Supporting Statement for Paperwork Reduction Act Submissions

B. COLLECTION OF INFORMATION EMPLOYING STATISTICAL METHODS

1. Description of the potential respondent universe and any sampling or other respondent selection methods to be used

To reduce the burden to the public for the survey, the Peace Corps intends to survey a proportionate random sample of Returned Peace Corps Volunteers (RPCVs) sufficient to gather data with a 99 percent confidence level and a confidence interval of plus or minus 5.

The potential respondent universe includes all RPCVs since the inception of the Agency in 1961, excluding RPCVs known to be deceased. Returned Peace Corps Volunteers are defined as those individuals who completed at least 12 months of Peace Corps service (including training). Based on these criteria, there is a potential pool of 134,276 individuals. Using the following formula the minimum sample needed for this survey is 662.

$$SS = \frac{Z^2 * (p) * (1-p)}{c^2}$$

Where:

Z = Z value (e.g. 1.96 for 95% confidence level)
p = percentage picking a choice, expressed as decimal
(.5 used for sample size needed)
c = confidence interval, expressed as decimal (e.g., .04 = ±4)

Formula downloaded on 11/6/08 from: http://www.surveysystem.com/sample-size-formula.htm

The accuracy of the Peace Corps' contact information for RPCVs declines the longer it has been since an RCPV's service and not all demographic groups are evenly distributed throughout the population of RPCVs. With regard to the accuracy of the Peace Corps RPCV contact information, the Peace Corps has made a concerted effort to update its address file over the past eighteen months. There is still concern that the system contains many invalid addresses. With regard to the demographic make up of the RPCV population over time, analyses of administrative data indicate that there is a relationship between the sex of the Volunteer and decade of service. Specifically, males are overrepresented among Volunteers serving in the 1960's and 1970's and slightly underrepresented in later decades (see the table below).

Year of Service	Percentage of PCV	
	Male	Female
1961-69	63%	37%
1970-79	63%	37%
1980-89	52%	48%
1990-99	45%	55%
2000-08	41%	59%

To ensure that there are sufficient members of these important population segments represented in the final data set, the Peace Corps intends to generate a sample of 1,500 RPCVs rather than the minimum required sample of 662. In addition, prior to selecting the sample, the population of RPCVs will be grouped by sex and, within those groups, by date of service. Sample members will then be selected from the population using a random start. The result will be a proportionate random sample with explicit stratification by gender and implicit stratification by date of service[1].

Population	Required Sample for 99% confidence level	Proposed sample
134,276	662	1,500

Strata	Number of entities by strata
Male	750
Female	750
Total Proposed Sample	1,500

Peace Corps staff considered hiring a private firm to generate current addresses for members of the sample, but with costs of approximately 4.95 per record, it was determined that the cost was significantly higher than the cost of over- sampling. Specifically, the cost of over sampling is $1470 ((662/1500) * ($150 + $2117 + 1075)) and the cost of verifying 662 addresses is $3277 (662*$4.95). If the number of respondents for whom addresses are determined to be incorrect is small, this option may be revisited.

While there is no recent survey of RPCVs on which to base the expected response rate, previous surveys of the Peace Corps Volunteer population can be used as a guide. The most recent survey of RPCVs reported a 54 percent response rate (Juanita Graul. *Survey of Returned Peace Corps Volunteers*. December 1996. The Peace Corps, Washington DC). The 2008 and 2009 survey of active Peace Corps Volunteers reported 60 percent and 71 percent response rates respectively (*Peace Corps 2008 Volunteer Survey: Global Report*, Peace Corps Office of

---

[1] According to Agency records, fewer than four percent of individuals serve as Peace Corps Volunteers more than once. In cases where an individual has served more than once, the data related to their most recent service will be used in the sample selection process.

Strategic Information, Research and Planning; *Peace Corps 2009 Volunteer Survey: Global Report,* Peace Corps Office of Strategic Information, Research and Planning, in progress). The response rate for the 2008 *Volunteer Close of Service Survey* was 53 percent (internal agency report). The expected response rate for this survey is 70 percent. This rate is based on ongoing publicity and outreach to RPCVs in conjunction with the upcoming 50th anniversary of the Peace Corps. Specific methods that will be used to reach the expected response rate are described under question B-3 below.

With regard to the focus groups, a convenience sample of Returned Peace Corps Volunteers will be developed. Convenience sampling was selected in order to obtain a reasonable approximation of RPCVs' true responses, while maximizing efficiency and cost. This non-probability sampling technique is appropriate given the exploratory, rather than confirmatory, nature of the proposed research. To develop this sample, the Peace Corps will distribute electronic and paper flyers through established RPCV channels. This will include staff of Peace Corps' Office of Returned Volunteer Services   sending recruitment materials to members of their list serves in the target cities (i.e., Washington DC, San Francisco, and New York). In addition, the Peace Corps' recruitment offices in the target cities will distribute the information through their list serves, and post flyers in their offices where they frequently host events for RPCVs. The Peace Corps has successfully used these methods to reach RPCVs in the past.

2. Procedures for the collection of information

A proportionate random sample of returned Peace Corps Volunteers will be used for the survey data collection. The first step will be grouping the population by sex and within these groups ordering by date of most recent service. The sample will then be generated using the SAMPLE command in the Statistical Package for the Social Sciences (SPSS). Sampling is based on a pseudo-random-number generator that depends on a seed value that is established by the program. The algorithm used by SPSS is presented below:

(a)

$p = \frac{n_1}{n}$
$n = n - 1$

Select a case if its uniform (0,1) number is less than p. If selected, $n_1 = n_1 - 1$, and return to (a).

There may be post-collection weighting of variables, unless indicated, to address non-response bias as described under B-3 below. There are no unusual problems requiring specialized sampling procedures. This survey is a one-time data collection effort.

No special procedures will be used as part of the focus group data collection.

3. Methods to maximize response rates and to deal with non response issues

The response rate for the survey collection will be maximized through the use of an initial invitation letter from the Director of the Peace Corps printed on official agency stationary that will be sent to members of the survey sample inviting them to participate in the survey. The link to the web-based survey will be provided in the initial invitation.

Proposed text for the invitation to participate in the 2009 Survey of Returned Peace Corps Volunteers

"Peace Corps invites you to participate in the fourth survey of Returned Peace Corps Volunteers. Your feedback will help the Peace Corps learn more about the activities of the RPCV community, as well as help assess agency programs for the RPCV community   To complete the survey, go to *insert survey web address here* by *insert date of the end of the data collection period.* Please use survey code xxxx.
If you have any questions or would prefer to complete the survey by telephone, please contact Susan Jenkins at Peace Corps headquarters at 202.692.1241.

Thank you in advance for your ongoing support of the Peace Corps!"

There will be up to two follow-up contacts for non-respondents during the third and fourth weeks of the data collection period. The text for the follow up contacts will be similar to the text used in the initial invitation. Follow-up contact will be made either through additional hard copy mailings or e-mails in cases where the Peace Corps has verified e-mail addresses. In either case, the reminder will be sent from the agency Director.

A notice about the survey will be placed on the Peace Corps' website and distributed through the Peace Corps' regional offices and contact lists (e.g., the National Peace Corps Association and Regional Returned Peace Corps Volunteer groups). This will provide respondents with information about the research and assure them of the legitimacy of the data collection. Contact information for agency staff will be provided so that potential respondents can ask questions and further reassure themselves of the legitimacy of the data collection effort.

A potential concern regarding response rate is the accuracy of the RPCV address file. As a result, the Peace Corps will continue efforts to ensure that the addresses in the RPCV address database are up-to-date. Specifically, outreach through the regional recruiting offices and RPCV contact with the Peace Corps typically results in the Peace Corps' ability to update approximately 200 e-mail addresses each month.

A multi-step process will be used to address possible non-response bias. To address non-response due to non-contact (e.g., incorrect addresses), we propose to over-sample the population. If it is determined, based on tracking the number of returned survey announcements and messages, that the non-response is largely due to non-contact, we will check that the resulting respondents are not significantly different from the entire population of RPCVs. The following variables contained in the database from which the sample will be drawn will be used for this check: dates of Peace Corps service, geographic region of Peace

Corps service, and gender. If no statistically significant differences are found, the data analysis will proceed without changes to the data (i.e., no post-collection weighting).

If there are significant differences between the respondents and the population of RPCVs, the data will be adjusted to accurately represent the population. Agency administrative data will be used to calculate the non-response by decade of Peace Corps service (based on dates of service), geographic region of Peace Corps service, and Volunteer gender. Specifically, the weight for each decade-region-gender stratum will be calculated by dividing the rate of that stratum in the population by the rate of that stratum in the sample. The resulting weights will be applied to the data in an effort to increase the degree to which the data can be generalized to the population of RPCVs.

Additional analysis may also be conducted following the approach suggested by Henry (*Practical Sampling.* (1990*)* Applied Social Research Methods Series Volume 21, Sage Publications, Newbury Park California). This approach is based on the assumption that late responders share characteristics with non-responders. Specifically, unweighted responses from late responders would be compared to those from early responders. If there is a significant difference between responses from early and late responders the latter may be treated as separate strata and included in the data weighting process. Alternately, the data report may simply include a note about this analysis to alert readers to this potential bias in the results.

This survey collection is expected to yield reliable data that can be generalized to the universe of Returned Peace Corps Volunteers.

No special procedures will be used to maximize response as part of the focus group data collection.

4. Tests of procedures or methods

No tests of procedures or methods will be undertaken with either the survey collection or the focus group collection.

5. Names and telephone numbers of individuals consulted on statistical aspects of the design

The staff of the Peace Corps' Office of Strategic Information, Research, and Planning contributed to the statistical aspects of the design, and several will collect and analyze the information for the Peace Corps. They are listed below:

Name	Job Title	Telephone Number
Kerley, Janet*	Chief, Research, Evaluation and Measurement	(202) 692-2178
Griffin, Eric	Chief, Planning, Data and Information Management	(202) 692-2146
Jenkins, Susan	Evaluation Program Analyst	(202) 692-1241
Lawlis, Cathy	Evaluation Program Analyst	(202) 692-2144
Ryssman, Alice-Lynn	Social Science Analyst	(202) 692-2149

*Indicates the person who will oversee the collection and analysis of the data.