country from the United States and its mean value for the six World Governance Indicator (WGI) variables. Distance from the United States may influence voting rates by affecting the time it takes a ballot to reach the United States from the host country. WGI variables may be related to voting rates because they are associated with the quality of a country's infrastructure and, therefore, the ability to send and receive absentee ballots by mail. The demographic variables are included to capture potential motivation mechanisms underlying differences in expected and actual voting rates. If the overseas voting rate is lower relative to the voting rate, one would expect that because of low levels of motivation levels of who migrates or because of the effect of living overseas on migrants' motivation, the voting gap would be larger in countries with a large numbers of individuals who would have been likely to vote if they had been in the United States (i.e., those who are older, highly educated, or female).

Results of the model of the voting rates gap are presented in Tables C.2 and C3. The first column in each table presents a model of the gap in voting rates using just the geographic proxies for the opportunity to vote in 2012 and 2014, respectively. Interestingly, there is a significant negative relationship between the country's quality of governance (i.e., WGI) and the overseas citizen voting rate relative to that of a demographically similar domestic citizen population. One potential explanation for this unexpected relationship is that countries with higher-quality governance host an overseas citizen population that is highly motivated to vote. To the degree that having to go through the absentee ballot process lowers the opportunity to vote in even the most developed countries, this negative effect will be largest in countries whose overseas citizen population has the highest motivation to vote.

Table C.2: 2012 Difference Between Estimated and Expected Overseas Citizen Voting Rates, OLS Regression

	Base Specification	Full Specification
WGI	-0.046	0.075
	(0.012)***	(0.018)***
Ln (Distance from the U.S.)	0.007	0.007
	(0.007)	(0.006)
%, Age 65+		-0.424
		(0.437)
%, Age 25–64		-0.004
		(0.125)
% Male		1.712
		(0.322)***
% with Post- Secondary Education		-0.790
		(0.155)***
Constant	-0.615	-1.335
	(0.050)***	(0.185)***
R^2	0.05	0.37
N	186	186

* $p<0.1$; ** $p<0.05$; *** $p<0.01$. Robust standard errors in parentheses. Omitted age category is 18–24. Omitted education category is Less Than Post-Secondary Education (no education, primary education, or secondary education).

Table C.3: 2014 Difference Between Estimated and Expected Overseas Citizen Voting Rates, OLS Regression

	Base Specification	Full Specification
WGI	-0.047	0.053
	(0.010)***	(0.014)***
Ln (Distance from the U.S.)	-0.003	0.002
	(0.007)	(0.005)
%, Age 65+		-0.586
		(0.340)*
%, Age 25–64		0.010
		(0.090)
% Male		1.120
		(0.253)***
% with Post- Secondary Education		-0.692
		(0.105)***
Constant	-0.330	-0.734
	(0.053)***	(0.143)***
R^2	0.08	0.46
N	186	186

* $p<0.1$; ** $p<0.05$; *** $p<0.01$. Robust standard errors in parentheses. Omitted age category is 18–24. Omitted education category is Less Than Post-Secondary Education (no education, primary education, or secondary education).

To confirm this interpretation, in Table C.4 the relationship between the expected voting rate and the geographic proxies for opportunity are examined. Consistent with the mechanism already outlined, quality of governance and distance from the United States are positively associated with expected voting rates.

Table C.4: Ordinary Least Squares (OLS) Model of Expected Voting Rate

	Base Specification, 2012	Base Specification, 2014
WGI	0.042	0.050
	(0.003)***	(0.004)***
Ln(Distance from the U.S.)	0.011	0.012
	(0.003)***	(0.004)***
Constant	0.608	0.347
	(0.028)***	(0.034)***
R^2	0.41	0.41
N	186	186

* $p<0.1$; ** $p<0.05$; *** $p<0.01$. Robust standard errors in parentheses.

Once the imputed demographic characteristics of the country's overseas citizen population are controlled for in the second columns of Tables C.2 and C.3, the relationship between WGI and relative voting rates becomes positive and significant. The coefficients on the demographic variables take signs consistent with the most motivated overseas citizen populations suffering the most from living overseas.

However, if the opportunity effect being largest for the most motivated populations were the sole explanation for the larger gap in voting rates in developed countries, one would not expect to observe a negative relationship between the proxies for motivation and the actual voting rate. This is because one might still expect age, being female, and education to be positively correlated with voting rates after controlling for opportunity. To test this hypothesis, similar models of the absolute voting rate are presented in Table C.5. Contrary to the explanation provided above, the results indicate in that, after controlling for governance and distance, countries with educated and predominantly female populations are less likely to vote, despite the fact that individuals residing in the United States with such characteristics are more likely to vote. This may indicate that the voting behavior of members of the overseas citizen population differs from that of domestic citizens with similar demographic characteristics, which could be due to differences in the motivation to vote of those choosing to emigrate or living overseas having a relatively strong negative effect on the motivation of these groups to vote. These populations may also be located in parts of their countries where the barriers to voting are especially high.

Table C.5: OLS Model of Estimated Voting Rate

	Base Specification, 2012	Base Specification, 2014	Full Specification, 2012	Full Specification, 2014
WGI	-0.003	0.004	0.075	0.053
	(0.011)	(0.009)	(0.018)***	(0.014)***
Ln(Distance from the U.S.)	0.017	0.009	0.009	0.003
	(0.005)***	(0.004)**	(0.006)	(0.005)
% of Post- Secondary Education			-0.569	-0.493
			(0.155)***	(0.106)***
%, Age 65+			-0.252	-0.230
			(0.437)	(0.339)
%, Age 25–64			0.144	0.233
			(0.125)	(0.091)**
% Male			1.695	1.129
			(0.326)***	(0.256)***
Constant	-0.007	0.017	-0.860	-0.561
	(0.041)	(0.033)	(0.188)***	(0.144)***
R^2	0.01	0.01	0.20	0.20
N	186	186	186	186

* $p<0.1$; ** $p<0.05$; *** $p<0.01$. Robust standard errors in parentheses. Omitted age category is 18–24. Omitted education category is Less Than Post-Secondary Education (no education, primary education, or secondary education).

This analysis examines how geographic and demographic characteristics relate to differences in voting between the eligible overseas voter and domestic citizen populations not explained by demographics. While the results are consistent with individuals in less developed countries facing higher barriers to voting, they also indicate that the relationships between demographic characteristics and voting are fundamentally different for the eligible overseas voter population after controlling for observable proxies for the opportunity to vote. However, the imputed and aggregated nature of the data means that these results should be interpreted with caution. These limitations are addressed by using microdata from the OCPS to make an adjusted comparison between the overseas and domestic citizen population.

D Appendix D: Data and Methodology for Comparisons of Overseas Citizen Voting Behavior

The variables used in the comparison models for the overseas citizen population are listed in Table D.1 below.

Table D.1: Comparison Variables

Variable	Description
Voted in 2014	1 if stated voted in 2014, 0 if did not vote
Voted in 2010	1 if stated voted in 2010, 0 if did not vote
Vote was Counted 2010	1 if vote history file indicates a vote from the respondent was counted (or the respondent was given credit for voting), 0 if not vote was counted
Gender	1 for males, 0 for females
Changed Residence	1 if changed residential address in past year, 0 if in residential address 1 year or longer
Family Status	1 if single with children, 2 if single without children, 3 if married with children, 4 if married without children
Education	1 if no college education, 2 if some college or associate degree, 3 if bachelor's degree in college, 4 if MA/PhD/professional degree
Age	1 is 18–24, 2 is 25–29, 3 is 30–34, 4 is 35–44, 5 is older than 45
Employed	1 if employed and working, 0 if unemployed or not in labor force
Race/Ethnicity	1 for White, 2 for non-Hispanic Black, 3 for Hispanic, 4 for all others
Region	10 U.S. Census Bureau Regions[68]

68 New England (CT, ME, MA, NH, RI, VT), Middle Atlantic (NJ, NY, PA), East North Central (IN, IL, MI, OH, WI), West North Central (IA, KS, MN, MO, NE, ND, SD), South Atlantic (DE, DC, FL, GA, MD, NC, SC, VA, WV), East South Central (AL, KY, MS, TN), West South Central (AR, LA, OK, TX), Mountain (AZ, CO, ID, NM, MT, UT, NV, WY), Pacific (AK, CA, HI, OR, WA), Other Territories (AS, GU, PR, VI).

Similar variables were included for the active duty military (ADM) and domestic citizen populations, except there is no vote-counted outcome variable for the ADM or domestic citizen populations. The primary difference between the overseas citizen data and the domestic citizen and ADM data is that the overseas citizen and domestic citizen data measure mobility as a residential address change but an ADM member is considered mobile if the individual had been deployed in the past year, experienced a permanent change in station or was currently deployed on Election Day.

In FVAP's 2012 and 2014 Post-Election Reports to Congress, respondents who reported being unsure about voting were treated as non-voters. In this analysis, such respondents were excluded from the samples of the overseas citizen, domestic citizen and ADM populations. This was done because there are well-understood variables used in voting research to clearly differentiate between voters and non-voters, but little literature or theory to explain differences between voters and those who are unsure whether they voted.[69] In addition, because employment is an important covariate for understanding participation rates, and all ADM members are, by definition, employed in the Military, overseas citizen respondents who were not employed were excluded from the model.

For both the ADM and domestic citizen samples, the estimation sample was restricted to those respondents who had complete data for all relevant variables. Specifically, a total of 1,644 observations (2.59 percent) were dropped from the registered Current Population Survey (CPS) sample whose registration status was known with a positive sampling weight, and 1,196 observations (13.13 percent) were dropped from the registered ADM sample whose registration status was known with a positive sampling weight. From the total sample with a positive sampling weight, 1,954 (24.19 percent) were dropped, whereas 1,201 (24.68 percent) were dropped from that subset of the Overseas Citizen Population Survey (OCPS) sample, whose employment status was known, and who had a positive sampling weight.

This analysis used the Blinder-Oaxaca decomposition technique to examine the effects of these factors on voting.[70] In this analysis, the Blinder-Oaxaca technique breaks down participation rate differentials into two components: (1) a portion that arises because the overseas citizen population and either the ADM or domestic citizen, on average, have different demographic characteristics that affect voting (explained component), and (2) a portion that arises because the overseas citizen

69 Coding for unsure respondents also complicates the comparison of voting rates over time. See Hur, A., & Achen, C. H. (2013). Coding Voter Turnout Responses in the Current Population Survey. *Public Opinion Quarterly, 73*(4), 641–678.

70 The technique creates hypothetical domestic citizen populations and ADM populations that are demographically similar to the overseas citizen population. It uses these populations to determine the size and statistical significance of the differences between the overseas citizen and domestic citizen and ADM voting rates not explained by differences in demographic characteristics. In addition, the procedure allows differences in voting behavior to be attributed to various factors. The specific methodology is commonly referred to as the Blinder-Oaxaca decomposition, a methodology widely used in labor economics to study group differences in a variety of economic settings—most commonly, differences in wage rates. For more information, see the following: Oaxaca, R. (1973). Male-female wage differentials in urban labor markets. *International Economic Review, 14*(3), 693–709. Blinder, A. S. (1973). Wage discrimination: Reduced form and structural estimates. *The Journal of Human Resources, 8*(4), 436–455. A discussion of the decomposition methods incorporated into the statistical framework used in this analysis can be found in Jann, 2008. Jann's procedure is contained in the STATA procedure Oaxaca.

population has a more difficult time voting than the domestic citizen population, given the same individual characteristics (unexplained component).[71]

The decomposition results were generated using the Oaxaca Stata package[72]. Tables D.2 and D.4 have three sections. The first section presents the total difference. In Table D.2, the total difference is the percentage point difference between the participation rates of the domestic citizen population and the overseas citizen population. As shown in Table D.2, the domestic citizen population votes at a rate 0.69 percentage points lower than the overseas citizen population. As shown in Table D.4, the ADM population votes at a rate 35.41 percentage points lower than the overseas citizen population.

The domestic citizen population (Table D.2) and the ADM population (Table D.4) are modeled so that the domestic citizen or ADM population has the observable demographic characteristics of the overseas citizen population. In Table D.2, estimates of the explained differences start by taking the domestic citizen population as a baseline, and then asks what would be the change in the domestic citizen participation rate if a particular, observed characteristic of that population were changed such that it matched the mean characteristic of the overseas citizen population, while keeping the differences in the demographic subgroups the same as they are in the domestic citizen population.

For example, holding other characteristics fixed, if domestic citizens were redistributed across different education categories such that the distribution matched that of the overseas citizen population, the domestic citizen participation rate would be expected to rise 6.98 percentage points. If all the observed characteristics were changed simultaneously to match those of the overseas citizen population, the domestic citizen voting model underlying the decomposition implies that the result would be a net increase of approximately 3.6 percentage points in the domestic citizen participation rate. This total increase is due entirely to changes in the distribution of the domestic citizen population across demographic subgroups defined by observable demographic and geographic characteristics (but assuming that the participation rate within any subgroup is the same as it is in the domestic citizen population). Because this 3.6 percentage-point shift is entirely the result of changes in the *observed* characteristics of the domestic citizen population, it is referred to as the *explained* difference between the domestic and overseas citizen population.

The predicted participation rate after this change to the observed characteristics is referred to as the participation rate of the modeled domestic citizen population. The (statistically insignificant) 2.96 percentage-point difference between the overseas citizen participation rate and this modeled domestic citizen voting is referred to as the *total unexplained* difference. This unexplained difference is the result of differences in the mean participation rate between domestic and overseas

71 The Blinder-Oaxaca decomposition uses a linear probability model of registration and voting. Because both are binary dependent variables, for robustness purposes a similar logit specification of these outcomes was estimated, in which the coefficients for the explanatory variables were allowed to differ between the domestic citizen population or ADM population and overseas citizen population. This model was used to generate an estimate of the average marginal effect of being an overseas citizen for the overseas citizen population, which is equivalent to the total unexplained difference in the baseline results. The estimates of the total unexplained difference did not differ significantly between the linear and nonlinear models.

72 Jann, 2008.

citizens within the same demographic and geographic subgroup. These differences are due to differences in unobserved characteristics between the domestic and overseas citizen population, and are thus referred to as *unexplained*. If one were to assume that these unexplained differences within demographic subgroups reflected the effect of living overseas, then the total unexplained difference could be interpreted as the average effect of living overseas for a population with the overseas citizen population's demographic characteristics.

Table D.2: 2014 Participation Decomposition, Domestic Citizen Population Reference

Variable	Frequency/Difference (Percent Scale)	Standard Error	95% CI Lower Bound	95% CI Upper Bound
Total Difference (Domestic Citizen—Overseas Citizen)				
Domestic Citizen	66.05***	0.22	65.62	66.48
Overseas Citizen	66.72***	0.89	64.99	68.46
Difference	-0.67	0.91	-2.46	1.12
Explained Difference (Domestic Citizen—Modeled Domestic Citizen)				
Mobility	-0.59***	0.07	-0.72	-0.46
Male	0.00	0.00	0.00	0.00
Family	1.79***	0.20	1.40	2.18
Education	-6.98***	0.24	-7.45	-6.51
Age	0.43**	0.19	0.05	0.80
Race	0.60***	0.10	0.41	0.79
Region	1.13***	0.24	0.66	1.59
Total Explained	-3.63***	0.45	-4.51	-2.75
Unexplained Difference (Modeled Domestic Citizen—Overseas Citizen)				
Total Unexplained	2.96***	1.00	1.01	4.92

*p <.10, **p <.05, ***p < .01 Associated ordinary least squares (OLS) regression results are presented in Table D.3.

Table D.3: 2014 Participation, Registered Domestic and Overseas Voters

	Registered Domestic Voter		Registered Overseas Voter	
Variable	Coefficient	Standard Error	Coefficient	Standard Error
Mobility	-0.12***	0.01	-0.11**	0.05
Male	0.00	0.00	0.02	0.02
Single Without Children	0.05***	0.01	0.03	0.03
Married With Children	0.06***	0.01	-0.01	0.03
Married Without Children	0.12***	0.01	0.03	0.03
Some College or Associate Degree	0.09***	0.01	0.06	0.04
Bachelor's Degree	0.17***	0.01	0.06	0.04
MA/PhD/Professional Degree	0.20***	0.01	0.08**	0.04
25–29	-0.01	0.01	0.10*	0.06
30–34	0.04***	0.01	0.04	0.06
35–44	0.09***	0.01	0.02	0.06
45+	0.22***	0.01	0.12**	0.05
Non-Hispanic Black	0.05***	0.01	-0.07	0.05
Hispanic	-0.07***	0.01	-0.05	0.03
Other	-0.10***	0.01	-0.03	0.03
Middle Atlantic	-0.10***	0.01	-0.29***	0.02
East North Central	-0.04***	0.01	-0.27***	0.05
West North Central	-0.03***	0.01	-0.22***	0.04
South Atlantic	-0.02**	0.01	-0.38***	0.02
East South Central	-0.08***	0.01	-0.05	0.05
West South Central	-0.07***	0.01	-0.23***	0.04
Mountain	0.03***	0.01	-0.34***	0.03
Pacific	0.00	0.01	-0.34***	0.03
Constant	0.39***	0.02	0.83***	0.07
N	61,780		6,124	

*p <.10, **p <.05, ***p < .01 The model was estimated using OLS. Observations are weighted using nonresponse/poststratification weights. Standard errors are robust to heteroscedasticity.

Table D.4: 2014 Participation Decomposition, ADM Reference

Variable	Frequency/Difference (Percent Scale)	Standard Error	95% CI Lower Bound	95% CI Upper Bound
Total Difference (ADM—Overseas Citizen)				
ADM	31.24***	/	29.91	32.58
Overseas Citizen	66.65***	1.13	64.44	68.86
Difference	-35.41***	1.32	-37.99	-32.83
Explained Difference (ADM—Modeled ADM)				
Mobility	-3.59***	0.73	-5.01	-2.16
Male	1.36**	0.64	0.11	2.62
Family	0.04	0.23	-0.40	0.48
Education	-8.65***	1.22	-11.03	-6.27
Age	-11.22***	1.15	-13.48	-8.97
Race	-0.35	0.25	-0.85	0.15
Region	0.38	0.86	-1.31	2.07
Total Explained	-22.03***	1.62	-25.19	-18.86
Unexplained Difference (Modeled ADM—Overseas Citizen)				
Total Unexplained	-13.39***	2.01	-17.33	-9.45

*p <.10, **p <.05, ***p < .01 Associated OLS regression results are presented in Table D.5.

Table D.5: 2014 Participation, ADM and Employed Overseas Citizen

	ADM		Employed Overseas Citizen	
Variable	Coefficient	Standard Error	Coefficient	Standard Error
Mobility	-0.07***	0.01	-0.19***	0.06
Male	0.04**	0.02	0.00	0.02
Single Without Children	0.06	0.04	0.01	0.04
Married With Children	0.09***	0.04	-0.03	0.04
Married Without Children	0.07*	0.04	0.06	0.04
Some College or Associate Degree	0.02	0.02	0.03	0.08
Bachelor's Degree in College	0.11***	0.02	0.10	0.07
MA/PhD/Professional Degree	0.17***	0.03	0.11	0.07
25–29	0.05***	0.02	0.05	0.09
30–34	0.09***	0.02	0.00	0.08
35–44	0.18***	0.03	-0.04	0.08
45+	0.27***	0.03	0.05	0.08
Non-Hispanic Black	-0.02	0.02	-0.10	0.06
Hispanic	-0.04*	0.02	-0.03	0.04
Other	-0.03	0.02	-0.02	0.04
Middle Atlantic	0.02	0.04	-0.31***	0.03
East North Central	0.03	0.04	-0.28***	0.07
West North Central	0.03	0.05	-0.27***	0.06
South Atlantic	0.08**	0.04	-0.40***	0.03
East South Central	-0.01	0.04	-0.10**	0.05
West South Central	0.03	0.04	-0.21***	0.05
Mountain	0.08*	0.04	-0.38***	0.05
Pacific	0.08**	0.04	-0.35***	0.04
Constant	0.08	0.05	0.91***	0.11
N	7,915		3,666	

*p <.10, **p <.05, ***p < .01 The model was estimated using OLS. Observations are weighted using nonresponse/poststratification weights. Standard errors are robust to heteroscedasticity.

Table D.6: 2010 Participation Decomposition, Future Migrants Reference

Variable	Frequency/Difference (Percent Scale)	Standard Error	95% CI Lower Bound	95% CI Upper Bound
Total Difference (Future Migrant—2010 Overseas Citizen)				
Future Migrant	72.83***	2.05	68.81	76.84
2010 Overseas Citizen	66.94***	1.06	64.86	69.03
Difference	5.88**	2.31	1.36	10.41
Explained Difference (Future Migrant—Modeled Future Migrant)				
Male	-0.01	0.04	-0.09	0.07
Family	-0.64	0.95	-2.50	1.21
Education	-0.40	0.42	-1.21	0.41
Age	-1.99*	1.05	-4.05	0.08
Race	-0.49	0.46	-1.38	0.41
Region	0.00	0.47	-0.91	0.92
Total Explained	-3.52**	1.44	-6.35	-0.70
Unexplained Difference (Modeled Future Migrant—Overseas Citizen)				
Total Unexplained	9.40***	2.27	4.96	13.85

*p <.10, **p <.05, ***p < .01 Associated OLS regression results are presented in Table D.7.

Table D.7: 2010 Participation, Future Migrants and 2010 Overseas Citizen

Variable	Future Migrants		2010 Overseas Citizen	
	Coefficient	Standard Error	Coefficient	Standard Error
Male	-0.01	0.04	0.04**	0.02
Single Without Children	-0.03	0.08	-0.09**	0.04
Married With Children	0.08	0.08	-0.06**	0.03
Married Without Children	0.17*	0.08	0.00	0.04
Some College or Associate Degree	-0.03	0.11	-0.02	0.05
Bachelor's Degree in College	0.08	0.10	0.04	0.05
MA/PhD/Professional Degree	0.16*	0.10	0.06	0.05
25–29	0.20**	0.09	0.14*	0.08
30–34	0.15	0.10	0.19***	0.07
35–44	0.10	0.09	0.19***	0.06
45+	0.22***	0.08	0.26***	0.06
Non-Hispanic Black	0.08	0.08	0.05	0.05
Hispanic	-0.06	0.07	0.03	0.04
Other	-0.10	0.07	0.02	0.04
Middle Atlantic	-0.16	0.13	-0.30***	0.02
East North Central	-0.32*	0.17	-0.29***	0.08
West North Central	-0.10	0.14	-0.02	0.03
South Atlantic	-0.16	0.13	-0.32***	0.03
East South Central	-0.28	0.19	-0.10	0.08
West South Central	-0.04	0.14	-0.16***	0.04
Mountain	-0.14	0.13	-0.26***	0.04
Pacific	-0.06	0.13	-0.20***	0.03
Constant	0.59***	0.17	0.72***	0.08
N	1,130		4,307	

*p <.10, **p <.05, ***p < .01 The model was estimated using OLS. Observations are weighted using nonresponse/poststratification weights. Standard errors are robust to heteroscedasticity.

Table D.8: 2010 Voting Decomposition, Future Migrants Reference

Variable	Frequency/Difference (Percent Scale)	Standard Error	95% CI Lower Bound	95% CI Upper Bound
Total Difference (Future Migrant—2010 Overseas Citizen)				
Future Migrant	47.77***	2.01	43.82	51.72
2010 Overseas Citizen	33.02***	0.80	31.45	34.60
Difference	14.74***	2.17	10.49	18.99
Explained Difference (Future Migrant—Modeled Future Migrant)				
Male	0.06	0.10	-0.15	0.26
Family	-0.36	0.90	-2.13	1.41
Education	-0.01	0.27	-0.53	0.52
Age	-2.15**	1.04	-4.19	-0.10
Race	-0.89**	0.44	-1.76	-0.02
Region	1.34***	0.51	0.34	2.35
Total Explained	-2.00	1.28	-4.51	0.51
Unexplained Difference (Modeled Future Migrant—2010 Overseas Citizen)				
Total Unexplained	16.74***	2.17	12.48	21.00

*p <.10, **p <.05, ***p < .01 Associated OLS regression results are presented in Table D.9.

Table D.9: 2010 Voting, Future Migrants and 2010 Overseas Citizen

Variable	Future Migrants		Overseas Citizen	
	Coefficient	Standard Error	Coefficient	Standard Error
Male	0.04	0.04	0.02	0.02
Single Without Children	-0.02	0.08	0.00	0.03
Married With Children	0.05	0.07	-0.01	0.02
Married Without Children	0.14*	0.08	0.02	0.03
Some College or Associate Degree	0.09	0.09	0.00	0.04
Bachelor's Degree in College	0.10	0.08	0.03	0.03
MA/PhD/Professional Degree	0.12	0.08	0.04	0.03
25–29	0.03	0.09	0.03	0.06
30–34	0.02	0.09	0.07	0.05
35–44	0.12	0.09	0.06	0.05
45+	0.13*	0.07	0.17***	0.04
Non-Hispanic Black	-0.12	0.08	-0.07	0.04
Hispanic	-0.18	0.06	-0.07***	0.03
Other	-0.11	0.07	-0.05	0.03
Middle Atlantic	-0.52***	0.11	-0.07	0.13
East North Central	-0.56***	0.15	-0.10	0.14
West North Central	0.00	0.11	0.46***	0.13
South Atlantic	-0.53***	0.11	-0.13	0.13
East South Central	-0.44*	0.23	0.25	0.20
West South Central	-0.52***	0.13	-0.18	0.14
Mountain	-0.42***	0.12	-0.11	0.13
Pacific	-0.48***	0.12	-0.04	0.13
Constant	0.75***	0.15	0.26*	0.14
N	1,227		5,373	

*p <.10, **p <.05, ***p < .01 The model was estimated using OLS. Observations are weighted using nonresponse/poststratification weights. Standard errors are robust to heteroscedasticity.

Federal Voting Assistance Program

Overseas Citizen Population Analysis

Volume 2: Survey Administration and Methodology

February 2016

FORS|MARSH GROUP

Table of Contents

1 Summary of Survey Findings

Survey Objectives

The 2014 Overseas Citizen Population Survey (OCPS) was conducted to better understand the impact of living overseas on voting behavior. A survey of this population allowed for more precise estimates of registration and participation rates and richer comparisons with domestic citizen and active duty military (ADM) populations. This effort also provided the added value of allowing the Federal Voting Assistance Program (FVAP) to collect additional data on resource awareness and voting behaviors. These additional data include overseas voter awareness of FVAP, use of and satisfaction with FVAP services, and the use of other voting resources.

The OCPS was divided into five sections, and asked respondents about their:

1. Place of residence overseas;
2. Voting experience in the 2014 General Election;
3. Voting experiences in the 2010 and 2012 General Elections;
4. Access to different types of media; and
5. Demographic information.

Survey Administration

The survey was implemented through a mixed-mode design in which initial contact included three "push to web" letters. Individuals who did not respond to initial invitations were then sent a paper survey with a postage-paid return envelope. Additionally, up to four email reminders were sent to individuals with valid email addresses (17 percent). Finally, nonrespondents to the subsequent waves were mailed a postcard to their domestic address in the event that they had traveled or relocated back to the United States. The letters and email reminders informed the respondents about the purpose of the survey and instructions for completion. Data were collected for the survey starting on September 18, 2015, and ending on December 9, 2015.

Sampling and Response Rate

The *preliminary* sampling frame consisted of absentee voter data for voters registered during the 2014 General Election in the District of Columbia and 49 of the 50 States (*N* = 302,256) as well as State voter files obtained by the FMG Team for voters registered in Minnesota (*N* = 1,376). In total, the preliminary sampling frame for the OCPS had 303,632 records. After removing 123,770 cases that were outside of the target population, could not be contacted, or were duplicates, the final sampling frame contained 179,862 records. Of this frame, final survey sample was drawn that consisted of 40,000 individuals who requested an absentee ballot in the 2014 General Election and asked for it to be sent to an international address.

A total of 10,009 respondents completed the survey; 8,453 completed the survey online (84 percent) and 1,556 completed the survey by mail (16 percent). Of these, 8,078 were considered eligible respondents for a final response rate of 26 percent. Eligible respondents in this survey are those who responded to the survey and:

- Were within a State absentee request voter file
- Resided overseas on November 4, 2014
- Were citizens of the United States
- Were not Uniformed Services voters
- Completed at least 25 percent of the survey or gave valid answers to Q1 through Q6

2 Data Collection and Validation

Although the FMG Team has been able to estimate the size of the overseas citizen population, by country and by region, there is no registry of overseas citizens that records where each of these individuals resides overseas.[1] However, there is a subpopulation of overseas citizens for which address information is available: overseas citizens who have requested an absentee ballot. These data are not in a single database; instead, data on voter registration are held at the State or local level. The lack of a central repository of voter registration information meant that for this effort, these data had to be collected from each State or local jurisdiction and combined in order to develop a comprehensive sample frame.

This type of data collection could be especially cumbersome; fortunately, there are vendors with existing voter data infrastructure who create parallel databases of domestic voters for use in national political campaigns. The effort of compiling a sample frame required a custom data collection effort since it involved registered overseas voters rather than registered domestic voters. The FMG Team contracted with Aristotle, Inc. to carry out this effort because of the company's long history of providing high-quality data and political technology to a variety of campaigns, research groups, and advocacy organizations. Aristotle obtained the names and addresses of U.S. citizens voting from outside of the United States in the 2010, 2012, and 2014 General Elections. Specifically, the FMG Team constructed a file for each of those general elections with each containing data for individuals who had made a *Uniformed and Overseas Citizens Absentee Voting Act* (*UOCAVA*) absentee ballot request as well as individuals who were registered at an overseas address in States that keep a permanent record of overseas addresses in their voter files. This variation is necessary since some States do not allow permanent registration from an overseas address, and States vary in their policies regarding how long they allow an overseas registration to last and how often they remove outdated addresses from their voter rolls. These varying policies affect the comprehensiveness of such a list at any given point in time, and the data quality and thoroughness is further examined later in this section.

1 U.S. citizens living or traveling overseas are advised, but not obligated, to register with the nearest U.S. Embassy or Consulate.

The final data set of overseas citizens who requested an absentee ballot in 2010–2014 (referred to in this report as the absentee voter data) was compiled in the following manner:

1. Aristotle, which compiles State voter files into a nationwide voter file that represents registered voters across all 50 States and the District of Columbia, searched its nationwide voter file using custom database queries for each State, county and town (as applicable), for voter characteristics that suggested a person was a registered overseas voter in the 2014 General Election. These characteristics included being tagged as a *UOCAVA* voter in the file, having a nonstandard State listing or ZIP code, or having an overseas address listed. These queries had to be applied separately for voter file records originating from different States or localities because of inconsistencies in how States, counties and towns maintain their voter files. Based on these searches, a record was created for each registered overseas voter that included his or her name and overseas address, the demographic information contained in the State's voter record and the vote history for that overseas citizen for the years 2000 to 2014, as available.

2. Some States do not keep a permanent *UOCAVA* voter tag or maintain the overseas address where a ballot was sent in their State voter file, but instead keep this information in a separate absentee ballot request file. Other States tag their voter files for overseas citizen ballot requests and also keep an absentee ballot request file as well. To ensure that the absentee voter data set was as complete as possible, a custom data collection effort was conducted, which involved contacting every State (and counties and municipalities as needed) to obtain a list of individuals in the State absentee file for voters asking for an absentee ballot from an overseas location. For each record collected from the absentee ballot request file, information from the individual's State voter file was appended to these records.

Table 2.1 lists each State and the District of Columbia and their associated source(s) of the overseas addresses included in the final data set; Table 2.2 lists the counties and municipalities providing voter information. For States that had both a voter file and absentee voter file, these data sets were merged and de-duplicated to produce a single comprehensive file. The final data set contained a voter's name, address, State of legal residence, vote history, and key demographics (e.g., age, gender).

Aristotle obtained the desired data at the State level from all States except for Massachusetts, Minnesota and Tennessee. For Massachusetts, each locality was contacted and records were obtained from 19 cities and towns, representing 22 percent of the total registered voters in the State. For privacy reasons, the Minnesota Secretary of State did not provide Aristotle with names and addresses of overseas citizens who requested an absentee ballot. However, the office provided this information directly to FMG on behalf of FVAP, with restrictions on sharing this data

or using it for any purpose other than modeling and survey implementation. In the study, the variables in the Minnesota data are consistent with those in the overseas absentee voter data gathered by Aristotle, with the exception of full voting history. Tennessee did not provide any overseas addresses, citing privacy concerns, although it provided the domestic address associated with each overseas citizen who requested an absentee ballot. Without the overseas addresses, Tennessee voters could not be included in the survey or other estimations of the overseas citizen population.

For many States, some of the voters represented in the data did not have an overseas address listed, and the reasons for this were varied. Individuals associated with these records were, on average, younger and more likely to have voted than individuals who had an overseas address listed, and there is no single explanation for some records having an address and others missing one. The States that had the highest rates of missing addresses were queried to determine why this information was missing, and the States provided varying responses. For example, Utah stated that many of the individuals asked for email delivery of ballots, so the overseas address was not recorded. New Jersey has a policy that for those who are temporarily overseas, the overseas address is recorded in a freeform "Notes" field rather than in the State voter file, so these addresses were not included. Individuals without an overseas address were not included in the OCPS, which means that survey results cannot be generalized to this portion of the overseas citizen population to the extent that they differ from survey participants.

Table 2.1: Absentee Voter Data Source by State				
	State File		County or City Files	
	Voter file	Absentee File	Voter file	Absentee File
Alabama	X			
Alaska		X		
Arizona	X			X
Arkansas	X			
California			X	X
Colorado		X		
Connecticut	X			
Delaware		X		
District of Columbia		X		
Florida		X		
Georgia	X	X		
Hawaii		X		
Idaho		X		
Illinois	X	X		
Indiana	X	X		
Iowa		X		
Kansas		X		
Kentucky		X		X
Louisiana		X		
Maine	X	X		
Maryland		X		
Massachusetts	X			X
Michigan	X			
Minnesota				
Mississippi	X			
Missouri	X			
Montana	X			
Nebraska	X			
Nevada				X
New Hampshire	X			
New Jersey		X		
New Mexico	X			
New York		X		
North Carolina		X		
North Dakota	X			
Ohio	X	X		X
Oklahoma		X		
Oregon		X		
Pennsylvania	X	X		
Rhode Island		X		
South Carolina		X		
South Dakota	X	X		
Tennessee				
Texas	X	X		
Utah	X	X		X
Vermont	X			
Virginia		X		
Washington	X			
West Virginia	X	X		
Wisconsin	X	X		
Wyoming		X		

Table 2.2: Counties and Municipalities Providing Overseas Voter Information	
Local Absentee File	
State	Counties or Municipalities
Arizona	Maricopa County
Utah	Davis, Iron, Salt Lake, Utah
Massachusetts	Amherst, Boston, Burlington, Cambridge, Fall River, Franklin, Lowell, Lynn, Malden, Plymouth, Quincy, Revere, Weymouth, Worcester
California	Orange, Plumas, San Francisco, Siskiyou, Sutter
Nevada	Carson City, Churchill, Clark, Douglas, Elko, Esmeralda, Eureka, Humboldt, Lander, Lincoln, Lyon, Mineral, Nye, Pershing, Storey, Washoe, White Pine
Kentucky	Jefferson, Fayette
Ohio	Adams, Allen, Ashland, Ashtabula, Athens, Auglaize, Belmont, Brown, Butler, Carroll, Champaign, Clark, Clermont, Clinton, Columbiana, Coshocton, Crawford, Cuyahoga, Darke, Defiance, Delaware, Erie, Fairfield, Fayette, Franklin, Fulton, Gallia, Geauga, Greene, Guernsey, Hamilton, Hancock, Hardin, Harrison, Henry, Highland, Hocking, Holmes, Huron, Jackson, Jefferson, Knox, Lake, Lawrence, Licking, Logan, Lorain, Lucas, Madison, Mahoning, Marion, Medina, Meigs, Mercer, Miami, Monroe, Montgomery, Morgan, Morrow, Muskingum, Noble, Paulding, Perry, Pickaway, Pike, Portage, Preble, Putnam, Richland, Ross, Sandusky, Scioto, Seneca, Shelby, Stark, Summit, Trumbull, Tuscarawas, Union, Vinton, Warren, Washington, Wayne, Williams, Wood, Wyandot
Local Voter File	
California	Alameda, Alpine, Amador, Butte, Calaveras, Colusa, Contra Costa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Imperial, Inyo, Kern, King, Lake, Lassen, Los Angeles, Madera, Marin, Mariposa, Mendocino, Merced, Modoc, Mono, Monterey, Napa, Nevada, Placer, Riverside, Sacramento, San Benito, San Bernardino, San Diego, San Francisco, San Joaquin, San Luis Obispo, San Mateo, Santa Barbara, Santa Clara, Santa Cruz, Shasta, Sierra, Solano, Sonoma, Stanislaus, Tehama, Trinity, Tulare, Tuolumne, Ventura, Yolo, Yuba

Absentee Voter Data Quality Analysis

Representatives from each State—and local election jurisdictions when appropriate—were contacted in order to collect these data. Because any biases in the absentee voter data could influence the sampling frame, the survey results, and its interpretation, the FMG Team conducted thorough internal and external validation of the absentee voter data. The internal validation

focused on determining the consistency of coverage for the data fields provided to determine their usability. The external validation analysis used other data sets, in particular data from the U.S. Election Assistance Commission's (EAC) Election Administration and Voting Survey (EAVS) data related to *UOCAVA* voting.[2] These data quality analyses also used absentee voter data for the 2012 and 2014 General Elections to uncover trends in data quality over time.

Internal Validation

The internal validation process focused on verifying the quality of the overseas addresses in the 2014 absentee voter data and through data cleaning for specific variables. Constructing a valid sample of those overseas citizens who asked for absentee ballots requires knowing (1) the name of the voter who requested an absentee ballot and (2) whether the voter voted domestically or from overseas in the 2014 General Election. In the absentee voter data for the 2014 General Election, 34 percent of the records were missing an overseas address and country of residence, compared to 31 percent in 2012 and 22 percent in 2010. For the 34 percent of records missing an overseas address and country of residence, the FMG Team was unable to confirm that the ballot requesters were overseas citizens and not domestic citizens. Based on conversations with Aristotle and with State and local election officials, the FMG Team determined that these individuals most likely registered or requested a ballot by email, and so did not need to provide an overseas address to the local election official so that the ballot could be mailed.

This determination is consistent with an analysis conducted by the FMG Team that found: (1) the proportion of records without an overseas address increased between 2012 and 2014, and (2) this increase was larger in States that accepted ballot requests by email in 2012. The latter finding is important, because if more people requested ballots via email from 2012 to 2014 in those States, and the States don't require voters to provide an address when requesting a ballot this way, we would expect to see an increase in the proportion of voters without overseas addresses, relative to other States. Ideally, the comparison would be drawn using States that started accepting ballot requests by email in 2014, but not enough States did so to be able to evaluate the change in overseas address recording.

The most likely explanations for the lack of addresses are that these voters were domestic voters erroneously included in their State absentee voter file or that these voters requested electronic ballots and, thus, their overseas address was not recorded. The decision to omit these individuals was supported by the results of a regression analysis, conducted to determine if there were any significant demographic differences between individuals who had overseas addresses listed in the absentee voter data and those who did not. The results indicated that individuals who had voted in 2010 and 2014 were less likely to have an overseas address listed, which may indicate that at

2 This data quality analysis uses the methodology recommended in Thomas N. Herzog, Fritz J. Scheuren, and William E. Winkler, "Data Quality and Record Linkage Techniques," New York, Springer-Verlag.

least some of those records without overseas addresses belong to individuals who resided in the United States at the time of the election (if one assumes that individuals in the United States are more likely to vote). It also may indicate that these records represent voters who received ballots electronically and that these voters were more successful in completing the voting process. Additionally, there was a positive correlation between age and the likelihood of having an overseas address listed, which may indicate that younger voters are more likely than older voters to request a ballot electronically or that they were more likely to have returned to the United States and completed the voting process domestically. There were 22,895—or 25 percent of records with no overseas address or country listed—that had an email address listed in the absentee voter data. Although it would have been possible to send an email survey invitation to these individuals, these records were excluded from the survey because their overseas citizen status could not be confirmed.

For the remaining 186,640 individuals who had an overseas address in the absentee voter data, 169 were determined to be unmailable.[3] This number represents a loss of less than 0.1 percent of the absentee voter data. Because of the vast number of possible addresses and the variety of formats for overseas addresses, it is very difficult to develop a simple method to easily verify the validity of the address information provided in the absentee voter data.

For more than 90 percent of the records, key demographic variables such as gender and age were complete. With the exception of age and date of birth, the demographic variables were primarily categorical. All of the variables were consistently documented, the distributions of the key demographics were within reasonable limits and there were no drastic changes in the distributions between years.

Absentee voter age for all three data sets ranged from 18 to 114. Although having an age of 114 often indicates that an individual was arbitrarily assigned the birth year of 1900, only two people had that age. The mean age was 50 in 2010; 47 in 2012; and 50 in 2014. This field was compared with birth year to determine how frequently an individual's age did not match his or her birthdate. Fewer than 50 voters out of all 300,000 in the full 2014 absentee voter data had a mismatch based on this criterion, indicating that both variables were either quite reliable or were derived from the same initial variable. The same steps were taken with registration date, and only a total of 655 individuals were recorded as having registered before they were 18 years of age (97 in 2010; 279 in 2012; and 279 again in 2014).

3 Cenveo, which was hired to print and mail the surveys, performed a check of the validation of each address against a large database of established foreign addresses and corrected addresses when a better address was available. The company then coded addresses (169) that did not include valid countries and marked them as undeliverable. Each address was given a mailability code, but these were not found to be strongly correlated with returned survey responses. This suggests that even addresses coded as "poor" deliverability were still able to successfully receive mail.

External Validation

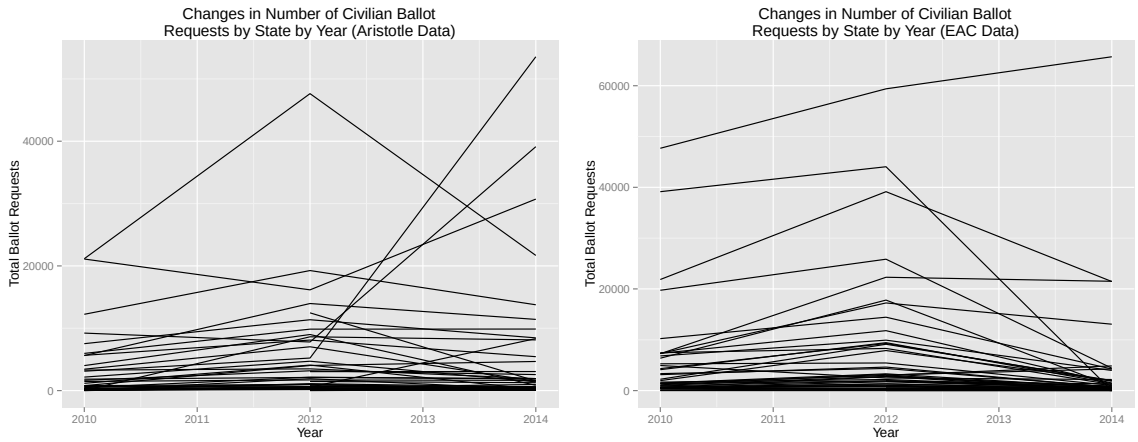
External validation testing of the absentee voter data was done to make sure that there were no systematic biases affecting who was included in the data set. This testing was done by comparing the absentee voter data to the data from the EAVS related to overseas citizens for the 2010, 2012 and 2014 General Elections. The FMG Team relied on the EAVS data because they represent the primary source of data on registered overseas voters and voting rates, as well as administrative data, and it is available for most States for a number of election cycles.[4] The EAVS is one of the only available sources of data on the number of overseas absentee ballots submitted and received, but it is likely that it also contains some undetermined amount of error.

Table 2.3: Comparing Absentee Voter Data with EAVS Data

Year	Ballot Requests		Successful Voters	
	Absentee Voter Data	EAVS	Absentee Voter Data	EAVS
2010	137,633	224,708	35,045	76,388
2012	256,006	374,570	161,927	263,905
2014	302,256	168,173	100,706	65,361

Both the absentee voter data and the EAVS data were aggregated by State and election year, and then the number of ballot requests reported by each source was compared. This analysis was done by State instead of by county or other geographical levels to make the presentation of these data clearer. However, even at the State level, there was a substantial amount of unexplained variation present in both data sets across all three years of data. This variation is visible in Figure 2.1, which compares the trend in the number of ballot requests by State over time for the two data sources.

Figure 2.1: Ballot Requests by State in 2010, 2012 and 2014



4 The EAC *UOCAVA* data can be found here: http://www.eac.gov/research/uocava_studies.aspx

Each line in the graphs shown in Figure 2.1 represents one State; the *x*-axis measures time and the *y*-axis measures the total number of overseas citizen ballot requests. The two graphs above were restricted to just civilian voters because the EAVS data included domestic ADM voters in their counts, with no way to differentiate them from overseas ADM voters. This validation exercise indicates that not only were there more records in the absentee voter data for the 2014 General Election than for the 2012 and 2010 General Elections, but also that 2014 was the only year in which the absentee voter data reported more ballot requests than the EAVS, as well as more successful votes. The data collection for all three of these elections occurred in the latter half of 2014, which may indicate that the absentee voter data did not contain as many of the records for 2010 and 2012 as it was in 2014 and that future efforts would benefit from collecting data as soon after an election as possible. The graphs show a large amount of variation over time and between data sources, with no strong trends emerging across either dimension.

Because of the variation in the counts reported by each source for a single State year, the FMG Team modeled the difference in the number of absentee ballot requests by State to determine if any variables explained the relationship between the EAVS and absentee voter data for each State. Specifically, the FMG Team examined how a set of variables explained the ratio of civilian ballot requests in the absentee voter data to EAVS civilian ballot requests, by State and by year. However, the FMG Team's modeling efforts did not produce any statistically significant results.[5] The variables included in this model are listed in Table 2.4 below.

Table 2.4: Variables Used in Comparison of Absentee Voter Data and EAVS Data

Absentee Voter Data Aggregates	EAVS Aggregates	Other
Percent female	Percent civilian	Year
Percent civilian	Average number of ballots by jurisdiction	Permanent absentee voter option[6]
Percent Hispanic		Permanent absentee voter option[7]
Percent African American		Percent who voted for Obama in 2012[8]
Percent in Europe		Percent who experienced difficulties with registration or their absentee ballot[9]
Percent in Asia		The State's region[10]
Percent in Western Hemisphere		If the State performed a post-election audit in 2012[4]
Percent Democrat		General election turnout[11]
Percent Republican		

5 The only two statistically significant variables were year and the percent female, but each could only explain less than 2 percent of the variation from the mean.
6 From http://www.ncsl.org/research/elections-and-campaigns/absentee-and-early-voting.aspx
7 Contains States that permit absentee voting with an excuse.
8 From http://www.fec.gov/pubrec/fe2012/federalelections2012.pdf
9 From Pew's Election Performance Index: http://www.pewtrusts.org/en/multimedia/data-visualizations/2014/elections-performance-index; the 2010 values were used in place of the 2014 values for registration and ballot issues variables as the 2014 data is not yet available and Pew found that there were significant differences between presidential and midterm elections.
10 Using the U.S. Census Bureau's definition.
11 From http://www.electproject.org/home/voter-turnout/voter-turnout-data

Because of the low level of agreement between years and data sets and the lack of findings in the multivariate analysis, an analysis was conducted on a subset of States that had minimal levels of variation over time in both the EAVS and absentee voter data sets. Table 2.5 summarizes the States that were analyzed and the variation in each data set for each State. This analysis was calculated by determining the mean number of ballot requests and the range across the three elections by State, then dividing that range by the mean.[12]

This analysis shows that the States with a high amount of variation in the absentee voter data ballot request counts across elections do not necessarily have high variation in their EAVS counts, and vice versa.

Table 2.5: Variation in Counts of Overseas Absentee Voters

State	Range as Percentage of the Mean	
	Absentee Voter Data	EAVS
VT	10%	124%
MO	14%	143%
CT	15%	140%
SD	26%	70%
NE	34%	147%
OR	42%	87%
AR	42%	112%
CO	42%	80%
MI	46%	150%
WA	47%	88%

The multivariate model was re-estimated with this truncated data set and, once again, none of the demographic, regional or political variables included in the model were significant predictors of differences between the absentee voter data and EAVS counts. Based on this lack of significant predictors, the FMG Team concluded that there were no structural explanations for the difference between the number of ballot requests reported by the State and local lists and the EAVS.

The FMG Team also assessed the differences in the number of successful overseas voters—voters who had their ballots included in the final tabulation in their jurisdiction—between the absentee voter and EAVS data. There are several possible explanations for the discrepancy between the EAVS count and the count compiled from the absentee voter data for the 2010, 2012 and 2014 General Elections. The EAVS relied on responses from State election officials, who often included information from local election officials from smaller jurisdictions.[13] The quality of the data

12 For instance, if the absentee voter data reported that a given State had 100 ballot requests in 2012, 200 in 2012, and 150 in 2014, the mean would be 150 and the range would be 100, making the range as a proportion of the mean 67 percent. Essentially, the mean is being used as an indicator of what a "big" change in the number of ballot requests is for each State.

13 The EAC Uniformed and Overseas Citizens Absentee Voting Act, July 2013 report is available at

collected in the EAVS data is highly variable.[14] There are many reasons for the inconsistency in reporting and quality of the EAVS data. State and local election officials have differing capacities to capture and keep election administration data. States also vary in the degree to which each centralizes election administration at the State level, including the storage and organization of election information. These differences likely affect both the EAVS data collection process as well as the amount of information in the absentee voter data.

Additionally, the data collection period for the absentee voter data for the 2010 and 2012 General Elections took place in the latter half of 2014, almost two years after the 2012 General Election and four years after the 2010 General Election. Because some States and local areas do not keep absentee voter data this long after the election, there are likely underestimates of overseas citizen voting rates for 2010 and 2012, and variation in data quality across States. The 2014 General Election data are likely more robust because data collection began in November 2014, directly following the general election, and was completed on June 1, 2015. Future efforts will benefit from collecting data as soon after the election as possible. The more timely data collection effort likely explains why the number of absentee voter records provided by State and local election officials is higher than the counts generated by the EAVS for the 2014 General Election.

The internal and external data validation processes indicate that although the absentee voter data do have shortcomings, they provided usable demographic information, vote history and—most notably—contact information for the overseas citizen population, about which very little is known. The issues noted in the FMG Team's data quality analysis addressed problems in the absentee voter data received from the States and local jurisdictions. The issues with data collection and reporting by States and local jurisdictions likely resulted in the data set of overseas voters being less than complete, but the data do allow surveys to be successfully delivered to a substantial subset of this population.

http://www.eac.gov/assets/1/Documents/508compliant_Main_91_p.pdf

14 For example, the Pew Charitable Trusts used the EAC Election Day survey information in its "Elections Performance Index" (April 2014). In that report, the researchers noted "The Election Assistance Commission's EAVS data had substantial missing or anomalous information" (page 7, http://www.pewtrusts.org/en/multimedia/data-visualizations/2014/~/media/assets/2014/04/07/epi_methodology.pdf). In a study of the 2006 EAC surveys, Gronke and Schrieber found a great deal of incomplete data in all three of the EAC surveys, including the *UOCAVA* survey (Paul Gronke and Bailey Schreiber, "Response Rates on the 2006 Election Administration Commission Survey," The Pew Charitable Trusts, "Data Democracy: Improving Elections Through Metrics and Measurement," December 2008, pages 54-57).

3 Survey Instrument Design

Before this effort, there had never been a survey of overseas registered voters conducted. This new survey instrument was designed to include specific questions related to where people live overseas, their 2014 voting experience and previous voting experiences, access to media, and demographic information. The instrument needed to be adaptable to both a print and online design, which meant limiting complicated skip patterns and omitting prefilled responses from previous questions. The process of designing the survey instrument for the OCPS involved adapting questions from comparable surveys, conducting cognitive interviews and then testing the print and online surveys during a pilot stage.

The content and wording of the questions used in the OCPS came from a variety of sources. The privacy notice, additional information and *Paperwork Reduction Act* notice sections of the survey were all taken verbatim from FVAP guidelines. The majority of questions were drawn from the 2014 Post-Election Voting Survey (PEVS) of Active Duty Military Members and the 2014 Current Population Survey (CPS) Voting and Registration Supplement.[15] The survey incorporated as many relevant questions from these two surveys as possible, with a focus on maintaining replicability and minimizing survey burden. The questions on media use came from the American National Election Studies (ANES) 2012 Pre-Election Questionnaire, the ANES 2012 Time Series Study, the Pew Internet Project 25th Anniversary of the Web, and the Pew November 2012 Post-Election Survey. Questions related to living overseas, child and spouse citizenship, overseas social networks, postal service reliability, and road quality were written specifically for this survey. After constructing an initial survey based on its outlined goals, the FMG Team collectively edited the survey by rewording specific questions, adding and removing response options, and discussing the merits of specific questions.

Cognitive Interviews

After the first draft of the survey was constructed, cognitive interviews were conducted with nine individuals to test how potential sample members responded to the individual questions within the survey and to make sure that the length of time

15 Details on FVAP's 2014 Post-Election Voting Survey can be found at http://www.fvap.gov/info/reports-surveys. Information on the CPS and the Voting and Registration Supplement can be found at http://www.census.gov/hhes/www/socdemo/voting/.

required to complete the survey would not be overly burdensome to respondents. Using an online screener, these interviewees were selected because they were registered overseas voters who had lived overseas for at least one year in the past five years and had asked for an absentee ballot while they were living overseas. The interviews were held on December 15, 2014, in Arlington, Virginia, at the Fors Marsh Group offices. Participants read through the initial invitation letter and provided feedback, then took the survey as if they had been living overseas during the 2014 General Election. The interviewer timed each participant's response to make sure that the burden was appropriately estimated.

Following the survey, the interviewer and participant reviewed any questions that were unclear, and the interviewer asked in-depth questions about several survey items. These questions probed at how the interviewee interpreted the wording of the question and how he or she came to choose a specific response. Question and response clarity was measured based on four questions:

1. Was the item understandable?
2. Were the response scale options adequate?
3. Was the item asked in such a way that multiple answers could be appropriate?
4. Was the item leading, making one response too obvious?

The cognitive interviews led to a number of improvements in the survey, such as presenting clearer skip logic, clarifying the timeframes expressed in a question, rewriting certain questions and improving the response options for some questions. Other questions were dropped from the survey entirely.

Survey Preparation

The survey questions were formalized into an annotated questionnaire, which served as a guide to programming the print and online surveys. The annotated questionnaire presented all of the questions, survey text, specific response values, skip logic, program notes and labels. Using the annotated questionnaire as a guide, the FMG Team formatted the print survey to limit the estimated time a respondent would take to complete the survey to approximately 10 minutes, with each of the survey questions easily discernable. After creating a graphic design of the print survey, all wording and skip logic were compared to the annotated questionnaire and updated for errors. Each change to the print survey was noted with a change log, implemented by an operations personnel member and double checked to verify the correct change.

The online survey was designed to be as identical as possible to the print survey and used the same annotated questionnaire as the guide. The difference in survey mode created a difference

in designs between the two surveys, although they were designed to be as similar as possible given the differences in format.[16] The online survey included programmed logic that skipped questions based on the respondent's answers to previous questions. This reduced the time burden on respondents and prevented redundant or inapplicable questions from being asked. Questions were presented individually on single web pages to minimize onscreen confusion. Selection of open-ended "other" response options resulted in a new page. Respondents were aware of their progress in the survey based on a progress bar located at the bottom of the online survey screen. Once the online survey was created, the logic and wording were checked against the annotated questionnaire for errors. All changes were listed in the online survey change log, which were then implemented by an operations personnel member and double-checked to verify a correct change. The online survey was given a dedicated URL that asked for a ticket number to enter the survey.

Pilot Survey and Revisions

The survey instrument was tested in a pilot survey administration and, based on the results of the survey and the feedback provided by pilot participants, several minor, nonsubstantive changes to the survey instrument were made. Specifically, three questions that asked about overseas residency were modified by allowing an open-ended numerical response as opposed to categorical options. A large proportion of respondents to the pilot survey answered that they had lived overseas for 14 years or more; changing the response options allowed for greater variation in responses to be captured, in addition to collecting more precise, continuous data. A question that asked about reasons for being overseas was revised to include responses for military members and military spouses. This was necessary to ensure that the survey does not inadvertently sample participants who are not part of the target population. A question that asked about reasons for not voting was modified from a "mark all" to a "mark one" question to correctly replicate previous CPS and PEVS questions. Two questions on media resources for voting information were modified by removing confusing questions on local media resources and by separating social media and non-social media Internet resources. A small number of other questions underwent minor, nonsubstantive changes to question wording, response option wording and skip logic changes to improve the overall flow of the study survey.

These nonsubstantive changes were implemented, and the revised survey went through the same survey preparation process described above. Copies of the survey instruments used in the pilot survey and the final survey as well as copies of the survey invitations and reminder letters can be found in Appendix A.

16 It is possible that the difference in survey format led to systematic differences in responses between the web and print surveys. The FMG Team did not find evidence that this was the case but, nonetheless, a control variable for survey mode was included in all analyses of the final survey data.

4 Survey Sampling

In this survey, the target population was U.S. citizens who were registered to vote on November 4, 2014, were residing outside the United States and were not Uniformed Services voters. The focal interest was registered overseas voters who requested an absentee ballot for the 2014 General Election that was sent to an overseas address. The absentee voter data have certain issues with missing and inconsistently reported data. However, the overall data quality is reasonable considering the data were collected independently by every State or local jurisdiction. The internal data validation analysis indicated that the absentee voter data was of good quality, sufficient for fielding the proposed surveys.

Sampling Frame Overview

There are many ways to conduct a survey to understand the behaviors or attitudes of a given population. For small populations—such as 100 people working in an office—it may be possible to survey everyone. By surveying the entire population, inferences can be easily made about the behaviors or attitudes of the people in that population, since everyone is represented in the survey (assuming full survey participation). However, for larger populations, such as the population of voters, given the cost and time constraints, it is typically necessary to survey a subset of people and have those people represent the larger population. The mechanism for selecting survey invitees is known as *sampling*, and it typically entails a random process in which every individual has a known probability of being selected into the survey. The conduct of such a sample survey starts with the identification of a sampling frame.

The sampling frame is the basis for inference in surveys; generalizations can only be made to the sampled population (i.e., individuals who have a chance of being selected for the survey). Although survey efforts typically seek to learn about a certain group of individuals, known as the target population, there are sometimes differences between the target population and the sampled population due to factors such as the inability to obtain a perfect sampling frame. For the purposes of this survey, the target population consists of U.S. citizens living outside the United States on November 4, 2014, who had requested an absentee ballot and who are not considered a Uniformed Services voter.

Generally, there is a need to ensure that the sampling frame does a good job of representing the target population (i.e., has good *coverage*), which in this context means that it would contain all States where voters are registered and all countries where such voters live. A sampling frame is perfect when there is a one-to-one correspondence between members of the sampling frame and members of the target population. In practice, nearly every frame will encounter problems relating to members of the target population who are not included in the frame, and members outside the target population who are included in the frame.

For this survey, overcoverage refers to any individuals on the list who are outside of the target population, such as Uniformed Services voters, individuals who were in the U.S. on November 4, 2014, or individuals who had died before November 4, 2014, and should no longer be on the list. Undercoverage in this survey refers to individuals who should be on the list but who were not on the list; for example, individuals for whom both of the following are true: (1) the State, county or municipality of registration did not provide a list of absentee ballot requesters, and (2) the State voter file does not otherwise indicate an overseas address for the voter.

Sampling Frame

The survey sampling frame was constructed using the absentee voter data, which consists of the voter information described previously for known overseas citizens who requested an absentee ballot during the 2014 General Election. The *preliminary* sampling frame consisted of absentee voter data for voters registered in the District of Columbia and 49 of the 50 States (N = 302,256) and State voter file obtained by the FMG Team for voters registered in Minnesota (N = 1,376). In total, the preliminary sampling frame for the OCPS had 303,632 records.

In order to create a sampling frame that allowed for accurate estimates, exclusion criteria were applied to remove cases that were outside of the target population, could not be contacted or were duplicates. Categories of excluded cases were removed sequentially, in the following order:

1. No International Address: If the absentee voting address was not overseas, or no overseas address was available, the case was excluded. It appeared that some records were for domestic voters who had requested absentee ballots at a U.S. address, and these records were included in the file because a jurisdiction conducted an overly inclusive search for overseas absentee voters. This category also included voters who had an Army Post Office (APO)/Fleet Post Office (FPO) military address or a missing address. All records from Tennessee (N = 1,306) were excluded because no addresses were available for these individuals.

2. Bad Country Code: This category reflected cases with mailing addresses in countries or territories outside the scope of the data collection effort. This category included cases with mailing addresses for U.S. territories (e.g., Guam, American Samoa), territories of overseas

countries (e.g., Bonaire, a Dutch territory), or countries that were otherwise excluded because the lack of standardized data on these countries precluded the level of analysis carried out in this report. A list of these countries is provided in Table 4.1 below.

3. Duplicates—Voter Record Source: As a first check for duplicates, the frame was checked to make sure that there were no duplicates of entire sections of the voter file at the geographic units for which the voter records originated (e.g., State or county). As part of this check, searches were conducted for duplicate names and/or voter identification number, using overly inclusive search criteria, to see if there were any portions of the frame that had large proportions of possible duplicate cases. This search indicated near-complete duplicates of the San Francisco and Amador County local voter files, and thus the duplicated records were removed.

4. Duplicates—Other: Next, additional processing was conducted to remove remaining duplicates in the frame. In this step, the file was searched for duplicates on various combinations of identifying variables. In the case of duplicates, absentee records with attached voter file data were prioritized over unconfirmed requester records; holding this constant, the record with the most recent voter registration date was kept under the assumption that this would be the most up-to-date. This processing was conducted iteratively, and results of each de-duplication step were examined manually to prevent the removal of non-duplicates who had common names. The final set of de-duplication criteria included the following search parameters:

    - Exact match of first name, last name and email address (N = 48) for cases with complete data on all three fields. Email was used in conjunction with name given that it was sometimes attached at the household level rather than individual level; this step did not apply to cases with missing full name or missing email address.
    - Exact match of first name, last name, voter identification number and State (N = 111); this step did not apply to cases with missing voter identification number.
    - Exact match of first name, last name and birthdate (N = 574); this step did not apply to cases with missing birthday. Cases in which only a birth year was available were dropped only when the birth year matched and the State matched as well.

5. Unmailable Addresses: Before sampling, address processing was conducted to improve the quality of addresses to increase the contact rate for the survey, given that different countries have different address formats. This category reflected cases for which no mail could be delivered. Additional address processing was conducted after sampling.

Counts for the number of frame exclusions are provided in Table 4.1 and counts for the number of country code exclusions are provided in Table 4.2.

Table 4.1: Frame Exclusions for OCPS 2014		
Reason for Exclusion	Number of Cases	Percentage of Exclusions
No international address	117,164	94.7%
Bad country code	1,367	1.1%
Duplicates—voter record source	4,405	3.6%
Duplicates—other	733	0.6%
Unmailable addresses	101	0.1%
Total	**123,770**	**100.0%**

Table 4.2: Country and Territory Code Exclusions for OCPS 2014		
Country or Territory	Number of Cases	Percentage
Puerto Rico	228	16.7%
Guam	221	16.2%
Cayman Islands	210	15.4%
Virgin Islands, U.S.	89	6.5%
San Marino	61	4.5%
Korea, Democratic People's Republic of	52	3.8%
Myanmar	51	3.7%
Netherlands Antilles	43	3.1%
Monaco	36	2.6%
Northern Mariana Islands	32	2.3%
Holy See (Vatican City State)	32	2.3%
French Polynesia	30	2.2%
Aruba	29	2.1%
Turks and Caicos Islands	27	2.0%
Virgin Islands, British	27	2.0%
Anguilla	25	1.8%
Serbia and Montenegro	21	1.5%
Sint Maarten (Dutch part)	21	1.5%
Curaçao	20	1.5%
Martinique	14	1.0%
Saint Martin (French part)	13	1.0%
New Caledonia	11	0.8%
All others	74	5.4%
Total	**1,367**	**100.0%**

After removing 123,770 cases due to frame-level exclusions, the final sampling frame contained 179,862 records. Table 4.3 provides counts of the frame-level exclusions and final sampling frame by State and data source.

Table 4.3: Counts of Excluded and Included Records by State and Data Source

State	Excluded Records			Included Records		
	Records from Voter File	Absentee Records With Attached Voter Data	Total Exclusions	Records from Voter File	Absentee Records With Attached Voter Data	Final Total Frame Size
AK	0	423	423	0	331	331
AL	323	0	323	436	0	436
AR	192	0	192	404	0	404
AZ	163	59	222	214	592	806
CA	6,692	85	6,777	35,859	7,302	43,161
CO	0	89	89	0	8,459	8,459
CT	88	0	88	1,627	0	1,627
DC	0	110	110	0	517	517
DE	0	8	8	0	344	344
FL	0	22,818	22,818	0	24,846	24,846
GA	286	195	481	2,083	198	2,281
HI	0	10	10	0	233	233
IA	0	50	50	0	245	245
ID	0	91	91	0	175	175
IL	181	53,823	54,004	556	452	1,008
IN	6,191	5	6,196	2,308	15	2,323
KS	0	17	17	0	98	98
KY	0	671	671	0	327	327
LA	0	1	1	0	92	92
MA	1	114	115	4	56	60
MD	0	404	404	0	808	808
ME	66	0	66	3,047	0	3,047
MI	5,632	0	5,632	4,624	0	4,624
MN	0	17	17	0	1,359	1,359
MO	1,308	0	1,308	1,335	0	1,335
MS	28	0	28	28	0	28
MT	101	0	101	934	0	934
NC	0	233	233	0	1,462	1,462
ND	164	0	164	94	0	94
NE	74	0	74	215	0	215
NH	31	0	31	619	0	619
NJ	0	1,127	1,127	0	436	436
NM	112	0	112	326	0	326
NV	0	689	689	0	211	211
NY	0	1,336	1,336	0	38,179	38,179
OH	28	614	642	21	1,374	1,395
OK	0	1,125	1,125	0	164	164
OR	0	931	931	0	5,443	5,443
PA	207	1,106	1,313	946	2,626	3,572
RI	0	18	18	0	138	138
SC	0	452	452	0	96	96
SD	284	39	323	143	32	175
TN	0	1,306	1,306	0	0	0
TX	2,218	457	2,675	8,365	2,589	10,954
UT	8,004	0	8,004	142	0	142
VA	0	1,993	1,993	0	549	549
VT	81	0	81	347	0	347
WA	330	0	330	13,516	0	13,516
WI	318	68	386	1,203	315	1,518
WV	172	10	182	304	30	334
WY	0	1	1	0	69	69
Total	**33,275**	**90,495**	**123,770**	**79,700**	**100,162**	**179,862**

Sampling Frame: Pilot Survey

The pilot survey sampling frame was constructed in a similar manner as the main survey sampling frame, but with two main differences.

First, the pilot survey sampling frame was restricted to the absentee records with attached voter data. Unconfirmed requester records (i.e., cases from the voter file only) were excluded since the primary focus of this survey effort is on overseas citizens who requested an absentee ballot in 2014. For States, counties, and/or towns that did not provide an absentee file, it was not clear how well their voter files reflected the population of interest. The primary problem with including such unconfirmed requester cases in the pilot survey was that these State voter files could have had substantial overcoverage by virtue of including domestic voters who did not ask for an absentee ballot overseas in the 2014 General Election, which could reduce eligibility rates for this study. The voter files could also contain out-of-date records, which could decrease contact rates. Thus, these jurisdictions were excluded from the pilot survey. However, the response rates for the pilot survey were sufficiently high that for the main survey, 10 percent of the sample was allocated toward such jurisdictions (e.g., States without absentee voter files). Although such records might have had overcoverage, as well as the possibility of undercoverage (i.e., voters who requested absentee ballots overseas whose overseas addresses were not listed in the voter file), excluding them from the main survey would have meant complete noncoverage of this population.

The second difference between the pilot survey sampling frame and the main survey sampling frame was that the pilot survey was fielded using a preliminary version of the sampling frame, due to its earlier field dates, in which absentee records from some States and localities were yet to be received. The main impact of this difference was that only 91 percent of the absentee voter data were available for sampling at the time of the pilot survey; cases that were unavailable for the pilot survey—but available for the main survey—comprised all available absentee records from Arizona, California, Illinois, several counties in Ohio and Clark County in Nevada. Of the 100,162 valid absentee records, 91,395 were available at the time of sampling for the pilot survey, as displayed in Table 4.4. Further, due to improved de-duplication procedures for the main survey, 160 cases available for pilot sampling were removed from the main survey sampling frame; one case included in the pilot sampling was later determined to be from an unconfirmed requester record source. Thus, the final pilot survey sampling frame comprised 91,556 records, of which 99.8 percent (91,395) were included as valid frame population members for the main survey.

Table 4.4: Final Valid Absentee Records: Availability for Pilot and Main Surveys			
State	Available for Pilot and Main Survey	Available for Main Survey Only	Total Available Absentee Records
AK	331	0	331
AZ	0	592	592
CA	0	7,302	7,302
CO	8,459	0	8,459
DC	517	0	517
DE	344	0	344
FL	24,846	0	24,846
GA	198	0	198
HI	233	0	233
IA	245	0	245
ID	175	0	175
IL	0	452	452
IN	15	0	15
KS	98	0	98
KY	327	0	327
LA	92	0	92
MA	56	0	56
MD	808	0	808
MN	1,359	0	1,359
NC	1,462	0	1,462
NJ	436	0	436
NV	144	67	211
NY	38,179	0	38,179
OH	1,020	354	1,374
OK	164	0	164
OR	5,443	0	5,443
PA	2,626	0	2,626
RI	138	0	138
SC	96	0	96
SD	32	0	32
TX	2,589	0	2,589
VA	549	0	549
WI	315	0	315
WV	30	0	30
WY	69	0	69
Total	**91,395**	**8,767**	**100,162**

Table 4.5: Countries Included in Pilot Sample	
Afghanistan	Laos
Albania	Latvia
Angola	Lebanon
Antigua and Barbuda	Lesotho
Argentina	Liberia
Armenia	Lithuania
Australia	Luxembourg
Austria	Macedonia
Azerbaijan	Madagascar
Bahamas	Malawi
Bahrain	Malaysia
Bangladesh	Mali
Barbados	Malta
Belgium	Mauritania
Belize	Mauritius
Benin	Mexico
Bermuda	Micronesia
Bhutan	Moldova
Bolivia	Mongolia
Bosnia and Herzegovina	Montenegro
Botswana	Morocco
Brazil	Mozambique
Bulgaria	Namibia
Burkina Faso	Nepal
Burundi	Netherlands
Cambodia	New Zealand
Cameroon	Nicaragua
Canada	Niger
Cape Verde	Nigeria
Chad	Norway
Chile	Oman
China	Pakistan
Colombia	Panama
Congo	Papua New Guinea
Costa Rica	Paraguay
Côte d'Ivoire	Peru
Croatia	Philippines
Cuba	Poland
Cyprus	Portugal
Czech Republic	Qatar
Denmark	Romania
Djibouti	Russian Federation
Dominica	Rwanda
Dominican Republic	Saint Kitts and Nevis
Ecuador	Saint Lucia
Egypt	Samoa
El Salvador	Saudi Arabia
Estonia	Senegal
Ethiopia	Serbia

Table 4.5: Countries Included in Pilot Sample	
Fiji	Seychelles
Finland	Sierra Leone
France	Singapore
Gambia	Slovakia
Georgia	Slovenia
Germany	South Africa
Ghana	South Korea
Greece	Spain
Grenada	Sri Lanka
Guatemala	Sudan
Guinea	Suriname
Guyana	Swaziland
Haiti	Sweden
Honduras	Switzerland
Hong Kong	Taiwan
Hungary	Tajikistan
Iceland	Tanzania
India	Thailand
Indonesia	Togo
Iraq	Tonga
Ireland	Trinidad and Tobago
Israel	Turkey
Italy	Uganda
Jamaica	Ukraine
Japan	United Arab Emirates
Jordan	United Kingdom
Kazakhstan	Uruguay
Kenya	Venezuela
Kuwait	Vietnam

Sampling Design Overview

The OCPS used a complex sampling design on account of the unequal sampling probabilities, explicit and implicit stratification, and multiple phases of selection (i.e., given that pilot sample members were excluded from the main survey). The key sample design feature for both the pilot and the main survey was the use of unequal probability sampling, in which the probability of a frame member's selection into the sample depends on the survey precision requirements. For the purposes of sampling, the absentee voter data file is considered to have two components:

1. Absentee records (N = 100,162), who are comprised of individuals who had an overseas mailing address and were on a State-, county-, or municipality-provided list of individuals who requested an absentee ballot in order to vote in the 2014 General Election (i.e., by virtue of an explicit ballot request or from having permanent absentee status).

2. Unconfirmed requesters (N = 79,700), who are comprised of individuals who had an overseas address listed in their State voter file but for whom there was not a record of a

specific request for an absentee ballot in 2014 (i.e., generally due to the State, county, or municipality not having provided a list of absentee ballot requesters).

The probability of selection depended on the source of the absentee voter records (voter file–only data source compared to absentee ballot request data source). For absentee records, the selection probability was primarily determined by country of mailing address, although for the main survey, country was taken into account after sampling all available absentee records in States with rare ballot policies. Secondary design features involved the use of explicit and/or implicit stratification to reduce sampling variance.

The unequal probability sampling was implemented using a probability proportional to size (PPS) sampling procedure. The pilot survey and main survey shared many common features. A key difference relates to the fact that the pilot survey sampling frame was restricted to confirmed absentee records (with attached voter data, where available). The main survey also focused primarily on this absentee portion of the sampling frame, but it included a secondary sample drawn from the unconfirmed requester portion.

There were two surveys conducted: a pilot survey and the main survey. For the pilot survey, a sample size of 5,000 was drawn from the pilot survey sampling frame (N = 91,556), which only contains the requester portion and excludes a small number of requester records that were not yet available. For the main survey, the primary sample (size 36,000), was drawn from the absentee portion of the sampling frame, which comprised 100,162 records; a secondary sample (size 4,000), was drawn from the unconfirmed requester portion of the sampling frame, which comprised 79,700 records. The pilot survey results helped to inform the design for the main study, although their overarching features were relatively similar. Cases sampled in the pilot survey were excluded from the main survey. Table 4.6 provides key sample summary information for the main survey and pilot survey; details follow in the subsequent sections.

Table 4.6: Overview of Pilot and Main Survey Samples, among Final Frame Population Members			
World Region or Ballot Policy Group[17]	Final Frame Population Size	Pilot Survey Sample Size[18]	Main Survey Sample Size
Africa	1,886	195	1,691
East Asia and Pacific	14,513	700	5,170
Europe and Eurasia	44,291	1,911	12,745
Near East	13,335	634	4,029
South and Central Asia	1,349	138	1,211
Canada and Mexico	14,079	505	2,982
Western Hemisphere—Other	9,403	870	6,904
Rare State Ballot Policies	1,306	38	1,268
Total Absentee Records	**100,162**	**4,991**	**36,000**
Unconfirmed Requester Records	79,700	0	4,000
Total Records	**179,862**	**4,991**	**40,000**

Sampling Design: Main Survey—Absentee Records

Upon the completion of the construction of the main survey sampling frame, a sample of 36,000 was drawn from the absentee portion of the frame, after excluding cases that had been sampled in the pilot survey, regardless of whether these pilot sample members had responded. The sample design incorporated the use of unequal selection probabilities, which were designed based on reporting requirements for small domains—specifically, frame members living in countries where there were fewer members were sampled at higher rates, as were individuals registered in States with rare balloting policies. The sample design also included the use of stratification in order to reduce sampling variance. Explicit stratification was used by placing voters in one of several mutually exclusive groups, or strata, based on (1) the region of the world in which they were living when they voted in the 2014 General Election, and (2) the type of State in which they registered, based on the voting policies in effect in that State. Implicit stratification was used by ordering the list within each explicit stratum based on secondary characteristics of interest, and then taking this ordering into account when selecting the sample. Stratification is used in sampling so that the selected sample more closely resembles the target population than might happen by chance, which reduces the sampling variance. However, it should be noted that unequal probability sampling is not synonymous with stratification in this study given the use of a PPS sampling method and due to the use of implicit stratification.

17 World region or ballot policy groups are mutually exclusive. World region counts in the table above exclude individuals who are associated with States having rare ballot policies.

18 Pilot sample sizes are restricted to members of the final sampling frame for the main survey; thus, they exclude nine cases that were sampled for the pilot but not part of the frame population for the main survey.

The four steps for sampling for the main survey were as follows:

1. Small Domain Requirements: The frame distributions for State voter policies affecting overseas citizens were examined to determine whether it was necessary to sample all available records of voters registered in States with rare voter policies, as described in more detail below. Similarly, the frame distributions for world region were examined to determine whether it was necessary to sample all available records in any particular world regions.

2. Country-Level Compromise Allocation: An ideal probability of selection was computed for a compromise allocation in which 36,000 sample members were allocated to 179 mutually exclusive groups. The first group was comprised of voters in States with rare ballot policies (due to one of the small domain requirements noted above), and the 178 remaining groups each represented a country. The allocation was a compromise allocation in that it balanced between domain estimation requirements (precision requirements at world region and other subpopulation levels) and population estimation requirements. For the most part, individuals in countries with fewer available records for sampling were sampled at higher rates than those in countries with more available records.

3. Stratum Assignment and Adjustment: Sample members were assigned to eight explicit strata, based on world region, proximity to the United States and whether voters' home States had rare ballot policies. Within each stratum, a slight adjustment was made to the ideal probability of selection such that the totals of the ideal probability of selection summed to an integer.

4. Sampling Implementation: As explained in more detail below, sampling was conducted using a probability proportional to size without replacement (PPSWOR) sampling algorithm. Specifically, sampling was conducted using Chromy's method of sequential random sampling (Chromy, 1979), incorporating the explicit strata described in step 3, with the adjusted ideal probability of selection from the previous step as a measure of size. Implicit stratification was achieved by sorting the list based on voter participation history, a World Governance Indicator (WGI) index score, and ZIP code associated with the voter's U.S. address, and then taking the list ordering into account when drawing the sample, which allowed a more balanced sample to be achieved on these variables without explicitly dividing the sample on these lines.

Small Domain Requirements

Data on ballot policies were collected from official State and local election websites in early April 2015. Nine dichotomous ballot policy variables were constructed and should closely reflect the policies that were in place in November 2014. The nine variables reflect the 3x3 cross-

classification of States that (1) accept ballot requests, (2) transmit ballots, and/or (3) receive voted ballots through (a) email, (b) fax, and/or (c) the web. A voter was considered to be in a State with a "rare" ballot policy if that policy was associated with less than 1 percent of valid absentee records. Four States—Alaska, Arizona, Iowa, and Rhode Island—had such policies, which affected 1,306 records in the frame. After excluding the 38 of these cases that had been sampled for the pilot survey, the remaining 1,268 cases were designated to be sampled with certainty.

Certain regions of the world are also home to relatively small numbers of overseas citizens. When there are a smaller number of cases in a given region, a sufficient number of respondents are needed to estimate region-specific statistics. For Africa as well as South and Central Asia, it was determined that 100 percent of cases would be included in the sample in order to meet this threshold. Specifically, an anticipated margin of error was computed for domain-level estimates at the world region level to determine whether it was necessary to oversample any particular countries to attain a margin of error of +/- 5 percent. This anticipated margin of error was for a 95-percent confidence interval of a population proportion parameter of 50 percent under finite population sampling, taking into account anticipated unequal sampling by country. Various simplifying assumptions were made, such as the use of a stratified simple random sampling (STSRS) design, a 20 percent response rate, and nonresponse occurring completely at random. However, under these assumptions, the analysis indicated that the margin of error for Africa and for South and Central Asia would exceed +/- 5 percent, even if all such cases were sampled. Thus, cases in these strata were selected with certainty as to allow the most precise possible estimates for these domains. The remaining domains provided sample sizes well in excess of that required for the desired levels of precision.

Country-Level Compromise Allocation

In computing a compromise allocation, members of the absentee portion of the sampling frame (N = 100,162) were assigned to 179 mutually exclusive groups. The first group referred to voters in States with rare ballot policies; the remaining 178 groups referred to the country of voters who were not in the States with rare ballot policies. The compromise allocations can be classified into three categories:

1. Certainty Units: Based on the small domain requirement, registered overseas voters in States with rare ballot policies, as well as those whose mailing addresses were in Africa or in South and Central Asia, were designated to be sampled with certainty. In addition, registered overseas voters who resided in a country with fewer than 400 available cases for sampling were also designated to be sampled with certainty.

2. Equal Allocation: Groups that had between 400 and 1,860 registered overseas voters available for sampling were designated to be sampled at a rate equal to 400 divided by the number of available registered overseas voters for sampling in their group; in other

words, the allocation calculation indicated that 400 sample members should be selected per group.

3. **Proportional Allocation**: The remaining sample was allocated proportionally among groups that had greater than 1,860 registered overseas voters available for sampling, which resulted in an approximate probability of selection of 21.5 percent.

Note that this sample allocation was calculated using an iterative algorithm. The cutoff point of 1,860 that separated groups 2 and 3 had been implicitly computed (i.e., implied by the resulting allocation rather than being explicitly computed) using this iterative algorithm, such that the sampling fraction as a function of group size was a monotonic function (after accounting for certainty groups). That is, no group in category 3 would have a bigger sampling fraction than a group in category 2, although it was also designed to make sure a minimum group sample size of 400 for all groups that had a high enough number of available sample members.

Table 4.7 lists the group name, number of population members, number of cases available for sampling, ideal compromise allocation, and ideal compromise probability of selection, as computed during this process. The ideal compromise allocation is roughly analogous to the number of individuals who would subsequently be sampled in every group, although not exactly so since the sample was not explicitly stratified by these groups. Note that the probabilities of selection do not reflect the group sample sizes, which were rounded. Further, the probabilities of selection are conditional upon the cases not being sampled in the pilot survey, and are thus computed as a fraction of the total measures of size divided by the total number of cases available for sampling within each group.

Table 4.7: Ideal Compromise Probability of Selection by Group				
Group Name	Final Group Population Size	Total Available for Sampling	Ideal Compromise Allocation	Approximate Conditional Probability of Selection
Canada	12,464	12,015	2,582	21.5%
United Kingdom	12,440	12,002	2,577	21.5%
Israel	11,116	10,691	2,303	21.5%
France	6,292	6,070	1,304	21.5%
Germany	5,825	5,619	1,207	21.5%
Australia	3,665	3,549	759	21.4%
Italy	2,861	2,759	593	21.5%
Spain	2,489	2,397	516	21.5%
Switzerland	2,361	2,278	489	21.5%
Japan	1,976	1,909	409	21.4%
Netherlands	1,816	1,752	400	22.8%
Mexico	1,615	1,559	400	25.7%
Ireland	1,413	1,358	400	29.5%
Greece	1,406	1,350	400	29.6%
China	1,402	1,343	400	29.8%
Hong Kong	1,377	1,320	400	30.3%
Rare Ballot Policies	1,306	1,268	1,268	100.0%
Sweden	1,298	1,243	400	32.2%
New Zealand	1,181	1,125	400	35.6%
Thailand	1,141	1,084	400	36.9%
Brazil	1,045	992	400	40.3%
Singapore	896	842	400	47.5%
India	838	755	755	100.0%
Costa Rica	818	763	400	52.4%
Norway	759	705	400	56.7%
South Korea	750	696	400	57.5%
Argentina	747	688	400	58.1%
United Arab Emirates	738	684	400	58.5%
Austria	731	677	400	59.1%
Belgium	727	673	400	59.4%
Philippines	721	668	400	59.9%
Denmark	691	637	400	62.8%
Colombia	606	551	400	72.6%
Dominican Republic	577	523	400	76.5%
Jamaica	556	501	400	79.8%
Taiwan	525	476	400	84.0%
Panama	459	411	400	97.3%
South Africa	458	411	411	100.0%
Chile	441	397	397	100.0%
Peru	425	379	379	100.0%
Nicaragua	410	367	367	100.0%
Czech Republic	386	345	345	100.0%
Poland	360	322	322	100.0%
Saudi Arabia	358	321	321	100.0%

Table 4.7: Ideal Compromise Probability of Selection by Group				
Group Name	Final Group Population Size	Total Available for Sampling	Ideal Compromise Allocation	Approximate Conditional Probability of Selection
Turkey	349	313	313	100.0%
Ecuador	341	306	306	100.0%
Guatemala	332	300	300	100.0%
Hungary	286	257	257	100.0%
Finland	276	248	248	100.0%
Trinidad and Tobago	261	231	231	100.0%
Portugal	255	231	231	100.0%
Haiti	254	224	224	100.0%
Kenya	238	216	216	100.0%
Barbados	225	200	200	100.0%
Indonesia	225	204	204	100.0%
Egypt	208	186	186	100.0%
Malaysia	206	187	187	100.0%
Russia	205	183	183	100.0%
Lebanon	204	182	182	100.0%
Bahamas	202	182	182	100.0%
Bermuda	194	171	171	100.0%
Uruguay	182	165	165	100.0%
Belize	180	160	160	100.0%
Dominica	178	157	157	100.0%
Venezuela	177	158	158	100.0%
Vietnam	175	162	162	100.0%
Honduras	161	142	142	100.0%
Qatar	152	135	135	100.0%
Bolivia	138	123	123	100.0%
Afghanistan	129	113	113	100.0%
Kuwait	129	116	116	100.0%
Luxembourg	127	113	113	100.0%
Morocco	126	112	112	100.0%
El Salvador	119	111	111	100.0%
Ghana	113	101	101	100.0%
Bangladesh	112	101	101	100.0%
Tanzania	110	99	99	100.0%
Cambodia	102	92	92	100.0%
Grenada	101	89	89	100.0%
Uganda	98	89	89	100.0%
Jordan	92	79	79	100.0%
Senegal	90	81	81	100.0%
Yugoslavia[19]	88	80	80	100.0%
Bahrain	83	76	76	100.0%
Ukraine	83	74	74	100.0%

19 Country displayed is based on the country classification at the time of sampling. Cases that had originally been designated as being in Yugoslavia were reclassified according to current political boundaries in the final stages of data cleaning, before weighting.

Table 4.7: Ideal Compromise Probability of Selection by Group				
Group Name	Final Group Population Size	Total Available for Sampling	Ideal Compromise Allocation	Approximate Conditional Probability of Selection
Zambia	81	73	73	100.0%
Guyana	80	72	72	100.0%
Cyprus	75	65	65	100.0%
Pakistan	73	67	67	100.0%
Croatia	72	67	67	100.0%
Albania	71	63	63	100.0%
Nepal	70	61	61	100.0%
Ethiopia	68	59	59	100.0%
Romania	66	58	58	100.0%
Slovakia	61	58	58	100.0%
Guinea	55	51	51	100.0%
Iceland	53	48	48	100.0%
Nigeria	53	47	47	100.0%
Rwanda	52	49	49	100.0%
Sri Lanka	52	47	47	100.0%
Paraguay	51	46	46	100.0%
Saint Kitts and Nevis	49	45	45	100.0%
Malta	48	44	44	100.0%
Bulgaria	47	41	41	100.0%
Oman	46	41	41	100.0%
Kazakhstan	45	39	39	100.0%
Latvia	44	40	40	100.0%
Malawi	41	37	37	100.0%
Iraq	40	37	37	100.0%
Mongolia	38	33	33	100.0%
Bosnia and Herzegovina	37	33	33	100.0%
Antigua and Barbuda	35	31	31	100.0%
Estonia	35	33	33	100.0%
Fiji	35	32	32	100.0%
Cameroon	33	30	30	100.0%
Botswana	30	28	28	100.0%
Macedonia	30	28	28	100.0%
Lithuania	29	28	28	100.0%
Mozambique	28	24	24	100.0%
Slovenia	28	26	26	100.0%
Micronesia	27	24	24	100.0%
Burkina Faso	26	24	24	100.0%
Saint Lucia	26	21	21	100.0%
Zimbabwe	24	20	20	100.0%
Laos	22	21	21	100.0%
Madagascar	20	17	17	100.0%
Namibia	20	19	19	100.0%
Sierra Leone	20	19	19	100.0%
Mali	19	16	16	100.0%

Table 4.7: Ideal Compromise Probability of Selection by Group				
Group Name	Final Group Population Size	Total Available for Sampling	Ideal Compromise Allocation	Approximate Conditional Probability of Selection
Georgia	18	16	16	100.0%
Chad	17	16	16	100.0%
Sudan	17	15	15	100.0%
Suriname	17	14	14	100.0%
Togo	17	14	14	100.0%
Azerbaijan	16	14	14	100.0%
Gambia	16	14	14	100.0%
Tunisia	16	16	16	100.0%
Cuba	15	12	12	100.0%
Moldova	15	14	14	100.0%
Niger	14	13	13	100.0%
Congo	13	12	12	100.0%
Swaziland	13	11	11	100.0%
Angola	12	10	10	100.0%
Armenia	12	10	10	100.0%
Benin	11	10	10	100.0%
Liberia	11	10	10	100.0%
Yemen	11	9	9	100.0%
Côte d'Ivoire	10	8	8	100.0%
Gabon	10	10	10	100.0%
Kyrgyzstan	10	10	10	100.0%
Mauritania	9	7	7	100.0%
Montenegro	9	7	7	100.0%
Samoa	9	8	8	100.0%
Burundi	8	7	7	100.0%
Iran	8	8	8	100.0%
Uzbekistan	8	8	8	100.0%
Vanuatu	8	8	8	100.0%
Marshall Islands	7	7	7	100.0%
Palau	7	7	7	100.0%
Solomon Islands	7	7	7	100.0%
Tajikistan	7	6	6	100.0%
Lesotho	6	5	5	100.0%
Mauritius	6	5	5	100.0%
Papua New Guinea	6	5	5	100.0%
Seychelles	6	5	5	100.0%
Algeria	4	4	4	100.0%
Djibouti	4	2	2	100.0%
Tonga	4	3	3	100.0%
Eritrea	3	3	3	100.0%
Syria	3	3	3	100.0%
Democratic Republic of the Congo	2	2	2	100.0%
Maldives	2	2	2	100.0%

Table 4.7: Ideal Compromise Probability of Selection by Group				
Group Name	Final Group Population Size	Total Available for Sampling	Ideal Compromise Allocation	Approximate Conditional Probability of Selection
Turkmenistan	2	2	2	100.0%
Belarus	1	1	1	100.0%
Brunei	1	1	1	100.0%
Libya	1	1	1	100.0%
Saint Vincent and the Grenadines	1	1	1	100.0%
São Tomé and Principe	1	1	1	100.0%
Somalia	1	1	1	100.0%

Stratum Assignment and Adjustment

Next, sample members were assigned to explicit strata and a mild adjustment was made to the compromise sample allocation to ensure rounded sample sizes for each explicit stratum. One stratum was formed for cases associated with rare State ballot policies, and the other seven strata were formed by world region for cases associated with non-rare State ballot policies, with two categories for the Western Hemisphere region based on proximity to the United States (i.e., Canada and Mexico vs. all others). After allocating cases to explicit strata, the ideal compromise probability of selection for each case was used as a preliminary measure of size. These figures summed to 36,000 for the entire frame, but did not sum to integer figures within non-certainty strata. Thus, a flat multiplicative adjustment factor was computed for non-certainty cases within each stratum, by computing the total measures of size for non-certainty cases, rounding this figure to the nearest integer, and dividing the rounded figure by the non-rounded figure. The preliminary measures of size were multiplied by this adjustment factor for non-certainty cases, whereas the measures of size were not modified for certainty cases. This step was used to compute a measure of size that would yield a fixed sample size for each stratum (i.e., by rounding the sample size for each explicit stratum to the nearest integer). The strata definitions, frame population sizes, and main survey sample sizes are displayed below in Table 4.8, although it is worth noting that for the three certainty strata (Africa cases with non-rare State ballot policies; South and Central Asia cases with non-rare State ballot policies; and cases with rare State ballot policies), the sample size is not equal to the population size given that some cases had been sampled for the pilot survey and were, therefore, not available for sampling for the main survey.

Table 4.8: Strata Definitions, Frame Population Sizes and Main Survey Sample Sizes			
State Ballot Policy	World Region	Frame Population Size	Main Survey Sample Size
Non-rare	Africa	1,886	1,691
Non-rare	East Asia and Pacific	14,513	5,170
Non-rare	Europe and Eurasia	44,291	12,745
Non-rare	Near East	13,335	4,029
Non-rare	South and Central Asia	1,349	1,211
Non-rare	Western Hemisphere—Canada and Mexico	14,079	2,982
Non-rare	Western Hemisphere—Other	9,403	6,904
Rare	All	1,306	1,268
Total		**100,162**	**36,000**

Sample Implementation

Next, sampling was conducted using a PPSWOR sampling algorithm. In a PPS sampling algorithm, cases are sampled with a probability that is proportional to a measure of size, which indicates the relative importance of sampling the given case; the "without replacement" aspect of the sampling algorithm indicates that cases cannot be sampled more than once. For example, in an economic survey of businesses, a natural measure of size would be annual revenue, so that a business with $5 million in revenue per year would have twice the probability of being selected as a business with annual revenues of $2.5 million. For our survey, the PPS design allowed for the probabilities of selection to vary by country or State ballot policy without needing to explicitly form 179 strata. Given that the measures of size added up to the total sample size within each explicit stratum, the measures of size were thus equivalent to the probabilities of selection but could vary within an explicit stratum.

For a simple demonstration, consider the East Asia and Pacific stratum, where there were 162 available records for sampling in Vietnam, 696 in South Korea, and 1,909 for Japan (in addition to numerous records available for other countries which are not considered in this example). Given that the measures of size added up to the desired number of sample members for the explicit stratum, by assigning measures of size of 1 to possible sample members in Vietnam, .575 to possible sample members in South Korea, and .215 to possible sample members in Japan, the described sample design will, on average, yield 162 sample members in Vietnam (the maximum available), $696 * .575 \approx 400$ sample members in South Korea, and $.215 * 1909 \approx 410$ sample members in Japan.

More specifically, sampling was conducted using Chromy's method of sequential random sampling (Chromy, 1979), using the explicit strata from the previous step, with the adjusted ideal probability

of selection from the previous step as a measure of size (as demonstrated in the previous example). Further, implicit stratification was achieved by sorting the list based on voter participation history, a WGI index score, and ZIP code associated with the voter's U.S. address. As previously indicated, implicit stratification was used to improve the balance of the resulting sample with respect to the variables used in implicit stratification. Sampling was implemented in Stata using the FMG-written *ppschromy* package (Mendelson, 2014).

Chromy's sequential selection algorithm implicitly stratifies the sample within each explicit stratum by selecting a sample sequentially after taking into account a sort ordering. This implicit stratification can yield benefits in terms of variance reduction, by spreading the sample throughout the given explicit strata. Further, Chromy's algorithm uses hierarchic serpentine sorting within each explicit stratum, which improves over simply sorting all variables in ascending order, by virtue of reversing the sort orderings for lower levels of sorting variables when the boundary for higher levels of sorting variables is crossed. This results in increased similarity of nearby cases in the sorted list.

Three sort ordering variables were used:

1. *Voter participation history* was computed based on whether voters had voted in the 2014 and/or 2012 General Elections, as indicated in the voter file. The categories created were: (1) voted in 2014 *and* 2012; (2) voted in 2014 *or* 2012; and (3) voted in neither. Note that Minnesota cases did not have voter participation history records and were, therefore, treated as a separate category. The reason for including this variable was that voter participation history was expected to be associated with response propensity (i.e., an individual's likelihood of replying to the survey) as well as key survey measures, and, therefore, this would improve sample balance on these measures. Only three levels were included for this variable, such that subsequent variables could also have substantive impact on the sort ordering.

2. *WGI index scores* were obtained. These index scores had been computed for each country as a measure of the effectiveness of governance, and they are strongly related to per-capita economic output. These scores were used collectively as a sorting variable as it was anticipated that they could relate to response rates (e.g., they might relate to the level of infrastructure in a country, which could relate to contact rates) and/or survey measures.

3. *ZIP codes* were used as the third sorting variable. The ZIP codes reflected the low-level geography of the voters' U.S. addresses and, in most cases, the ZIP+4 code was available. Although ZIP codes do not provide a perfect way of reflecting geography in the United States, the first two digits reflect a State-level ordering, and a small numerical difference between ZIP codes typically indicates that the regions are nearby. For the small proportion

of cases with missing ZIP code data, this variable was imputed as the median ZIP code for the State to make sure that these cases were grouped with others from their State.

By incorporating sorting variables at the individual, country, and State levels, the sort ordering enabled the implicit stratification of the sampling frame in a manner such that nearby cases were of high similarity. Implicit stratification on these measures was expected to reduce sampling variability and, therefore, to increase the precision of estimates; this effect might be particularly meaningful for smaller domains.

Sampling Design for Unconfirmed Requester Records

A sample size of 4,000 for the main survey was drawn from the unconfirmed requester portion of the sampling frame (N = 79,700). Specifically, this section of the sampling frame comprised records for which an overseas address was available in the voter file; it was unclear, however, whether the voter had specifically requested an absentee ballot in 2014. Originally, this set of records was to be excluded from the OCPS given that it was unclear how well this portion of the *frame population* reflects the *target population* in the study (i.e., by omitting individuals in the target population and/or by including individuals from outside of the target population). However, the higher-than-anticipated response rate of the pilot survey allowed for the use of a small portion of the overall sample to gain exploratory information about this separate population. Given that little was known about this population, and given that the sample size was not sufficient to make precise inferences at the country level, the sample from this portion of the frame was drawn using an equal probability of selection method (EPSEM). The responses from the unconfirmed requester portion will be evaluated to determine if this population should be included in future studies.

For this portion of the sampling frame (i.e., unconfirmed requesters), Chromy's method of sequential random sampling was also used, but the measures of size were set to the same number for every record, allowing it to function as an EPSEM. In this context, it operated functionally similar to systematic sampling—except that the sorting method used was hierarchic serpentine sorting, to increase the similarity of nearby cases. The sort ordering variables used were (1) world region by distance; (2) voter participation history; (3) WGI index score; and (4) ZIP code. The first variable incorporated seven categories, which reflected the previously defined six regions, with the Western Hemisphere region split into two categories based on distance to the United States (i.e., Canada and Mexico vs. all others). The voter participation history, WGI index score, and ZIP code sorting variables were formed in a manner consistent with that used in drawing the absentee portion of the sample.

Sampling Design: Pilot Survey

The pilot survey sampling design was similar to the design of the primary sample for the main survey. In the pilot survey, 5,000 records were drawn from the pilot survey sampling frame of 91,556 records, based on the following three steps:

1. Seven explicit strata were defined, based on the world region by distance categories defined previously.

2. An ideal compromise country-level allocation was computed for an overall sample size of 45,000. This allocation was computed in a manner consistent with the main survey, except that the minimum number of voters in a country was set to be 500 per group rather than 400 per group, and State voter policies were not taken into account.

3. This ideal compromise allocation was divided by nine for purposes of the pilot study, and the number of sample members for each explicit stratum was rounded to the nearest even number, so that the sample could be divided evenly within each stratum for the incentive experiment.

In general, this sampling plan allowed for an allocation that would roughly resemble that of the main survey if the main survey sample were to be drawn in a similar manner (i.e., oversampling smaller countries to a similar degree).

The sample was then drawn using Chromy's method of sequential random sampling, using anticipated mail deliverability (i.e., mailability), voter participation history, WGI index scores, and ZIP code as sorting variables. Deliverability had been computed by a mailing vendor that had assessed the anticipated mailability of various addresses based on whether the addresses fit the standard expected formats for international mail. It had been computed in four categories: (1) corrected/confirmed; (2) addresses with "good" mailability; (3) addresses with "fair" mailability; and (4) addresses with "poor" mailability. In the draft survey sampling plan (before finalizing the pilot survey sampling frame), it had been anticipated that cases tagged as having "poor" mailability would be excluded from receiving the survey. However, it turned out that a substantial portion of the sampling frame had been tagged as having poor mailability, and these cases were disproportionately in countries with lower WGI index scores and in developing countries. Furthermore, it was not clear whether these cases were truly unmailable, or whether it was the case that the addresses simply did not fit a standardized format but could perhaps still be valid. In the pilot study, the mailability flag was used as a sorting variable, given the anticipated association with response rates. It was not used as a sorting variable in the main survey because there was not a clear and monotonic relationship between deliverability code and response rates.

Another difference in the pilot survey related to the sorting variables, given that the 2014 General Election voter participation history data had not yet been obtained for all States. Although the voter participation history categories were constructed in a generally similar manner as in the absentee portion of the main survey sample, voter participation history for the 2010 General Election was used as a substitute for voter participation history in the 2014 General Election for States in which the latter had not yet been obtained. The voter participation history variable used in sorting reflected whether voters had voted in the 2012 General Election and/or in the most recent midterm general election for which data were available in the pilot survey sampling frame. The WGI index scores and ZIP code sorting variables were generally constructed in a similar manner as in the main study, except that imputation was not used for missing ZIP code data in the pilot survey.

After selecting the overall pilot survey sample, cases were then randomly assigned to experimental conditions using an STSRS design, based on the following four steps:

1. The pilot survey base weights were computed for sampled cases as the inverse of the pilot survey probability of selection from the sampling frame.

2. The seven original explicit strata (based on world region by distance to the United States) were subdivided based on the base weights to create a new set of sampling strata for the experimental condition. This step was conducted to ensure that each condition received approximately the same effective sample size, which could increase the statistical power for detecting treatment effects using the design weights.

    a. For three strata (Africa, South and Central Asia, and Western Hemisphere—Canada and Mexico), the probabilities of selection within stratum were constant, therefore these strata were not subdivided.

    b. For the other four strata (i.e., in which cases were selected using unequal probability sampling within stratum), the *k*-means clustering algorithm was determined to split each stratum further into two categories; these categories were examined empirically to confirm that the splits appeared reasonable.

3. The number of cases per experimental condition was computed for each of the 11 experimental strata. This was usually equal to the stratum population size divided by two, although for the strata with odd sizes, the number of cases was randomly rounded up or down such that the overall sample size was 2,500 per condition.

4. The STSRS design was employed to randomly select approximately half of cases per stratum to receive the incentive condition (i.e., the FVAP magnet).

Note that the STSRS design was employed in the experimental assignment—and implicit stratification was not used—to simplify the analysis of the experimental condition. Implicit stratification typically reduces sampling variance but it often complicates the task of variance estimation. Specifically, the joint probabilities of selection must be computed for sample members to compute unbiased variance estimates, and implicit stratification can complicate this task. A solution is often to ignore the implicit stratification, which results in higher (i.e., more conservative) variance estimates, and thus the benefits of this extra stratification are not reflected in the margin of error. For the overall pilot and main survey samples, the benefits of improved precision in point estimates were viewed as outweighing the cost in terms of the increased complication of variance estimation. However, for the experimental manipulation, the complications associated with implicit stratifications would cause problems for assessing the statistical significance of the measured treatment effect of the incentives; hence, implicit stratification was not used in this case.

5 Pilot Survey

Before the main survey was conducted, a pilot survey of 5,000 sample members was conducted. The pilot survey had a 27 percent response rate,[20] providing the FMG Team with a robust data set to use to evaluate the quality of the survey responses and any issues with the survey administration.

For a survey, there are two populations of interest. The first are the survey **sample members**. The survey sample members are the population intended to receive the survey. The second are **respondents**. Respondents are people who complete the survey or part of the survey.

In this report, the term **sample member** is used to discuss all individuals who were sent a survey invitation, and **respondent** is used to discuss all individuals who completed the survey.

Administration

A third-party printing and mailing house was used for all mailings. The mailing house was given the 5,000 international addresses from the sample and formatted them to international standards based on the Universal Postal Union Postal Export Guide.[21] Materials sent to an incorrectly formatted address typically can still be delivered, but a delay might result. For this reason, every effort was made to increase response rates with correctly formatted addresses.

Invitations for the survey were sent by mail on the following schedule:

- Invitation letters were sent on June 5, 2015
- A follow-up letter was sent on June 17, 2015
- A second follow-up letter was sent along with a copy of the survey and postage-paid return envelope on June 24, 2015, and finally
- A reminder postcard was sent to each participant's international and domestic addresses on July 8, 2015

20 The pilot survey window was officially closed after 12 weeks in order to analyze results in preparation for the final survey effort. However, the FMG Team continued to log survey responses received until 15 weeks after the initial pilot survey mailings, and the 27 percent response rate is based on this extended collection window.

21 The Universal Postal Union is a United Nations (UN) agency that oversees international mail cooperation. There is no standardized address template for all countries; each country requires unique address formatting. Countries differ in the order and type of information included, such as mailing codes, provinces, and regional zones.

Corresponding email messages were sent to individuals with an email address on file on June 5, June 19, June 26, and July 10, 2015. The June 26 email was solely a reminder; there was no survey document (e.g., a pdf) sent by email because each email included a link to complete the survey online. There were 724 sample members (14 percent) who had email addresses, but 69 of these were found to be undeliverable, so there were 655 respondents in the sample who had valid email addresses (13 percent).[22]

Each of the mailings included the sample member's unique password, the survey URL, a description of FVAP, and the purpose of the survey. Sample members were informed that the survey was voluntary, confidential, and did not collect information on political affiliation. If sample members responded to the survey before the sending dates, they did not receive any further contacts. Copies of the invitation and follow-up letters, the postcard and the survey document are provided in Appendix A.

Sample members who had questions or comments about the survey were provided with a help desk email and phone number, which were monitored daily. All inquiries were responded to within one business day. There were 72 sample members (32 telephone calls and 40 emails) who contacted the help desk. The most common reason sample members contacted the help desk was to confirm receipt of the survey, to indicate they had connectivity or login issues, or to ask to be removed from the survey. If this information was received, the person was logged in a removal log so that they were not contacted again by future mailings and emails.

22 The pilot survey also included an incentive experiment, to test whether provision of an incentive before survey completion improved the survey response rate and the quality of the survey response. The analysis of the incentive experiment in the pilot survey is provided in a later section of this report.

Table 5.1: Countries Included in Pilot Sample	
Afghanistan	Laos
Albania	Latvia
Angola	Lebanon
Antigua and Barbuda	Lesotho
Argentina	Liberia
Armenia	Lithuania
Australia	Luxembourg
Austria	Macedonia
Azerbaijan	Madagascar
Bahamas	Malawi
Bahrain	Malaysia
Bangladesh	Mali
Barbados	Malta
Belgium	Mauritania
Belize	Mauritius
Benin	Mexico
Bermuda	Micronesia
Bhutan	Moldova
Bolivia	Mongolia
Bosnia and Herzegovina	Montenegro
Botswana	Morocco
Brazil	Mozambique
Bulgaria	Namibia
Burkina Faso	Nepal
Burundi	Netherlands
Cambodia	New Zealand
Cameroon	Nicaragua
Canada	Niger
Cape Verde	Nigeria
Chad	Norway
Chile	Oman
China	Pakistan
Colombia	Panama
Congo	Papua New Guinea
Costa Rica	Paraguay
Côte d'Ivoire	Peru
Croatia	Philippines
Cuba	Poland
Cyprus	Portugal
Czech Republic	Qatar
Denmark	Romania
Djibouti	Russian Federation
Dominica	Rwanda
Dominican Republic	Saint Kitts and Nevis
Ecuador	Saint Lucia
Egypt	Samoa
El Salvador	Saudi Arabia
Estonia	Senegal

Table 5.1: Countries Included in Pilot Sample	
Ethiopia	Serbia
Fiji	Seychelles
Finland	Sierra Leone
France	Singapore
Gambia	Slovakia
Georgia	Slovenia
Germany	South Africa
Ghana	South Korea
Greece	Spain
Grenada	Sri Lanka
Guatemala	Sudan
Guinea	Suriname
Guyana	Swaziland
Haiti	Sweden
Honduras	Switzerland
Hong Kong	Taiwan
Hungary	Tajikistan
Iceland	Tanzania
India	Thailand
Indonesia	Togo
Iraq	Tonga
Ireland	Trinidad and Tobago
Israel	Turkey
Italy	Uganda
Jamaica	Ukraine
Japan	United Arab Emirates
Jordan	United Kingdom
Kazakhstan	Uruguay
Kenya	Venezuela
Kuwait	Vietnam

Response Rates and Analysis

After these contacts by mail and email, 1,338 respondents (27 percent of the sampled voters) returned a completed survey. There were 31 respondents who returned both an online and a mail survey; the survey response with the most questions completed was included in the final data set.[23] Excluding duplicate responses, 263 paper-based surveys (20 percent) were returned by mail, and 1,075 surveys (80 percent) were returned online.

Table 5.2 provides a complete breakdown of the final disposition of the 5,000 mail contacts, using standard definitions provided by the American Association for Public Opinion Research (AAPOR). There were 1,338 valid and completed surveys returned. Of the remainder, 62 percent were classified as "nothing ever returned" and 10 percent were classified as undeliverable mail because of bad addresses, because the sample member had moved or because of a vacant address.

[23] In all instances, the online surveys were the most complete.

Table 5.2: Disposition Code Frequencies			
Disposition Code	Calculation Code	Frequency	Percent
1: Questionnaire Returned, Complete, Nonblank	I	1,338	26.76
1.2: Partial (75% of Questions Refused)	P	0	0.00
2.111: Refusal	R	3	0.06
2.25: Respondent Unavailable During Field Period (Mail Surveys)	NC	1	0.02
2.3: Other, Non-Refusals	O	36	0.73
3.19: Nothing Returned	UH	3,096	61.92
3.23: USPS: Refused by Addressee	UO	33	0.66
3.31: USPS: Undeliverable as Addressed	UO	461	9.22
3.3134: USPS: Vacant	UO	2	0.04
3.32: USPS: Moved, Left no Address	UO	13	0.26
4.7: No Eligible Respondent		3	0.06
4.9: Other/Duplicate Listing		9	0.18
Total		5,000	100

This disposition information can be used to calculate a variety of measures of the quality of the pilot survey data, as shown in Table 5.3.[24] The process used by the FMG Team for contacting and soliciting response produced a 27 percent response rate. The cooperation rate, which gives the percentage of sample members who were successfully contacted, was 97 percent. Refusal rates, based on known sample member refusals of known eligible overseas absentee voters, were almost nonexistent according to the AAPOR calculations given in Table 5.3. Finally, the contact rate gives the percentage of overseas absentee voters contacted. According to AAPOR contact rate calculation 1, the contact rate was 27 percent.

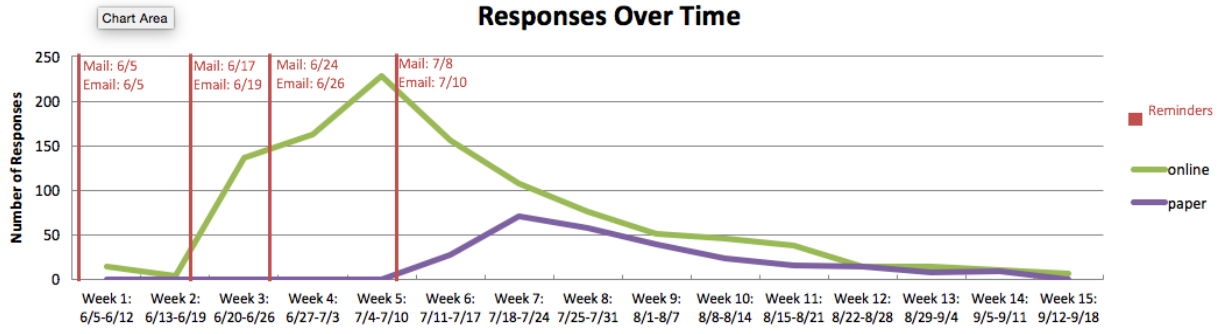
24 American Association for Public Opinion Research (AAPOR), "Standard Definitions: Final Dispositions of Case Codes and Outcome Rates for Surveys", April 2015 revision, https://www.aapor.org/AAPOR_Main/media/MainSiteFiles/Standard-Definitions2015_8thEd.pdf. For the calculation of the various AAPOR rates, the "response rate calculator" available from AAPOR was used, Version 3-1, 11/22/2010. In some instances, the disposition information collected differed slightly from that called for in the AAPOR calculations, but from the information reported in Tables 5.2 and 5.3, interested readers can compute these quantities in a variety of different ways.

Table 5.3: Pilot Survey Response Rates		
Response Rate 1	I/((I+P) + (R+NC+O) + (UH+UO))	26.82%
Response Rate 2	(I+P)/((I+P) + (R+NC+O) + (UH+UO))	26.82%
Cooperation Rate 1	I/((I+P)+R+O))	96.82%
Cooperation Rate 2	(I+P)/((I+P)+R+O))	96.82%
Refusal Rate 1	R/((I+P)+(R+NC+O) + (UH + UO))	0.06%
Contact Rate 1	((I+P)+R+O) / ((I+P)+R+O+NC+ (UH + UO))	27.71%

The response and contact rates from the pilot survey are comparable to what has been observed in other mail, self-completion surveys. When compared to a recent meta-analysis of survey incentives and response rates in household surveys, the response rate from the pilot survey is comparable to those found in similar surveys, which is especially encouraging since the pilot study was conducted using international mail whereas the surveys considered in the meta-analysis were conducted domestically.[25] A survey of U.S. taxpayers living overseas also reported similar response rates.[26]

The paper and digitally returned and completed surveys were tracked by the date they were received, as shown in Figure 5.1. The number of online completions steadily began to build after the June 17 mailing, and total completions peaked on July 15, 2015.

Figure 5.1: Pilot Survey Response Timing



The first mail survey responses arrived in week 5, then 27 were returned in week 6, and 71 in week 7, after which the number of mail completes diminished slowly. Both mail and online completions slowly tapered off to just a few per week after the 12th week. The survey window was

25 Andrew Mercer, Andrew Caporaso, David Cantor, and Reanne Townsend, "How Much Gets You How Much? Monetary Incentives and Response Rates in Household Surveys." Public Opinion Quarterly 79(1), Spring 2015, pp. 105–129. The pilot survey response can be compared to other survey responses using Mercer's data: (http://poq.oxfordjournals.org/content/suppl/2015/06/16/nfu059.DC1/poq_13_0264_File003.pdf).

26 2011 Survey of Individuals Living Abroad: Top Line Report. ICF Macro, September 16, 2011.

officially closed on August 5, 2015, in order to analyze pilot data in time to launch the main survey, but the FMG Team continued recording returned surveys until September 15, 2015—15 weeks after the first round of mail and email contacts were sent.

Table 5.4 shows there were differences in survey completion rates across the State Department region classifications. Respondents were more likely to be from Europe and Eurasia (47 percent relative to 36 percent among the nonrespondents). Survey nonrespondents were slightly more likely to be in the regions Near East and the Western Hemisphere.

Table 5.4: Response by Geographic Region

State Department Region	Africa	East Asia and Pacific	Europe and Eurasia	Near East	South and Central America	Western Hemisphere	Total
Frequency	196	716	1,928	636	138	1,386	5,000
Percentage	3.92%	14.32%	38.56%	12.72%	2.76%	27.72%	100.00%
Percentage of Respondents (*N* = 1,382)	2.53%	13.97%	46.53%	9.62%	2.32%	25.04%	100.00%

Tables 5.5 and 5.6 provide age and gender information for the overseas citizens in the full sample, which came from the voting history data and was used to construct the sample. Since age and gender information is available for most of the sample members, it was used to examine the profile of the sample frame and the survey respondents. Table 5.5 gives the age distribution of the sample by whether they responded, method of response and the average number of questions refused per survey response. Table 5.6 provides the same set of information by the recorded gender.

Table 5.5 shows that the pilot sample was skewed toward the upper age categories; only 5 percent of the sample is under age 25, and 17 percent is between ages 25 and 34. By comparison, 24 percent of the sample is aged 65 or older. Interestingly, there is little difference in response rates by age group. Table 5.5 also shows that older registered overseas voters were slightly more likely to return a paper survey, although all age groups were much more likely to have returned an electronic survey. Finally, the mean number of questions refused was lowest for respondents aged 55 to 64, and highest for those aged 25 to 34.

Table 5.5: Age of Pilot Sample							
Age	Under 25	25 to 34	35 to 44	45 to 54	55 to 64	65+	N/A
Frequency	231	820	833	907	813	1,159	237
Percentage	4.85%	17.22%	17.49%	19.04%	17.07%	24.33%	4.74%
Percent of Respondents (*N* = 1,382)	4.85%	17.00%	16.43%	18.38%	15.05%	23.30%	4.99%
Percent of Paper Responses (*N* = 267)	4.49%	16.10%	16.10%	16.48%	15.73%	24.72%	6.37%
Percent of Online Responses (*N* = 1,115)	4.93%	17.22%	16.50%	18.83%	14.89%	22.96%	4.66%
Mean Question Refusals	6.03	6.44	5.38	5.58	3.99	5.43	4.91

Table 5.6 examines response differences by gender. The sample was slightly skewed toward female overseas absentee voters, but men were more likely to return the survey compared to women. There was a noticeable difference in method of return by gender: 16 percent of men returned a paper survey compared to 23 percent of women. There was no real difference in the mean number of questions either group refused to answer.

Table 5.6: Gender of Pilot Sample			
Gender	Male	Female	N/A
Frequency	2,322	2,474	204
Percent	46.44%	49.48%	4.08%
Percent of Responded (*N* = 1,382)	48.12%	47.11%	4.78%
Percent of Paper Responses (*N* = 267)	39.33%	56.55%	4.12%
Percent of Online Responses (*N* = 1,115)	50.22%	44.84%	4.93%
Mean Question Refusals	5.39	5.62	3.48

The pilot survey conducted by the FMG Team provided an important preliminary test of the sampling and sample member contact approach developed to aid collection of as much high-quality survey response data as possible from overseas absentee voters. The approach developed

and discussed here, which used multiple forms of sample member contact (primarily mail contact, though sample members were contacted by email as well when email information was available), produced response, cooperation and completion rates comparable with similar studies found in the research literature (e.g., Mercer et al., 2015). Examination of the information available in the sample frame shows little evidence of large or systematic skews in response rates by age or gender. Most survey completions occurred between three and eight weeks of initial contact with sample members, and the FMG Team closed the survey 15 weeks after initial fielding.

Image of Incentive Magnet

Incentive Experiment and Analysis

In the pilot survey, an experiment was conducted to determine whether registered overseas voters would be more likely to respond to a survey if they were given an incentive for participating.[27] Originally, the FMG Team planned to test differences in response rates between cash or a cash equivalent (e.g., a gift card), an in-kind incentive (e.g., a FVAP-branded "Vote" magnet), and a control group (those receiving just the survey). In that experimental design, response rates across the three groups would be compared to determine whether, all things being equal, either incentive condition resulted in an increased response rate compared to the control group. However, it was impossible to identify a cash incentive or cash equivalent that would be both legal to send and feasible to redeem internationally. A substantial number of countries prohibit sending currency through their mail systems, which precluded the use of any type of cash incentive in USD or other currencies. Several other options were considered, most notably different types of gift cards, because many gift cards for e-commerce can only be redeemed using a U.S. address, or because other gift cards had prohibitively high minimum amounts and processing fees. Additionally, financial incentives were at a higher risk of being lost or stolen in some countries relative to others, due to less-secure postal systems. Because of these concerns, only the magnet incentive was tested.

The pilot survey tested response rates between the FVAP-branded incentive and a control group that received no incentive. The 5,000 sample members in the pilot survey were randomly

27 Past literature on the role of respondent incentives on survey nonresponse has generally found that incentives increase response rates (Church, 1993 Armstrong and Yokum, 1994) and that cash incentives increase response rates to a greater degree than in-kind transfers (Ryu, Couper, and Marans, 2005). Incentives might influence response because of self-interest (Singer, 2013) or general inclinations to reciprocate an unconditional benefit (Torres and Hoax, 2014). The effectiveness of in-kind incentives can vary based on the use and value of the incentive to the respondent (Dawson and Dickinson 1988; James and Bolstein 1992; Jobber et al. 1991).

assigned to one of two statistically equivalent groups: members of the treatment group received an incentive, whereas members of the control group did not.[28]

Following completion of the pilot survey, response rates between the two groups were compared to determine whether the incentive produced higher response rates overall or for specific subpopulations. Additionally, a comparison of responses to a self-reported voting question was conducted to determine whether the incentive introduced a social desirability bias.

Results of Incentive Analysis

The analysis found no evidence that the magnet incentive significantly increased either response rates or response bias. There were 681 responses to the survey from those who *did not* receive the incentive and 701 responses from those who *did* receive an incentive. Although slightly more respondents received the incentive, the difference between the two groups is not statistically significant.

An additional analysis was done to determine if the incentive had an effect on how a given respondent answered voting-related survey questions. In particular, given that the FVAP magnet prominently displays the word "VOTE," the FMG Team hypothesized that respondents who might not have voted in previous elections might have felt they needed to say they voted because it would be the socially desirable answer.[29] However, there was no social desirability bias in responses to voting questions based on receiving the FVAP-branded magnet. Because the incentive did not increase turnout, the FMG Team concluded that the in-kind incentive should not be used in the main survey.

28 The treatment and control samples were subjected to balance tests on relevant individual and geographic covariates. No statistically significant differences between the two samples were found, with the exception of age, in which treatment groups were found to be slightly younger on average than control groups for both the overall sample and the subset that responded.

29 To account for the possibility that social desirability bias might manifest as a lower probability of responding to the vote history questions on the survey, a model similar to Equation 2 was estimated with the dependent variable indicating whether the respondent refused to answer the question or answered "Not Sure". Though not reported, the results were qualitatively similar to the models of self-reported voting.

Table 5.7: Descriptive Statistics by Response Category				
	Sampled		Respondents	
	Treatment	Control	Treatment	Control
Voted in Both 2012 and 2014	24%	24%	38%	42%
Voted in 2012 but not in 2014	38%	39%	33%	34%
Did Not Vote in 2012 but Voted in 2014	6%	4%	9%	7%
Did Not Vote in Either Election	32%	33%	20%	18%
Age (Years)	47.7	49.7	53.9	56.6
Male	48%	48%	50%	51%
Live in Dual Citizenship Countries	57%	57%	60%	57%
World Governance Indicator (Mean)	0.74	0.76	0.91	.93
Africa	3%	3%	2%	3%
East Asia and Pacific	14%	14%	14%	14%
Europe and Eurasia	39%	39%	46%	47%
Near East	13%	13%	10%	9%
South and Central Asia	3%	3%	2%	3%
Western Hemisphere	28%	28%	26%	24%
English is Spoken in Country	48%	48%	50%	48%
Spanish is Spoken in Country	21%	21%	17%	19%
Fraction of Electronic Registration Policies Adopted by State of Legal Residence	51%	52%	55%	57%
Fraction of Electronic Balloting Policies Adopted by State of Legal Residence	64%	64%	64%	65%
Respondents	2,500	2,500	701	681

6 Weighting the Data

Sample weighting for the main survey was carried out to accomplish the following objectives:

- Adjust for differences in the probability of selection from the frame.
- Reduce possible biases that could occur because the characteristics of nonrespondents may have been different from those of the respondents.
- Improve the precision of the survey-based estimates (Skinner, Holt, & Smith, 1989).

The survey weights for the main survey were computed in several steps:

1. A disposition code was assigned to each sample member indicating whether the sample member was an eligible respondent, an eligible nonrespondent, an ineligible sample member or a sample member whose eligibility status was unknown.

2. The base weights were computed as the inverse of each sample member's probability of selection from the frame.

3. The base weights were adjusted to account for sample members whose eligibility for the survey could not be determined (members with unknown eligibility). These members neither returned a questionnaire nor provided any other information to indicate that they were ineligible for the study.

4. The weights were adjusted for nonresponse among eligible sample members (eligible nonrespondents). These members were eligible but did not have usable survey data because they returned a blank or incomplete questionnaire.

5. The weights were calibrated using a raking technique to control totals, which had been computed as population counts or estimated population counts from the sampling frame. Calibration adjustments were used because they help correct for distortions in the sums of weights caused by nonresponse.

Assignment of Disposition Codes

Before the weights were calculated, each case was assigned a disposition code indicating whether the sample member was an eligible respondent, an eligible nonrespondent, an ineligible sample member or a member whose eligibility status was unknown. These disposition codes were a key input in weighting and in the computation of response rates. Disposition codes were assigned in accordance with the standards defined by AAPOR (AAPOR, 2015).

Eligibility Status

For the sample member to be considered eligible, he or she needed to be a U.S. citizen who was registered to vote on November 4, 2014, residing outside the United States on November 4, 2014, and not a Uniformed Services voter. Eligibility was based on frame information that was collected from the sample member or an acceptable proxy (e.g., a spouse or other household member) as part of the fielding process, and based on responses to three key survey questions. Individuals surveyed were assumed to be registered overseas voters based on the source of the sampling records; eligibility based upon the remaining criteria was determined primarily in relation to additional frame processing and responses to survey screening questions, as will be detailed in this section.

Although the sampling frame cleaning process involved the removal of individuals with invalid mailing addresses, U.S. mailing addresses, and military addresses, additional address processing steps were taken subsequent to sampling to ensure that resulting sample members were within the scope of the target population. Although the original processing resulted in the removal of nearly all such address-ineligible cases, large scale address processing can sometimes result in a small amount of error that may be identified through a subsequent manual review. Thus, additional processing was conducted to ensure correct country classification and civilian *UOCAVA* status. This step resulted in the identification of 286 sample members who were determined to be ineligible due to having an APO-style address (n = 253), a U.S. address (n = 28), or an out-of-scope-country address (n = 5). For the remaining eligibility criteria, the following survey questions were used in determining eligibility:

Question 1 was used to determine whether the individual was residing outside of the United States on November 4, 2014. If the sample member affirmatively indicated being in a country other than the United States on November 4, 2014, then he or she was determined to be *overseas eligible*. Sample members who indicated that they resided in the United States and its territories during the November 2014 General Election were determined to be *overseas ineligible*, as were a small number of sample members (n = 28) who were identified as residing in the United States as determined by the final round of address processing subsequent to the sampling process. If the sample member did not provide an answer to Question 1 or selected multiple response options,

then he or she was considered neither *overseas eligible* nor *overseas ineligible*, but was treated as having unknown overseas eligibility.

Question 5 was used to determine whether an individual was *civilian eligible* (i.e., not a Uniformed Services voter). Sample members who selected the option "I was serving in the military" or "My spouse was serving in the military" were determined to be *civilian ineligible*. Sample members who selected other options were determined to be *civilian eligible*; given that nearly all individuals with non-APO addresses replying to Question 5 were determined to be *civilian eligible* (99.8 percent), individuals who did not provide a response to Question 5 or who provided multiple responses but who met all other eligibility criteria were assumed to be *civilian eligible*.

Question 34 was used to determine whether an individual was *citizenship eligible*. As part of this process, the open-ended responses associated with the "other" response option were coded. Individuals who indicated having U.S. citizenship were treated as *citizenship eligible*. An individual who indicated being a citizen of another country and did not affirmatively indicate being a citizen of the United States was treated as *citizenship ineligible*. Sample members who neither selected one of the main response options nor provided this information through an open-ended response option were treated as having unknown citizenship eligibility.

Completion Status

In order for the questionnaire to be considered complete, the sample member needed to complete at least 25 percent of the total questionnaire or to provide valid responses to Questions 1–6. For the purposes of computing completion status, any question allowing the sample member to select multiple responses (e.g., Question 15) was counted as one item instead of as multiple items.

Case Dispositions

Final case dispositions for weighting were determined using information from field operations and returned surveys. Case dispositions were assigned for weighting purposes based on eligibility and completion of the survey.

1. **Questionnaire returned—Complete/Eligible:** The survey was returned with at least 25 percent completed or answers to all of the first six questions, and the sample member indicated he or she was eligible.

2. **Explicit refusal of survey (by proxy):** An acceptable proxy contacted the FMG Team to indicate that the sample member was not willing to participate in the survey.

3. **Explicit refusal of survey (by sample member):** The sample member contacted the FMG Team to indicate that he or she was not willing to participate in the survey.

4. **Returned blank:** The survey was returned blank.

5. **Returned too incomplete to process:** The survey was returned with less than 25 percent completed and with at least one of the first six questions unanswered.

6. **Unavailable during entire fielding:** The sample member, or an acceptable proxy, contacted the FMG Team to indicate he or she was not available to complete the survey during the fielding period.

7. **Technical issues:** The sample member contacted the FMG Team to indicate that he or she was unable to complete the survey due to technical issues, such as a lack of internet access.

8. **Nothing ever returned:** No reply was received from the sample member, and the survey was not returned by the postal system.

9. **Refused by addressee:** Delivery of the survey was explicitly refused at the point of delivery.

10. **Cannot be delivered as addressed:** The survey materials did not reach the sample member. The materials were returned by the postal system as "return to sender."

11. **Sample member moved, no forwarding address:** The survey materials were returned by the postal system because the sample member moved but no forwarding address was available.

12. **Unknown citizenship eligibility:** The sample member did not provide an answer to the question determining citizenship eligibility.

13. **Unknown overseas eligibility:** The sample member did not provide an answer to the question determining overseas eligibility.

14. **Ineligible—Not overseas on November 4, 2014:** The sample member (or an acceptable proxy) corresponded with the FMG Team to indicate that the member was not overseas on November 4, 2014; or, the sample member did not have an overseas address in one of the eligible countries for this survey.

15. **Ineligible—Uniformed Services voter:** The sample member (or an acceptable proxy) corresponded with the FMG Team to indicate that he or she was living out of the country on November 4, 2014, due to being in the military or due to his or her spouse being in the military; or, the sample member had an APO address.

16. **Ineligible—Not U.S. citizen:** The sample member (or an acceptable proxy) corresponded with the FMG Team to indicate that he or she was not a U.S. citizen as of November 4, 2014.

Final Disposition Code (DISP)

Collapsing across the case dispositions resulted in the final disposition code (DISP) for each case with the categories below.

- ER—Eligible respondents: This group consisted of all sample members who returned a nonblank questionnaire that indicated they were eligible and either completed 25 percent of the survey or provided complete responses to the first six questions.
- ENR—Eligible nonrespondents: This group consisted of all sample members who explicitly refused to participate in the survey, returned the questionnaire blank, returned an incomplete questionnaire, were unavailable during the fielding period or were unable to complete the survey due to technical issues.
- IN—Ineligible sample members: This group consisted of sample members who were not overseas, were Uniformed Services members, or were not U.S. citizens as of November 4, 2014. This was determined using information from the sampling frame, their survey questionnaire or other communication.
- UNK—Other sample members whose eligibility was unknown: This group consisted of sample members for whom nothing was ever returned, for whom delivery was refused, whose survey materials could not be delivered as addressed, who moved without leaving a forwarding address, or for whom U.S. citizenship status or overseas residency on November 4, 2014, could not be established.

Tables 6.1 and 6.2 provide the frequencies for the case dispositions for each final disposition code by portion of the sampling frame (i.e., absentee vs. unconfirmed requester).

Table 6.1: Case Dispositions and Final Disposition Codes for Absentee Records			
DISP	Case Disposition	Number of Cases	% Sample Cases
Eligible Respondents			
ER	Questionnaire returned: Complete/Eligible	8,078	22.44%
Eligible Nonrespondents			
ENR	Explicit refusal of survey (by proxy)	1	<0.01%
ENR	Explicit refusal of survey (by sample member)	65	0.18%
ENR	Returned blank	1	<0.01%
ENR	Returned too incomplete to process	321	0.89%
ENR	Unavailable during entire fielding	7	0.02%
ENR	Technical issues	4	0.01%
Ineligible			
IN	Ineligible: Not overseas on November 4	324	0.90%
IN	Ineligible: Uniformed Services voter	250	0.69%
IN	Ineligible: Not U.S. citizen	180	0.50%
Unknown Eligibility			
UNK	Nothing ever returned	23,511	65.31%
UNK	Refused by addressee	222	0.62%
UNK	Cannot be delivered as addressed	2,685	7.46%
UNK	Moved, left no forwarding address	148	0.41%
UNK	Unknown citizenship eligibility	156	0.43%
UNK	Unknown overseas eligibility	47	0.13%
	Total	**36,000**	**100.00%**

Note: Figures may not add up to displayed total because of rounding.

Table 6.2: Case Dispositions and Final Disposition Codes for Unconfirmed Requester Records			
DISP	Case Disposition	Number of Cases	% Sample Cases
Eligible Respondents			
ER	Questionnaire returned: Complete/Eligible	836	20.90%
Eligible Nonrespondents			
ENR	Explicit refusal of survey (by proxy)	1	0.03%
ENR	Explicit refusal of survey (by sample member)	7	0.18%
ENR	Returned too incomplete to process	31	0.78%
Ineligible			
IN	Ineligible: Not overseas on November 4	29	0.73%
IN	Ineligible: Uniformed Services voter	18	0.45%
IN	Ineligible: Not U.S. citizen	10	0.25%
Unknown Eligibility			
UNK	Nothing ever returned	2,536	63.40%
UNK	Refused by addressee	55	1.38%
UNK	Cannot be delivered as addressed	444	11.10%
UNK	Moved, left no forwarding address	15	0.38%
UNK	Unknown citizenship eligibility	16	0.40%
UNK	Unknown overseas eligibility	2	0.05%
	Total	**4,000**	**100.00%**

Note: Figures may not add up to displayed total because of rounding.

Calculation of Base Weights

After the disposition codes were determined, the first step in computing the weights was to calculate the base weight for each sample member; the base weight was equal to the inverse of the probability of being selected from the frame. Given that the probability of selection varied by country, State, and source of voter record (i.e., confirmed absentee ballot requester vs. unconfirmed requester), this step allowed for unbiased estimates that reflected the sample design, prior to any nonresponse. This step also accounted for pilot survey sampling given that individuals sampled in the pilot were excluded from sampling for the main study but reflected part of the target population.

As described in the sampling chapter, individuals who were sampled for the pilot survey were excluded from sampling for the main survey. Thus, sampling for the main survey can be conceptualized as a two-phase selection process: in the first phase, individuals who were *not* sampled for the pilot survey were eligible for the main survey; in the second phase, a sample of 40,000 individuals was drawn from all eligible cases. In the second phase, individuals were sampled using a PPSWOR procedure (i.e., probability proportional to size without replacement); the measure of size was determined based on precision and/or sample size goals for various reporting domains.[30]

Thus, base weights were computed in two phases:

1. The first phase base weights were computed for all members of the final sampling frame who had not been sampled for the pilot survey as the inverse of the probability of being eligible for second phase sampling. The probability of being eligible for second phase sampling is equal to the probability of *not* being selected in the pilot sampling. Let π_i be the probability of selection in the pilot study for sample member i; thus, $\pi_i' = 1 - \pi_i$ is the probability that individual i remains eligible for second phase sampling. Let d_i' denote the first phase base weight for sample member i; the first phase base weights were thus computed as $d_i' = \frac{1}{\pi_i'} = \frac{1}{1-\pi_i}$. Note that individuals who were eligible for sampling for the main survey only (i.e., all available absentee records from Arizona, California, Illinois, several counties in Ohio, and Clark County in Nevada, as well as all unconfirmed requester records) had zero probability of being sampled for the pilot survey (i.e., $\pi_i = 0$, and thus received a first phase base weight of $d_i' = 1$).

2. The second phase base weights were computed by applying an adjustment factor as the inverse of the main study conditional probability of selection given that the case was not

30 Pilot sampling was also conducted using a PPSWOR procedure, with the measure of size determined to roughly resemble that of the main survey if the main survey sample were to be drawn in a similar manner (e.g., oversampling smaller countries to a similar degree). Additional information is provided in the sampling chapter.

sampled in the pilot survey. Hence, the second phase base weights for sample member i were computed as $d_i'' = d_i' \cdot \frac{1}{\pi_i''} = \frac{1}{1-\pi_i} \cdot \frac{1}{\pi_i''}$ where π_i'' is defined as the conditional probability of selection for the main survey assuming that the case was available for second phase sampling (i.e., had not been sampled in the pilot survey).

For the absentee portion of the frame, given that disproportionate sampling was used, with oversampling of individuals in countries with fewer confirmed absentee ballot requesters or in States with rare balloting policies, the base weights varied by country, State balloting policies, and whether the case was available for sampling in the pilot survey.

As described in the sampling chapter, little was known about the unconfirmed requester portion of the sampling frame and, thus, only 10 percent of the main survey sample size was allocated toward this part of the frame. In order to avoid a reduction in sampling efficiency due to disproportionate sampling, the decision was made to assign all such cases the same measure of size, which resulted in the PPS method becoming an EPSEM for this portion of the sampling frame (i.e., all unconfirmed requester cases had the same probability of selection). For such cases, the base weight calculations above were thus reduced to $d_i'' = d_i' \cdot \frac{1}{\pi_i''} = 1 \cdot \frac{1}{\pi_i''} = \frac{N_{nonabs}}{n_{nonabs}}$, where $N_{nonabs} = 79{,}700$ is the number of unconfirmed requester population members and $n_{nonabs} = 4{,}000$ is the number of unconfirmed requester sample members. This calculation does not apply for the absentee portion of the sampling frame.

Nonresponse Weighting Adjustments

In an ideal survey, all the units in the inferential population would be eligible to be selected into the sample, and all those selected to participate in the survey would actually do so. In practice, these conditions rarely occur. Often, some of the sampled units do not respond, some sample units are discovered to be ineligible and the eligibility status of some units cannot be determined. If these problems are not addressed in the weighting scheme, the estimates of the survey may be biased. Thus, nonresponse weighting adjustments are used to deal with unknown eligibility and unit nonresponse.

To compensate for unit nonresponse, the weights were adjusted in two stages: first, for sample members with unknown eligibility; next, for survey completion among eligible sample members. The first stage of nonresponse adjustment accounted for the fact that the eligibility status of some sample members could not be determined. The second stage of nonresponse adjustment addressed the fact that some sample members known to be eligible did not complete the questionnaire (e.g., by returning a blank or incomplete questionnaire). At each stage, the weights of usable cases were inflated to account for ones that were unusable.

Nonresponse adjustments were computed separately for *absentee records* (i.e., for States, counties and/or municipalities that provided them) and *unconfirmed requester records* (i.e., for all other areas, based on the voter file only) in order to appropriately account for differences in these populations.

For the first nonresponse adjustment, logistic regression models were estimated separately for the absentee and unconfirmed requester populations to predict each sample member's probability of eligibility for the survey (known eligibility vs. unknown eligibility). Each logistic model was weighted by the base weights as appropriate.[31]

For the absentee population, the predictors used in the final model were voter participation history,[32] world region by distance at time of mailing,[33] age,[34] age squared, WGI index score, State,[35] and indicator variables for missing age and voter participation history data as appropriate. For the unconfirmed requester population, the predictors used in the model were voter participation history,[36] age, age squared, and WGI mean.[37] These variables were selected because they had a meaningful impact both on estimated response propensity and on key survey metrics; special care was taken in accounting for the patterns of missing data as described above (i.e., due to the patterns of missing data for the absentee and unconfirmed requester populations, indicator variables were used to reflect missing data in the absentee population, and imputation was used for missing data in the unconfirmed requester population).

Cases that were identified as being ineligible and excluded at the full-sample level (i.e., individuals who were identified as having APO-style addresses, U.S. addresses, or out-of-scope country addresses) were excluded from the logistic models and received an adjustment factor of 1. The reason for this was that the eligibility-based suppression procedures were applied to all cases in the sample and reflected in the base weights. Therefore, these cases did not need to receive an additional adjustment. With the exception of these sample-level excluded cases, adjustment factors were computed for cases with known eligibility as the inverse of model-estimated

31 The absentee model was weighted. It was not necessary to weight the unconfirmed requester model given the use of an equal probability of selection method for sampling unconfirmed requester cases, which leads to equivalent model results regardless of applying the base weights.

32 Voter participation history was treated as categorical and based on the four-way cross-classification of whether individuals voted in the 2012 and/or 2014 General Elections. Separate indicator variables were included for Minnesota absentee ballot requesters who voted successfully in 2014 and those who did not, given that Minnesota voter participation history data was available only for 2014 and not for 2012.

33 The six region categories used were those described in the sampling chapter, with Western Hemisphere split into two categories based on proximity to the United States (i.e., Canada and Mexico vs. all others).

34 Individuals with missing age data had their age imputed to the mean and then were reflected separately in the model via indicator variables, reflecting the pattern of missing data.

35 A categorical variable was included in the model for State, with all States with fewer than 250 absentee sample members combined into a single category and used as the reference group.

36 Voter participation history was initially based on the four-way cross-classification of whether individuals voted in the 2012 and/or 2014 General Elections, but the "voted in 2012 only" and "voted in 2014 only" categories were combined for unconfirmed requester cases due to the similar known eligibility rates and smaller sample sizes.

37 For the unconfirmed requester portion of the sampling frame, given the very small amount of missing data for age and voter participation history (which prevented using separate indicator variables for each), and as the missing data assumptions underlying this approach appeared reasonable in this situation, a random imputation approach was used to account for missing age and/or voter participation history. This imputation approach took into account the observed distributions of age and voter participation history within each world region by distance category for the unconfirmed requester portion of the sampling frame.

probabilities. The weights of cases with known eligibility were multiplied by this adjustment factor, whereas the weights of cases with unknown eligibility were removed, thereby redistributing the weights of cases with unknown eligibility to cases with known eligibility.

For the second nonresponse adjustment, the weights of eligible nonrespondents were redistributed to eligible respondents in order to account for eligible sample members who did not complete the survey; this step was applied separately for the absentee and unconfirmed requester populations.

For the absentee population, a logistic regression model was estimated predicting survey completion (i.e., being an eligible respondent) among eligible individuals (i.e., eligible respondents and eligible nonrespondents), weighted by the known eligibility-adjusted weights. The predictors considered for inclusion were the same as those included in the known eligibility model for the absentee population. The predictors in the final model were voter participation history, age, age squared, WGI index score and an indicator variable for missing age data. After estimating the probability of survey completion, the known eligibility-adjusted weights for eligible respondents were multiplied by the multiplicative inverse of this model-estimated probability, whereas the weights of eligible nonrespondents were removed, thereby redistributing the weights of eligible nonrespondents to eligible respondents. Ineligible individuals received an adjustment factor of 1 (i.e., their weights were not modified during this step).

For the unconfirmed requester population, initially, a logistic regression model was estimated predicting survey completion among eligible individuals, weighted by the known eligibility-adjusted weights. The predictors considered for inclusion were the same as those included in the known eligibility model for the unconfirmed requester population. However, none of these variables were found to be significant predictors of survey completion. Thus, weighting class adjustments were used rather than response propensity adjustments, with the three voter participation history groups used as weighting classes. Specifically, within a given weighting class, an adjustment factor was computed for eligible respondents as the total known eligibility-adjusted weights of all eligible sample members (i.e., eligible respondents and eligible nonrespondents) within that cell divided by the total known eligibility-adjusted weights of all eligible respondents within that cell. Ineligible sample members received an adjustment factor of 1. The known eligibility-adjusted weights for eligible respondents and ineligible sample members were multiplied by this adjustment factor, whereas the weights for eligible nonrespondents were removed, thereby redistributing the weights of eligible nonrespondents to eligible respondents.

Applying nonresponse adjustments to the absentee and unconfirmed requester sample members resulted in the final weights before calibration. Distributions of the base weights, adjustment factors, and final weights before calibration by final disposition code are shown in Tables 6.3 and 6.4, broken out separately by the source of the record (i.e., absentee vs. unconfirmed requester).

Table 6.3: Distribution of Weights and Adjustment Factors for Absentee Cases by Final Disposition Code

Eligibility Status	Statistic	Base Weight d_i''	Eligibility Status Adj. Factor f_i^{A1}	Complete Status Adj. Factor f_i^{A2}	Final Weight Before Calibration w_i^{NR}
Eligible Respondents	N	8,078	8,078	8,078	8,078
	MIN	1.00	1.27	1.00	1.51
	MAX	4.86	36.43	1.39	141.91
	MEAN	3.08	3.90	1.05	11.67
	STD	1.67	2.91	0.02	10.18
Eligible Nonrespondents	N	399	399	399	399
	MIN	1.00	1.43	--	--
	MAX	4.86	37.11	--	--
	MEAN	2.83	4.53	--	--
	STD	1.67	3.60	--	--
Ineligible Sample Members	N	754	754	754	754
	MIN	1.00	1.00	1.00	1.00
	MAX	4.86	29.46	1.00	57.97
	MEAN	2.23	3.44	1.00	7.24
	STD	1.55	3.57	0.00	8.03
Unknown Eligibility Sample Members	N	26,769	26,769	26,769	26,769
	MIN	1.00	--	--	--
	MAX	4.86	--	--	--
	MEAN	2.71	--	--	--
	STD	1.66	--	--	--

Table 6.4: Distribution of Weights and Adjustment Factors for Unconfirmed Requester Cases by Final Disposition Code

Eligibility Status	Statistic	Base Weight d_i''	Eligibility Status Adj. Factor f_i^{A1}	Complete Status Adj. Factor f_i^{A2}	Final Weight Before Calibration w_i^{NR}
Eligible Respondents	N	836	836	836	836
	MIN	19.93	1.63	1.04	33.73
	MAX	19.93	29.86	1.07	635.57
	MEAN	19.93	4.39	1.05	91.90
	STD	0.00	3.05	0.01	64.97
Eligible Nonrespondents	N	39	39	39	39
	MIN	19.93	1.73	--	--
	MAX	19.93	20.20	--	--
	MEAN	19.93	4.82	--	--
	STD	0.00	3.70	--	--
Ineligible Sample Members	N	57	57	57	57
	MIN	19.93	1.00	1.00	19.93
	MAX	19.93	15.17	1.00	302.23
	MEAN	19.93	3.65	1.00	72.65
	STD	0.00	3.39	0.00	67.47
Unknown Eligibility Sample Members	N	3,068	3,068	3,068	3,068
	MIN	19.93	--	--	--
	MAX	19.93	--	--	--
	MEAN	19.93	--	--	--
	STD	0.00	--	--	--

Thus, after each of the two adjustment stages, the nonresponse-adjusted weight for a respondent (*i*) could be written as $w_i^{NR} = d_i'' \cdot f_i^{A1} \cdot f_i^{A2}$. The weight w_i^{NR} was the final weight before calibration. Note that after the two stages of nonresponse adjustments, only the eligible respondents (*ER*) and ineligible sample members (*IN*) had nonzero weights. The weights of sample members with unknown eligibility (*UNK*) and eligible nonrespondents (*ENR*) had been removed after the two adjustment stages. The ineligible sample members (*IN*) represented a unique and well-defined group whose weights could not be redistributed among the other eligibility categories.

Calibration of Weights

The final step in the calculation of the weights involved the modification of the nonresponse-adjusted weights of the eligible respondents so that the sample distribution of important demographic characteristics was similar to the known distribution in the population. This modification is referred to as calibration and can be used to decrease variance and improve the efficiency of estimators (Valliant, Dever, and Kreuter, 2013).

Calibration adjustments were calculated using a raking procedure. Raking allows the calibrated weights to reflect known characteristics of the population. This procedure is done to ensure consistency between complete population counts and sample data. Raking is used in situations in which the interior cells of the cross tabulation are either unknown or sample sizes in some cells are too small for efficient estimation in poststratification to the full cross tabulation.

Given the number of APO-style addresses identified in the final sample, another round of frame cleaning was applied to identify all remaining APO addresses not only in the sample but also in the frame so that these cases could be excluded from the calibration process. Thus, no such cases entered the calibration process, and estimated population counts used as control totals reflect a final population of 179,106 non-APO individuals.

Raking was conducted separately for absentee and unconfirmed requester records given that these portions of the population were mutually exclusive and had different sample designs. Most importantly, the primary focus of the survey was on the absentee portion of the sampling frame; therefore, 90 percent of the sample was allocated to these cases, which allowed for a substantial amount of oversampling for small domains as well as calibration dimensions that reflected the population at finer levels (e.g., adjustments that ensured balance not just on voter participation by world region but also on voter participation by country for larger countries). On the other hand, for the unconfirmed requester portion of the sampling frame, the sample was designed for overall estimates and, therefore, an EPSEM sample was drawn, the size of which does not allow for many cross-classifications to be incorporated into the calibration dimensions.

For each of the two sources of records, the data were raked on each of the four raking dimensions toward population totals or estimated population totals from the frame. Each raking dimension was cross-classified by voter participation history given that this was strongly associated both with response rates and with key survey measures. Categories with insufficient numbers of respondents were collapsed with other similar categories where necessary. Voter participation history was initially computed by cross-classifying the individual's voter participation history from the 2012 and 2014 General Elections, forming four categories:

1. Voted in neither the 2012 nor 2014 General Elections;
2. Voted in the 2012 General Election only;
3. Voted in the 2014 General Election only;
4. Voted in both the 2012 and 2014 General Elections.

For each portion of the sampling frame, there were too few cases in category (3) above to fully cross-classify this category in every raking dimension. For the absentee portion of the frame, in which the response rate for category (3) was much closer to that of category (4) than to that of (2), categories (3) and (4) were combined. For the unconfirmed requester portion of the frame, in

which the response rates for categories (2) and (3) were quite similar, the middle two categories were combined.

For absentee records, the four raking dimensions used were:

1. Voter participation history by country (Raking Dimension 1a);
2. Voter participation history by State (Raking Dimension 2a);
3. Voter participation history by sex (Raking Dimension 3a);
4. Voter participation history by age group (Raking Dimension 4a).

For unconfirmed requester records, the four raking dimensions used were:

1. Voter participation history by region by distance (Raking Dimension 1b);
2. Voter participation history by State (Raking Dimension 2b);
3. Voter participation history by sex (Raking Dimension 3b);
4. Voter participation history by age group (Raking Dimension 4b).

In certain cases, there were limited amounts of missing data that had to be taken into account during the weighting process. One option for accounting for missing data in weighting would be to allow these cases to form their own raking cells. However, in some cases, this could produce small cell sizes that would substantially drive up design effects; further, in certain "zero cells" in which there are population members but zero respondents, it is impossible to directly apply adjustments. Another option for dealing with missing data would be to combine groups with other similar groups in which they exist. An additional option would be to use an imputation approach for purposes of assigning cases to the raking categories.

The general approach taken for missing data was to avoid collapsing cells where possible; in limited cases in which similar cells were available and it was necessary to do so, this option was used. However, in cases in which a similar cell was not available and the number of respondents was very low, an imputation approach was used. The imputation approach took into account the frame distribution of the variables for individuals in a given category (e.g., world region by distance category), and each missing value was replaced with a non-missing value from a random sample member with non-missing data within the category (with replacement of donors). This action ensured that the distribution of the imputed variables within a given category was approximately equal to the distribution of non-missing data within that category. Given that internal consistency of control totals is important in allowing the raked weights to converge, for raking dimensions in which imputation was necessary, imputed values were incorporated into estimated population totals to ensure internally consistent control totals across raking dimensions.

Given the differing patterns and amounts of missing data, somewhat different approaches were used for the absentee and unconfirmed requester records. For instance, individuals with missing voter participation records in the absentee portion of the sampling frame were often found in States with fewer available records but which had higher response rates than in larger States. This implied that the data missingness mechanism was related to survey response rates, which suggested that the data missingness was nontrivial; given this, and given the sufficient number of such sample members, such cases were allowed to form their own raking cells rather than using single imputation methods. On the other hand, the unconfirmed requester portion of the sampling frame did not exhibit such patterns and had many fewer sampled individuals with missing voter participation records (due primarily to the lower overall sample size), and thus imputation was more frequently used for the unconfirmed requester portion of the sampling frame.

For the absentee portion of the sampling frame, the decision rules for creating raking categories, collapsing cells and conducting imputation were as follows:

- Voter participation history: As previously indicated, the three main voter participation categories of interest were (1) those who voted in neither the 2012 nor 2014 General Elections; (2) those who voted in the 2012 General Election only; (3) those who voted in the 2014 General Election only or who voted in both the 2012 and 2014 General Elections. Those with any missing voter participation history data were allowed to form a separate category.[38]
- Raking Dimension 1a (voter participation history by country): For each country for which at least 350 individuals were sampled from the absentee portion of the sampling frame, the voter participation history categories were cross-classified by country.[39] Countries with fewer than 350 sample members were combined by world region before cross-classifying with voter participation history. Cells were collapsed as follows:
- Due to a small number of individuals who had missing voter participation history data, these individuals were cross-classified by world region by distance group rather than by country.
- For China, Mexico, Singapore, South Korea, Sweden, and the United Arab Emirates, the category of individuals who had voted in neither the 2012 nor 2014 General Election

38 The voter file does not directly identify those cases lacking a voter participation history and does not distinguish between confirmed non-voters and those who are missing voter participation history. However, The FMG Team identified a set of cases that appeared to suffer from a voter file record linkage failure. That is, for most cases, there were two separate sets of voter name variables, and there appeared to be voter participation history information; however, for a small subset of cases, one of these sets of name variables was empty, and these cases were missing all voter participation information. These cases, which lacked voter participation information, had relatively similar self-reported vote participation as the other cases, which suggested that they were simply missing their voter records rather than being non-voters. For raking purposes, the Minnesota records, which only had absentee voter information from the 2014 General Election, were included in the category with missing voter participation history data.

39 Note that the country codes and region codes at the time of sampling included a small amount of misclassification (0.50 percent of cases had a misclassified country, the majority of which were Dominican Republic cases which had been incorrectly classified as Dominica, and 0.15 percent of cases had a misclassified region). The population counts used as control totals for calibration purposes were corrected to account for this misclassification. Specifically, the individually-corrected frame variable was used in computing control totals, which were then modified to correct for misclassification between Dominica and Dominican Republic.

was combined with the category of individuals who voted in the 2012 General Election only, due to small cell sizes.

- **Raking Dimension 2a** (voter participation history by State): For each State in which at least 250 individuals were sampled from the absentee portion of the sampling frame, the voter participation categories were cross-classified by State. States with fewer than 250 sample members were combined into a single category before cross-classifying by voter participation history. This cutoff point of 250 could be set at a lower number than the country cutoff point from Raking Dimension 1a given that State-wide response rates did not vary as much as the country-level response rates. After cross-classifying State (or group of States) by voter participation history, changes were made to this dimension as follows:
- For each of Alaska, Arizona, and North Carolina, the category of individuals who had voted in neither the 2012 nor 2014 General Election was combined with the category of individuals who voted in the 2012 General Election only, due to small cell sizes.
- Individuals with missing voter participation history in California, Colorado, Maryland, North Carolina, Ohio, Oregon, and Pennsylvania were combined into a single category across States, due to small cell sizes.
- Minnesota cases were categorized based on whether the individual was recorded as having voted in 2014 versus not having voted, given that these cases did not have a full voter participation history before 2014.[40]
- **Raking Dimension 3a** (voter participation history by sex): Voter participation history was cross-classified by sex. For individuals whose sex was not recorded on the voter file, imputation was applied as follows:
- Initially, sex was missing for 3.16 percent of records in the frame. For these, it was then estimated based on first name and birthdate (where available), and these predictions were used to reduce the proportion of missing data to 0.36 percent.[41]
- Among the remaining individuals with unknown sex and whose first name could not be used to predict sex, but who had a middle name which could be classified based on predicted sex, the predicted sex from the middle name was used in forming donor cells in order to apply the previously described random imputation method. This step further reduced the proportion of missing data to 0.25 percent.[42]
- The remaining individuals with unknown sex had their sex randomly imputed, with donor cells formed based on voter participation history group.
- **Raking Dimension 4a** (voter participation history by age group): Voter participation history was cross-classified by age group (18–29; 30–39; 40–49; 50–59; 60–69; 70+; and missing). Cells were collapsed as follows:

40 As mentioned in the sampling chapter, the Minnesota sampling frame was provided to FMG, but was not allowed to be linked to voter records from an external source; therefore, Minnesota's voter participation history information before the 2014 General Election did not appear to be comparable to that from other States, given that Minnesota voter participation history appeared to be for *UOCAVA* voters only. For instance, if an individual voted as an in-person domestic voter in 2012 but as a *UOCAVA* voter in 2014, then his or her voter participation record in 2012 would be missing for Minnesota but could be available for other States.

41 In order to validate this step, the same imputation procedures were applied to predict the sex of all members of the sampling frame for whom sex was already known. Of these individuals, 97.4 percent of females and 97.3 percent of males were correctly classified based on first name, assuming that the frame variable was correct.

42 The random imputation method, which took into account the observed distribution of sex among those with the same predicted sex, was applied, rather than using the predicted sex directly, given that known females had higher rates of misclassification based on middle name (13.8 percent) than did known males (4.1 percent).

- Individuals who did not vote in 2014 or 2012 and who had a missing age were combined with individuals who voted in 2012 only and who had a missing age, due to small cell sizes.

For the unconfirmed requester portion of the sampling frame, the decision rules for creating raking categories, collapsing cells, and/or conducting imputation are as follows:

- **Voter Participation History**: As previously indicated, the three voter participation categories of interest were (1) those who voted in neither the 2012 nor 2014 General Elections; (2) those who voted in the 2012 General Election only or the 2014 General Election only; and (3) those who voted in both the 2012 and 2014 General Elections. Values were imputed before the nonresponse adjustment stage for unconfirmed requester individuals with missing voter participation history, as described earlier in this chapter. These previously imputed values were reused for purposes of calibration, rather than being reimputed, given that the latter could have led to increased weight variation and reduced precision.
- **Raking Dimension 1b** (voter participation history by region by distance): Due to the smaller sample sizes for the unconfirmed requester portion of the frame, voter participation history was cross-classified by region by distance rather than by country. The final region by distance groups were as follows: (1) East Asia and Pacific; (2) Europe and Eurasia; (3) Western Hemisphere–Canada and Mexico; and (4) all others. Although category (4) comprised individuals from fairly disparate world region by distance groups (i.e., Africa, Near East, South and Central Asia, and Western Hemisphere–Other), these represented the world region by distance groups with the four lowest WGI mean scores and had fairly similar response rates. Further, these four groups were not large enough to serve as separate categories in the unconfirmed requester sample, which had been designed for inference to the full set of unconfirmed requester population members rather than for domain estimates in each region.
- **Raking Dimension 2b** (voter participation history by State): For each State in which at least 250 individuals were sampled from the unconfirmed requester portion of the sampling frame (e.g., California, Texas, and Washington), the voter participation categories were cross-classified by State. States with fewer than 250 sample members were combined into a single category prior to cross-classification by voter participation history. After cross-classifying State (or group of States) by voter participation history, changes were made to the raking dimensions as follows:
- Due to a small cell size, voters in Texas were classified into two categories (i.e., voted in neither the 2012 nor 2014 General Election vs. voted in the 2012 and/or 2014 General Election(s)) rather than using the original three categories.
- **Raking Dimension 3b** (voter participation history by sex): Voter participation history was cross-classified by sex. For individuals whose sex was not recorded on the voter file, imputation was applied using the same procedures as had been applied for the absentee portion of the sampling frame. Given that the distributions of the sex variable appeared to be independent of the portion of the sampling frame after

conditioning on other relevant variables (e.g., voter participation history), imputation was conducted on the full sampling frame rather than being conducted separately for the two portions of the sampling frame (i.e., absentee vs. unconfirmed requester).

- **Raking Dimension 4b** (voter participation history by age group): Voter participation history was cross-classified by age group (18–34; 35–49; 50–64; and 65+). Imputation was applied to records missing age data in order to avoid small cell sizes; the previously imputed values of age which had been computed before the nonresponse adjustment stage were reused, rather than being reimputed, the latter of which could have led to increased weight variation and reduced precision.

Population sizes for Raking Dimensions 1a,[43] 2a, and 4a and estimated population sizes[44] for Raking Dimensions 3a, 1b, 2b, 3b, and 4b are provided in Tables 6.5–6.12.

At the conclusion of the raking step, the weights were evaluated to determine whether weight trimming should be implemented. The goal of weight trimming is to reduce the mean square error by trimming extreme weights (Potter, 1993). Weight trimming was applied separately for each of the two major populations represented by the sampling frame (i.e., absentee records and unconfirmed requester records). For each of these two populations, weights greater than four standard deviations from the mean for the respective portion of the sampling frame were trimmed, after which the weights were rescaled via a flat multiplicative adjustment in order to preserve the sum of the weights through the trimming stage. After weight trimming, the data were reraked to population totals.

As previously mentioned, it was possible to remove cases having APO addresses from the control totals and, therefore, to exclude them from the calibration process. However, the remaining ineligible cases represented a unique part of the population whose weights could not be redistributed to the other eligibility categories. It was necessary, therefore, to include these cases when adjusting toward control totals, given that they were reflected in the control totals. However, these cases were not included in the analysis data set.

43 Raking dimension 1a primarily comprises population totals, but the dimensions incorporating cases from Dominica and/or the Dominican Republic are estimated totals due to a minor correction for misclassification.

44 As mentioned previously, imputed values were incorporated into the raking totals in order to ensure internally consistent benchmark totals and improve raking convergence. Thus, for the absentee portion of the sampling frame, raking dimension 3a consists of estimated totals due to a small amount of imputation for cases with missing gender; for the unconfirmed requester portion of the sampling frame, the control totals include imputation relating to voter participation history, gender, and age.

Table 6.5: Raking Dimension 1A (Absentee Records): Voter History by Country		
Voter Participation History 2012 - 2014	Country (or Region)	Population Count
Neither	Argentina	350
2012 only	Argentina	225
2014 or both	Argentina	151
Neither	Australia	874
2012 only	Australia	1,611
2014 or both	Australia	1,149
Neither	Austria	141
2012 only	Austria	279
2014 or both	Austria	297
Neither	Belgium	145
2012 only	Belgium	314
2014 or both	Belgium	239
Neither	Brazil	371
2012 only	Brazil	409
2014 or both	Brazil	247
Neither	Canada	2,282
2012 only	Canada	5,191
2014 or both	Canada	4,642
Neither	Chile	140
2012 only	Chile	170
2014 or both	Chile	116
Neither or 2012 only	China	1,065
2014 or both	China	302
Neither	Colombia	297
2012 only	Colombia	197
2014 or both	Colombia	101
Neither	Costa Rica	261
2012 only	Costa Rica	305
2014 or both	Costa Rica	238
Neither	Czech Republic	91
2012 only	Czech Republic	138
2014 or both	Czech Republic	140
Neither	Denmark	146
2012 only	Denmark	268
2014 or both	Denmark	238
Neither	Dominican Republic	402
2012 only	Dominican Republic	188
2014 or both	Dominican Republic	109
Neither	France	1,233
2012 only	France	2,633
2014 or both	France	2,258
Neither	Germany	1,059
2012 only	Germany	2,396
2014 or both	Germany	2,079
Neither	Greece	372
2012 only	Greece	492
2014 or both	Greece	521

6.5: Raking Dimension 1A (Absentee Records): Voter History by Country		
Voter Participation History 2012 - 2014	Country (or Region)	Population Count
Neither	Hong Kong	421
2012 only	Hong Kong	625
2014 or both	Hong Kong	312
Neither	India	338
2012 only	India	303
2014 or both	India	173
Neither	Ireland	367
2012 only	Ireland	510
2014 or both	Ireland	495
Neither	Israel	4,165
2012 only	Israel	5,469
2014 or both	Israel	1,423
Neither	Italy	672
2012 only	Italy	1,168
2014 or both	Italy	948
Neither	Jamaica	212
2012 only	Jamaica	230
2014 or both	Jamaica	108
Neither	Japan	365
2012 only	Japan	787
2014 or both	Japan	743
Neither or 2012 only	Mexico	1,101
2014 or both	Mexico	477
Neither	Netherlands	437
2012 only	Netherlands	780
2014 or both	Netherlands	531
Neither	New Zealand	256
2012 only	New Zealand	539
2014 or both	New Zealand	355
Neither	Nicaragua	253
2012 only	Nicaragua	100
2014 or both	Nicaragua	52
Neither	Norway	144
2012 only	Norway	289
2014 or both	Norway	293
Neither	Panama	210
2012 only	Panama	143
2014 or both	Panama	98
Neither	Peru	191
2012 only	Peru	171
2014 or both	Peru	62
Neither	Philippines	219
2012 only	Philippines	233
2014 or both	Philippines	251
Neither or 2012 only	Singapore	654
2014 or both	Singapore	226
Neither	South Africa	168

6.5: Raking Dimension 1A (Absentee Records): Voter History by Country

Voter Participation History 2012 - 2014	Country (or Region)	Population Count
2012 only	South Africa	198
2014 or both	South Africa	80
Neither or 2012 only	South Korea	485
2014 or both	South Korea	201
Neither	Spain	739
2012 only	Spain	992
2014 or both	Spain	683
Neither or 2012 only	Sweden	751
2014 or both	Sweden	498
Neither	Switzerland	522
2012 only	Switzerland	1,006
2014 or both	Switzerland	754
Neither	Taiwan	163
2012 only	Taiwan	186
2014 or both	Taiwan	161
Neither	Thailand	312
2012 only	Thailand	389
2014 or both	Thailand	386
Neither or 2012 only	United Arab Emirates	555
2014 or both	United Arab Emirates	157
Neither	United Kingdom	3,086
2012 only	United Kingdom	5,336
2014 or both	United Kingdom	3,677
Missing data	Africa	97
Missing data	East Asia and Pacific	642
Missing data	Europe and Eurasia	1,815
Missing data	Near East	200
Missing data	South and Central Asia	59
Missing data	Western Hemisphere – Close (Canada and Mexico)	649
Missing data	Western Hemisphere – Far	270
Neither	Africa – Other	494
2012 only	Africa – Other	514
2014 or both	Africa – Other	357
Neither	East Asia and Pacific – Other	263
2012 only	East Asia and Pacific – Other	327
2014 or both	East Asia and Pacific – Other	261
Neither	Europe and Eurasia – Other	892
2012 only	Europe and Eurasia – Other	991
2014 or both	Europe and Eurasia – Other	822
Neither	Near East – Other	591
2012 only	Near East – Other	433
2014 or both	Near East – Other	309
Neither	South and Central Asia – Other	174
2012 only	South and Central Asia – Other	146
2014 or both	South and Central Asia – Other	87
Neither	Western Hemisphere – Far – Other	1,375

6.5: Raking Dimension 1A (Absentee Records): Voter History by Country

Voter Participation History 2012 - 2014	Country (or Region)	Population Count
2012 only	Western Hemisphere – Far – Other	1,065
2014 or both	Western Hemisphere – Far – Other	661
Total		**99,750**

Note: Figures may not add up to displayed total due to rounding. Categories containing cases from Dominica and/or the Dominican Republic contain population estimates rather than population counts.

Table 6.6: Raking Dimension 2A (Absentee Records): Voter History by State

Voter Participation History 2012 - 2014	State(s)	Population Count
Neither or 2012 only	AK	57
2014 or both	AK	200
Missing	AK	69
Neither or 2012 only	AZ	360
2014 or both	AZ	231
Neither	CA	1,933
2012 only	CA	3,877
2014 or both	CA	1,356
Neither	CO	1,897
2012 only	CO	3,392
2014 or both	CO	3,156
Neither	FL	9,655
2012 only	FL	9,715
2014 or both	FL	4,846
Missing	FL	363
Neither	MD	95
2012 only	MD	192
2014 or both	MD	519
Neither or 2012 only	MN	504
2014 or both	MN	851
Neither or 2012 only	NC	275
2014 or both	NC	1,169
Neither	NY	10,330
2012 only	NY	17,117
2014 or both	NY	10,696
Neither	OH	345
2012 only	OH	440
2014 or both	OH	503
Neither	OR	833
2012 only	OR	2,672
2014 or both	OR	1,878
Neither	PA	766
2012 only	PA	886
2014 or both	PA	875
Neither	TX	706
2012 only	TX	377
2014 or both	TX	797
Missing	TX	700
Missing	CA/CO/MD/NC/OH/OR/PA	361
Neither	All others	510

2012 only	All others	1,119
2014 or both	All others	2,243
Missing	All others	884
Total		**99,750**

Table 6.7: Raking Dimension 3A (Absentee Records): Voter History by Sex

Voter Participation History	Sex	Population Estimate
Neither	Male	12,722
Neither	Female	14,464
2012 only	Male	17,997
2012 only	Female	22,366
2014 or both	Male	13,868
2014 or both	Female	14,601
Missing	Male	1,793
Missing	Female	1,939
Total		**99,750**

Table 6.8: Raking Dimension 4A (Absentee Records): Voter History by Age Group

Voter Participation History	Age Group	Population Count
Neither	18–29	4,820
Neither	30–39	5,781
Neither	40–49	5,486
Neither	50–59	4,342
Neither	60–69	3,465
Neither	70+	3,204
2012 only	18–29	6,413
2012 only	30–39	7,615
2012 only	40–49	8,022
2012 only	50–59	7,293
2012 only	60–69	6,129
2012 only	70+	4,690
2014 or both	Missing	289
2014 or both	18–29	2,798
2014 or both	30–39	3,462
2014 or both	40–49	4,150
2014 or both	50–59	5,477
2014 or both	60–69	6,169
2014 or both	70+	5,209
2014 or both	Missing	1,204
Missing	18–29	501
Missing	30–39	409
Missing	40–49	405
Missing	50–59	440
Missing	60–69	461
Missing	70+	292
Missing	Missing	1,224
Total		**99,750**

Table 6.9: Raking Dimension 1B (Unconfirmed Requester Records): Voter History by Country		
Voter Participation History	Region	Population Estimate
Neither	East Asia and Pacific	7,028
2012 or 2014	East Asia and Pacific	7,994
2014 and 2014	East Asia and Pacific	2,376
Neither	Europe and Eurasia	12,317
2012 or 2014	Europe and Eurasia	16,172
2014 and 2014	Europe and Eurasia	5,073
Neither	W. Hemisphere – Canada and Mexico	4,956
2012 or 2014	W. Hemisphere – Canada and Mexico	7,958
2014 and 2014	W. Hemisphere – Canada and Mexico	2,599
Neither	Other	6,549
2012 or 2014	Other	5,131
2014 and 2014	Other	1,203
Total		**79,356**

Table 6.10: Raking Dimension 2B (Unconfirmed Requester Records): Voter History by State		
Voter Participation History	State Group	Population Estimate
Neither	CA	12,896
2012 or 2014	CA	17,652
2012 and 2014	CA	5,296
Neither	TX	5,600
2012 and/or 2014	TX	2,708
Neither	WA	3,897
2012 or 2014	WA	6,771
2012 and 2014	WA	2,832
Neither	Other	8,457
2012 or 2014	Other	10,465
2012 and 2014	Other	2,782
Total		**79,356**

Table 6.11: Raking Dimension 3B (Unconfirmed Requester Records): Voter History by Sex		
Voter Participation History	Sex	Population Estimate
Neither	Male	14,726
Neither	Female	16,124
2012 or 2014	Male	16,889
2012 or 2014	Female	20,366
2012 and 2014	Male	5,565
2012 and 2014	Female	5,686
Total		**79,356**

Table 6.12: Raking Dimension 4B (Unconfirmed Requester Records): Voter History by Age Group		
Voter Participation History	Age Group	Population Estimate
Voted in neither	18–34	8,637
Voted in neither	35–49	9,773
Voted in neither	50–64	7,751
Voted in neither	65+	4,689
Voted in 2012 or 2014	18–34	9,368
Voted in 2012 or 2014	35–49	10,553
Voted in 2012 or 2014	50–64	10,387
Voted in 2012 or 2014	65+	6,947
Voted in 2012 and 2014	18–34	1,901
Voted in 2012 and 2014	35–49	2,292
Voted in 2012 and 2014	50–64	3,663
Voted in 2012 and 2014	65+	3,395
Total		**79,356**

After the conclusion of the weighting process, there were $n = 8{,}914$ eligible respondents receiving weights, of whom $n = 8{,}078$ were from the absentee portion of the sampling frame and $n = 836$ were from the unconfirmed requester portion of the sampling frame. The subset of weights for the $n = 8{,}078$ eligible respondents from absentee portion of the sampling frame is considered to be the *official* set of weights, whereas the full set of $n = 8{,}914$ weights is considered to be an *exploratory* set of weights.

Although this full set of exploratory weights allows for valid overall estimates of eligible members of the finalized sampling frame, the focus of the sampling design allows for much better domain estimates (e.g., world region-level estimates) for the absentee portion alone, and combining the absentee and unconfirmed requester records could produce very high design effects and imprecision. Further, given that the unconfirmed requester portion of the sampling frame was not directly based on lists of absentee ballot requesters from States, counties, and municipalities, it can be expected to include some registered voters who did not request absentee ballots while possibly excluding some registered voters who did request absentee ballots. Nevertheless, the inclusion of a smaller sample for the unconfirmed requester portion of the frame can allow for some preliminary information about this portion of the population. This information can be used to determine whether this portion of the population would yield a fruitful line of inquiry for future research, as well as to assess the possible impacts of excluding this portion of the population from the survey.

Computation of Variance Estimates

Variance estimation procedures are developed to characterize the uncertainty in point estimates while accounting for complex sample design features such as stratification, selection of a sample

in multiple phases or stages and survey weighting. The two main methods for variance estimation are Taylor series linearization and replication. Taylor series linearization involves approximating a statistic by applying the Taylor series expansion to the relevant nonlinear function, and substituting this approximation into the appropriate variance formula for the given sample design; this method is commonly used in estimating variances for statistics such as means and proportions. Replication methods such as jackknife repeated replication (JRR), balanced repeated replication (BRR), or bootstrap methods are also sometimes used, depending on the complexity of the sample design and type of statistic. Although replication methods can be designed to reflect the impacts of multiple steps of weighting adjustments, they also add computational complexity.

In this survey, Taylor series linearization methods were used to estimate variances. Taylor series linearization generally relies on the simplicity associated with estimating the variance for a linear statistic even with a complex sample design and is valid in large samples. In this formulation, the variance strata, primary sampling units (PSU), and survey weights must be defined. For this survey, the variance strata for absentee records were defined based on the explicit strata used in the sampling process. Specifically, as displayed in Table 6.13 below, the variance strata for absentee records were based on world region or ballot policy group, as specified in the sampling chapter, whereas unconfirmed requester records were combined into a single variance stratum.

Table 6.13: Variance Strata

Variance Stratum	Portion of Sampling Frame	State Policies	World Region
1	Absentee	Non-rare policies	Africa
2	Absentee	Non-rare policies	East Asia and Pacific
3	Absentee	Non-rare policies	Europe and Eurasia
4	Absentee	Non-rare policies	Near East
5	Absentee	Non-rare policies	South and Central Asia
6	Absentee	Non-rare policies	Canada and Mexico
7	Absentee	Non-rare policies	Western Hemisphere – Other
8	Absentee	Rare policies	All
9	Unconfirmed Requester	All	All

Finite Population Correction

Surveys often include a finite population correction (FPC) in order to give credit for a reduction in sampling variance obtained from sampling from a finite population without replacement. For example, in an extreme scenario, if a census is conducted and there is no nonresponse, then there would be zero sampling error. Although there is some debate on when and whether to apply FPCs (Rust et al., 2006), applying an FPC could lead to underestimates of variance when measurement error is a factor (Kalton, 2002) and might also overcharacterize the certainty of estimates in not

accounting for variability relating to missing data or to the weighting process. Thus, in order to provide more conservative confidence intervals, an FPC is not applied in this survey.

Calculation of Outcome Rates

The outcome rates for this survey were computed in accordance with the standards defined by AAPOR (AAPOR, 2015). Table 6.14 shows the AAPOR outcome rates obtained for the two portions of the sampling frame (i.e., absentee vs. unconfirmed requester); Table 6.15 shows weighted rates by world region for the absentee portion of the sampling frame; and Tables 6.16–6.17 show the final dispositions used to calculate outcome rates by portion of the sampling frame. The following section describes what each of these rates represent and how they were calculated. The base weights developed from the frame and the sample were used for the calculations of the weighted rates in order to adjust for differences in probability of selection from the frame. Sampled cases that were determined to be ineligible at the full-sample level did not have any impact on outcome rates and were, therefore, excluded from the tables below.

Table 6.14: AAPOR Outcome Rates

	Absentee Records		Unconfirmed Requester Records	
	Unweighted	Weighted	Unweighted	Weighted
Response Rate 3	23.91%	26.14%	21.89%	21.89%
Contact Rate 2	25.07%	27.30%	22.91%	22.91%
Cooperation Rate 1	95.37%	95.74%	95.54%	95.54%
"e" (% eligible among unknowns)	94.56%	95.51%	95.94%	95.94%

Note: Weighted rates use the base weight. Unconfirmed requester rates are the same unweighted and weighted due to the use of equal-probability sampling within this portion of the sampling frame.

Table 6.15: AAPOR Outcome Rates by World Region (Absentee Records Only)

	Africa	E. Asia & Pacific	Europe and Eurasia	Near East	S. & Cent. Asia	Canada and Mexico	W. Hemisphere (Other)
Response Rate 3	12.77%	24.10%	31.66%	16.92%	17.71%	27.98%	17.25%
Contact Rate 2	13.48%	24.98%	32.97%	17.94%	18.76%	29.25%	18.37%
Cooperation Rate 1	94.69%	96.48%	96.05%	94.31%	94.40%	95.63%	93.91%
"e" (% eligible among unknowns)	90.00%	96.36%	95.86%	95.43%	89.50%	96.28%	90.71%

Note: Rates above are weighted by the base weight.

Table 6.16: AAPOR Final Dispositions: Absentee Records					
Final Dispositions	Symbol	Sample Count	Sample Percent	Weighted Count	Weighted Percent
Eligible respondents	ER	8,078	22.61%	24,889	24.97%
Refusals	R	388	1.09%	1,101	1.10%
Noncontacts	NC	7	0.02%	20	0.02%
Other eligible nonrespondents	O	4	0.01%	8	0.01%
Unknown eligibility	UNK	26,769	74.91%	72,451	72.68%
Ineligible	IN	488	1.37%	1,222	1.23%
Total		35,734	100.00%	99,691	100.00%

Note: Sample counts and percentages are unweighted. Weighted counts and percentages use the base weight. Totals may not add up to 100 percent or displayed total because of rounding. Cases that were identified as ineligible at the full-sample level had no impact on outcome rate calculations and are thus excluded from the table above.

Table 6.17: AAPOR Final Dispositions: Unconfirmed Requester Records					
Final Dispositions	Symbol	Sample Count	Sample Percent	Weighted Count	Weighted Percent
Eligible respondents	ER	836	21.01%	16,657	21.01%
Refusals	R	39	0.98%	777	0.98%
Noncontacts	NC	0	0.00%	0	0.00%
Other eligible nonrespondents	O	0	0.00%	0	0.00%
Unknown eligibility	UNK	3,068	77.09%	61,130	77.09%
Ineligible	IN	37	0.93%	737	0.93%
Total		3,980	100.00%	79,302	100.00%

Note: Sample counts and percentages are unweighted. Weighted counts and percentages use the base weight. Totals may not add up to 100 percent or displayed total because of rounding. Cases that were identified as ineligible at the full-sample level had no impact on outcome rate calculations and are thus excluded from the table above.

Response Rate

The response rate is the number of eligible sample members who returned complete questionnaires divided by the estimated number of eligible individuals in the sample. For this survey, Response Rate 3 (RR3) was calculated. RR3 was chosen in order to account for sample members whose eligibility could not be determined. The formula for RR3 is:

$$RR3 = \frac{ER}{(ER + R + NC + O + e \cdot UNK)}$$

An important element of RR3 is "e": the estimated proportion of unknown eligibility cases that are eligible, inclusion of which makes the response rate more accurate.[45] There is no single method to most accurately calculate "e" across all surveys, given that the proportion of unknown sample members who are eligible depends on design elements of the specific study (Smith, 2009). Thus, the AAPOR standards indicate that researchers should simply use the best available scientific information in calculating "e." One popular method of calculating "e" is the proportional allocation or Council of American Survey Research Organizations (CASRO) method. This method assumes that the ratio of eligible to ineligible cases among the known cases also applies to the unknown cases. This method is easily used and tends to produce conservative estimates (i.e., estimates that do not inflate the response rate).

For purposes of computing "e," using the proportional allocation method for the full sample would produce an artificially low estimate for "e" due to the application of a subset of eligibility criteria at the full-sample level (i.e., for all 40,000 sampled units). Specifically, given that all sample members had their addresses reexamined to ensure APO eligibility, the assumption that known cases are similar to unknown cases in their eligibility rate would most likely lead to an underestimate of how many unknown cases are eligible (and therefore an artificially high response rate). Thus, "e" was calculated among cases meeting address eligibility criteria (i.e., non-APO addresses and within-scope country addresses) as the number of known eligible cases divided by the number of cases with known eligibility (i.e., known eligible and known ineligible cases).

The formula for calculating "e" is:

$$e = \frac{(ER + R + NC + O)}{(ER + R + NC + O + IN)}$$

For the absentee portion of the sampling frame, "e" was equal to 95.51 percent (weighted; 94.56 percent unweighted), indicating that after removing APO-style addresses and out-of-scope country addresses, approximately 95.51 percent of the population represented by the absentee portion of the sampling frame can be assumed to be eligible. Therefore, for the absentee portion of the sample, RR3 was equal to 26.14 percent weighted, 23.91 percent unweighted. The response rate for the absentee portion of the sample is higher weighted than unweighted due to the need to oversample individuals in harder-to-reach areas due to precision requirements for domain estimation.

For the unconfirmed requester portion of the sample, "e" was equal to 95.94 percent (weighted and unweighted), which translated to an RR3 for unconfirmed requester records of 21.89 percent. This rate was lower than that of the absentee portion of the sample due to a lower contact rate.

[45] For all outcome rates, the formula was chosen that incorporated "e" (where applicable). Only complete surveys (i.e., at least 25 percent of each survey completed or all of the first six questions answered) were included as eligible respondents (*ER*). Sample members who returned partially completed surveys were slotted into the refusals (*R*) category.

Contact Rate

The contact rate represents the proportion of sample members that were actually contacted. This rate is equal to the number of eligible respondents and eligible nonrespondents who were contacted, divided by the estimated number of eligible individuals in the sample. Contact Rate 2 (CON2) was calculated using the following formula:

$$CON2 = \frac{ER + R + O}{(ER + R + NC + O + e \cdot UNK)}$$

For the absentee portion of the sample, Contact Rate 2 was determined to be 27.30 percent weighted, 25.07 percent unweighted. For the unconfirmed requester portion of the sample, Contact Rate 2 was determined to be 22.91 percent (both weighted and unweighted).

Cooperation Rate

The cooperation rate represents the proportion of contacted sample members who agreed to complete the survey. This is equal to the number of eligible respondents who returned complete questionnaires divided by the number of sample members who had been reached. Cooperation Rate 1 (COOP1) was calculated, for which the formula is:

$$COOP1 = \frac{ER}{(ER + R + O)}$$

For the absentee portion of the sample, Cooperation Rate 1 was determined to be 95.74 percent weighted, 95.37 percent unweighted. For the unconfirmed requester portion of the sample, Cooperation Rate 1 was determined to be 95.54 percent (both weighted and unweighted).

Design Effect

The design effect is a statistic that indicates the effect of using the selected sampling and weighting plans. This statistic demonstrates the impact the survey design and weighting have on the variance of the point estimates. Each point estimate can have a unique design effect. Two pieces of information are necessary to calculate the design effect:

- The variance achieved using the selected design
- The variance that would have been achieved using a simple random sampling design

The design effect is calculated as the ratio of these two pieces of information (Kish, 1965). Holding all else constant, it is desirable for the design effect to be as small as possible. A design effect less than 1 means that the selected design resulted in a smaller variance (and smaller standard error) than would have been achieved with a simple random sample. A design effect greater than 1 means that the selected design resulted in a larger variance (and larger standard

error) than would have been achieved using a simple random sample. It is important to note that the design effect is only one measure of the usefulness of a design plan (e.g., budget and feasibility also must factor into design decisions).

Table 6.18 shows the design effects for six key estimates for each portion of the sampling frame, and 6.19 shows the design effects for world region subpopulation estimates for the absentee portion of the sampling frame. For the absentee portion of the sampling frame, the design effects were above 1 because of disproportionate allocation, differential nonresponse, weighting adjustments for nonresponse and calibration adjustments. For the unconfirmed requester portion of the sampling frame, the design effects were above 1 because of differential nonresponse, weighting adjustments for nonresponse, and calibration adjustments. The higher design effects for the absentee portion of the sampling frame are likely attributable to two factors: (1) the need to oversample individuals from smaller countries and from States with rare balloting policies led to a design which increased the variation in the sampling weights for the absentee records compared with unconfirmed requester records; and (2) the ability to allow for more levels and/or interactions of variables in the unconfirmed requester and calibration weighting adjustment processes, which led to a higher variation in weighting adjustment factors.

Table 6.18: Design Effects by Portion of Sampling Frame

Question	Absentee	Unconfirmed Requester
Voted in 2014 General Election (% voted)[46]	2.00	1.42
Voted in 2012 General Election (% voted)[47]	2.34	1.69
Voted in 2010 General Election (% voted)[48]	1.93	1.45
Requested Absentee Ballot for 2014 General Election (% yes)[49]	1.89	1.50
Interested in 2014 General Election (% somewhat/very)[50]	1.93	1.45
Aware of FVAP (% sought help from or were aware of FVAP)[51]	1.84	1.52

Note: Design effects (DEFF) were computed by treating the absentee and unconfirmed requester portions of the sampling frame as separate populations (i.e., absentee records were excluded from the computation of unconfirmed requester record DEFFS, and similarly unconfirmed requester records were excluded from the computation of absentee record DEFFs), given that the primary focus of the study was on the absentee portion of the sampling frame.

Table 6.19: Design Effects by World Region (Absentee Records Only)

Question	Africa	E. Asia & Pacific	Europe and Eurasia	Near East	S. & Cent. Asia	Canada and Mexico	W. Hemisphere (Other)
Voted, 2014 GE	1.43	2.04	1.78	3.12	0.92	2.41	1.13
Voted, 2012 GE	2.13	2.27	2.16	3.44	0.93	2.88	1.29
Voted, 2010 GE	1.47	2.02	1.71	2.93	0.76	2.28	1.13
Requested Absentee Ballot	1.50	1.96	1.65	3.04	0.87	2.14	1.13
Interested in 2014 GE	1.41	1.98	1.70	3.07	0.82	2.16	1.14
Aware of FVAP	1.73	1.94	1.61	2.81	0.87	2.16	1.17

Note: Design effects (DEFF) were computed by treating the absentee and unconfirmed requester portions of the sampling frame as separate populations (i.e., unconfirmed requester records were not taken into account in the table above), given that the primary focus of the study was on the absentee-portion of the sampling frame.

Calculation of Pilot Weights

For the most part, the pilot survey weighting design was similar to the design of the weights for the primary sample for the main survey. The biggest differences between the pilot study weights and

46 Question 6. "In the election held on November 4, 2014, did you definitely vote in person on election day, definitely complete an absentee ballot by mail, e-mail, fax, or online on or before November 4, 2014, definitely not vote, or are you not completely sure whether you voted?" (Design effect is reported for the proportion of individuals who reported voting.)

47 Question 21. "Elections for the President, U.S. Senate, and U.S. House of Representatives were held in 2012. A lot of people did not get to vote because they weren't registered, they were sick, or they didn't have time. How about you – did you vote in the 2012 general election?" (Design effect is reported for the proportion of individuals who reported voting.)

48 Question 20. "Elections for the U.S. Senate and U.S. House of Representatives were held in 2010. A lot of people did not get to vote because they weren't registered, they were sick, or they didn't have time. How about you – did you vote in the 2010 general election?" (Design effect is reported for the proportion of individuals who reported voting.)

49 Question 8. "Did you request an absentee ballot for the November 4, 2014, election?" (Design effect is reported for the proportion of individuals who reported requesting an absentee ballot.)

50 Question 9. "How interested or uninterested were you in the U.S. elections held on November 4, 2014?" (Design effect is reported for the proportion of individuals who reported being "very interested" or "somewhat interested.")

51 Question 14. "Did you seek voting information from the Federal Voting Assistance Program (FVAP)?" (Design effect is reported for the proportion of individuals who reported either "yes" or "no, but I was aware of FVAP's services.")

the main study primary sample weights were: (1) the pilot study eligibility criteria were defined more loosely to allow for analyses of eligibility criteria which could inform the main study's eligibility criteria; (2) the pilot study had a simpler sample design and, therefore, the base weights could be computed in a single step; (3) the smaller sample size did not allow for as many classifications or interactions in the raking dimensions; and (4) the techniques for accounting for missing data were less involved due to the need for timely pilot results (and without any advance knowledge of the associations between patterns of missing data, response rates, and survey variables).

The pilot survey weights were computed in five steps:

1. A disposition code was assigned to each pilot sample member indicating whether the sample member was an eligible respondent, an eligible nonrespondent, an ineligible sample member or a sample member whose eligibility status was unknown. Sample members providing completed questionnaires for the pilot survey were allowed to receive survey weights regardless of their answers to main survey screening questions to allow for analysis of such cases for purposes of informing the main study's eligibility criteria.

2. The pilot base weights were computed as the inverse of each sample member's probability of selection from the frame. Given that the probability of selection varied by country, in that it depended on the number of pilot survey population members available for sampling (i.e., with smaller countries oversampled), this step allowed for unbiased estimates that reflect the sample design, before any nonresponse.

3. The pilot base weights were adjusted to account for sample members whose eligibility for the survey could not be determined (members with unknown eligibility). These members neither returned a questionnaire nor provided any other information to indicate that they were ineligible for the study.

    - A logistic regression model was estimated predicting known eligibility based on voter participation history (i.e., whether sample members voted in the 2012 General Election only, in the 2014 General Election only, in both, or in neither), world region, WGI mean, age and age squared (continuous), State (CO; FL; NY; OR; and other), and sex; with random imputation applied for missing data, conditional on relevant covariates. The inverse of the model-estimated probabilities was applied as a multiplicative weighting adjustment to the base weights for cases with known eligibility, and weights for cases with unknown eligibility were removed.

4. The weights were adjusted for nonresponse among eligible sample members (eligible nonrespondents). These members were eligible but did not have usable survey data because they returned a blank or incomplete questionnaire.

- This adjustment was applied using weighting class adjustment methods, with four classes determined by voter participation history from step (3). Within each class, a flat multiplicative adjustment was applied to redistribute the weights of eligible nonrespondents to eligible respondents.

5. The weights were calibrated via raking to control totals from the frame. Calibration adjustments were used because they help correct for distortions in the sums of weights caused by nonresponse. Ineligibles were included in the calibration stage as they were reflected in the control totals, although their weights were removed from the final pilot analysis file.

    - Raking was conducted using the following dimensions: voter participation history cross-classified by country or region; voter participation history crossed by State; voter participation history crossed by sex; and voter participation history crossed by age group. Imputation was conducted for missing data. Voter participation history categories of *2014 only* and *both* were combined.

Although the weighting methods in the pilot survey and main survey are similar, the responses from pilot survey participants were not assigned weights for purposes of the main survey due to changes that could affect comparability, such as changes to eligibility screening criteria, as well as differences in timeframe for the surveys. Estimates from the pilot survey are not directly comparable to estimates from the main survey due to factors such as differences in survey eligibility criteria, updates to the sampling frame, and changes in the questionnaire.

Given that responses to the main survey are weighted to represent the entire absentee portion of the sampling frame, data users are strongly advised against combining responses from the pilot survey and main survey for analytical purposes. Simply combining the two data sets together and computing weighted estimates would be inappropriate and could cause severely biased estimates given that the pilot survey population is already represented in the main survey weights and, thus, this portion of the population would be overrepresented.

A Appendix A: Survey and Mailing Materials

Survey Instrument

FVAP.GOV
Federal Voting Assistance Program

FVAP 2015
Survey of Registered Voters Living Overseas

Privacy Notice

This survey does not collect or use personally identifiable information and is not retrieved by personal identifier. This notice informs you of the purpose of the *2015 Survey of Registered Voters Living Overseas* and how the findings of this survey will be used. Please read it carefully.

The Uniformed and Overseas Citizens Absentee Voting Act as modified by the Military and Overseas Voting Empowerment Act, 42 United States Code, Section 1973ff, and Executive Order 12642 requires the Department of Defense to conduct this survey.

This survey is conducted by the Federal Voting Assistance Program (FVAP), which works to ensure that all Service members, their eligible family members, and overseas citizens are aware of their right to vote and have the tools to do so - from anywhere in the world. Information collected in this survey will provide FVAP with critical information to help improve the services and information available for voters residing outside of the United States. Reports will be provided to the President and to Congress. Some findings may be published by FVAP or in professional journals, or presented at conferences, symposia, and scientific meetings. Data could be used in future research.

Completing this survey is voluntary. Most people can complete the survey in 10 minutes. There is no penalty if you choose not to respond. However, maximum participation is encouraged so that the data will be complete and representative. This survey is being conducted for program evaluation at the worldwide level and at the country level. Your responses will be treated as confidential. Identifying information will not be collected in this survey or delivered to FVAP.

Additional Information

SURVEY ELIGIBILITY AND POTENTIAL BENEFITS:

A sample of registered voters requesting absentee ballots sent to an international address was selected to participate in the survey. There is no direct benefit for your individual participation; however, your responses, when taken together with the responses from other overseas citizens, will ***make a difference*** by helping to identify absentee voting difficulties that arise and areas where FVAP's products and services can be improved.

STATEMENT OF RISK:

The data collection procedures do not involve any substantial risk of disclosure of data.

If you experience any difficulties taking the survey, please contact the Survey Processing Center by sending an e-mail to helpdesk@overseascitizensurvey.com or call 877-374-6217 toll-free. If you have concerns about your rights as a research participant, please contact the OUSD(P&R) Research Regulatory Oversight Office at 703-575-2677/703-575-3536 or e-mail R202@mail.mil.

Once you start answering the survey, if you desire to withdraw your answers, please notify the Survey Processing Center prior to 12/31/15. Please include in the e-mail or phone message your name, Ticket Number, and the PIN that you selected when you started this survey. Unless withdrawn, partially completed survey data may be used after that date.

Paperwork Reduction Act Notice

The public reporting burden for this collection of information is estimated to average 10 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to the Department of Defense, Washington Headquarters Services, Executive Services Directorate, Directives Division, 4800 Mark Center Drive, East Tower, Suite 02G09, Alexandria, VA 22350-3100 (0704-0539). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

Thank you for participating in our survey.
It is only by hearing from everyone that we can be sure that the results are truly representative.

Your participation is voluntary and you may choose not to answer specific questions.

Please make sure to fill out this survey using only blue/black ink or pencil.

WHERE DO YOU LIVE?

1. On November 4, 2014, where was your place of residence? (MARK ONLY ONE)

(1) United States/territories → **Skip to Question 6**

(2) Country other than the United States (please specify):

2. As of November 4, 2014, how long had you been located in this country?

YEARS

3. As of November 4, 2014, how long had you lived at your current address?

YEARS

4. As of November 4, 2014, how long had it been since you last lived in the United States?

YEARS

5. What was the primary reason you were living outside of the United States on November 4, 2014? (MARK ONLY ONE)

(1) To be close to extended family
(2) So that I could retire
(3) So that my spouse could retire
(4) So that I could go to school
(5) So that my spouse could go to school
(6) To obtain a job with a new employer
(7) So that my spouse could obtain a job with a new employer
(8) I was transferred by my employer
(9) My spouse was transferred by his/her employer
(10) I was a citizen of my destination country
(11) My spouse was a citizen of my destination country
(12) I was serving in the military
(13) My spouse was serving in the military
(14) Other (please specify):

OMB Control Number 0704-0539, expiration date 5/31/2018

YOUR 2014 VOTING EXPERIENCE

A lot of people were not able to vote because they weren't registered, they were sick, they didn't have time, or something else happened to prevent them from voting. And sometimes, people who USUALLY vote or who PLANNED to vote forget that something UNUSUAL happened on election day this year that prevented them from voting THIS time. So please think carefully for a minute about the election held on November 4, 2014.

6. In the election held on November 4, 2014, did you definitely vote in person on election day, definitely complete an absentee ballot by mail, e-mail, fax, or online on or before November 4, 2014, definitely not vote, or are you not completely sure whether you voted?
(MARK ONLY ONE)

1. Definitely voted in person
2. Definitely voted by mail
3. Definitely voted by e-mail
4. Definitely voted at an online website
5. Definitely voted by fax

→ **Skip to Question 8**

6. Not sure
7. Definitely did not vote

→ **7. What was the main reason you did not vote in the November 4, 2014, election?**
(MARK ONLY ONE)

1. I was too busy to vote.
2. I forgot to vote.
3. I was not registered to vote.
4. I had no candidate preference.
5. I did not think my vote would matter.
6. I felt out of touch with the issues in my local community.
7. I felt out of touch with the issues in the United States.
8. I did not know how to get an absentee ballot.
9. My absentee ballot arrived too late.
10. My absentee ballot did not arrive at all.
11. The absentee voting process was too complicated.
12. I was concerned my absentee ballot would not be counted.
13. Some other reason

8. Did you request an absentee ballot for the November 4, 2014, election?
(MARK ONLY ONE)

1. Yes
2. No, but I automatically received an absentee ballot from a local election official
3. No, and I never received an absentee ballot
4. No, I did not need an absentee ballot

9. How interested or uninterested were you in the U.S. elections held on November 4, 2014?
(MARK ONLY ONE)

1. Very uninterested
2. Somewhat uninterested
3. Neither interested nor uninterested
4. Somewhat interested
5. Very interested

10. Did you receive information about *voting procedures* from any of the following sources in 2014? (MARK ONE ANSWER FOR EACH ITEM)

	NO / YES
A. State or local election official	(Y) (N)
B. U.S. newspapers, magazines, radio, or TV	(Y) (N)
C. International newspapers, magazines, radio, or TV	(Y) (N)
D. Family or friends	(Y) (N)
E. Federal Voting Assistance Program website	(Y) (N)
F. Internet other than social media	(Y) (N)
G. Social media (e.g., Facebook, Twitter, blogs)	(Y) (N)
H. Directly from candidates/parties	(Y) (N)
I. Other	(Y) (N)

11. Did you receive information about the *candidates or election issues* from any of the following sources in 2014?
(MARK ONE ANSWER FOR EACH ITEM)

	NO / YES
A. U.S. newspapers, magazines, radio, or TV	(Y) (N)
B. International newspapers, magazines, radio, or TV	(Y) (N)
C. Family or friends	(Y) (N)
D. Internet other than social media	(Y) (N)
E. Social media (e.g., Facebook, Twitter, blogs)	(Y) (N)
F. Directly from candidates/parties	(Y) (N)
G. Other	(Y) (N)

12. In preparation for the 2014 primaries and general election, how many times did you visit your State/local election website? (MARK ONLY ONE)

1. Never → **Skip to Question 14**
2. Once
3. More than once
4. Do not recall

→ **13. Overall, how satisfied were you with the State/local election website when you visited it in 2014?**

1. Very satisfied
2. Satisfied
3. Neither satisfied nor dissatisfied
4. Dissatisfied
5. Very dissatisfied

OMB Control Number 0704-0539, expiration date 5/31/2018

14. Did you seek voting information from the Federal Voting Assistance Program (FVAP)?
(1) Yes
(2) No, and I was not aware of FVAP's services
(3) No, but I was aware of FVAP's services

15. Please indicate which, if any, FVAP products or services you used for voting assistance.
(MARK ALL THAT APPLY)
(1) FVAP.gov
(2) FVAP staff support
(3) FVAP online assistant tool
(4) None

16. In preparation for the 2014 primaries and general election, how many times did you visit FVAP.gov?
(MARK ONLY ONE)
(1) Never → **Skip to Question 18**
(2) Once
(3) More than once
(4) Do not recall

17. Overall, how satisfied were you with the FVAP website when you visited it in 2014?
(MARK ONLY ONE)
(1) Very satisfied
(2) Satisfied
(3) Neither satisfied nor dissatisfied
(4) Dissatisfied
(5) Very dissatisfied

18. How many U.S. citizens do you know who reside in the country in which you resided on November 4, 2014?
(MARK ONLY ONE)
(1) None → **Skip to Question 20**
(2) 1-2
(3) 3-4
(4) 5-10
(5) 11-20
(6) 21-50
(7) 51+

19. Of these U.S. citizens, how many of them would you estimate voted in the general election held on November 4, 2014?
(MARK ONLY ONE)
(1) None
(2) 1-2
(3) 3-4
(4) 5-10
(5) 11-20
(6) 21-50
(7) 51+

YOUR 2010 AND 2012 VOTING EXPERIENCES

20. Elections for the U.S. Senate and U.S. House of Representatives were held in 2010. A lot of people did not get to vote because they weren't registered, they were sick, or they didn't have time.

How about you – did you vote in the 2010 general election?
(MARK ONLY ONE)
(1) Definitely voted in person
(2) Definitely voted by mail
(3) Definitely voted by e-mail
(4) Definitely voted at an online website
(5) Definitely voted by fax
(6) Not sure
(7) Definitely did not vote

21. Elections for the President, U.S. Senate, and U.S. House of Representatives were held in 2012. A lot of people did not get to vote because they weren't registered, they were sick, or they didn't have time.

How about you – did you vote in the 2012 general election?
(MARK ONLY ONE)
(1) Definitely voted in person
(2) Definitely voted by mail
(3) Definitely voted by e-mail
(4) Definitely voted at an online website
(5) Definitely voted by fax
(6) Not sure
(7) Definitely did not vote

YOUR ACCESS TO MEDIA

22. Did you have a cell phone in November 2014?
(MARK ONLY ONE)
(1) Yes
(2) No → **Skip to Question 24**

23. Some cell phones are called "smartphones" because of certain features they have. Was your cell phone a smartphone such as an iPhone, Android, BlackBerry, or Windows phone?
(MARK ONLY ONE)
(1) Yes, it was a smartphone
(2) No, it was not a smartphone

OMB Control Number 0704-0539, expiration date 5/31/2018

24. Did you use a desktop or laptop computer at your workplace, at school, at home, or anywhere else on at least an occasional basis in November 2014? (MARK ONLY ONE)
- (1) Yes
- (2) No

25. Did you use the internet or email, at least occasionally in November 2014? (MARK ONLY ONE)
- (1) Yes
- (2) No → **Skip to Question 29**

26. Did you access the internet on a cell phone, tablet or other mobile handheld device, at least occasionally in November 2014? (MARK ONLY ONE)
- (1) Yes
- (2) No
- (3) Not sure/Don't know

27. During a typical week, how many days did you watch, read, or listen to news on the Internet, not including sports in November 2014? (MARK ONLY ONE)
- (1) None → **Skip to Question 29**
- (2) 1 day
- (3) 2 days
- (4) 3 days
- (5) 4 days
- (6) 5 days
- (7) 6 days
- (8) 7 days

28. How much attention did you pay to news about U.S. politics on the Internet in November 2014? (MARK ONLY ONE)
- (1) A great deal
- (2) A lot
- (3) A moderate amount
- (4) A little
- (5) None at all

29. How would you characterize the reliability of the postal service of the country in which you resided on November 4, 2014? (MARK ONLY ONE)
- (1) Very low reliability
- (2) Low reliability
- (3) Somewhat reliable
- (4) Reliable
- (5) Very reliable

30. How would you describe the quality of the roads near your home in the country in which you resided on November 4, 2014? (MARK ONLY ONE)
- (1) Very low quality
- (2) Low quality
- (3) Moderate quality
- (4) High quality
- (5) Very high quality

MORE ABOUT YOU

31. Are you Spanish/Hispanic/Latino? (MARK ONLY ONE)
- (1) No, not Spanish/Hispanic/Latino
- (2) Yes, Mexican, Mexican-American, Chicano, Puerto Rican, Cuban, or other Spanish/Hispanic/Latino

32. What is your race? (MARK ALL THAT APPLY)
- (1) White
- (2) Black or African-American
- (3) American Indian or Alaska Native
- (4) Asian (e.g., Asian Indian, Chinese, Filipino, Japanese, Korean, Vietnamese)
- (5) Native Hawaiian or other Pacific Islander (e.g., Samoan, Guamanian, or Chamorro)

33. What is the highest degree or level of school that you have completed? (MARK ONLY ONE)
- (1) 12 years or less of school
- (2) High school graduate - traditional diploma
- (3) High school graduate - alternative diploma (home school, GED, etc.)
- (4) Some college credit, but less than 1 year
- (5) 1 or more years of college, no degree
- (6) Associate's degree (e.g., AA, AS)
- (7) Bachelor's degree (e.g., BA, AB, BS)
- (8) Master's, doctoral, or professional school degree (e.g., MA, PhD, JD)

34. As of November 4, 2014, in which country or countries did you hold citizenship? (MARK ALL THAT APPLY)
- (1) United States
- (2) Country in which you were residing
- (3) Other (please specify):

OMB Control Number 0704-0539, expiration date 5/31/2018

35. What is your marital status?
(MARK ONLY ONE)

1. Married
2. Separated
3. Divorced
4. Widowed
5. Never Married

→ Skip to Question 37

36. As of November 4, 2014, in which country or countries did your spouse hold citizenship?
(MARK ALL THAT APPLY)

1. United States
2. Country in which you were residing
3. Other (please specify):

37. Do you have children?
(MARK ONLY ONE)

1. Yes
2. No → Skip to Question 39

38. As of November 4, 2014, in which country or countries did your children hold citizenship?
(MARK ALL THAT APPLY)

1. United States
2. Country in which you were residing
3. Other (please specify):

39. Which category represents your household's total combined income during the 12 months leading up to November 4, 2014? (MARK ONLY ONE)

1. Under $1,000
2. $1,000-4,999
3. $5,000-9,999
4. $10,000-19,999
5. $20,000-39,999
6. $40,000-49,999
7. $50,000-74,999
8. $75,000-99,999
9. $100,000-149,999
10. $150,000+

40. In the week before November 4, 2014, did you have a job either full-time or part-time? (MARK ONLY ONE)

1. Yes
2. No, I am retired
3. No, I am disabled
4. No, I am unable to work

→ Skip to end of survey

5. No, and not retired, disabled, or unable to work

41. Had you been doing anything to find work during the 4 weeks before November 4, 2014?
(MARK ONLY ONE)

1. No
2. Yes

Thank you for participating in the survey. If you have comments or concerns that you were not able to express in answering this survey, please enter them in the space provided below.

OMB Control Number 0704-0539, expiration date 5/31/2018

THANK YOU FOR YOUR PARTICIPATION!

Federal Voting Assistance Program
P.O. Box 42047
Arlington, VA 22204-9047

Invitation Letter

FVAP.GOV
Federal Voting Assistance Program

June, 5 2015

Dear ,

We are currently trying to learn more about the voting experiences of Americans living outside the United States, so that we can help ensure that all Americans abroad know of their right to vote and are able to successfully cast their ballots. You were randomly selected because state voting records show that you were living at a foreign address during the November 2014 election, and that qualifies you to give us the type of feedback that is vital to our success. As the Director the Federal Voting Assistance Program (FVAP), **I personally invite you to participate in a short, 10-minute survey regarding your experience with the 2014 election, whether you voted or not.**

We invite you to complete the 2015 Survey of Registered Voters Living Overseas online at:

http://www.OverseasCitizenSurvey.com

So that we do not re-contact you, enter your personal **Ticket Number:**

The act of voting is one of the most fundamental rights associated with democracy, and many citizens consider it to be an important experience. You may be aware that Americans who live and work abroad have the right to vote in American elections, but difficulties exercising this right do occur—in fact, you might have directly experienced difficulty in trying to cast an absentee ballot from outside of the United States. The United States government specifically established FVAP to ensure that all overseas citizens are aware of their right to vote and have the tools to do so from anywhere in the world. We need your participation in this survey to help us make sure we are doing all we can to fulfill that mission. The information gathered in this survey will help us as we work to improve the absentee voting process for all overseas U.S. citizens.

The survey is entirely voluntary. It does not collect any information regarding your political party affiliation or other political choices, and your responses to the survey will be kept confidential and will never be associated with your name.

If you have any questions or need assistance, please call our Survey Help Desk at 877-828-3122 or send an e-mail to helpdesk@overseascitizensurvey.com. If you have any questions or suggestions about the survey, please visit our website at www.FVAP.gov/info/contact.

Thank you for your help as we work to ensure that all Americans abroad know of their right to vote and have all the information and tools necessary to exercise that right.

Sincerely,

Matthew D Boehmer

Matt Boehmer
Director, FVAP

First Reminder Letter

FVAP.GOV
Federal Voting Assistance Program

June, 17 2015

Dear ,

About a week ago you should have received a letter inviting you to participate in an important survey sponsored by the Federal Voting Assistance Program (FVAP). FVAP is the federal office dedicated to ensuring that American citizens living outside the United States are aware of their right to vote and have the tools to do so. We asked for your feedback in order to learn more about the experiences of Americans living outside the United States so we can improve the services that we provide them. This survey is being conducted this year for the first time; our hope is that all overseas citizens, like you, have the opportunity to cast their vote no matter where they are located around the world. Your participation in this survey will provide us with critical information to make this possible.

If you have already completed the online survey, we thank you for sharing your experiences. If you have not yet had the opportunity to complete the survey, we encourage you to do so today.

To complete the short, 10-minute *2015 Survey of Registered Voters Living Overseas* go to:

http://www.OverseasCitizenSurvey.com

So that we do not re-contact you, enter your personal **Ticket Number:**

Although the survey is voluntary, we want to hear from everyone selected—voters and non-voters alike. Our goal is to receive replies from as many different citizens as possible and to use those replies to better understand the needs of citizens of the United States residing in other nations. The survey does not collect any information regarding your political party affiliation or other political choices. Your responses to the survey will be kept confidential and will never be associated with your name.

Our Survey Help Desk is available to assist you with completing the survey or to answer any questions you may have. You may contact us at 877-828-3122 or send an e-mail to helpdesk@overseascitizensurvey.com. If you have any additional questions or suggestions about the survey, please visit our website at www.FVAP.gov/info/contact.

Thank you for your help as we work to ensure that all Americans abroad know of their right to vote and have the information and tools to exercise that right from anywhere in the world.

Sincerely,

Matthew D Boehmer

Matt Boehmer
Director, FVAP

Second Reminder Letter

FVAP.GOV
Federal Voting Assistance Program

June, 25 2015

Dear ,

Voters and nonvoters, the Federal Voting Assistance Program (FVAP), the U.S. government agency charged with facilitating the voting process for overseas citizens, needs your participation in its *2015 Survey of Registered Voters Living Overseas*. Your views and opinions are important to us, and you are in a unique position to provide relevant insights on your experience with the 2014 election, whether you voted or not. I urge you to take this opportunity to complete the survey. The information and opinions you provide are critical to identifying and addressing problems that American citizens living outside the U.S. face as they exercise their right to vote. It is extremely important that U.S. citizens have the opportunity for full participation in our democracy, and your answers to this short survey will help us provide that opportunity for all Americans, wherever they may live around the world.

We understand that international mail can take some time, so you may have already completed the survey by the time you receive this notice. If this is the case, thank you for your time and effort. If you have not completed the survey, we invite you to do so as soon as possible. As of this mailing, we are still accepting both online and paper copies of the survey, and these additional responses will be combined with those we have already received and will also help us provide better voting services and assistance. The survey will only take 10 minutes, and does not collect any information regarding your political party affiliation or other political choices. Your responses to the survey will be kept confidential and will never be associated with your name.

A paper copy of the survey is enclosed here—you can complete this and return it in the envelope provided. If you would prefer to complete the survey online, please visit the *2015 Survey of Registered Voters Living Overseas* website at **http://www.OverseasCitizenSurvey.com** and enter your personal **Ticket Number:** 300000

If you have any questions or need assistance, please call our Survey Help Desk at 877-828-3122 or send an e-mail to helpdesk@overseascitizensurvey.com. If you have any suggestions about the survey, please visit our website at www.FVAP.gov/info/contact.

Thank you for your help as we work to ensure that all Americans abroad know of their right to vote and have the information and tools to successfully exercise that right.

Sincerely,

Matthew D Boehmer

Matt Boehmer
Director, FVAP

Final Reminder Postcard – Overseas Address

Recently you should have received an invitation to complete a survey about your experience as an American citizen living overseas during the November 2014 election. If you have already completed the survey, we thank you for your feedback. The information you provided will help us improve and support the absentee voting process for all citizens living outside of the United States.

If you have not yet completed the survey, please take a few moments to do so now. Go to this website:

http://www.OverseasCitizenSurvey.com

To access the survey, enter your personal Ticket Number, which is located above your name on the other side of this postcard.

If you have any questions or need assistance, please call our Survey Help Desk at 877-828-3122 or send an e-mail to helpdesk@overseascitizensurvey.com.

THANK YOU FOR YOUR TIME AND PARTICIPATION!

Final Reminder Postcard – Domestic Address

You were recently selected to participate in a survey being conducted by the Federal Voting Assistance Program, because state voting records show that you were living at a foreign address during the November 2014 election. We sent several letters to the overseas address listed in the state records, but have not received a response. Even if you are no longer living outside the U.S., we are still very interested in hearing about your experience with the 2014 election, whether you voted or not.

You can complete the short, 10-minute survey by going to this website:

http://www.OverseasCitizenSurvey.com

To access the survey, enter your personal Ticket Number, which is located above your name on the other side of this postcard.

If you have any questions or need assistance, please call our Survey Help Desk at 877-828-3122 or send an e-mail to helpdesk@overseascitizensurvey.com.

THANK YOU FOR YOUR TIME AND PARTICIPATION!

Federal Voting Assistance Program

Overseas Citizen Population Analysis

Volume 3: Tabulation of Survey Responses

February 2016

FORS|MARSH GROUP

Table of Contents

1 Summary of Survey Findings

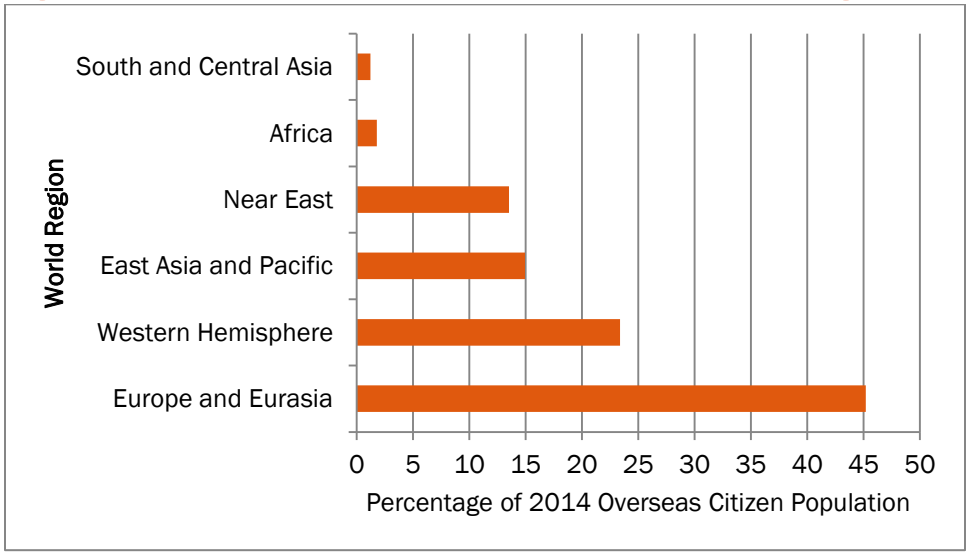
The Overseas Citizen Population Survey (OCPS) asked eligible respondents questions in five topic areas: (1) place of residence overseas, (2) voting experience in the 2014 General Election, (3) voting experiences in the 2010 and 2012 General Elections, (4) access to different types of media, and (5) demographic information. The survey was sent to 36,000 potential respondents and 8,078 (26 percent) responded. To be eligible, a respondent had to be a citizen of the United States; have resided overseas on November 4, 2014; not be a Uniformed Services voter; live in a State with an absentee request voter file; and have completed at least 25 percent of the survey or provided valid answers to the first six questions (Q1 through Q6). All of the results were weighted so that they are representative of this larger population.

Where Are Overseas Voters?

Overseas citizens who requested an absentee ballot can be found around the world, but the largest population by far lives in Europe and Eurasia (Europe, Russia, south to Turkey).[1] Approximately 16 percent live in Asia—which includes South/Central Asia (the Indian subcontinent to Kazakhstan) and the East Asia/Pacific regions (Korean, China, Japan south to Australia, including Pacific islands)—approximately 14 percent live in the Near East (North Africa and the Middle East), and just under one-fourth live in the Western Hemisphere—from Canada to Argentina. Only 2 percent of ballot requesters were living in Africa (sub-Saharan Africa) in 2014.

[1] The U.S. Department of State definitions of world regions can be found here: http://www.state.gov/countries/

Figure 3.1: Absentee Ballot Requesters, by World Region



Who Are Overseas Voters?

The weighted survey results presented in the summary table show that, in general, overseas citizens are older, White, married, employed and extremely well-educated. Almost 43 percent have dual citizenship in the country where they reside and about half use the internet daily. Overall, 56 percent of overseas citizens reported that they definitely voted in the 2014 election, 58 percent reported that they were either interested or very interested in the 2014 election and 29 percent were aware of FVAP and its resources.

Table 3.1: Key Characteristics by World Region

	Overall	Africa	East Asia	Europe	Near East	South Asia	Western Hemisphere
Reported Definitely Voted	57%	44%	55%	58%	51%	56%	57%
Aware of FVAP	29%	39%	32%	29%	26%	45%	25%
Interested/Very Interested in Election	58%	58%	54%	58%	58%	63%	59%
Age 18–34	23%	30%	22%	24%	30%	32%	16%
Age 55+	39%	32%	35%	35%	36%	29%	54%
Employed	66%	78%	74%	66%	71%	59%	56%
Retired	19%	9%	15%	17%	16%	19%	29%
Bachelor's	32%	29%	40%	31%	27%	41%	30%
Graduate Degree	46%	63%	46%	50%	44%	46%	40%
White, Non-Hispanic	80%	83%	74%	86%	91%	26%	70%
Hispanic	8%	1%	4%	6%	2%	1%	17%
Married	64%	57%	64%	61%	76%	66%	64%
Dual Citizen (Country in Which Residing)	43%	10%	24%	40%	73%	8%	47%
Low/Very Low Postal Reliability	15%	64%	13%	6%	26%	35%	23%
Use Internet Daily	48%	39%	54%	50%	35%	46%	47%
20+ Friends	28%	37%	31%	18%	70%	27%	20%

The overseas citizen population is diverse and varies in its characteristics across world regions.

- Africa: Younger, most likely to be employed and live in countries with the poorest postal reliability. These factors may explain, in part, the low voting rate by overseas citizens here.
- East Asia: Highest smartphone and internet use rates. Reported relatively low interest in the 2014 election but voted at roughly the overall rate.
- Europe: Most reliable postal systems, smallest American friend networks in-country. Largely White and well-educated.
- Near East: Most likely to be white, married and dual citizens. Have the lowest smartphone and internet use rates. Report the most American friends living in their country of residence.
- South Asia: Highest awareness of FVAP and interest in the election but voted at the overall rate. Largest under age 55 population and lowest dual citizen population.
- Western Hemisphere: Older, most likely to be retired, to be Hispanic and to be dual citizens.

2 Tabulation Procedures and Results

The following tabulations list the percentage for each question asked on the 2014 *Overseas Citizen Population Survey* (OCPS). Each question has been crossed with age, sex and region, which were obtained from the State voter and absentee request files, with income, race, education and marital status, which were obtained from the survey. All reported percentages were weighted using analytical weights for eligible respondents. To compress the width of columns in each table, column headings are labeled with a number which corresponds to one of the response options. Within a set of response options, percentages may not add to 100 percent due to rounding. There were few multiple responses (coded -97) or survey responses that were unintelligible due to damage to the paper survey (coded -91). For ease of reporting, these were recoded as refused (99) in the tabulations below. All tables list the number of eligible respondents, *N*, that were asked to answer this question. Tables in which *N* is less than the total number of eligible respondents are due to skip patterns planned within the survey questionnaire.

Place of Residence

Q1: On November 4, 2014, where was your place of residence? (*N* = 8078)
(1) United States/territories (2) Country other than the United States

All eligible respondents answered that they lived outside the United States on November 4, 2014. Those who responded to the survey and answered that they were in the United States were not considered eligible respondents.

Q2: As of November 4, 2014, how long had you been located in this country? [Years] (*N* = 8078)
(1) 5 years or less (2) 5+ to 13 years (3) 13+ to 25 years (4) More than 25 years (99) Refused

	Recoded Response Number				
	1	2	3	4	99
Respondents	27%	23%	26%	22%	1%
AGE					
Age 18 to 24	26%	8%	64%	0%	1%
Age 25 to 34	49%	21%	15%	15%	1%
Age 35 to 44	36%	35%	18%	10%	1%
Age 45 to 54	20%	25%	40%	13%	2%
Age 55 to 64	17%	19%	28%	36%	1%
Age 65 and up	17%	18%	21%	44%	1%
SEX					
Male	27%	23%	28%	21%	1%
Female	28%	22%	25%	24%	1%
REGION					
Africa	57%	23%	10%	8%	2%
East Asia	38%	28%	23%	10%	1%
Europe	25%	22%	29%	22%	1%
Near East	19%	15%	33%	30%	2%
South Asia	62%	22%	11%	4%	1%
Western Hemisphere	25%	24%	22%	27%	1%
INCOME					
$0–$19,999	30%	18%	32%	19%	1%
$20,000–$74,999	27%	23%	24%	25%	1%
$75,000+	28%	25%	26%	20%	0%
RACE					
White	25%	22%	27%	25%	1%
Black	35%	26%	23%	14%	1%
Hispanic	37%	25%	25%	13%	1%
Other Race	45%	29%	19%	6%	2%
EDUCATION					
Less Than Bachelor's	21%	20%	33%	24%	2%
Bachelor's Degree	28%	24%	25%	22%	1%
More Than Bachelor's	30%	22%	25%	22%	1%
MARITAL STATUS					
Married	25%	24%	26%	23%	1%
Divorced/Widowed	22%	22%	26%	30%	1%
Never Married	37%	18%	29%	15%	1%

Eligible respondents had been located in their overseas country for 15.4 years on average. One-quarter had been located there for 5 years or less, half had been there 13 years or less and three-quarters had been there 25 years or less.

Younger, non-White and never-married respondents had typically lived in their overseas country for less time than older, White and married respondents. Those with a bachelor's degree and those living in Africa, East Asia and South Asia were more likely to have recently moved to that foreign country than respondents with less than a college education or those living in Europe, the Near East and the Western Hemisphere.

Q3: As of November 4, 2014, how long had you lived at your current address? [Years] (*N* = 8078)
(1) 3 years or less (2) 3+ to 7 years (3) 7+ to 14 years (4) More than 14 years (99) Refused

	Q3 Recoded Response Number				
	1	2	3	4	99
Respondents	29%	26%	21%	22%	2%
AGE					
Age 18 to 24	25%	13%	25%	35%	2%
Age 25 to 34	53%	24%	6%	15%	2%
Age 35 to 44	40%	36%	17%	5%	1%
Age 45 to 54	22%	29%	31%	16%	2%
Age 55 to 64	19%	23%	26%	30%	1%
Age 65 and up	15%	21%	24%	37%	3%
SEX					
Male	29%	26%	22%	21%	2%
Female	29%	25%	21%	23%	2%
REGION					
Africa	52%	22%	16%	9%	1%
East Asia	40%	30%	19%	10%	2%
Europe	29%	26%	21%	22%	2%
Near East	25%	18%	21%	34%	3%
South Asia	43%	33%	12%	10%	2%
Western Hemisphere	23%	27%	25%	24%	2%
INCOME					
$0–$19,999	28%	23%	20%	27%	3%
$20,000–$74,999	30%	25%	21%	22%	1%
$75,000+	31%	29%	22%	18%	1%
RACE					
White	28%	25%	22%	24%	1%
Black	31%	26%	18%	23%	2%
Hispanic	31%	28%	23%	15%	3%
Other Race	39%	33%	17%	9%	2%
EDUCATION					
Less Than Bachelor's	21%	23%	24%	30%	3%
Bachelor's Degree	31%	25%	22%	20%	2%
More Than Bachelor's	32%	27%	20%	20%	1%
MARITAL STATUS					
Married	27%	26%	23%	22%	2%
Divorced/Widowed	24%	28%	23%	23%	2%
Never Married	38%	22%	16%	22%	2%

Respondents had been located at their overseas address for 8.6 years on average. One-quarter had been located at this address for 3 years or less, half had been there 7 years or less and three-quarters had been there 14 years or less.

Those aged 25 to 44 years old were more likely to have recently moved to their overseas address than those aged 55 and up. Respondents who had a lower income, were White, were college educated and were never married were more likely to recently have moved to their overseas address than those who had a higher income, were non-White, had less than college educated and were married. Respondents in Africa, East Asia and South Asia had more recently moved to their overseas address than those living in countries in Europe, the Near East and the Western Hemisphere.

Q4: As of November 4, 2014, how long had it been since you last lived in the United States? [Years] (*N* = 8078)

(1) 5 years or less (2) 5+ to 12 years (3) 12+ to 24 years (4) More than 24 years (99) Refused

	Q4 Recoded Response Number				
	1	2	3	4	99
Respondents	26%	26%	23%	23%	3%
AGE					
Age 18 to 24	36%	11%	42%	2%	9%
Age 25 to 34	46%	27%	11%	13%	3%
Age 35 to 44	27%	43%	20%	8%	2%
Age 45 to 54	17%	26%	39%	16%	2%
Age 55 to 64	17%	19%	24%	38%	2%
Age 65 and up	17%	20%	17%	43%	3%
SEX					
Male	26%	26%	24%	21%	3%
Female	25%	25%	23%	24%	3%
REGION					
Africa	48%	30%	13%	9%	0%
East Asia	32%	33%	21%	13%	2%
Europe	22%	25%	26%	24%	2%
Near East	25%	19%	26%	26%	4%
South Asia	53%	24%	14%	6%	2%
Western Hemisphere	25%	26%	20%	26%	3%
INCOME					
$0–$19,999	32%	22%	24%	19%	3%
$20,000–$74,999	26%	26%	21%	24%	3%
$75,000+	24%	28%	26%	21%	1%
RACE					
White	24%	25%	24%	25%	3%
Black	36%	26%	19%	15%	3%
Hispanic	30%	28%	27%	12%	3%
Other Race	38%	33%	19%	7%	3%
EDUCATION					
Less Than Bachelor's	24%	21%	27%	23%	5%
Bachelor's Degree	28%	26%	21%	22%	3%
More Than Bachelor's	25%	27%	23%	23%	2%
MARITAL STATUS					
Married	23%	27%	24%	24%	2%
Divorced/Widowed	18%	24%	25%	30%	3%
Never Married	38%	22%	23%	13%	4%

On average, eligible respondents had last lived in the United States 13.6 years ago. One-quarter had been located at this address for 5 years or less, half had been there 12 years or less and three-quarters had been there 24 years or less. Younger, male, White and never-married respondents were more likely to have recently lived in the United States than older, female, non-White and married respondents. Respondents in Africa, East Asia and South Asia had more recently lived in the United States than those living in countries in Europe, the Near East and the Western Hemisphere.

Q5: What was the primary reason you were living outside of the United States on November 4, 2014? (*N* = 8078)

(1) To be close to extended family (2) So that I could retire (3) So that my spouse could retire (4) So that I could go to school (5) So that my spouse could go to school (6) To obtain a job with a new employer (7) So that my spouse could obtain a job with a new employer (8) I was transferred by my employer (9) My spouse was transferred by his/her employer (10) I was a citizen of my destination country (11) My spouse was a citizen of my destination country (12) I was serving in the military (13) My spouse was serving in the military (14) Other (99) Refused

	Q5 Response Number												
	1	2	3	4	5	6	7	8	9	10	11	14	99
Respondents	13%	4%	0%	4%	0%	14%	3%	5%	2%	12%	19%	23%	1%
AGE													
Age 18 to 24	16%	0%	0%	19%	0%	4%	0%	0%	0%	32%	4%	24%	0%
Age 25 to 34	10%	0%	0%	9%	1%	20%	2%	3%	1%	17%	15%	22%	1%
Age 35 to 44	9%	0%	0%	2%	0%	19%	3%	7%	3%	12%	24%	19%	1%
Age 45 to 54	11%	1%	0%	1%	0%	17%	4%	8%	3%	8%	24%	21%	1%
Age 55 to 64	11%	3%	0%	1%	0%	13%	3%	7%	3%	8%	23%	27%	1%
Age 65 and up	21%	15%	1%	0%	0%	7%	2%	2%	1%	7%	17%	24%	2%
SEX													
Male	12%	6%	0%	3%	0%	20%	1%	7%	1%	12%	15%	22%	1%
Female	13%	2%	1%	5%	0%	10%	4%	3%	3%	11%	23%	23%	1%
REGION													
Africa	7%	3%	0%	3%	0%	20%	0%	12%	2%	2%	16%	34%	0%
East Asia	6%	5%	0%	3%	0%	26%	3%	10%	4%	6%	17%	20%	1%
Europe	12%	2%	0%	4%	0%	12%	3%	5%	2%	12%	24%	23%	1%
Near East	22%	2%	0%	4%	1%	10%	2%	2%	0%	20%	6%	30%	2%
South Asia	29%	6%	1%	8%	0%	22%	2%	4%	2%	2%	6%	18%	1%
Western Hemisphere	14%	8%	1%	3%	0%	13%	4%	3%	2%	11%	20%	19%	1%
INCOME													
$0–$19,999	23%	6%	0%	8%	0%	7%	0%	1%	0%	14%	9%	29%	2%
$20,000–$74,999	14%	6%	1%	3%	1%	14%	2%	2%	1%	12%	19%	25%	1%
$75,000+	7%	2%	0%	2%	0%	20%	5%	10%	4%	10%	23%	17%	1%
RACE													
White	12%	4%	0%	3%	0%	14%	3%	5%	2%	12%	20%	23%	1%
Black	15%	12%	1%	3%	0%	13%	2%	3%	1%	10%	22%	18%	0%
Hispanic	19%	7%	1%	4%	0%	14%	2%	3%	2%	10%	18%	19%	1%
Other Race	15%	3%	0%	7%	0%	21%	3%	7%	3%	7%	15%	18%	1%
EDUCATION													
Less Than Bachelor's	22%	8%	1%	4%	0%	4%	2%	1%	1%	13%	18%	24%	2%
Bachelor's Degree	11%	3%	0%	4%	0%	13%	3%	6%	2%	11%	23%	23%	1%
More Than Bachelor's	10%	3%	0%	3%	0%	20%	3%	6%	2%	11%	17%	22%	1%
MARITAL STATUS													
Married	12%	4%	0%	2%	0%	13%	4%	6%	3%	8%	27%	20%	1%
Divorced/Widowed	22%	8%	0%	1%	0%	12%	2%	3%	1%	10%	12%	26%	3%
Never Married	11%	2%	0%	11%	0%	20%	0%	5%	0%	21%	3%	26%	1%

For those living abroad, 25 percent listed their spouse as the main reason he or she was overseas on November 4, 2014. Either their spouse was a citizen of the country in which they resided (19 percent), took a new job (3 percent) or was transferred for work (2 percent). Nineteen percent of respondents were overseas for work, either to obtain a job with a new employer (14 percent) or because they were transferred (5 percent). Thirteen percent were overseas to be with extended family, and 12 percent were citizens of that foreign country.

Younger respondents were more likely to be overseas to attend school or because they were citizens both of their country of residence and the United States. Middle-aged respondents were more likely to list obtaining a job, being transferred or moving because their spouse was a citizen of the destination country. Respondents 65 and older were more likely to answer that they were overseas to be with extended family or to retire. Males were more likely than females to say they were overseas because they were transferred, to obtain a job or to retire, and females were more likely to be overseas to go to school, so their spouse could obtain a job or because their spouse was a citizen of the destination country. Regionally, respondents from South Asia and the Near East were more likely to be overseas to be close to extended family, those in the Western Hemisphere to retire, and those in Africa, East Asia and South Asia to obtain a job or because they were transferred. Those with yearly incomes of less than $20,000 were more likely to say they were overseas to be close to extended family or go to school. Those with incomes over $75,000 were more likely to answer that they were overseas so that they or their spouse could obtain a job or were transferred, or that their spouse was a citizen of the destination country. Respondents with less than a college education more often said they were overseas to be close to extended family or retire, and those with a college education or higher more often said they were there to obtain a job or because they were transferred. Married respondents were more likely to explain being overseas as a result of moving to be with their spouse. Divorced and widowed respondents were more likely to answer they were overseas to be close to extended family or retire. Those who were never married were more likely to answer they moved to go to school, obtain a job or because they were a citizen of their country of residence.

Q5A: Content Coded Responses	
1: To be close to extended family	4%
2: Retirement	1%
3: Academic Reasons	2%
4: To obtain a job with a new employer	19%
5: Transferred by employer	1%
6: I am a resident in my destination country	21%
7: My spouse was a resident in my destination country	8%
8: Military reasons	0%
9: Religious/Missionary reasons	12%
10: Volunteer/Humanitarian work	3%
11: Caretaker responsibilities	2%
12: Quality of life concerns	4%
13: U.S. Policies	1%
14: Personal preference	14%
15: Other/Don't Know/Noise	7%

Note: The content code population consists of those who responded "14: Other" on Q5. Open-ended answers were content coded into the following categories based on a detailed content codebook that listed examples and variations for each category. If the respondent gave several reasons from multiple categories, their answer was coded as the category that is in order a) most prominent, b) their reason for leaving the U.S. initially or c) the first listed reason.

For those who responded "other" to the question, "What was the primary reason you were living outside of the United States on November 4, 2014?," 56 percent wrote answers that were listed in non-other responses to Q5 (Q5A: 1–7). Many of these respondents either responded that their

move was due to multiple reasons, despite one being more prominent, or that they were born or grew up in their current foreign country. For example, many were living in this country because their parent(s) had previously moved to the country. 14 percent of respondents moved abroad because it was their personal preference, 12 percent moved abroad for religious or missionary reasons and 4 percent moved abroad due to quality of life concerns.

2014 Voting Experience

A lot of people were not able to vote because they weren't registered, they were sick, they didn't have time or something else happened to prevent them from voting. And sometimes, people who usually vote or who planned to vote forget that something unusual happened on Election Day this year that prevented them from voting this time. So please think carefully for a minute about the election held on November 4, 2014.

Q6: In the election held on November 4, 2014, did you definitely vote in person on election day; definitely complete an absentee ballot by mail, e-mail, fax or online on or before November 4, 2014; definitely not vote or are you not completely sure whether you voted? (*N* = 8078)
(1) Definitely voted in person (2) Definitely voted by mail (3) Definitely voted by email (4) Definitely voted at an online website (5) Definitely voted by fax (6) Definitely did not vote (98) Not sure (99) Refused

	Q6 Response Number							
	1	2	3	4	5	6	98	99
Respondents	1%	45%	6%	3%	2%	25%	18%	1%
AGE								
Age 18 to 24	1%	44%	1%	2%	2%	27%	23%	0%
Age 25 to 34	1%	42%	7%	4%	2%	27%	16%	0%
Age 35 to 44	0%	40%	4%	3%	2%	31%	20%	0%
Age 45 to 54	1%	42%	6%	3%	3%	28%	18%	1%
Age 55 to 64	1%	49%	6%	3%	2%	21%	17%	1%
Age 65 and up	1%	50%	6%	2%	2%	20%	18%	1%
SEX								
Male	1%	47%	6%	3%	2%	25%	15%	1%
Female	1%	43%	5%	3%	2%	25%	20%	1%
REGION								
Africa	1%	19%	14%	5%	5%	39%	16%	1%
East Asia	1%	39%	8%	3%	4%	29%	16%	0%
Europe	1%	49%	5%	2%	1%	22%	19%	1%
Near East	1%	41%	4%	3%	2%	23%	24%	1%
South Asia	5%	37%	10%	1%	3%	24%	18%	2%
Western Hemisphere	1%	45%	6%	3%	2%	28%	14%	1%
INCOME								
$0–$19,999	2%	43%	5%	2%	1%	25%	21%	1%
$20,000–$74,999	1%	45%	6%	3%	2%	26%	18%	1%
$75,000+	1%	46%	7%	3%	3%	24%	16%	1%
RACE								
White	1%	46%	6%	3%	2%	24%	18%	1%
Black	2%	42%	4%	4%	1%	32%	13%	2%
Hispanic	1%	39%	5%	2%	2%	29%	20%	1%
Other Race	2%	43%	4%	5%	1%	30%	14%	0%
EDUCATION								
Less Than Bachelor's	1%	46%	4%	2%	1%	25%	20%	1%
Bachelor's Degree	1%	42%	6%	3%	2%	26%	19%	1%
More Than Bachelor's	0%	47%	7%	3%	2%	24%	17%	0%
MARITAL STATUS								
Married	1%	45%	6%	3%	2%	25%	17%	1%
Divorced/Widowed	1%	42%	6%	2%	2%	25%	21%	1%
Never Married	1%	45%	5%	2%	2%	26%	19%	0%

Fifty-seven percent of respondents said they had definitely voted by some means in the November 4, 2014, election. Most (45 percent) said they had submitted their 2014 vote via mail. Twenty-five percent of respondents said they definitely did not vote in the 2014 election, and 18 percent said they were unsure.

Those who were 55 years or older were more likely than younger age groups to answer that they definitely voted by some means, usually by mail. Respondents in Africa and South Asia were more likely than respondents in other regions to vote by email instead of by mail. Those living in Africa were also more likely to say they definitely did not vote.

Q7: What was the main reason you did not vote in the November 4, 2014, election? (*N* = 1527)
(1) I was too busy to vote (2) I forgot to vote (3) I was not registered to vote (4) I had no candidate preference (5) I did not think my vote would matter (6) I felt out of touch with the issues in my local community (7) I felt out of touch with the issues in the United States (8) I did not know how to get an absentee ballot (9) My absentee ballot arrived too late (10) My absentee ballot did not arrive at all (11) The absentee voting process was too complicated (12) I was concerned my absentee ballot would not be counted (13) Some other reason (99) Refused

	Q7 Response Number													
	1	2	3	4	5	6	7	8	9	10	11	12	13	99
Respondents	2%	7%	4%	12%	3%	14%	7%	2%	6%	11%	10%	1%	13%	7%
AGE														
Age 18 to 24	0%	11%	18%	10%	1%	7%	17%	1%	4%	0%	7%	0%	18%	6%
Age 25 to 34	5%	12%	3%	10%	2%	16%	6%	1%	14%	10%	11%	0%	4%	7%
Age 35 to 44	2%	7%	1%	9%	4%	12%	8%	4%	5%	11%	14%	1%	13%	8%
Age 45 to 54	1%	6%	4%	18%	6%	16%	4%	3%	5%	11%	10%	0%	10%	4%
Age 55 to 64	1%	3%	2%	13%	3%	21%	4%	2%	3%	12%	7%	5%	17%	5%
Age 65 and up	1%	5%	4%	13%	2%	12%	6%	2%	5%	12%	7%	1%	21%	8%
SEX														
Male	2%	6%	3%	14%	4%	13%	7%	4%	6%	12%	11%	1%	12%	5%
Female	2%	8%	4%	10%	3%	16%	7%	1%	6%	10%	9%	1%	14%	8%
REGION														
Africa	4%	3%	0%	11%	1%	15%	2%	3%	22%	10%	22%	0%	8%	1%
East Asia	3%	6%	0%	13%	5%	14%	8%	3%	7%	14%	13%	0%	8%	7%
Europe	2%	9%	2%	11%	3%	15%	9%	1%	6%	11%	8%	2%	13%	7%
Near East	1%	3%	14%	17%	9%	11%	4%	1%	3%	7%	5%	4%	12%	11%
South Asia	0%	1%	2%	25%	2%	8%	4%	7%	15%	9%	12%	0%	10%	5%
Western Hemisphere	1%	8%	4%	11%	1%	16%	3%	4%	6%	11%	13%	1%	18%	4%
INCOME														
$0–$19,999	2%	3%	10%	13%	1%	12%	7%	3%	5%	10%	11%	2%	15%	6%
$20,000–$74,999	2%	9%	3%	12%	3%	13%	7%	2%	8%	10%	9%	1%	14%	6%
$75,000+	2%	7%	1%	12%	5%	17%	6%	3%	5%	13%	11%	1%	10%	6%
RACE														
White	2%	7%	4%	12%	4%	16%	7%	2%	6%	10%	9%	2%	12%	7%
Black	1%	18%	1%	11%	4%	7%	5%	5%	14%	21%	4%	1%	5%	2%
Hispanic	2%	10%	4%	12%	0%	3%	2%	3%	5%	13%	21%	0%	26%	1%
Other Race	4%	7%	1%	14%	0%	16%	4%	3%	8%	11%	11%	0%	11%	8%
EDUCATION														
Less Than Bachelor's	2%	9%	7%	14%	1%	9%	7%	1%	5%	12%	10%	1%	14%	7%
Bachelor's Degree	2%	8%	3%	11%	5%	15%	6%	1%	6%	12%	11%	1%	11%	7%
More Than Bachelor's	2%	6%	3%	12%	3%	17%	7%	4%	7%	9%	9%	2%	14%	6%
MARITAL STATUS														
Married	2%	6%	4%	13%	4%	15%	6%	3%	6%	12%	10%	1%	12%	6%
Divorced/Widowed	2%	5%	6%	10%	1%	10%	4%	5%	5%	13%	10%	3%	20%	7%
Never Married	2%	11%	3%	10%	2%	14%	10%	1%	9%	7%	9%	0%	13%	8%

For the respondents who said they had not voted in the November 4, 2014, election, 29 percent answered that it was related to an absentee ballot issue. They indicated that they did not vote because their absentee ballot did not arrive at all (11 percent), the absentee voting process was too complicated (10 percent), their absentee ballot arrived too late (6 percent) or they did not know how to get an absentee ballot (2 percent). Other respondents most commonly answered

that they did not vote because they felt out of touch with issues in their local community (14 percent) or had no candidate preference (12 percent).

Compared to other age groups, respondents aged 18 to 24 were more likely to say they did not vote because they were not registered or forgot; those aged 25 to 34 were more likely to report they did not vote because they had an absentee ballot issue or were too busy and those aged 45 to 64 were more likely to report they did not vote because they had no candidate preference or were out of touch with the local community. Male respondents more often said that they did not vote because they had no candidate preference or faced an absentee ballot issue, and female respondents more often said they felt out of touch with their local community or forgot to vote. Those in Africa, East Asia and South Asia were more likely than those in other regions to say they did not vote due to an absentee ballot issue. Respondents living in countries in Europe, the Near East and the Western Hemisphere were more likely than other regions to say their reason for not voting was because they felt out of touch or forgot to vote. Respondents with incomes less than $20,000 who did not vote were more likely to say they did not vote because they were not registered, and those with incomes over $75,000 were more likely to say they did not vote because they felt out of touch with their local community. White respondents who did not vote in 2014 more often attributed not voting to being out of touch with their local community than non-Whites, whereas Blacks and Hispanics listed absentee ballot issues and forgetting to vote more often than Whites. Those with a college degree or more who did not vote were more likely to attribute it to feeling out of touch with their local community. Married respondents who did not vote were more likely to say they had no candidate preference, and never-married respondents were more likely to say they forgot to vote or felt out of touch with the United States.

Q8: Did you request an absentee ballot for the November 4, 2014, election? (*N* = 8078)
(1) Yes (2) No, but I automatically received an absentee ballot from a local election official (3) No, and I never received an absentee ballot (4) No, I did not need an absentee ballot

	Q8 Response Number				
	1	2	3	4	99
Respondents	43%	40%	11%	4%	2%
AGE					
Age 18 to 24	45%	32%	15%	5%	2%
Age 25 to 34	49%	33%	12%	4%	1%
Age 35 to 44	40%	44%	12%	3%	1%
Age 45 to 54	41%	41%	12%	4%	1%
Age 55 to 64	41%	46%	8%	3%	1%
Age 65 and up	40%	43%	10%	4%	3%
SEX					
Male	44%	39%	12%	3%	2%
Female	43%	41%	11%	4%	2%
REGION					
Africa	49%	35%	11%	4%	2%
East Asia	48%	36%	10%	4%	1%
Europe	42%	42%	10%	4%	2%
Near East	40%	40%	15%	4%	2%
South Asia	51%	35%	10%	2%	1%
Western Hemisphere	43%	40%	12%	4%	2%
INCOME					
$0–$19,999	42%	37%	13%	6%	2%
$20,000–$74,999	43%	41%	11%	4%	1%
$75,000+	46%	40%	11%	3%	1%
RACE					
White	43%	41%	10%	4%	2%
Black	41%	39%	15%	3%	2%
Hispanic	43%	33%	16%	6%	2%
Other Race	48%	39%	10%	2%	1%
EDUCATION					
Less Than Bachelor's	39%	41%	14%	4%	2%
Bachelor's Degree	43%	41%	11%	4%	1%
More Than Bachelor's	46%	39%	10%	4%	1%
MARITAL STATUS					
Married	42%	42%	11%	3%	1%
Divorced/Widowed	42%	39%	11%	5%	2%
Never Married	47%	36%	12%	4%	1%

A total of 83 percent of respondents received an absentee ballot by either requesting an absentee ballot (43 percent) or automatically receiving it from a local election official (40 percent).

Though different age groups received absentee ballots roughly equally, those over age 35 were more likely to receive them automatically through a local election official. Respondents from Europe, the Near East and the Western Hemisphere were more likely to receive absentee ballots automatically than those in other geographic regions. Black and Hispanic respondents were more likely to report not receiving an absentee ballot than White respondents. Those with less than a college degree were more likely than those with a college degree to not receive an absentee ballot. Respondents who were married were more likely than never-married respondents to receive their absentee ballot automatically.

Q9: How interested or uninterested were you in the U.S. elections held on November 4, 2014? (*N* = 8078)

(1) Very uninterested (2) Somewhat uninterested (3) Neither interested nor uninterested
(4) Somewhat interested (5) Very interested (99) Refused

	Q9 Response Number					
	1	2	3	4	5	99
Respondents	19%	13%	9%	25%	33%	0%
AGE						
Age 18 to 24	11%	14%	17%	35%	23%	0%
Age 25 to 34	15%	15%	11%	30%	29%	0%
Age 35 to 44	18%	18%	10%	26%	28%	0%
Age 45 to 54	23%	13%	10%	23%	31%	0%
Age 55 to 64	21%	12%	6%	23%	38%	0%
Age 65 and up	23%	8%	8%	21%	40%	1%
SEX						
Male	22%	14%	8%	23%	34%	0%
Female	17%	13%	11%	27%	32%	0%
REGION						
Africa	12%	16%	14%	26%	32%	0%
East Asia	17%	16%	13%	24%	30%	0%
Europe	20%	12%	9%	26%	32%	0%
Near East	19%	15%	8%	29%	29%	0%
South Asia	19%	10%	8%	30%	33%	0%
Western Hemisphere	21%	12%	8%	21%	38%	0%
INCOME						
$0–$19,999	15%	13%	10%	28%	34%	1%
$20,000–$74,999	21%	13%	9%	24%	32%	0%
$75,000+	21%	14%	9%	24%	33%	0%
RACE						
White	20%	13%	9%	25%	33%	0%
Black	19%	12%	12%	23%	34%	0%
Hispanic	18%	11%	13%	21%	37%	0%
Other Race	16%	13%	11%	32%	28%	0%
EDUCATION						
Less Than Bachelor's	19%	10%	10%	27%	33%	1%
Bachelor's Degree	19%	15%	10%	24%	31%	0%
More Than Bachelor's	20%	13%	8%	24%	34%	0%
MARITAL STATUS						
Married	20%	13%	9%	24%	33%	0%
Divorced/Widowed	22%	11%	8%	23%	37%	0%
Never Married	17%	14%	10%	28%	31%	0%

The majority of people (58 percent) said they were either very or somewhat interested in the U.S. elections held on November 4, 2014. Thirty-two percent said they were either somewhat or very uninterested in the 2014 elections.

Older and male respondents were more polarized than younger and female respondents, with the majority saying they were either very interested or very uninterested. Respondents with incomes below $20,000 were more interested in the 2014 election than those with higher income levels. Those who were never married were more neutral in their interest levels towards the 2014 election compared to married respondents.

Voting Procedure Information

Q10A: Did you receive information about voting procedures from any of the following sources in 2014? [State or local election official] (*N* = 8078)

(0) No (1) Yes (99) Refused

	Q10A Response Number		
	0	1	99
Respondents	42%	48%	10%
AGE			
Age 18 to 24	58%	28%	14%
Age 25 to 34	50%	42%	7%
Age 35 to 44	46%	47%	7%
Age 45 to 54	42%	49%	8%
Age 55 to 64	34%	56%	10%
Age 65 and up	32%	53%	15%
SEX			
Male	40%	51%	9%
Female	43%	46%	11%
REGION			
Africa	43%	49%	8%
East Asia	41%	53%	6%
Europe	41%	49%	10%
Near East	49%	38%	14%
South Asia	42%	43%	15%
Western Hemisphere	40%	50%	10%
INCOME			
$0–$19,999	45%	43%	12%
$20,000–$74,999	43%	47%	10%
$75,000+	40%	52%	8%
RACE			
White	41%	49%	10%
Black	44%	45%	11%
Hispanic	45%	44%	11%
Other Race	45%	47%	8%
EDUCATION			
Less Than Bachelor's	44%	43%	13%
Bachelor's Degree	43%	49%	9%
More Than Bachelor's	40%	51%	9%
MARITAL STATUS			
Married	40%	50%	10%
Divorced/Widowed	38%	50%	12%
Never Married	48%	44%	9%

Forty-eight percent of respondents received information about voting procedures from a State or local election official. Older, male, higher income, White, college educated and married respondents were more likely to receive information from a State or local election official than younger, female, lower income, non-White, not college educated and never-married respondents.

Q10B: Did you receive information about voting procedures from any of the following sources in 2014? [U.S. newspapers, magazines, radio or TV] (*N* = 8078)
(0) No (1) Yes (99) Refused

	Q10B Response Number		
	0	1	99
Respondents	65%	15%	20%
AGE			
Age 18 to 24	77%	10%	13%
Age 25 to 34	73%	14%	13%
Age 35 to 44	72%	15%	13%
Age 45 to 54	69%	13%	18%
Age 55 to 64	60%	15%	25%
Age 65 and up	49%	21%	29%
SEX			
Male	64%	16%	20%
Female	66%	15%	19%
REGION			
Africa	67%	11%	23%
East Asia	67%	15%	18%
Europe	65%	16%	19%
Near East	66%	12%	22%
South Asia	52%	20%	28%
Western Hemisphere	63%	17%	20%
INCOME			
$0–$19,999	62%	16%	22%
$20,000–$74,999	63%	17%	20%
$75,000+	70%	14%	16%
RACE			
White	66%	15%	20%
Black	51%	23%	26%
Hispanic	63%	20%	17%
Other Race	65%	19%	17%
EDUCATION			
Less Than Bachelor's	61%	16%	23%
Bachelor's Degree	68%	14%	17%
More Than Bachelor's	65%	16%	20%
MARITAL STATUS			
Married	66%	15%	19%
Divorced/Widowed	55%	17%	28%
Never Married	69%	15%	16%

Fifteen percent of respondents received information about voting procedures from U.S. newspapers, magazines, radio or TV. Respondents with income less than $75,000 who were older and non-White were more likely to receive information from U.S. newspapers, magazines, radio or TV than higher income, younger and White respondents.

Q10C: Did you receive information about voting procedures from any of the following sources in 2014? [International newspapers, magazines, radio or TV] (*N* = 8078)
(0) No (1) Yes (99) Refused

	Q10C Response Number		
	0	1	99
Respondents	63%	16%	20%
AGE			
Age 18 to 24	71%	15%	14%
Age 25 to 34	72%	15%	13%
Age 35 to 44	70%	17%	14%
Age 45 to 54	68%	13%	19%
Age 55 to 64	58%	17%	24%
Age 65 and up	49%	21%	31%
SEX			
Male	63%	17%	20%
Female	64%	16%	20%
REGION			
Africa	62%	12%	26%
East Asia	69%	12%	18%
Europe	62%	18%	20%
Near East	61%	17%	21%
South Asia	53%	17%	30%
Western Hemisphere	64%	16%	21%
INCOME			
$0–$19,999	56%	20%	23%
$20,000–$74,999	62%	17%	21%
$75,000+	69%	15%	16%
RACE			
White	65%	15%	20%
Black	56%	17%	27%
Hispanic	56%	24%	20%
Other Race	64%	20%	17%
EDUCATION			
Less Than Bachelor's	59%	18%	23%
Bachelor's Degree	67%	15%	18%
More Than Bachelor's	64%	16%	20%
MARITAL STATUS			
Married	65%	15%	20%
Divorced/Widowed	54%	17%	28%
Never Married	65%	19%	17%

Sixteen percent of respondents received information about voting procedures from international newspapers, magazines, radio or TV. Those respondents who were aged 55 or older, were not living in Africa or East Asia, were non-White, had a lower income and were never-married were more likely to receive information about voting procedures from international newspapers, magazines, radio or TV than younger, higher income, White, married respondents from Africa or East Asia.

Q10D: Did you receive information about voting procedures from any of the following sources in 2014? [Family or friends] (*N* = 8078)
(0) No (1) Yes (99) Refused

	Q10D Response Number		
	0	1	99
Respondents	57%	24%	19%
AGE			
Age 18 to 24	41%	47%	12%
Age 25 to 34	55%	37%	8%
Age 35 to 44	62%	25%	13%
Age 45 to 54	64%	17%	19%
Age 55 to 64	58%	18%	25%
Age 65 and up	51%	16%	33%
SEX			
Male	58%	21%	21%
Female	55%	26%	18%
REGION			
Africa	60%	17%	23%
East Asia	62%	21%	18%
Europe	56%	25%	19%
Near East	46%	34%	19%
South Asia	48%	23%	29%
Western Hemisphere	61%	18%	21%
INCOME			
$0–$19,999	49%	30%	22%
$20,000–$74,999	55%	25%	20%
$75,000+	64%	21%	16%
RACE			
White	57%	24%	19%
Black	48%	22%	30%
Hispanic	54%	26%	20%
Other Race	57%	28%	15%
EDUCATION			
Less Than Bachelor's	51%	27%	22%
Bachelor's Degree	59%	24%	17%
More Than Bachelor's	58%	23%	19%
MARITAL STATUS			
Married	59%	21%	19%
Divorced/Widowed	54%	17%	29%
Never Married	51%	35%	14%

Twenty-four percent of respondents received information about voting procedures from family or friends. Those who were younger, were female, had a lower income, were not college educated or were never married were more likely to receive information about voting procedures from friends and family than older, male, higher income, college educated and married respondents.

Q10E: Did you receive information about voting procedures from any of the following sources in 2014? [Federal Voting Assistance Program website] (*N* = 8078)
(0) No (1) Yes (99) Refused

	Q10E Response Number		
	0	1	99
Respondents	58%	22%	19%
AGE			
Age 18 to 24	61%	24%	15%
Age 25 to 34	63%	26%	11%
Age 35 to 44	63%	25%	12%
Age 45 to 54	61%	23%	16%
Age 55 to 64	56%	20%	24%
Age 65 and up	52%	16%	32%
SEX			
Male	58%	22%	19%
Female	59%	22%	19%
REGION			
Africa	55%	23%	22%
East Asia	59%	25%	16%
Europe	58%	23%	19%
Near East	60%	18%	22%
South Asia	42%	37%	21%
Western Hemisphere	59%	21%	21%
INCOME			
$0–$19,999	54%	22%	23%
$20,000–$74,999	57%	22%	21%
$75,000+	63%	23%	14%
RACE			
White	59%	22%	19%
Black	48%	25%	26%
Hispanic	58%	22%	20%
Other Race	58%	27%	15%
EDUCATION			
Less Than Bachelor's	57%	20%	23%
Bachelor's Degree	60%	22%	18%
More Than Bachelor's	58%	24%	18%
MARITAL STATUS			
Married	59%	22%	19%
Divorced/Widowed	53%	19%	28%
Never Married	60%	24%	16%

Twenty-two percent of respondents received information about voting procedures from the FVAP.gov website. Those respondents who were younger, never married or had more than a bachelor's degree were more likely to receive information about voting procedures from the FVAP.gov website than those respondents who were older, divorced or widowed, or had less than a college degree.

Q10F: Did you receive information about voting procedures from any of the following sources in 2014? [Internet other than social media] (*N* = 8078)
(0) No (1) Yes (99) Refused

	Q10F Response Number		
	0	1	99
Respondents	56%	24%	20%
AGE			
Age 18 to 24	60%	25%	15%
Age 25 to 34	63%	25%	12%
Age 35 to 44	60%	27%	13%
Age 45 to 54	59%	23%	18%
Age 55 to 64	53%	23%	24%
Age 65 and up	49%	20%	31%
SEX			
Male	54%	26%	20%
Female	58%	22%	20%
REGION			
Africa	59%	17%	24%
East Asia	59%	24%	17%
Europe	56%	25%	19%
Near East	59%	19%	22%
South Asia	45%	28%	27%
Western Hemisphere	56%	25%	20%
INCOME			
$0–$19,999	54%	22%	24%
$20,000–$74,999	54%	26%	20%
$75,000+	61%	23%	16%
RACE			
White	57%	23%	19%
Black	52%	18%	30%
Hispanic	53%	27%	20%
Other Race	53%	31%	16%
EDUCATION			
Less Than Bachelor's	54%	22%	24%
Bachelor's Degree	58%	24%	17%
More Than Bachelor's	57%	24%	19%
MARITAL STATUS			
Married	57%	24%	19%
Divorced/Widowed	53%	19%	28%
Never Married	57%	27%	16%

Twenty-four percent of respondents received information about voting procedures from the internet, excluding social media. Younger, male, middle income, Hispanic and never-married respondents were more likely to receive information about voting procedures from the internet, excluding social media, than older, female, high and low income, non-Hispanic and divorced or widowed respondents.

Q10G: Did you receive information about voting procedures from any of the following sources in 2014? [Social media (e.g., Facebook, Twitter, blogs)] (*N* = 8078)
(0) No (1) Yes (99) Refused

	Q10G Response Number		
	0	1	99
Respondents	68%	10%	22%
AGE			
Age 18 to 24	69%	15%	16%
Age 25 to 34	73%	15%	12%
Age 35 to 44	70%	14%	15%
Age 45 to 54	72%	9%	20%
Age 55 to 64	65%	6%	28%
Age 65 and up	59%	5%	36%
SEX			
Male	68%	10%	23%
Female	67%	10%	22%
REGION			
Africa	68%	6%	26%
East Asia	69%	12%	19%
Europe	68%	10%	22%
Near East	66%	10%	24%
South Asia	54%	12%	33%
Western Hemisphere	69%	8%	23%
INCOME			
$0–$19,999	62%	11%	26%
$20,000–$74,999	66%	11%	23%
$75,000+	73%	9%	18%
RACE			
White	69%	9%	22%
Black	59%	12%	30%
Hispanic	63%	15%	23%
Other Race	66%	15%	19%
EDUCATION			
Less Than Bachelor's	63%	11%	26%
Bachelor's Degree	69%	11%	20%
More Than Bachelor's	69%	9%	22%
MARITAL STATUS			
Married	69%	9%	22%
Divorced/Widowed	61%	7%	32%
Never Married	67%	14%	19%

Ten percent of respondents received information about voting procedures from social media, such as Facebook, Twitter or blogs. Younger, lower income, non-White, never-married respondents with a bachelor's degree or less were more likely to receive information about voting procedures from social media, such as Facebook, Twitter or blogs, than older, higher income, White and married respondents with more than a bachelor's degree.

Q10H: Did you receive information about voting procedures from any of the following sources in 2014? [Directly from candidates/parties] (*N* = 8078)
(0) No (1) Yes (99) Refused

	Q10H Response Number		
	0	1	99
Respondents	66%	13%	21%
AGE			
Age 18 to 24	77%	6%	17%
Age 25 to 34	78%	10%	12%
Age 35 to 44	73%	13%	14%
Age 45 to 54	69%	12%	18%
Age 55 to 64	59%	15%	25%
Age 65 and up	52%	16%	32%
SEX			
Male	66%	14%	21%
Female	67%	12%	21%
REGION			
Africa	65%	9%	26%
East Asia	68%	14%	18%
Europe	67%	13%	20%
Near East	66%	10%	25%
South Asia	60%	7%	33%
Western Hemisphere	64%	15%	21%
INCOME			
$0–$19,999	64%	13%	23%
$20,000–$74,999	66%	12%	22%
$75,000+	70%	14%	16%
RACE			
White	67%	12%	21%
Black	53%	19%	28%
Hispanic	60%	19%	20%
Other Race	71%	12%	17%
EDUCATION			
Less Than Bachelor's	64%	12%	24%
Bachelor's Degree	68%	13%	19%
More Than Bachelor's	66%	13%	20%
MARITAL STATUS			
Married	66%	13%	20%
Divorced/Widowed	58%	13%	29%
Never Married	71%	12%	17%

Thirteen percent of respondents received information about voting procedures directly from candidates or parties. Older, male, black and Hispanic respondents were more likely to receive information about voting procedures directly from candidates or parties than younger, female and White respondents.

Q10I: Did you receive information about voting procedures from any of the following sources in 2014? [Other] (*N* = 8078)
(0) No (1) Yes (99) Refused

	Q10I Response Number		
	0	1	99
Respondents	60%	8%	32%
AGE			
Age 18 to 24	71%	6%	24%
Age 25 to 34	69%	7%	24%
Age 35 to 44	68%	7%	25%
Age 45 to 54	62%	8%	30%
Age 55 to 64	53%	8%	39%
Age 65 and up	48%	9%	43%
SEX			
Male	61%	7%	32%
Female	60%	8%	32%
REGION			
Africa	47%	15%	38%
East Asia	63%	6%	31%
Europe	61%	8%	31%
Near East	56%	9%	35%
South Asia	54%	7%	39%
Western Hemisphere	60%	8%	32%
INCOME			
$0–$19,999	56%	9%	35%
$20,000–$74,999	59%	8%	33%
$75,000+	65%	7%	27%
RACE			
White	61%	8%	32%
Black	52%	7%	41%
Hispanic	59%	8%	33%
Other Race	64%	6%	31%
EDUCATION			
Less Than Bachelor's	58%	8%	34%
Bachelor's Degree	62%	8%	31%
More Than Bachelor's	61%	8%	32%
MARITAL STATUS			
Married	61%	8%	32%
Divorced/Widowed	52%	9%	40%
Never Married	65%	7%	28%

Eight percent of respondents received information about voting procedures from other sources.

Election Information Sources

Q11A: Did you receive information about the candidates or election issues from any of the following sources in 2014? [U.S. newspapers, magazines, radio or TV] (*N* = 8078)
(0) No (1) Yes (99) Refused

	Q11A Response Number		
	0	1	99
Respondents	37%	52%	10%
AGE			
Age 18 to 24	59%	38%	4%
Age 25 to 34	41%	51%	9%
Age 35 to 44	41%	53%	7%
Age 45 to 54	36%	55%	9%
Age 55 to 64	33%	55%	12%
Age 65 and up	31%	52%	17%
SEX			
Male	34%	56%	9%
Female	40%	48%	12%
REGION			
Africa	50%	38%	13%
East Asia	40%	53%	7%
Europe	38%	52%	11%
Near East	41%	43%	16%
South Asia	36%	46%	18%
Western Hemisphere	32%	59%	8%
INCOME			
$0–$19,999	47%	39%	14%
$20,000–$74,999	39%	50%	11%
$75,000+	32%	61%	7%
RACE			
White	37%	53%	10%
Black	37%	52%	11%
Hispanic	43%	45%	12%
Other Race	37%	54%	9%
EDUCATION			
Less Than Bachelor's	45%	42%	13%
Bachelor's Degree	40%	50%	10%
More Than Bachelor's	32%	58%	10%
MARITAL STATUS			
Married	36%	53%	11%
Divorced/Widowed	37%	49%	14%
Never Married	42%	51%	8%

Fifty-two percent of respondents received information about the candidates or election issues from U.S. newspapers, magazines, radio or TV. Males and higher income respondents living in the Western Hemisphere, East Asia or Europe were more likely to receive information about the candidates or election issues from U.S. newspapers, magazines, radio or TV than females and lower income respondents from Africa, the Near East and South Asia.

Q11B: Did you receive information about the candidates or election issues from any of the following sources in 2014? [International newspapers, magazines, radio or TV] (*N* = 8078)
(0) No (1) Yes (99) Refused

	Q11B Response Number		
	0	1	99
Respondents	37%	52%	11%
AGE			
Age 18 to 24	54%	38%	8%
Age 25 to 34	41%	51%	7%
Age 35 to 44	42%	51%	7%
Age 45 to 54	35%	55%	10%
Age 55 to 64	32%	55%	12%
Age 65 and up	29%	52%	18%
SEX			
Male	35%	54%	11%
Female	39%	50%	12%
REGION			
Africa	43%	42%	16%
East Asia	40%	51%	8%
Europe	34%	56%	10%
Near East	36%	51%	13%
South Asia	39%	42%	20%
Western Hemisphere	39%	48%	13%
INCOME			
$0–$19,999	43%	42%	15%
$20,000–$74,999	38%	51%	11%
$75,000+	34%	58%	8%
RACE			
White	36%	53%	11%
Black	38%	41%	22%
Hispanic	42%	46%	12%
Other Race	39%	53%	9%
EDUCATION			
Less Than Bachelor's	43%	43%	14%
Bachelor's Degree	39%	51%	10%
More Than Bachelor's	33%	57%	10%
MARITAL STATUS			
Married	36%	53%	11%
Divorced/Widowed	35%	50%	15%
Never Married	40%	51%	8%

Fifty-two percent of respondents received information about the candidates or election issues from international newspapers, magazines, radio or TV. Respondents who were aged 45 to 64, male, had a higher income, were White or were higher educated were more likely to receive information about the candidates or election issues from international newspapers, magazines, radio or TV than respondents who were female, had a lower income, were non-White, were less than college educated or were from other age groups.

Q11C: Did you receive information about the candidates or election issues from any of the following sources in 2014? [Family or friends] (*N* = 8078)
(0) No (1) Yes (99) Refused

	Q11C Response Number		
	0	1	99
Respondents	40%	46%	14%
AGE			
Age 18 to 24	42%	49%	10%
Age 25 to 34	34%	59%	7%
Age 35 to 44	42%	49%	9%
Age 45 to 54	42%	45%	12%
Age 55 to 64	41%	42%	18%
Age 65 and up	41%	33%	26%
SEX			
Male	42%	44%	15%
Female	39%	47%	14%
REGION			
Africa	47%	36%	16%
East Asia	43%	46%	10%
Europe	38%	48%	14%
Near East	34%	50%	16%
South Asia	37%	40%	23%
Western Hemisphere	46%	38%	16%
INCOME			
$0–$19,999	44%	40%	17%
$20,000–$74,999	39%	46%	16%
$75,000+	41%	48%	11%
RACE			
White	39%	47%	14%
Black	42%	35%	23%
Hispanic	49%	35%	16%
Other Race	45%	43%	11%
EDUCATION			
Less Than Bachelor's	42%	41%	17%
Bachelor's Degree	41%	46%	13%
More Than Bachelor's	38%	48%	14%
MARITAL STATUS			
Married	40%	46%	15%
Divorced/Widowed	44%	35%	20%
Never Married	38%	51%	10%

Forty-six percent of respondents received information about the candidates or election issues from family or friends. Younger, female, higher income, White, higher educated and never-married respondents were more likely to receive information about the candidates or election issues from family and friends than older, male, lower income, non-White, lower educated and divorced or widowed respondents.

Q11D: Did you receive information about the candidates or election issues from any of the following sources in 2014? [Internet other than social media] (*N* = 8078)
(0) No (1) Yes (99) Refused

	Q11D Response Number		
	0	1	99
Respondents	35%	52%	13%
AGE			
Age 18 to 24	48%	43%	9%
Age 25 to 34	34%	58%	8%
Age 35 to 44	38%	53%	8%
Age 45 to 54	33%	57%	10%
Age 55 to 64	29%	58%	13%
Age 65 and up	37%	40%	23%
SEX			
Male	32%	57%	11%
Female	38%	48%	14%
REGION			
Africa	45%	40%	15%
East Asia	32%	61%	7%
Europe	34%	53%	13%
Near East	38%	44%	17%
South Asia	29%	51%	20%
Western Hemisphere	37%	51%	12%
INCOME			
$0–$19,999	42%	40%	18%
$20,000–$74,999	34%	54%	12%
$75,000+	34%	58%	8%
RACE			
White	35%	53%	12%
Black	44%	32%	24%
Hispanic	39%	47%	14%
Other Race	34%	58%	8%
EDUCATION			
Less Than Bachelor's	40%	43%	17%
Bachelor's Degree	36%	53%	11%
More Than Bachelor's	32%	56%	11%
MARITAL STATUS			
Married	35%	53%	12%
Divorced/Widowed	36%	47%	17%
Never Married	35%	54%	10%

Fifty-two percent of respondents received information about the candidates or election issues from the internet, excluding social media. Middle-aged, male, higher income, White and higher educated respondents were more likely to receive information about the candidates or election issues from the internet (excluding social media) than female, lower income, non-White, lower educated and other age group respondents.

Q11E: Did you receive information about the candidates or election issues from any of the following sources in 2014? [Social media (e.g., Facebook, Twitter, blogs)] (*N* = 8078)
(0) No (1) Yes (99) Refused

	Q11E Response Number		
	0	1	99
Respondents	55%	27%	19%
AGE			
Age 18 to 24	57%	31%	12%
Age 25 to 34	45%	44%	11%
Age 35 to 44	51%	38%	11%
Age 45 to 54	59%	25%	16%
Age 55 to 64	59%	18%	23%
Age 65 and up	58%	10%	32%
SEX			
Male	55%	27%	18%
Female	54%	27%	19%
REGION			
Africa	55%	26%	19%
East Asia	55%	32%	13%
Europe	54%	27%	19%
Near East	51%	25%	24%
South Asia	48%	26%	27%
Western Hemisphere	58%	23%	19%
INCOME			
$0–$19,999	55%	23%	22%
$20,000–$74,999	51%	29%	20%
$75,000+	58%	29%	14%
RACE			
White	55%	26%	19%
Black	57%	17%	26%
Hispanic	54%	28%	18%
Other Race	51%	36%	13%
EDUCATION			
Less Than Bachelor's	57%	21%	22%
Bachelor's Degree	53%	30%	16%
More Than Bachelor's	55%	27%	18%
MARITAL STATUS			
Married	56%	25%	19%
Divorced/Widowed	56%	17%	26%
Never Married	50%	36%	14%

Twenty-seven percent of respondents received information about the candidates or election issues from social media, including Facebook, Twitter and blogs. Younger, higher income and never-married respondents and those respondents whose highest level of education was a bachelor's degree were more likely to receive information about the candidates or election issues from social media, including Facebook, Twitter and blogs, than older, lower income and divorced or widowed respondents with less than a bachelor's degree.

Q11F: Did you receive information about the candidates or election issues from any of the following sources in 2014? [Directly from candidates/parties] (*N*=8078)
(0) No (1) Yes (99) Refused

	Q11F Response Number		
	0	1	99
Respondents	57%	26%	17%
AGE			
Age 18 to 24	70%	16%	14%
Age 25 to 34	60%	28%	12%
Age 35 to 44	64%	25%	11%
Age 45 to 54	60%	26%	14%
Age 55 to 64	54%	26%	19%
Age 65 and up	47%	26%	27%
SEX			
Male	57%	27%	16%
Female	58%	25%	17%
REGION			
Africa	52%	29%	19%
East Asia	56%	32%	12%
Europe	57%	26%	17%
Near East	60%	18%	23%
South Asia	56%	19%	25%
Western Hemisphere	57%	26%	17%
INCOME			
$0–$19,999	58%	21%	20%
$20,000–$74,999	57%	25%	18%
$75,000+	59%	29%	12%
RACE			
White	58%	26%	17%
Black	52%	23%	24%
Hispanic	55%	28%	17%
Other Race	58%	28%	14%
EDUCATION			
Less Than Bachelor's	60%	20%	19%
Bachelor's Degree	59%	25%	16%
More Than Bachelor's	55%	29%	16%
MARITAL STATUS			
Married	57%	26%	17%
Divorced/Widowed	53%	25%	22%
Never Married	62%	24%	14%

Twenty-six percent of respondents received information about the candidates or election issues directly from candidates or parties. Higher income and higher educated respondents were more likely to receive information about the candidates or election issues directly from candidates or parties than lower income and lower educated respondents.

Q11G: Did you receive information about the candidates or election issues from any of the following sources in 2014? [Other] (*N* = 8078)
(0) No (1) Yes (99) Refused

	Q11G Response Number		
	0	1	99
Respondents	61%	8%	30%
AGE			
Age 18 to 24	73%	7%	20%
Age 25 to 34	67%	9%	24%
Age 35 to 44	68%	8%	23%
Age 45 to 54	63%	8%	29%
Age 55 to 64	56%	8%	36%
Age 65 and up	51%	8%	41%
SEX			
Male	61%	9%	30%
Female	62%	8%	30%
REGION			
Africa	55%	5%	39%
East Asia	62%	9%	29%
Europe	63%	8%	29%
Near East	57%	9%	34%
South Asia	58%	8%	33%
Western Hemisphere	62%	8%	31%
INCOME			
$0–$19,999	59%	9%	32%
$20,000–$74,999	61%	8%	31%
$75,000+	66%	8%	27%
RACE			
White	62%	8%	30%
Black	53%	7%	40%
Hispanic	61%	8%	31%
Other Race	62%	7%	30%
EDUCATION			
Less Than Bachelor's	61%	8%	31%
Bachelor's Degree	62%	8%	29%
More Than Bachelor's	61%	8%	30%
MARITAL STATUS			
Married	61%	9%	31%
Divorced/Widowed	55%	8%	37%
Never Married	67%	7%	26%

Eight percent of respondents received information about the candidates or election issues from other sources.

Q12: In preparation for the 2014 primaries and general election, how many times did you visit your State/local election website? (*N* = 8078)
(1) Never (2) Once (3) More than once (98) Do not recall (99) Refused

	Q12 Response Number				
	1	2	3	98	99
Respondents	58%	17%	14%	11%	1%
AGE					
Age 18 to 24	63%	11%	12%	12%	0%
Age 25 to 34	51%	23%	15%	11%	0%
Age 35 to 44	63%	16%	12%	9%	0%
Age 45 to 54	59%	15%	12%	13%	1%
Age 55 to 64	56%	18%	15%	11%	0%
Age 65 and up	60%	13%	14%	11%	2%
SEX					
Male	55%	18%	16%	10%	1%
Female	60%	15%	12%	11%	1%
REGION					
Africa	55%	20%	15%	9%	1%
East Asia	51%	21%	18%	10%	0%
Europe	60%	16%	13%	10%	1%
Near East	70%	13%	7%	10%	1%
South Asia	52%	17%	21%	10%	1%
Western Hemisphere	52%	18%	16%	14%	1%
INCOME					
$0–$19,999	59%	14%	13%	13%	1%
$20,000–$74,999	56%	17%	16%	11%	1%
$75,000+	58%	18%	13%	10%	0%
RACE					
White	59%	17%	14%	10%	1%
Black	55%	12%	13%	18%	2%
Hispanic	55%	17%	14%	14%	1%
Other Race	52%	18%	16%	13%	0%
EDUCATION					
Less Than Bachelor's	60%	13%	14%	11%	1%
Bachelor's Degree	58%	17%	14%	11%	1%
More Than Bachelor's	57%	18%	14%	11%	0%
MARITAL STATUS					
Married	58%	17%	13%	11%	1%
Divorced/Widowed	61%	13%	13%	12%	2%
Never Married	54%	18%	16%	11%	0%

Fifty-eight percent of respondents never visited their State or local election website before the 2014 election, and 31 percent visited their State or local election website at least once. Female, white, less educated and divorced or widowed respondents were less likely to have visited their State or local election website before the 2014 election than male, non-White, higher educated and never-married respondents.

Q13: Overall, how satisfied were you with the State/local election website when you visited it in 2014? (*N* = 2812)
(1) Very satisfied (2) Satisfied (3) Neither satisfied nor dissatisfied (4) Dissatisfied (5) Very dissatisfied

	Q13 Response Number					
	1	2	3	4	5	99
Respondents	15%	45%	30%	8%	2%	1%
AGE						
Age 18 to 24	11%	54%	24%	11%	0%	0%
Age 25 to 34	8%	40%	40%	9%	3%	0%
Age 35 to 44	10%	41%	36%	10%	3%	0%
Age 45 to 54	16%	45%	28%	8%	2%	1%
Age 55 to 64	16%	47%	29%	6%	2%	1%
Age 65 and up	24%	51%	18%	4%	2%	1%
SEX						
Male	16%	47%	27%	7%	3%	0%
Female	13%	44%	33%	8%	1%	1%
REGION						
Africa	6%	66%	19%	5%	4%	0%
East Asia	14%	43%	30%	8%	4%	1%
Europe	14%	45%	31%	8%	1%	0%
Near East	19%	40%	30%	4%	6%	1%
South Asia	21%	45%	15%	16%	3%	0%
Western Hemisphere	15%	46%	28%	8%	2%	1%
INCOME						
$0–$19,999	16%	45%	30%	6%	4%	1%
$20,000–$74,999	15%	44%	31%	7%	2%	0%
$75,000+	15%	46%	28%	8%	3%	1%
RACE						
White	16%	45%	29%	7%	2%	0%
Black	14%	54%	25%	5%	2%	0%
Hispanic	10%	52%	27%	9%	2%	1%
Other Race	9%	41%	37%	9%	2%	1%
EDUCATION						
Less Than Bachelor's	16%	49%	27%	6%	1%	1%
Bachelor's Degree	13%	46%	30%	7%	3%	0%
More Than Bachelor's	15%	43%	30%	9%	2%	1%
MARITAL STATUS						
Married	16%	44%	29%	8%	2%	1%
Divorced/Widowed	20%	41%	26%	7%	4%	1%
Never Married	9%	48%	33%	8%	2%	0%

Of those respondents who visited their State or local election website, 55 percent were very satisfied or satisfied with the website. Only 10 percent were dissatisfied or very dissatisfied with their State or local website, and 30 percent said they were neither satisfied nor dissatisfied. Older, male and lower educated respondents were more satisfied with their State or local election website than younger, female and higher educated respondents.

Experiences with FVAP

Q14: Did you seek voting information from the Federal Voting Assistance Program (FVAP)? (*N* = 8078) [2]

(1) Yes (2) No, and I was not aware of FVAP's services (3) No, but I was aware of FVAP's services (99) Refused

	Q14 Response Number			
	1	2	3	99
Respondents	15%	71%	14%	1%
AGE				
Age 18 to 24	20%	69%	10%	1%
Age 25 to 34	19%	69%	11%	1%
Age 35 to 44	15%	70%	16%	0%
Age 45 to 54	15%	70%	14%	1%
Age 55 to 64	13%	70%	16%	1%
Age 65 and up	10%	76%	13%	1%
SEX				
Male	15%	70%	14%	1%
Female	14%	71%	13%	1%
REGION				
Africa	19%	61%	20%	0%
East Asia	17%	68%	15%	0%
Europe	14%	70%	15%	1%
Near East	13%	73%	13%	1%
South Asia	29%	54%	16%	1%
Western Hemisphere	15%	74%	10%	1%
INCOME				
$0–$19,999	17%	71%	11%	1%
$20,000–$74,999	15%	70%	15%	1%
$75,000+	14%	71%	14%	1%
RACE				
White	14%	71%	14%	1%
Black	15%	72%	12%	1%
Hispanic	16%	68%	15%	1%
Other Race	19%	67%	14%	0%
EDUCATION				
Less Than Bachelor's	13%	73%	12%	2%
Bachelor's Degree	15%	70%	14%	1%
More Than Bachelor's	16%	70%	14%	1%
MARITAL STATUS				
Married	14%	71%	14%	1%
Divorced/Widowed	14%	70%	15%	1%
Never Married	18%	70%	12%	0%

Seventy-one percent of respondents said they did not seek voting information from FVAP and were not aware of FVAP. Fifteen percent used FVAP to seek out voting information. Younger, lower income, higher educated and never-married respondents were more likely to use FVAP to seek out voting information than older, higher income, lower educated and married respondents.

2 The slight differences observed across the FVAP resource questions (Q10E, Q14, Q15_1, Q15_2, Q15_3, and Q16) are the result of issues related to survey question ordering, question wording and how questions were presented to respondents. Note that, although there are small variations in results across questions, in general, the findings are consistent.

Q15_1: Please indicate which, if any, FVAP products or services you used for voting assistance. [FVAP.gov] (*N* = 8078)
(0) Not Selected (1) Selected

	Q15_1 Response Number 0	1
Respondents	84%	16%
AGE		
Age 18 to 24	81%	19%
Age 25 to 34	78%	22%
Age 35 to 44	82%	18%
Age 45 to 54	83%	17%
Age 55 to 64	86%	14%
Age 65 and up	92%	8%
SEX		
Male	83%	17%
Female	85%	15%
REGION		
Africa	79%	21%
East Asia	80%	20%
Europe	84%	16%
Near East	88%	12%
South Asia	68%	32%
Western Hemisphere	85%	15%
INCOME		
$0–$19,999	83%	17%
$20,000–$74,999	84%	16%
$75,000+	84%	16%
RACE		
White	85%	15%
Black	83%	17%
Hispanic	81%	19%
Other Race	75%	25%
EDUCATION		
Less Than Bachelor's	86%	14%
Bachelor's Degree	84%	16%
More Than Bachelor's	83%	17%
MARITAL STATUS		
Married	85%	15%
Divorced/Widowed	86%	14%
Never Married	81%	19%

Sixteen percent of respondents used FVAP.gov for voting assistance. Younger, male, non-White, higher educated and never-married respondents from Africa, East Asia and South Asia were more likely to use FVAP.gov for voting assistances than older, female, White, lower educated and married respondents from Europe, the Near East and the Western Hemisphere.

Q15_2: Please indicate which, if any, FVAP products or services you used for voting assistance. [FVAP staff support] (*N* = 8078)
(0) Not Selected (1) Selected

	Q15_2 Response Number 0	1
Respondents	99%	1%
AGE		
Age 18 to 24	98%	2%
Age 25 to 34	98%	2%
Age 35 to 44	99%	1%
Age 45 to 54	99%	1%
Age 55 to 64	99%	1%
Age 65 and up	99%	1%
SEX		
Male	99%	1%
Female	99%	1%
REGION		
Africa	99%	1%
East Asia	99%	1%
Europe	99%	1%
Near East	99%	1%
South Asia	96%	4%
Western Hemisphere	99%	1%
INCOME		
$0–$19,999	97%	3%
$20,000–$74,999	99%	1%
$75,000+	99%	1%
RACE		
White	99%	1%
Black	99%	1%
Hispanic	97%	3%
Other Race	98%	2%
EDUCATION		
Less Than Bachelor's	98%	2%
Bachelor's Degree	99%	1%
More Than Bachelor's	99%	1%
MARITAL STATUS		
Married	99%	1%
Divorced/Widowed	97%	3%
Never Married	99%	1%

One percent of respondents used FVAP staff support for voting assistance.

Q15_3: Please indicate which, if any, FVAP products or services you used for voting assistance. [FVAP online assistance tool] (*N* = 8078)
(0) Not Selected (1) Selected

	Q15_3 Response Number 0	1
Respondents	96%	4%
AGE		
Age 18 to 24	94%	6%
Age 25 to 34	96%	4%
Age 35 to 44	95%	5%
Age 45 to 54	96%	4%
Age 55 to 64	95%	5%
Age 65 and up	96%	4%
SEX		
Male	95%	5%
Female	96%	4%
REGION		
Africa	98%	2%
East Asia	93%	7%
Europe	96%	4%
Near East	95%	5%
South Asia	93%	7%
Western Hemisphere	96%	4%
INCOME		
$0–$19,999	94%	6%
$20,000–$74,999	96%	4%
$75,000+	95%	5%
RACE		
White	96%	4%
Black	94%	6%
Hispanic	94%	6%
Other Race	93%	7%
EDUCATION		
Less Than Bachelor's	95%	5%
Bachelor's Degree	95%	5%
More Than Bachelor's	96%	4%
MARITAL STATUS		
Married	96%	4%
Divorced/Widowed	96%	4%
Never Married	95%	5%

Four percent of respondents used FVAP online assistance tool for voting assistance.

Q15_4: Please indicate which, if any, FVAP products or services you used for voting assistance. [None] (*N* = 8078)
(0) Not Selected (1) Selected

	Q15_4 Response Number	
	0	1
Respondents	21%	79%
AGE		
Age 18 to 24	24%	76%
Age 25 to 34	27%	73%
Age 35 to 44	21%	79%
Age 45 to 54	21%	79%
Age 55 to 64	20%	80%
Age 65 and up	15%	85%
SEX		
Male	21%	79%
Female	21%	79%
REGION		
Africa	24%	76%
East Asia	24%	76%
Europe	21%	79%
Near East	19%	81%
South Asia	38%	62%
Western Hemisphere	20%	80%
INCOME		
$0–$19,999	24%	76%
$20,000–$74,999	21%	79%
$75,000+	20%	80%
RACE		
White	19%	81%
Black	22%	78%
Hispanic	25%	75%
Other Race	30%	70%
EDUCATION		
Less Than Bachelor's	20%	80%
Bachelor's Degree	21%	79%
More Than Bachelor's	21%	79%
MARITAL STATUS		
Married	20%	80%
Divorced/Widowed	21%	79%
Never Married	23%	77%

Seventy-nine percent of respondents did not use any FVAP products or services for voting assistance. Older, higher income, White and married respondents were less likely to use any FVAP products or services for voting assistance than younger, lower income, non-White and never-married respondents.

Q15_Refused: Please indicate which, if any, FVAP products or services you used for voting assistance. [Refused All] (*N* = 8078)
(0) Not Selected (1) Selected

	Q15_Refused Response Number	
	0	1
Respondents	98%	2%
AGE		
Age 18 to 24	98%	2%
Age 25 to 34	98%	2%
Age 35 to 44	99%	1%
Age 45 to 54	98%	2%
Age 55 to 64	98%	2%
Age 65 and up	96%	4%
SEX		
Male	98%	2%
Female	97%	3%
REGION		
Africa	100%	0%
East Asia	99%	1%
Europe	97%	3%
Near East	97%	3%
South Asia	99%	1%
Western Hemisphere	98%	2%
INCOME		
$0–$19,999	98%	2%
$20,000–$74,999	98%	2%
$75,000+	98%	2%
RACE		
White	98%	2%
Black	99%	1%
Hispanic	98%	2%
Other Race	99%	1%
EDUCATION		
Less Than Bachelor's	98%	2%
Bachelor's Degree	98%	2%
More Than Bachelor's	98%	2%
MARITAL STATUS		
Married	98%	2%
Divorced/Widowed	97%	3%
Never Married	99%	1%

Two percent refused to answer whether they used any FVAP products or services for voting assistance.

Q16: In preparation for the 2014 primaries and general election, how many times did you visit FVAP.gov? (*N* = 8078)
(1) Never (2) Once (3) More than once (98) Do not recall (99) Refused

	Q16 Response Number				
	1	2	3	98	99
Respondents	71%	9%	6%	14%	1%
AGE					
Age 18 to 24	66%	8%	8%	17%	0%
Age 25 to 34	66%	12%	6%	15%	1%
Age 35 to 44	69%	9%	6%	16%	0%
Age 45 to 54	71%	8%	6%	15%	1%
Age 55 to 64	73%	9%	5%	13%	1%
Age 65 and up	79%	6%	4%	9%	2%
SEX					
Male	70%	10%	6%	13%	1%
Female	72%	8%	5%	14%	1%
REGION					
Africa	69%	10%	6%	15%	1%
East Asia	66%	11%	7%	15%	0%
Europe	71%	8%	6%	14%	1%
Near East	73%	7%	4%	15%	1%
South Asia	59%	10%	16%	14%	1%
Western Hemisphere	74%	9%	5%	11%	1%
INCOME					
$0–$19,999	68%	9%	6%	15%	2%
$20,000–$74,999	71%	8%	6%	14%	1%
$75,000+	72%	9%	6%	12%	1%
RACE					
White	73%	8%	5%	13%	1%
Black	64%	10%	8%	16%	3%
Hispanic	70%	8%	9%	12%	1%
Other Race	62%	12%	8%	17%	0%
EDUCATION					
Less Than Bachelor's	73%	8%	5%	13%	1%
Bachelor's Degree	72%	8%	6%	13%	1%
More Than Bachelor's	70%	9%	5%	15%	1%
MARITAL STATUS					
Married	72%	8%	5%	14%	1%
Divorced/Widowed	75%	7%	6%	11%	2%
Never Married	66%	11%	7%	15%	1%

Seventy-one percent of respondents never visited the FVAP.gov website before the 2014 election, and 15 percent visited the FVAP.gov website at least once. Older, female, White, lower educated and divorced or widowed respondents living in Europe, the Near East and the Western Hemisphere were less likely to have visited the FVAP.gov website before the 2014 election than younger, male, non-White, higher educated and never-married respondents from Africa, East Asia or South Asia.

Q17: Overall, how satisfied were you with the FVAP website when you visited it in 2014? (*N* = 2418)
(1) Very satisfied (2) Satisfied (3) Neither satisfied nor dissatisfied (4) Dissatisfied (5) Very dissatisfied (99) Refused

	Q17 Response Number					
	1	2	3	4	5	99
Respondents	9%	39%	42%	3%	1%	6%
AGE						
Age 18 to 24	9%	33%	40%	3%	1%	14%
Age 25 to 34	4%	39%	46%	6%	0%	6%
Age 35 to 44	8%	36%	46%	1%	1%	9%
Age 45 to 54	11%	38%	43%	2%	0%	6%
Age 55 to 64	10%	45%	39%	2%	1%	4%
Age 65 and up	11%	44%	37%	2%	1%	4%
SEX						
Male	10%	40%	42%	3%	1%	5%
Female	8%	39%	43%	2%	1%	8%
REGION						
Africa	4%	59%	34%	0%	0%	3%
East Asia	6%	41%	47%	3%	0%	3%
Europe	10%	37%	43%	3%	1%	7%
Near East	5%	37%	39%	2%	1%	16%
South Asia	17%	54%	28%	0%	0%	0%
Western Hemisphere	11%	42%	41%	3%	1%	3%
INCOME						
$0–$19,999	10%	46%	38%	1%	0%	4%
$20,000–$74,999	8%	36%	44%	4%	1%	6%
$75,000+	10%	41%	41%	2%	1%	5%
RACE						
White	9%	40%	42%	2%	1%	7%
Black	9%	47%	35%	2%	0%	6%
Hispanic	8%	47%	36%	5%	1%	4%
Other Race	6%	34%	50%	4%	1%	5%
EDUCATION						
Less Than Bachelor's	11%	43%	34%	1%	1%	11%
Bachelor's Degree	7%	39%	45%	4%	0%	5%
More Than Bachelor's	9%	39%	44%	2%	1%	5%
MARITAL STATUS						
Married	9%	40%	42%	2%	0%	7%
Divorced/Widowed	12%	37%	38%	7%	2%	5%
Never Married	6%	40%	44%	3%	0%	6%

Of those respondents who had visited the FVAP.gov website, 48 percent were very satisfied or satisfied with the website. Four percent were dissatisfied or very dissatisfied with the FVAP.gov website, and 42 percent said they were neither satisfied nor dissatisfied. Older, male and non-White respondents were more likely to be very satisfied or satisfied with the FVAP.gov website than younger, female and White respondents.

Social Networks

Q18: How many U.S. citizens do you know who reside in the country in which you resided, on November 4, 2014? (*N* = 8078)

(1) None (2) 1–2 (3) 3–4 (4) 5–10 (5) 11–20 (6) 21–50 (7) 51+ (99) Refused

	Q18 Response Number							
	1	2	3	4	5	6	7	99
Respondents	8%	13%	15%	22%	13%	10%	18%	1%
AGE								
Age 18 to 24	4%	14%	16%	22%	13%	12%	18%	0%
Age 25 to 34	8%	15%	13%	24%	12%	9%	19%	1%
Age 35 to 44	6%	11%	17%	24%	13%	9%	20%	0%
Age 45 to 54	6%	12%	15%	21%	14%	11%	20%	0%
Age 55 to 64	8%	12%	15%	24%	13%	11%	17%	1%
Age 65 and up	12%	15%	17%	19%	12%	9%	15%	1%
SEX								
Male	7%	13%	15%	23%	13%	10%	18%	1%
Female	8%	13%	16%	21%	13%	10%	18%	1%
REGION								
Africa	3%	14%	19%	16%	10%	11%	26%	1%
East Asia	7%	12%	15%	21%	13%	12%	19%	0%
Europe	9%	16%	17%	24%	14%	9%	9%	1%
Near East	1%	1%	5%	12%	10%	14%	56%	0%
South Asia	9%	17%	19%	18%	9%	12%	15%	2%
Western Hemisphere	9%	14%	17%	24%	14%	8%	12%	1%
INCOME								
$0–$19,999	11%	16%	14%	20%	9%	10%	20%	1%
$20,000–$74,999	8%	14%	15%	21%	13%	9%	19%	0%
$75,000+	5%	11%	16%	24%	15%	11%	16%	0%
RACE								
White	7%	13%	15%	22%	13%	10%	19%	1%
Black	10%	14%	16%	28%	12%	7%	12%	1%
Hispanic	12%	17%	18%	19%	15%	6%	12%	1%
Other Race	9%	13%	18%	24%	12%	11%	13%	0%
EDUCATION								
Less Than Bachelor's	13%	16%	15%	20%	12%	7%	17%	1%
Bachelor's Degree	8%	14%	16%	22%	12%	10%	16%	1%
More Than Bachelor's	5%	11%	15%	23%	15%	11%	20%	0%
MARITAL STATUS								
Married	8%	12%	15%	21%	14%	10%	20%	1%
Divorced/Widowed	9%	17%	16%	23%	11%	8%	15%	1%
Never Married	7%	15%	17%	24%	13%	11%	14%	0%

The majority of respondents knew at least five U.S. citizens in their foreign country, with 35 percent knowing between five and 20 and 28 percent knowing more than 20 U.S. citizens living abroad in their country. Age 65 and up, lower income, non-White, lower educated and divorced or widowed respondents were more likely to know less than five U.S. citizens in their foreign country than younger, higher income, White, higher education and married respondents.

Q19: Of these U.S. citizens, how many of them would you estimate voted in the general election held on November 4, 2014? (*N* = 7313)
(1) None (2) 1–2 (3) 3–4 (4) 5–10 (5) 11–20 (6) 21–50 (7) 51+ (99) Refused

	Q19 Response Number							
	1	2	3	4	5	6	7	99
Respondents	15%	26%	18%	17%	10%	7%	4%	4%
AGE								
Age 18 to 24	17%	23%	20%	15%	9%	8%	4%	3%
Age 25 to 34	16%	29%	19%	15%	7%	8%	5%	1%
Age 35 to 44	14%	28%	18%	17%	9%	6%	5%	3%
Age 45 to 54	14%	24%	17%	18%	10%	8%	5%	4%
Age 55 to 64	14%	23%	18%	20%	11%	7%	4%	5%
Age 65 and up	16%	25%	16%	15%	10%	6%	4%	7%
SEX								
Male	15%	26%	18%	18%	10%	6%	4%	4%
Female	15%	26%	17%	17%	9%	8%	5%	4%
REGION								
Africa	10%	32%	15%	22%	11%	4%	3%	4%
East Asia	17%	25%	19%	17%	10%	5%	4%	3%
Europe	13%	30%	19%	18%	9%	5%	2%	4%
Near East	10%	8%	13%	16%	16%	19%	13%	5%
South Asia	24%	27%	17%	15%	7%	6%	1%	3%
Western Hemisphere	19%	28%	18%	16%	7%	4%	4%	4%
INCOME								
$0–$19,999	20%	24%	16%	15%	10%	7%	5%	4%
$20,000–$74,999	14%	26%	18%	17%	9%	7%	5%	4%
$75,000+	14%	26%	19%	17%	11%	7%	4%	3%
RACE								
White	14%	25%	17%	18%	10%	8%	5%	4%
Black	25%	21%	23%	15%	8%	2%	2%	5%
Hispanic	19%	31%	15%	15%	9%	3%	5%	3%
Other Race	19%	31%	20%	14%	6%	3%	3%	4%
EDUCATION								
Less Than Bachelor's	19%	25%	17%	14%	7%	6%	6%	6%
Bachelor's Degree	16%	28%	17%	17%	9%	6%	4%	4%
More Than Bachelor's	12%	25%	19%	18%	11%	8%	4%	3%
MARITAL STATUS								
Married	14%	25%	17%	17%	10%	7%	5%	4%
Divorced/Widowed	18%	28%	15%	17%	7%	6%	5%	4%
Never Married	16%	29%	19%	16%	8%	6%	3%	3%

The majority of respondents knew less than five U.S. citizens in their foreign country who voted in 2014, with 15 percent knowing none, 26 percent knowing one to two and 18 percent knowing three to four U.S. citizens living in their country who voted. Younger, non-White, lower educated and never-married respondents were more likely to know five or less U.S. citizens in their foreign country who voted in 2014 than older, White, higher educated and married respondents.

2010 And 2012 Voting Experiences

Q20: Elections for the U.S. Senate and U.S. House of Representatives were held in 2010. A lot of people did not get to vote because they weren't registered, they were sick or they didn't have time. How about you—did you vote in the 2010 general election? (*N* = 8078)
(1) Definitely voted in person (2) Definitely voted by mail (3) Definitely voted by email
(4) Definitely voted at an online website (5) Definitely voted by fax (6) Definitely did not vote
(98) Not sure (99) Refused

	Q20 Response Number							
	1	2	3	4	5	6	98	99
Respondents	7%	40%	3%	1%	2%	25%	22%	0%
AGE								
Age 18 to 24	4%	12%	1%	0%	0%	64%	15%	2%
Age 25 to 34	12%	36%	2%	1%	2%	24%	23%	0%
Age 35 to 44	7%	39%	2%	1%	1%	25%	25%	0%
Age 45 to 54	6%	38%	2%	1%	2%	23%	28%	0%
Age 55 to 64	5%	46%	4%	1%	2%	22%	20%	0%
Age 65 and up	6%	48%	3%	1%	1%	20%	19%	1%
SEX								
Male	7%	43%	3%	1%	2%	24%	19%	0%
Female	8%	36%	2%	1%	1%	26%	25%	1%
REGION								
Africa	14%	24%	4%	1%	5%	30%	22%	0%
East Asia	10%	39%	2%	1%	2%	20%	25%	0%
Europe	7%	43%	2%	1%	1%	23%	23%	1%
Near East	8%	29%	2%	1%	1%	33%	25%	0%
South Asia	12%	21%	5%	1%	2%	34%	24%	2%
Western Hemisphere	7%	41%	4%	1%	2%	28%	18%	0%
INCOME								
$0–$19,999	8%	31%	2%	1%	1%	35%	21%	1%
$20,000–$74,999	8%	41%	3%	1%	1%	23%	23%	0%
$75,000+	7%	41%	2%	1%	2%	25%	21%	0%
RACE								
White	7%	41%	2%	1%	2%	25%	23%	0%
Black	9%	41%	4%	3%	2%	24%	17%	0%
Hispanic	9%	34%	5%	1%	1%	30%	19%	1%
Other Race	11%	34%	2%	1%	1%	26%	24%	0%
EDUCATION								
Less Than Bachelor's	6%	36%	3%	1%	1%	32%	20%	1%
Bachelor's Degree	8%	38%	2%	1%	2%	26%	23%	1%
More Than Bachelor's	8%	42%	3%	1%	2%	22%	23%	0%
MARITAL STATUS								
Married	7%	41%	3%	1%	1%	23%	23%	0%
Divorced/Widowed	5%	44%	4%	1%	2%	22%	21%	1%
Never Married	8%	33%	1%	1%	1%	32%	23%	1%

Fifty-three percent of respondents said they had definitely voted by some means in the 2010 election. Most (40 percent) said they had submitted their 2010 vote via mail. Twenty-five percent of respondents said they definitely did not vote in the 2010 election, and 22 percent said they were unsure. Those who were aged 25 to 34 were more likely to have voted in person in 2010 than any other age group, whereas those aged 55 and up were more likely to have voted via mail. Male, higher income, higher educated and divorced or separated respondents were more likely to

have definitely voted in 2010 than female, lower income, lower educated and never-married respondents.

Q21: Elections for the president, U.S. Senate, and U.S. House of Representatives were held in 2012. A lot of people did not get to vote because they weren't registered, they were sick or they didn't have time. How about you—did you vote in the 2012 general election? (*N* = 8078)
(1) Definitely voted in person (2) Definitely voted by mail (3) Definitely voted by email
(4) Definitely voted at an online website (5) Definitely voted by fax (6) Definitely did not vote
(98) Not sure (99) Refused

	Q21 Response Number							
	1	2	3	4	5	6	98	99
Respondents	5%	62%	5%	2%	2%	12%	11%	1%
AGE								
Age 18 to 24	7%	55%	2%	0%	0%	23%	13%	1%
Age 25 to 34	8%	56%	6%	1%	2%	14%	13%	0%
Age 35 to 44	4%	62%	3%	2%	3%	14%	11%	1%
Age 45 to 54	4%	61%	5%	2%	3%	14%	11%	1%
Age 55 to 64	4%	68%	5%	2%	3%	9%	8%	0%
Age 65 and up	4%	66%	5%	2%	2%	9%	10%	2%
SEX								
Male	5%	63%	5%	2%	2%	13%	10%	1%
Female	5%	61%	5%	2%	3%	12%	11%	1%
REGION								
Africa	11%	46%	9%	6%	5%	13%	11%	0%
East Asia	8%	59%	6%	2%	4%	10%	12%	0%
Europe	4%	67%	5%	1%	2%	10%	10%	1%
Near East	5%	53%	2%	2%	2%	20%	14%	2%
South Asia	10%	40%	5%	3%	2%	21%	16%	2%
Western Hemisphere	5%	61%	6%	1%	3%	14%	8%	1%
INCOME								
$0–$19,999	8%	57%	4%	2%	1%	15%	13%	1%
$20,000–$74,999	5%	60%	5%	2%	2%	12%	12%	1%
$75,000+	5%	65%	5%	2%	3%	11%	8%	1%
RACE								
White	5%	64%	5%	2%	2%	11%	10%	1%
Black	9%	54%	3%	5%	5%	12%	11%	0%
Hispanic	6%	53%	6%	1%	3%	18%	12%	1%
Other Race	7%	55%	5%	3%	2%	16%	12%	1%
EDUCATION								
Less Than Bachelor's	4%	57%	4%	2%	2%	16%	13%	1%
Bachelor's Degree	6%	62%	5%	1%	3%	13%	10%	1%
More Than Bachelor's	5%	64%	5%	2%	3%	10%	10%	1%
MARITAL STATUS								
Married	5%	63%	5%	2%	2%	12%	10%	1%
Divorced/Widowed	4%	62%	4%	2%	3%	12%	11%	2%
Never Married	7%	58%	4%	1%	2%	14%	12%	1%

Seventy-two percent of respondents said they had definitely voted by some means in the 2012 election. Most (55 percent) said they had submitted their 2012 vote via mail. Twelve percent of respondents said they definitely did not vote in the 2012 election, and 11 percent said they were unsure. Older, higher income, White, higher educated and married were more likely to have

definitely voted in 2012 than younger, lower income, non-White, lower educated and never-married respondents.

Access to Media

Q22: Did you have a cell phone in November 2014? (*N* = 8078)
(0) No (1) Yes (99) Refused

	Q22 Response Number		
	0	1	99
Respondents	7%	92%	0%
AGE			
Age 18 to 24	5%	94%	0%
Age 25 to 34	3%	97%	0%
Age 35 to 44	2%	98%	0%
Age 45 to 54	4%	95%	1%
Age 55 to 64	8%	91%	1%
Age 65 and up	18%	81%	0%
SEX			
Male	8%	92%	0%
Female	7%	92%	0%
REGION			
Africa	2%	98%	0%
East Asia	5%	95%	0%
Europe	6%	94%	0%
Near East	6%	93%	1%
South Asia	6%	93%	1%
Western Hemisphere	13%	87%	0%
INCOME			
$0–$19,999	13%	87%	1%
$20,000–$74,999	8%	91%	0%
$75,000+	4%	96%	0%
RACE			
White	8%	92%	0%
Black	7%	92%	1%
Hispanic	7%	93%	0%
Other Race	5%	95%	0%
EDUCATION			
Less Than Bachelor's	12%	87%	1%
Bachelor's Degree	6%	94%	0%
More Than Bachelor's	6%	94%	0%
MARITAL STATUS			
Married	7%	92%	0%
Divorced/Widowed	12%	87%	0%
Never Married	4%	95%	0%

Ninety-two percent of respondents had a cell phone in November 2014. Younger, higher income, higher educated and never-married respondents living outside the Western Hemisphere were more likely to have a cell phone in November 2014 than older, lower income, lower educated and divorced or widowed respondents living in the Western Hemisphere.

Q23: Some cell phones are called "smartphones" because of certain features they have. Was your cell phone a smartphone, such as an iPhone, Android, BlackBerry or Windows phone? (*N* = 7336)
(0) No, it was not a smartphone (1) Yes, it was a smartphone (99) Refused

	Q23 Response Number		
	0	1	99
Respondents	27%	72%	1%
AGE			
Age 18 to 24	17%	83%	0%
Age 25 to 34	16%	84%	1%
Age 35 to 44	17%	82%	1%
Age 45 to 54	23%	76%	1%
Age 55 to 64	31%	69%	1%
Age 65 and up	52%	46%	2%
SEX			
Male	26%	74%	1%
Female	28%	71%	1%
REGION			
Africa	36%	64%	0%
East Asia	19%	80%	1%
Europe	24%	75%	1%
Near East	41%	59%	0%
South Asia	26%	73%	1%
Western Hemisphere	31%	69%	1%
INCOME			
$0–$19,999	45%	54%	1%
$20,000–$74,999	33%	67%	1%
$75,000+	15%	84%	1%
RACE			
White	28%	71%	1%
Black	24%	75%	1%
Hispanic	25%	74%	1%
Other Race	15%	85%	0%
EDUCATION			
Less Than Bachelor's	35%	64%	1%
Bachelor's Degree	24%	75%	1%
More Than Bachelor's	25%	74%	1%
MARITAL STATUS			
Married	27%	72%	1%
Divorced/Widowed	40%	59%	1%
Never Married	19%	80%	0%

Of those who had a cell phone, 72 percent of respondents had a smartphone in November 2014. Younger, male, higher income, non-White and higher educated respondents were more likely to have a smartphone in November 2014 than older, female, lower income, White and lower educated respondents.

Q24: Did you use a desktop or laptop computer at your workplace, at school, at home or anywhere else on at least an occasional basis in November 2014? (*N* = 8078)
(0) No (1) Yes (99) Refused

	Q24 Response Number		
	0	1	99
Respondents	4%	95%	1%
AGE			
Age 18 to 24	8%	92%	1%
Age 25 to 34	1%	98%	1%
Age 35 to 44	1%	98%	0%
Age 45 to 54	1%	98%	0%
Age 55 to 64	3%	97%	1%
Age 65 and up	12%	87%	1%
SEX			
Male	4%	95%	1%
Female	4%	95%	1%
REGION			
Africa	1%	99%	1%
East Asia	2%	98%	0%
Europe	3%	96%	1%
Near East	9%	89%	2%
South Asia	6%	94%	0%
Western Hemisphere	5%	95%	1%
INCOME			
$0–$19,999	14%	86%	1%
$20,000–$74,999	4%	96%	1%
$75,000+	1%	99%	0%
RACE			
White	4%	96%	1%
Black	12%	86%	1%
Hispanic	9%	91%	1%
Other Race	3%	97%	0%
EDUCATION			
Less Than Bachelor's	12%	87%	1%
Bachelor's Degree	2%	97%	1%
More Than Bachelor's	2%	98%	0%
MARITAL STATUS			
Married	4%	95%	1%
Divorced/Widowed	8%	91%	1%
Never Married	2%	97%	1%

Ninety-five percent of respondents used a desktop or laptop computer at their workplace, at school, at home or anywhere else on at least an occasional basis in November 2014. Respondents aged 65 and up who had a lower income, were lower educated and were divorced or separated were less likely to have used a desktop or laptop computer in November 2014 than younger, higher income, higher educated and married or never-married respondents.

Q25: Did you use the internet or email, at least occasionally in November 2014? (N = 8078)
(0) No (1) Yes (99) Refused

	Q25 Response Number		
	0	1	99
Respondents	4%	96%	1%
AGE			
Age 18 to 24	7%	92%	1%
Age 25 to 34	1%	99%	1%
Age 35 to 44	1%	99%	0%
Age 45 to 54	1%	99%	0%
Age 55 to 64	2%	98%	0%
Age 65 and up	10%	88%	1%
SEX			
Male	4%	96%	1%
Female	3%	96%	0%
REGION			
Africa	1%	99%	0%
East Asia	1%	99%	0%
Europe	3%	97%	0%
Near East	8%	91%	1%
South Asia	6%	93%	1%
Western Hemisphere	5%	95%	1%
INCOME			
$0–$19,999	12%	87%	1%
$20,000–$74,999	3%	97%	0%
$75,000+	1%	99%	0%
RACE			
White	3%	97%	0%
Black	11%	87%	1%
Hispanic	8%	91%	0%
Other Race	3%	97%	0%
EDUCATION			
Less Than Bachelor's	11%	87%	1%
Bachelor's Degree	2%	98%	0%
More Than Bachelor's	1%	99%	0%
MARITAL STATUS			
Married	3%	96%	0%
Divorced/Widowed	8%	91%	1%
Never Married	2%	98%	0%

Ninety-six percent of respondents used the internet or email at least occasionally in November 2014. Respondents aged 65 and up who had a lower income, were non-White, were lower educated and were divorced or widowed were less likely to use the internet or email at least occasionally in November 2014 than younger, higher income, White, higher educated and married or never-married respondents.

Q26: Did you access the internet on a cell phone, tablet or other mobile handheld device, at least occasionally in November 2014? (*N* = 7692)
(0) No (1) Yes (98) Not sure/Don't know (99) Refused

	Q26 Response Number			
	0	1	98	99
Respondents	18%	79%	2%	1%
AGE				
Age 18 to 24	9%	89%	2%	1%
Age 25 to 34	9%	88%	1%	1%
Age 35 to 44	9%	89%	1%	1%
Age 45 to 54	14%	83%	2%	1%
Age 55 to 64	21%	75%	2%	2%
Age 65 and up	38%	58%	3%	1%
SEX				
Male	18%	79%	2%	1%
Female	18%	78%	2%	1%
REGION				
Africa	22%	76%	1%	1%
East Asia	13%	84%	1%	2%
Europe	15%	81%	2%	1%
Near East	28%	68%	2%	2%
South Asia	14%	83%	2%	1%
Western Hemisphere	20%	77%	2%	1%
INCOME				
$0–$19,999	30%	67%	2%	1%
$20,000–$74,999	23%	74%	2%	1%
$75,000+	9%	89%	1%	1%
RACE				
White	20%	77%	2%	1%
Black	15%	80%	5%	1%
Hispanic	11%	85%	3%	1%
Other Race	7%	91%	1%	1%
EDUCATION				
Less Than Bachelor's	23%	73%	3%	1%
Bachelor's Degree	16%	81%	1%	1%
More Than Bachelor's	17%	80%	2%	1%
MARITAL STATUS				
Married	18%	79%	2%	1%
Divorced/Widowed	28%	68%	3%	2%
Never Married	13%	85%	1%	1%

Of those who had used the internet or email occasionally, 79 percent of respondents accessed the internet on a cell phone, tablet or other mobile handheld device at least occasionally in November 2014. Younger, higher income, non-White, higher educated and never-married respondents were more likely to have accessed the internet on a cell phone, tablet or other mobile handheld device at least occasionally in November 2014 than older, lower income, White, lower educated and divorced or separated respondents.

Q27: During a typical week, how many days did you watch, read or listen to news on the internet, not including sports in November 2014? (*N* = 7692)
(1) None (2) 1 day (3) 2 days (4) 3 days (5) 4 days (6) 5 days (7) 6 days (8) 7 days
(99) Refused

	Q27 Response Number								
	1	2	3	4	5	6	7	8	99
Respondents	8%	5%	5%	7%	6%	12%	9%	48%	1%
AGE									
Age 18 to 24	7%	8%	6%	17%	10%	9%	10%	34%	0%
Age 25 to 34	4%	6%	4%	9%	7%	12%	12%	45%	1%
Age 35 to 44	4%	6%	6%	5%	6%	14%	8%	50%	0%
Age 45 to 54	7%	5%	5%	6%	5%	12%	9%	50%	0%
Age 55 to 64	9%	4%	4%	6%	4%	11%	9%	52%	1%
Age 65 and up	16%	4%	4%	5%	6%	11%	7%	45%	1%
SEX									
Male	6%	3%	4%	5%	5%	12%	10%	55%	0%
Female	10%	7%	6%	8%	7%	11%	8%	42%	1%
REGION									
Africa	12%	11%	8%	4%	8%	11%	7%	39%	1%
East Asia	6%	5%	4%	5%	6%	11%	8%	54%	1%
Europe	7%	5%	5%	7%	6%	11%	8%	50%	1%
Near East	12%	6%	4%	7%	5%	14%	16%	35%	0%
South Asia	7%	5%	6%	12%	7%	8%	8%	46%	1%
Western Hemisphere	8%	6%	5%	7%	6%	13%	8%	47%	1%
INCOME									
$0–$19,999	13%	9%	6%	10%	8%	11%	8%	36%	1%
$20,000–$74,999	8%	6%	5%	7%	6%	12%	9%	46%	1%
$75,000+	5%	4%	4%	6%	6%	12%	8%	55%	0%
RACE									
White	9%	6%	4%	6%	6%	12%	9%	47%	1%
Black	9%	6%	4%	13%	7%	10%	3%	48%	0%
Hispanic	5%	4%	5%	11%	6%	11%	7%	50%	0%
Other Race	5%	4%	7%	5%	5%	15%	6%	53%	0%
EDUCATION									
Less Than Bachelor's	13%	8%	4%	9%	7%	11%	8%	40%	0%
Bachelor's Degree	8%	6%	5%	9%	6%	12%	10%	45%	1%
More Than Bachelor's	6%	4%	5%	5%	5%	12%	9%	53%	1%
MARITAL STATUS									
Married	8%	5%	5%	7%	5%	12%	9%	48%	0%
Divorced/Widowed	14%	4%	5%	5%	6%	9%	8%	48%	1%
Never Married	5%	6%	4%	9%	7%	12%	10%	47%	1%

Of those who used the internet or email occasionally, 48 percent watched, read or listened to news on the internet (not including sports) every day in November 2014. Twenty-five percent followed the news three days or fewer per week, and 27 percent followed the news four to six days per week. Middle-aged, male, higher income and higher educated respondents were more likely to have watched, read or listened to news on the internet (not including sports) in November 2014 than female, lower income and lower educated respondents.

Q28: How much attention did you pay to news about U.S. politics on the internet in November 2014? (*N* = 6995)

(1) A great deal (2) A lot (3) A moderate amount (4) A little (5) None at all (99) Refused

	Q28 Response Number					
	1	2	3	4	5	99
Respondents	24%	21%	32%	19%	3%	0%
AGE						
Age 18 to 24	6%	12%	31%	42%	9%	0%
Age 25 to 34	18%	22%	36%	20%	4%	0%
Age 35 to 44	20%	20%	34%	22%	3%	0%
Age 45 to 54	23%	22%	32%	21%	2%	0%
Age 55 to 64	32%	21%	32%	13%	2%	0%
Age 65 and up	34%	24%	28%	11%	2%	0%
SEX						
Male	30%	24%	29%	14%	2%	0%
Female	19%	18%	35%	23%	4%	0%
REGION						
Africa	16%	22%	36%	23%	4%	0%
East Asia	25%	20%	33%	19%	3%	0%
Europe	23%	21%	35%	19%	2%	0%
Near East	23%	23%	29%	23%	2%	0%
South Asia	19%	30%	28%	16%	5%	2%
Western Hemisphere	29%	21%	30%	17%	4%	0%
INCOME						
$0–$19,999	21%	19%	33%	23%	4%	0%
$20,000–$74,999	24%	21%	33%	19%	3%	0%
$75,000+	27%	22%	32%	17%	2%	0%
RACE						
White	24%	22%	32%	19%	3%	0%
Black	28%	22%	29%	18%	2%	0%
Hispanic	24%	15%	37%	20%	5%	0%
Other Race	24%	17%	36%	20%	3%	0%
EDUCATION						
Less Than Bachelor's	21%	21%	30%	24%	4%	0%
Bachelor's Degree	22%	20%	35%	19%	4%	0%
More Than Bachelor's	27%	22%	32%	17%	2%	0%
MARITAL STATUS						
Married	26%	22%	32%	18%	2%	0%
Divorced/Widowed	32%	22%	29%	15%	2%	0%
Never Married	18%	19%	35%	23%	5%	0%

Of those who had used the internet or email occasionally and followed the news, 45 percent said they paid a great deal or a lot of attention to news about U.S. politics on the internet in November 2014. Twenty-two percent said they paid little or no attention, and 32 percent said they paid a moderate amount of attention to news about U.S. politics on the internet in November 2014. Older, male, higher income, non-Hispanic, higher educated and divorced or widowed respondents were more likely to say they paid a great deal or a lot of attention to news about U.S. politics on the internet in November 2014 than younger, female, lower income, Hispanic, lower educated and never-married respondents.

Roads and Mail

Q29: How would you characterize the reliability of the postal service of the country in which you resided, on November 4, 2014? (*N* = 8078)

(1) Very low reliability (2) Low reliability (3) Somewhat reliable (4) Reliable (5) Very reliable (99) Refused

	Q29 Response Number					
	1	2	3	4	5	99
Respondents	6%	9%	17%	32%	36%	0%
AGE						
Age 18 to 24	5%	11%	19%	38%	27%	1%
Age 25 to 34	7%	8%	16%	31%	38%	1%
Age 35 to 44	6%	9%	16%	31%	38%	0%
Age 45 to 54	5%	9%	16%	32%	37%	0%
Age 55 to 64	5%	10%	16%	33%	37%	0%
Age 65 and up	7%	10%	18%	33%	32%	1%
SEX						
Male	6%	9%	16%	29%	39%	1%
Female	6%	9%	17%	35%	33%	0%
REGION						
Africa	33%	31%	21%	13%	3%	0%
East Asia	5%	8%	14%	29%	45%	0%
Europe	2%	4%	11%	34%	49%	0%
Near East	8%	18%	29%	32%	11%	2%
South Asia	14%	21%	26%	30%	9%	0%
Western Hemisphere	10%	13%	22%	33%	22%	0%
INCOME						
$0–$19,999	9%	12%	23%	32%	23%	0%
$20,000–$74,999	6%	10%	18%	33%	33%	0%
$75,000+	5%	7%	13%	31%	44%	0%
RACE						
White	5%	8%	16%	33%	37%	0%
Black	10%	11%	24%	29%	25%	0%
Hispanic	12%	14%	21%	29%	24%	0%
Other Race	7%	10%	18%	29%	35%	0%
EDUCATION						
Less Than Bachelor's	6%	10%	21%	35%	27%	1%
Bachelor's Degree	6%	9%	18%	30%	37%	0%
More Than Bachelor's	6%	9%	14%	32%	39%	0%
MARITAL STATUS						
Married	6%	9%	17%	32%	36%	1%
Divorced/Widowed	6%	11%	18%	32%	34%	0%
Never Married	7%	8%	16%	33%	36%	0%

Sixty-eight percent of respondents characterized the reliability of the postal service of the country in which they resided in November 2014 as either reliable or very reliable. Fifteen percent said the postal service there had very low- or low-reliability, and 17 percent said the postal service there was somewhat reliable. Those from Africa, the Near East, South Asia and the Western Hemisphere, and those respondents who had a lower income, were non-White and were lower educated respondents were more likely to characterize the reliability of the postal service of the country in which they resided as very low or low than those from Europe or East Asia and those who had a higher income, were White or were higher educated.

Q30: How would you describe the quality of the roads near your home in the country in which you resided, on November 4, 2014? (*N* = 8078)
(1) Very low quality (2) Low-quality (3) Moderate quality (4) High-quality (5) Very high-quality (99) Refused

	Q30 Response Number					
	1	2	3	4	5	99
Respondents	2%	5%	20%	34%	40%	1%
AGE						
Age 18 to 24	1%	6%	25%	32%	36%	0%
Age 25 to 34	2%	5%	15%	32%	45%	1%
Age 35 to 44	2%	5%	15%	32%	46%	0%
Age 45 to 54	1%	4%	22%	31%	42%	0%
Age 55 to 64	2%	5%	17%	35%	40%	0%
Age 65 and up	2%	5%	25%	37%	29%	1%
SEX						
Male	2%	6%	19%	33%	40%	1%
Female	2%	4%	20%	34%	40%	1%
REGION						
Africa	12%	32%	30%	20%	6%	1%
East Asia	1%	5%	20%	31%	43%	0%
Europe	1%	2%	14%	32%	49%	1%
Near East	1%	3%	17%	47%	32%	1%
South Asia	13%	20%	46%	17%	3%	1%
Western Hemisphere	3%	8%	28%	32%	28%	0%
INCOME						
$0–$19,999	5%	9%	30%	32%	23%	1%
$20,000–$74,999	2%	6%	22%	35%	35%	0%
$75,000+	1%	3%	13%	32%	51%	0%
RACE						
White	1%	5%	17%	35%	41%	0%
Black	6%	8%	34%	30%	20%	1%
Hispanic	2%	7%	34%	26%	30%	0%
Other Race	4%	6%	24%	30%	37%	1%
EDUCATION						
Less Than Bachelor's	2%	6%	28%	36%	26%	1%
Bachelor's Degree	2%	6%	20%	33%	40%	0%
More Than Bachelor's	1%	4%	15%	33%	46%	0%
MARITAL STATUS						
Married	1%	5%	19%	35%	39%	0%
Divorced/Widowed	2%	6%	22%	34%	35%	1%
Never Married	2%	5%	20%	29%	43%	0%

Seventy-four percent of respondents described the quality of the roads near their home in the country in which they resided in November 2014 as either high-quality or very high-quality. Seven percent said these roads were low-quality or very low-quality. Those who were living in Africa, South Asia or the Western Hemisphere and had a lower income were more likely to describe the quality of these roads as either low-quality or very low-quality compared to those living in Europe, East Asia or the Near East, or who had higher incomes.

Demographics

Q31: Are you Spanish/Hispanic/Latino?/ Q32: What is your race? (*N* = 8078)
(1) White Non-Hispanic (2) Black or African American Non-Hispanic (3) Hispanic Any Racial Group (4) Other Non-Hispanic (American Indian or Alaska Native, Asian, Native Hawaiian or other Pacific Islander, or Multiracial) (99) Refused

	Q31 & Q32 Recode Response Number				
	1	2	3	4	99
Respondents	80%	2%	8%	7%	2%
AGE					
Age 18 to 24	77%	2%	8%	10%	2%
Age 25 to 34	78%	1%	9%	10%	2%
Age 35 to 44	77%	2%	7%	11%	2%
Age 45 to 54	81%	2%	7%	7%	2%
Age 55 to 64	84%	2%	6%	4%	3%
Age 65 and up	82%	3%	8%	4%	3%
SEX					
Male	80%	2%	8%	8%	3%
Female	81%	2%	8%	7%	2%
REGION					
Africa	83%	11%	1%	4%	2%
East Asia	74%	1%	4%	19%	2%
Europe	86%	1%	6%	4%	2%
Near East	91%	1%	2%	4%	3%
South Asia	26%	0%	1%	68%	5%
Western Hemisphere	70%	6%	17%	5%	2%
INCOME					
$0–$19,999	71%	4%	13%	9%	3%
$20,000–$74,999	82%	2%	9%	5%	1%
$75,000+	83%	2%	5%	9%	1%
RACE					
White	100%	0%	0%	0%	0%
Black	0%	100%	0%	0%	0%
Hispanic	0%	0%	100%	0%	0%
Other Race	0%	0%	0%	100%	0%
EDUCATION					
Less Than Bachelor's	78%	4%	12%	4%	1%
Bachelor's Degree	78%	2%	7%	9%	4%
More Than Bachelor's	83%	2%	6%	8%	2%
MARITAL STATUS					
Married	82%	2%	7%	7%	2%
Divorced/Widowed	78%	4%	11%	5%	2%
Never Married	77%	2%	8%	11%	2%

Eighty percent of respondents were White, non-Hispanic, 2 percent black or African American, non-Hispanic, 8 percent Hispanic and 7 percent other racial group and non-Hispanic. Those who were older and married were more likely to be white, and those who were younger and never married were more likely to be non-Hispanic other. Respondents who had a higher income and were higher educated were more likely to be White; by contrast, lower income and lower educated respondents were more likely to be Hispanic.

Q33: What is the highest degree or level of school that you have completed? (*N* = 8078)
(1) 12 years or less of school (2) High school graduate—traditional diploma (3) High school graduate—alternative diploma (home school, GED, etc.) (4) Some college credit but less than 1 year (5) 1 or more years of college, no degree (6) Associate degree (e.g., AA, AS) (7) Bachelor's degree (e.g., BA, AB, BS) (8) Master's, doctoral, or professional school degree (e.g., MA, PhD, JD) (99) Refused

	Q33 Response Number								
	1	2	3	4	5	6	7	8	99
Respondents	2%	4%	1%	2%	9%	4%	32%	46%	1%
AGE									
Age 18 to 24	3%	13%	1%	2%	32%	3%	31%	14%	2%
Age 25 to 34	2%	3%	1%	1%	6%	1%	38%	47%	0%
Age 35 to 44	1%	1%	0%	2%	5%	3%	35%	54%	0%
Age 45 to 54	0%	3%	1%	2%	5%	5%	32%	50%	1%
Age 55 to 64	1%	3%	1%	2%	9%	5%	33%	46%	0%
Age 65 and up	4%	6%	2%	4%	10%	4%	25%	44%	2%
SEX									
Male	2%	4%	1%	2%	9%	4%	31%	47%	1%
Female	1%	4%	1%	2%	9%	4%	33%	46%	1%
REGION									
Africa	0%	0%	1%	1%	5%	1%	29%	63%	0%
East Asia	0%	1%	0%	2%	7%	2%	40%	46%	1%
Europe	2%	4%	1%	2%	7%	3%	31%	50%	1%
Near East	2%	6%	1%	3%	12%	3%	27%	44%	1%
South Asia	1%	4%	1%	1%	5%	1%	41%	46%	0%
Western Hemisphere	2%	5%	1%	3%	12%	6%	30%	40%	1%
INCOME									
$0–$19,999	6%	9%	2%	4%	14%	5%	34%	27%	1%
$20,000–$74,999	2%	4%	1%	3%	10%	4%	32%	44%	0%
$75,000+	0%	1%	0%	1%	5%	3%	31%	58%	0%
RACE									
White	1%	4%	1%	2%	9%	3%	31%	48%	0%
Black	5%	7%	3%	2%	12%	8%	30%	31%	1%
Hispanic	3%	7%	2%	3%	9%	7%	31%	36%	0%
Other Race	1%	1%	0%	1%	6%	3%	37%	50%	1%
EDUCATION									
Less Than Bachelor's	8%	18%	5%	11%	41%	17%	0%	0%	0%
Bachelor's Degree	0%	0%	0%	0%	0%	0%	100%	0%	0%
More Than Bachelor's	0%	0%	0%	0%	0%	0%	0%	100%	0%
MARITAL STATUS									
Married	1%	3%	1%	3%	8%	4%	31%	48%	0%
Divorced/Widowed	3%	5%	1%	2%	12%	4%	27%	45%	2%
Never Married	2%	4%	1%	1%	10%	3%	36%	43%	1%

Forty-six percent of respondents had a master's, doctoral or professional school degree, and 32 percent had a bachelor's degree. Fifteen percent of respondents had some college education or an associate degree, and 7 percent of respondents had a high school degree or less. Higher income, White respondents and respondents aged 25 to 54 were more likely to have at least a college degree than lower income, non-White respondents, and those aged 18 to 24 or 55 and older.

Q34_1: As of November 4, 2014, in which country or countries did you hold citizenship? [United States] (*N* = 8078)
(0) Not Selected (1) Selected

	Q34_1 Response Number	
	0	1
Respondents	0%	100%
AGE		
Age 18 to 24	0%	100%
Age 25 to 34	1%	99%
Age 35 to 44	0%	100%
Age 45 to 54	0%	100%
Age 55 to 64	1%	99%
Age 65 and up	1%	99%
SEX		
Male	0%	100%
Female	0%	100%
REGION		
Africa	0%	100%
East Asia	1%	99%
Europe	0%	100%
Near East	1%	99%
South Asia	0%	100%
Western Hemisphere	1%	99%
INCOME		
$0–$19,999	1%	99%
$20,000–$74,999	1%	99%
$75,000+	0%	100%
RACE		
White	0%	100%
Black	1%	99%
Hispanic	1%	99%
Other Race	1%	99%
EDUCATION		
Less Than Bachelor's	1%	99%
Bachelor's Degree	1%	99%
More Than Bachelor's	0%	100%
MARITAL STATUS		
Married	0%	100%
Divorced/Widowed	1%	99%
Never Married	0%	100%

Note: Those who did not select "1: United States" were deemed not eligible respondents, unless they selected "3: Other" and answered that they held dual US citizenship.

All eligible respondents responded that they held citizenship in the United States.

Q34_2: As of November 4, 2014, in which country or countries did you hold citizenship? [Country in which you were residing] (*N* = 8078)
(0) Not Selected (1) Selected

	Q34_2 Response Number	
	0	1
Respondents	57%	43%
AGE		
Age 18 to 24	32%	68%
Age 25 to 34	58%	42%
Age 35 to 44	63%	37%
Age 45 to 54	59%	41%
Age 55 to 64	57%	43%
Age 65 and up	57%	43%
SEX		
Male	58%	42%
Female	56%	44%
REGION		
Africa	90%	10%
East Asia	76%	24%
Europe	60%	40%
Near East	27%	73%
South Asia	92%	8%
Western Hemisphere	53%	47%
INCOME		
$0–$19,999	54%	46%
$20,000–$74,999	57%	43%
$75,000+	60%	40%
RACE		
White	55%	45%
Black	68%	32%
Hispanic	60%	40%
Other Race	70%	30%
EDUCATION		
Less Than Bachelor's	53%	47%
Bachelor's Degree	58%	42%
More Than Bachelor's	59%	41%
MARITAL STATUS		
Married	59%	41%
Divorced/Widowed	57%	43%
Never Married	53%	47%

Forty-three percent of respondents answered that they held citizenship in their current foreign country. Those living in countries in Europe, the Near East and the Western Hemisphere were more likely to say they held citizenship there than those living in countries in Africa, South Asia and East Asia. Lower income, White, lower educated and never-married respondents were more likely to hold citizenship in the country they currently were living in than higher income, non-White, higher educated and married respondents.

Q34_3: As of November 4, 2014, in which country or countries did you hold citizenship? [Other] (*N* = 8078)
(0) Not Selected (1) Selected

	Q34_3 Response Number	
	0	1
Respondents	92%	8%
AGE		
Age 18 to 24	90%	10%
Age 25 to 34	91%	9%
Age 35 to 44	91%	9%
Age 45 to 54	91%	9%
Age 55 to 64	95%	5%
Age 65 and up	92%	8%
SEX		
Male	93%	7%
Female	91%	9%
REGION		
Africa	96%	4%
East Asia	94%	6%
Europe	90%	10%
Near East	92%	8%
South Asia	96%	4%
Western Hemisphere	93%	7%
INCOME		
$0–$19,999	91%	9%
$20,000–$74,999	91%	9%
$75,000+	92%	8%
RACE		
White	92%	8%
Black	94%	6%
Hispanic	89%	11%
Other Race	96%	4%
EDUCATION		
Less Than Bachelor's	92%	8%
Bachelor's Degree	92%	8%
More Than Bachelor's	92%	8%
MARITAL STATUS		
Married	93%	7%
Divorced/Widowed	92%	8%
Never Married	90%	10%

Eight percent of respondents said that they held citizenship in a different country than the United States and different from the country where they currently were living. Respondents who said that they held a citizenship in a country other than the one in which they were living (other than the United States) were more likely to be female, Hispanic, living in Europe, and never married.

Q35: What is your marital status? (*N* = 8078)
(1) Married (2) Separated (3) Divorced (4) Widowed (5) Never Married (99) Refused

	Q35 Response Number					
	1	2	3	4	5	99
Respondents	64%	1%	8%	4%	23%	1%
AGE						
Age 18 to 24	14%	0%	1%	0%	86%	0%
Age 25 to 34	49%	0%	2%	0%	48%	1%
Age 35 to 44	73%	1%	6%	0%	20%	0%
Age 45 to 54	75%	2%	8%	1%	13%	1%
Age 55 to 64	74%	2%	12%	2%	9%	1%
Age 65 and up	66%	1%	11%	13%	7%	1%
SEX						
Male	67%	1%	6%	2%	23%	1%
Female	62%	1%	8%	5%	23%	1%
REGION						
Africa	57%	1%	7%	4%	30%	0%
East Asia	64%	1%	5%	2%	27%	1%
Europe	61%	1%	8%	4%	26%	1%
Near East	76%	0%	5%	4%	14%	0%
South Asia	66%	0%	5%	2%	25%	2%
Western Hemisphere	64%	2%	10%	4%	19%	1%
INCOME						
$0–$19,999	39%	1%	12%	6%	42%	0%
$20,000–$74,999	61%	1%	9%	4%	24%	0%
$75,000+	77%	1%	4%	2%	15%	0%
RACE						
White	66%	1%	7%	4%	22%	0%
Black	59%	2%	12%	9%	17%	0%
Hispanic	59%	2%	12%	3%	23%	1%
Other Race	58%	1%	6%	1%	34%	0%
EDUCATION						
Less Than Bachelor's	61%	1%	8%	6%	23%	1%
Bachelor's Degree	63%	1%	7%	3%	26%	1%
More Than Bachelor's	67%	1%	8%	3%	21%	0%
MARITAL STATUS						
Married	100%	0%	0%	0%	0%	0%
Divorced/Widowed	0%	9%	62%	29%	0%	0%
Never Married	0%	0%	0%	0%	100%	0%

Sixty-four percent of respondents were married, 23 percent never married and 13 percent divorced, separated or widowed. Respondents aged 35 to 64 were more likely to be married; younger respondents were more likely to be never married; and older respondents were more likely to be divorced or widowed than other age groups. Male, higher income, White and higher educated respondents were more likely to be married than female, lower income, non-White and lower educated respondents.

Q36_1: As of November 4, 2014, in which country or countries did your spouse hold citizenship? [United States] (*N* = 5394)
(0) Not Selected (1) Selected

	Q36_1 Response Number	
	0	1
Respondents	62%	38%
AGE		
Age 18 to 24	54%	46%
Age 25 to 34	75%	25%
Age 35 to 44	66%	34%
Age 45 to 54	63%	37%
Age 55 to 64	62%	38%
Age 65 and up	52%	48%
SEX		
Male	59%	41%
Female	65%	35%
REGION		
Africa	44%	56%
East Asia	57%	43%
Europe	73%	27%
Near East	44%	56%
South Asia	34%	66%
Western Hemisphere	59%	41%
INCOME		
$0–$19,999	57%	43%
$20,000–$74,999	61%	39%
$75,000+	64%	36%
RACE		
White	62%	38%
Black	66%	34%
Hispanic	65%	35%
Other Race	58%	42%
EDUCATION		
Less Than Bachelor's	60%	40%
Bachelor's Degree	65%	35%
More Than Bachelor's	60%	40%
MARITAL STATUS		
Married	62%	38%

Of respondents who had a spouse, 38 percent answered that their spouse held citizenship in the United States. Older, male, lower income and White respondents were more likely to have a spouse who held citizenship in the United States than younger, female, higher income and non-White respondents.

Q36_2: As of November 4, 2014, in which country or countries did your spouse hold citizenship? [Country in which you were residing] (*N* = 5394)
(0) Not Selected (1) Selected

	Q36_2 Response Number	
	0	1
Respondents	33%	67%
AGE		
Age 18 to 24	28%	72%
Age 25 to 34	34%	66%
Age 35 to 44	35%	65%
Age 45 to 54	31%	69%
Age 55 to 64	32%	68%
Age 65 and up	34%	66%
SEX		
Male	36%	64%
Female	31%	69%
REGION		
Africa	71%	29%
East Asia	46%	54%
Europe	32%	68%
Near East	26%	74%
South Asia	67%	33%
Western Hemisphere	30%	70%
INCOME		
$0–$19,999	29%	71%
$20,000–$74,999	32%	68%
$75,000+	36%	64%
RACE		
White	32%	68%
Black	32%	68%
Hispanic	32%	68%
Other Race	52%	48%
EDUCATION		
Less Than Bachelor's	27%	73%
Bachelor's Degree	31%	69%
More Than Bachelor's	38%	62%
MARITAL STATUS		
Married	33%	67%

Of respondents who had a spouse, 67 percent answered that their spouse held citizenship in the country where they were currently residing. Female, lower income and lower educated respondents were more likely to have a spouse that held citizenship in the country where they were residing than male, higher income and higher educated respondents.

Q36_3: As of November 4, 2014, in which country or countries did your spouse hold citizenship? [Other] (*N* = 5394)
(0) Not Selected (1) Selected

	Q36_3 Response Number	
	0	1
Respondents	84%	16%
AGE		
Age 18 to 24	90%	10%
Age 25 to 34	77%	23%
Age 35 to 44	81%	19%
Age 45 to 54	87%	13%
Age 55 to 64	86%	14%
Age 65 and up	88%	12%
SEX		
Male	85%	15%
Female	84%	16%
REGION		
Africa	83%	17%
East Asia	86%	14%
Europe	82%	18%
Near East	84%	16%
South Asia	92%	8%
Western Hemisphere	88%	12%
INCOME		
$0–$19,999	86%	14%
$20,000–$74,999	88%	12%
$75,000+	81%	19%
RACE		
White	85%	15%
Black	86%	14%
Hispanic	85%	15%
Other Race	79%	21%
EDUCATION		
Less Than Bachelor's	88%	12%
Bachelor's Degree	85%	15%
More Than Bachelor's	83%	17%
MARITAL STATUS		
Married	84%	16%

Of respondents who had a spouse, 16 percent answered that their spouse held citizenship in a different country than the United States or the country in which they were currently residing. Higher educated respondents were more likely to have a spouse that held citizenship in a different country than the United States or in the country where they were currently residing than lower educated respondents.

Q36_Refused: As of November 4, 2014, in which country or countries did your spouse hold citizenship? [Refused All] (*N* = 5394)
(0) Not Selected (1) Selected

	Q36_Refused Response Number	
	0	1
Respondents	98%	2%
AGE		
Age 18 to 24	92%	8%
Age 25 to 34	98%	2%
Age 35 to 44	99%	1%
Age 45 to 54	99%	1%
Age 55 to 64	98%	2%
Age 65 and up	98%	2%
SEX		
Male	99%	1%
Female	98%	2%
REGION		
Africa	95%	5%
East Asia	99%	1%
Europe	99%	1%
Near East	97%	3%
South Asia	100%	0%
Western Hemisphere	98%	2%
INCOME		
$0–$19,999	98%	2%
$20,000–$74,999	99%	1%
$75,000+	99%	1%
RACE		
White	98%	2%
Black	95%	5%
Hispanic	98%	2%
Other Race	100%	0%
EDUCATION		
Less Than Bachelor's	99%	1%
Bachelor's Degree	99%	1%
More Than Bachelor's	98%	2%
MARITAL STATUS		
Married	98%	2%

Of respondents who had a spouse, 2 percent refused to answer where their spouse had citizenship.

Q37: Do you have children? (*N* = 8078)
(0) No (1) Yes (99) Refused

	Q37 Response Number		
	0	1	99
Respondents	37%	54%	8%
AGE			
Age 18 to 24	92%	7%	1%
Age 25 to 34	64%	27%	9%
Age 35 to 44	34%	55%	11%
Age 45 to 54	24%	68%	9%
Age 55 to 64	26%	65%	9%
Age 65 and up	23%	70%	7%
SEX			
Male	35%	56%	9%
Female	39%	53%	8%
REGION			
Africa	44%	48%	9%
East Asia	42%	49%	9%
Europe	42%	50%	8%
Near East	22%	68%	11%
South Asia	36%	57%	6%
Western Hemisphere	34%	60%	7%
INCOME			
$0–$19,999	55%	42%	3%
$20,000–$74,999	39%	56%	6%
$75,000+	30%	58%	12%
RACE			
White	36%	55%	8%
Black	29%	65%	6%
Hispanic	40%	53%	7%
Other Race	49%	41%	10%
EDUCATION			
Less Than Bachelor's	37%	58%	5%
Bachelor's Degree	40%	52%	8%
More Than Bachelor's	36%	55%	10%
MARITAL STATUS			
Married	19%	69%	12%
Divorced/Widowed	28%	71%	0%
Never Married	94%	5%	0%

Fifty-four percent of respondents said they have children. Older, Male, higher income, married and divorced or widowed respondents were more likely to have had children than younger, female, lower income and never-married respondents.

Q38_1: As of November 4, 2014, in which country or countries did your children hold citizenship? [United States] (*N* = 4732)
(0) Not Selected (1) Selected

	Q38_1 Response Number	
	0	1
Respondents	15%	85%
AGE		
Age 18 to 24	70%	30%
Age 25 to 34	38%	62%
Age 35 to 44	17%	83%
Age 45 to 54	12%	88%
Age 55 to 64	11%	89%
Age 65 and up	12%	88%
SEX		
Male	15%	85%
Female	16%	84%
REGION		
Africa	5%	95%
East Asia	10%	90%
Europe	16%	84%
Near East	14%	86%
South Asia	10%	90%
Western Hemisphere	19%	81%
INCOME		
$0–$19,999	22%	78%
$20,000–$74,999	15%	85%
$75,000+	13%	87%
RACE		
White	15%	85%
Black	15%	85%
Hispanic	17%	83%
Other Race	11%	89%
EDUCATION		
Less Than Bachelor's	23%	77%
Bachelor's Degree	14%	86%
More Than Bachelor's	13%	87%
MARITAL STATUS		
Married	15%	85%
Divorced/Widowed	14%	86%
Never Married	41%	59%

Of respondents who had a child, 85 percent answered that their child held citizenship in the United States. Older, higher income, higher educated, married and divorced or widowed respondents were more likely to have a child that held citizenship in the United States than younger, lower income, lower educated and never-married respondents.

Q38_2: As of November 4, 2014, in which country or countries did your children hold citizenship? [Country in which you were residing] (*N* = 4732)
(0) Not Selected (1) Selected

	Q38_2 Response Number	
	0	1
Respondents	36%	64%
AGE		
Age 18 to 24	40%	60%
Age 25 to 34	28%	72%
Age 35 to 44	28%	72%
Age 45 to 54	30%	70%
Age 55 to 64	38%	62%
Age 65 and up	44%	56%
SEX		
Male	39%	61%
Female	32%	68%
REGION		
Africa	69%	31%
East Asia	53%	47%
Europe	30%	70%
Near East	22%	78%
South Asia	81%	19%
Western Hemisphere	40%	60%
INCOME		
$0–$19,999	38%	62%
$20,000–$74,999	37%	63%
$75,000+	33%	67%
RACE		
White	32%	68%
Black	58%	42%
Hispanic	47%	53%
Other Race	58%	42%
EDUCATION		
Less Than Bachelor's	41%	59%
Bachelor's Degree	32%	68%
More Than Bachelor's	35%	65%
MARITAL STATUS		
Married	34%	66%
Divorced/Widowed	43%	57%
Never Married	21%	79%

Of respondents who had a child, 64 percent answered that their child held citizenship in the country in which they were currently residing. Middle-aged, female, higher income, White and never-married respondents were more likely to have a child that held citizenship in the country in which they were currently residing than male, lower income, non-White and divorced or widowed respondents.

Q38_3: As of November 4, 2014, in which country or countries did your children hold citizenship? [Other] (*N* = 4732)
(0) Not Selected (1) Selected

	Q38_3 Response Number	
	0	1
Respondents	91%	9%
AGE		
Age 18 to 24	70%	30%
Age 25 to 34	91%	9%
Age 35 to 44	93%	7%
Age 45 to 54	90%	10%
Age 55 to 64	93%	7%
Age 65 and up	91%	9%
SEX		
Male	91%	9%
Female	92%	8%
REGION		
Africa	95%	5%
East Asia	95%	5%
Europe	90%	10%
Near East	89%	11%
South Asia	95%	5%
Western Hemisphere	93%	7%
INCOME		
$0–$19,999	90%	10%
$20,000–$74,999	92%	8%
$75,000+	91%	9%
RACE		
White	92%	8%
Black	94%	6%
Hispanic	87%	13%
Other Race	93%	7%
EDUCATION		
Less Than Bachelor's	92%	8%
Bachelor's Degree	92%	8%
More Than Bachelor's	91%	9%
MARITAL STATUS		
Married	93%	7%
Divorced/Widowed	86%	14%
Never Married	86%	14%

Of respondents who had a child, 9 percent answered that their child held citizenship in a different country than the United States and the country in which they were currently residing. Respondents in Europe and the Near East and those who were Hispanic, divorced or widowed, and never married were more likely to have a child that held citizenship in a different country than the United States and the country in which they were currently residing than respondents in other geographic regions and those who were non-Hispanic and married.

Q38_Refused: As of November 4, 2014, in which country or countries did your children hold citizenship? [Refused All] (*N* = 4732)
(0) Not Selected (1) Selected

	Q38_Refused Response Number	
	0	1
Respondents	99%	1%
AGE		
Age 18 to 24	100%	0%
Age 25 to 34	95%	5%
Age 35 to 44	100%	0%
Age 45 to 54	99%	1%
Age 55 to 64	100%	0%
Age 65 and up	98%	2%
SEX		
Male	99%	1%
Female	98%	2%
REGION		
Africa	100%	0%
East Asia	100%	0%
Europe	99%	1%
Near East	99%	1%
South Asia	98%	2%
Western Hemisphere	99%	1%
INCOME		
$0–$19,999	98%	2%
$20,000–$74,999	99%	1%
$75,000+	99%	1%
RACE		
White	99%	1%
Black	99%	1%
Hispanic	99%	1%
Other Race	99%	1%
EDUCATION		
Less Than Bachelor's	99%	1%
Bachelor's Degree	99%	1%
More Than Bachelor's	99%	1%
MARITAL STATUS		
Married	99%	1%
Divorced/Widowed	99%	1%
Never Married	96%	4%

Of respondents who had a child, 1 percent refused to answer about their child's citizenship.

Q39: Which category represents your household's total combined income during the 12 months leading up to November 4, 2014? (*N* = 8078)
(1) Under $1,000 (2) $1,000–4,999 (3) $5,000–9,999 (4) $10,000–19,999
(5) $20,000–39,999 (6) $40,000–49,999 (7) $50,000–74,999 (8) $75,000–99,999
(9) $100,000–149,999 (10) $150,000+ (99) Refused

	Q39 Response Number										
	1	2	3	4	5	6	7	8	9	10	99
Respondents	2%	3%	3%	7%	15%	9%	14%	11%	11%	16%	10%
AGE											
Age 18 to 24	11%	15%	3%	11%	13%	4%	6%	6%	9%	8%	14%
Age 25 to 34	2%	3%	4%	10%	21%	10%	14%	11%	8%	9%	8%
Age 35 to 44	1%	1%	2%	3%	13%	10%	16%	13%	15%	20%	7%
Age 45 to 54	1%	2%	2%	4%	11%	8%	13%	11%	12%	27%	10%
Age 55 to 64	2%	1%	2%	6%	13%	8%	14%	12%	13%	20%	11%
Age 65 and up	2%	4%	5%	9%	17%	11%	16%	9%	8%	8%	12%
SEX											
Male	2%	3%	2%	7%	14%	9%	15%	11%	12%	16%	8%
Female	2%	3%	3%	7%	16%	9%	13%	10%	10%	16%	11%
REGION											
Africa	4%	11%	5%	5%	16%	6%	19%	13%	7%	7%	5%
East Asia	1%	2%	2%	3%	15%	7%	12%	12%	14%	22%	10%
Europe	2%	2%	3%	6%	15%	10%	14%	11%	11%	17%	9%
Near East	2%	6%	4%	10%	19%	10%	11%	9%	6%	9%	15%
South Asia	7%	7%	3%	15%	14%	10%	10%	8%	8%	13%	5%
Western Hemisphere	2%	3%	3%	7%	13%	9%	16%	11%	12%	15%	8%
INCOME											
$0–$19,999	13%	21%	20%	46%	0%	0%	0%	0%	0%	0%	0%
$20,000–$74,999	0%	0%	0%	0%	39%	24%	37%	0%	0%	0%	0%
$75,000+	0%	0%	0%	0%	0%	0%	0%	29%	30%	42%	0%
RACE											
White	2%	2%	3%	6%	15%	10%	14%	11%	12%	17%	9%
Black	2%	6%	5%	10%	14%	9%	15%	10%	9%	9%	11%
Hispanic	4%	6%	5%	10%	21%	9%	15%	8%	7%	9%	7%
Other Race	2%	6%	2%	8%	12%	5%	10%	14%	12%	21%	8%
EDUCATION											
Less Than Bachelor's	4%	6%	4%	12%	20%	11%	12%	7%	7%	6%	11%
Bachelor's Degree	2%	3%	3%	7%	15%	8%	14%	11%	10%	16%	10%
More Than Bachelor's	1%	1%	2%	4%	12%	9%	15%	13%	14%	21%	8%
MARITAL STATUS											
Married	1%	2%	2%	5%	13%	9%	15%	12%	14%	20%	9%
Divorced/Widowed	2%	5%	6%	10%	19%	11%	16%	7%	6%	8%	9%
Never Married	5%	6%	5%	11%	20%	8%	11%	10%	7%	9%	9%

Thirty-eight percent of respondents had higher annual incomes ($75,000 or more), 38 percent had middle incomes (between $20,000 and $74,999) and 14 percent had lower incomes ($19,999 or less). Middle-aged, male, White, higher educated and married respondents were more likely to have higher incomes than 18 to 34 year old, 65 and older, female, non-White, lower educated, never-married and divorced or widowed respondents.

Q40: In the week before November 4, 2014, did you have a job either full-time or part-time? (*N* = 8078)

(1) Yes (2) No, I am retired (3) No, I am disabled (4) No, I am unable to work
(5) No, and not retired, disabled, or unable to work (99) Refused

	Q40 Response Number					
	1	2	3	4	5	99
Respondents	66%	19%	1%	1%	12%	2%
AGE						
Age 18 to 24	47%	1%	1%	1%	45%	6%
Age 25 to 34	86%	0%	0%	1%	10%	2%
Age 35 to 44	85%	0%	0%	1%	13%	1%
Age 45 to 54	82%	3%	1%	1%	12%	2%
Age 55 to 64	69%	15%	2%	1%	10%	2%
Age 65 and up	23%	72%	1%	1%	3%	1%
SEX						
Male	70%	20%	1%	1%	7%	2%
Female	62%	18%	1%	1%	15%	2%
REGION						
Africa	78%	9%	0%	1%	13%	0%
East Asia	74%	15%	1%	1%	8%	2%
Europe	66%	17%	1%	1%	14%	2%
Near East	71%	16%	1%	0%	8%	3%
South Asia	59%	19%	0%	1%	20%	1%
Western Hemisphere	56%	29%	1%	1%	11%	2%
INCOME						
$0–$19,999	50%	26%	2%	3%	19%	0%
$20,000–$74,999	65%	23%	1%	1%	10%	1%
$75,000+	77%	12%	0%	0%	10%	0%
RACE						
White	66%	19%	1%	1%	11%	2%
Black	60%	30%	0%	1%	8%	1%
Hispanic	59%	19%	1%	2%	16%	2%
Other Race	71%	11%	1%	1%	15%	1%
EDUCATION						
Less Than Bachelor's	47%	30%	2%	2%	16%	3%
Bachelor's Degree	67%	16%	1%	1%	13%	2%
More Than Bachelor's	73%	16%	0%	1%	9%	1%
MARITAL STATUS						
Married	66%	20%	1%	1%	10%	2%
Divorced/Widowed	52%	38%	2%	1%	6%	1%
Never Married	72%	5%	1%	1%	18%	3%

Sixty-six percent of respondents had either a full-time or part-time job in the week before November 4, 2014. Nineteen percent did not have a full-time or part-time job because they were retired, 2 percent because they were disabled or unable to work and 12 percent were not working for any of these reasons. Middle-aged, male, higher income, White, higher educated and never-married respondents were more likely to be employed than those respondents who were aged 18 to 24, aged 55 and up, female, lower income, non-White, lower educated or divorced or widowed.

Q41: Had you been doing anything to find work during the four weeks before November 4, 2014? (*N* = 795)
(0) No (1) Yes (99) Refused

	Q41 Response Number		
	0	1	99
Respondents	80%	19%	1%
AGE			
Age 18 to 24	88%	12%	0%
Age 25 to 34	79%	21%	0%
Age 35 to 44	77%	21%	2%
Age 45 to 54	80%	18%	2%
Age 55 to 64	68%	32%	0%
Age 65 and up	93%	4%	3%
SEX			
Male	76%	24%	0%
Female	81%	17%	2%
REGION			
Africa	56%	44%	0%
East Asia	87%	13%	0%
Europe	81%	18%	1%
Near East	77%	18%	5%
South Asia	79%	20%	1%
Western Hemisphere	75%	23%	1%
INCOME			
$0–$19,999	66%	34%	0%
$20,000–$74,999	77%	23%	0%
$75,000+	91%	9%	1%
RACE			
White	82%	16%	1%
Black	31%	67%	2%
Hispanic	72%	28%	0%
Other Race	81%	19%	0%
EDUCATION			
Less Than Bachelor's	80%	17%	3%
Bachelor's Degree	81%	18%	1%
More Than Bachelor's	78%	22%	0%
MARITAL STATUS			
Married	82%	16%	2%
Divorced/Widowed	55%	45%	0%
Never Married	81%	19%	0%

Of those who did not have a full-time or part-time job in the week before November 4, 2014, and not because they were retired, disabled or unable to work, 19 percent were actively seeking employment in the four weeks before November 4, 2014. Male, lower income, non-White and divorced or widowed respondents were more likely to be actively seeking employment in the four weeks before November 4, 2014 than female, higher income, white, married and never-married respondents.

Q42: Thank you for participating in the survey. If you have comments or concerns that you were not able to express by answering this survey please enter them in the space provided below. (*N* = 8078)
(0) No Comment (1) Comment

	Q42 Response Number 0	1
Respondents	75%	25%
AGE		
Age 18 to 24	78%	22%
Age 25 to 34	80%	20%
Age 35 to 44	80%	20%
Age 45 to 54	74%	26%
Age 55 to 64	74%	26%
Age 65 and up	68%	32%
SEX		
Male	75%	25%
Female	75%	25%
REGION		
Africa	65%	35%
East Asia	73%	27%
Europe	76%	24%
Near East	79%	21%
South Asia	68%	32%
Western Hemisphere	72%	28%
INCOME		
$0–$19,999	69%	31%
$20,000–$74,999	75%	25%
$75,000+	77%	23%
RACE		
White	75%	25%
Black	77%	23%
Hispanic	73%	27%
Other Race	76%	24%
EDUCATION		
Less Than Bachelor's	75%	25%
Bachelor's Degree	74%	26%
More Than Bachelor's	76%	24%
MARITAL STATUS		
Married	76%	24%
Divorced/Widowed	67%	33%
Never Married	78%	22%

Twenty-five percent of respondents answered the open-ended prompt at the end of the survey. Older, lower income and divorced or widowed respondents were more likely to answer the open-ended prompt at the end of the survey than younger, higher income, married and never-married respondents.

The content code population consists of respondents who gave any answer to Q42. Open-ended answers were content coded into the following categories based on a detailed content codebook that listed examples and variations for each category. Each response was coded in up to three categories; therefore, the percentages will not add up to 100 percent. If the respondent's

comment mentioned answers from more than three categories, their answer was coded as the three categories that were in order of a) most prominence and b) the first three listed reasons.

Q42: Content Coded Responses	
1: Cost burden to send ballot	3%
2: Absentee ballot envelope and U.S. paper size issues	1%
3: Post office issues	3%
4: Used personal ballot courier	1%
5: Sent absentee ballot too early	0%
6: Received absentee ballot too late	5%
7: Desire for vote receipt notification	3%
8: Voting signature issues	0%
9: Desire for online, email or electronic vote capacity	15%
10: Automatic ballot issues	5%
11: Difficulties having to register every 12 months	16%
12: U.S. address requirement causes issues	5%
13: Concerned about children's registration issues	1%
14: Used embassy or consulate	5%
15: Plan to use FVAP.gov or FVAP resources in the future	6%
16: Used non-government resources	2%
17: Contacted local election board	9%
18: Believe their vote does not matter	3%
19: Believe they can only vote in presidential elections	3%
20: Believe overseas voters should not vote in State/local elections	5%
21: Ineligible	1%
22: Overseas policy issues	3%
23: Survey administration issues	6%
24: Survey content issues	23%
25: Survey reactions	18%
26: Other/Don't Know/Noise	8%

Of those who made a comment at the end of the survey, 16 percent said they experienced difficulties having to register to vote every 12 months, and 15 percent expressed a desire for online, email or electronic vote capacity. In general, respondents expressed a diverse amount of mailing (1–6), voting (7–9), and registration (10–13) issues with overseas voting, even though they were not prompted to specifically address these topics.