# **Department of Veterans Affairs**

Independent Evaluation of the Conversion Privilege from Servicemembers' Group Life Insurance (SGLI) to Veterans' Group Life Insurance (VGLI) for Disabled Service Members

> Office of Management and Budget Clearance Package Supporting Statement for Paperwork Reduction Act Submissions

Part B Collections of Information Employing Statistical Methods

## B. COLLECTION OF INFORMATION EMPLOYING STATISTICAL METHODS

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### B. COLLECTION OF INFORMATION EMPLOYING STATISTICAL METHODS

**B1.** Describe (including a numerical estimate) the potential respondent universe and any sampling or other respondent selection methods to be used. Data on the number of entities (e.g., establishments, State and local government units, households, or persons) in the universe covered by the collection and in the corresponding sample are to be provided in tabular form for the universe as a whole and for each of the strata in the proposed sample. Indicate expected response rates for the collection as a whole. If the collection had been conducted previously, include the actual response rate achieved during the last collection.

Individuals in the study population satisfy the following requirements:

- Separated from the military during a four-month reference period starting 20 months prior to the beginning of data collection and ending 16 months prior to data collection.
- Did not return to military duty following separation,
- Policy holders of SGLI prior to separation,
- Eligible to purchase VGLI following separation, and
- Alive at the time of data collection.

Annually, there are approximately 300,000 individuals who separate from the military. Thus, using a four-month reference period to define the study population yields an approximate population size of 100,000. The overall expected response rate is 30 percent.

### **B2.** Describe the procedures for the collection of information including:

- \* Statistical methodology for stratification and sample selection,
- \* Estimation procedure,
- \* Degree of accuracy needed for the purpose described in the justification,
- \* Unusual problems requiring specialized sampling procedures, and
- \* Any use of periodic (less frequent than annual) data collection cycles to reduce burden.

The source for the sampling frame is a data file provided by the Veterans Administration, containing information for the 164,351 service members discharged between October 15, 2006,

and June 15, 2007. This file was subsetted to contain only addresses that are in one of the 50 states or in the District of Columbia. The resulting sampling frame contains 161,883 records.

The sampling frame contains variables to permit stratification by gender, officer versus enlisted, VGLI-policy application received, and percent disabled Table 1 shows the number of sampling frame records assigned to the 24 strata defined by these stratification variables.

|                            |            |         | Not      | 10%-40%  | 50%+     |
|----------------------------|------------|---------|----------|----------|----------|
|                            |            |         | disabled | disabled | disabled |
| VGLI<br>application        | Officers*  | Male*** | 577      | 299      | 281      |
|                            |            | Female  | 118      | 48       | 59       |
|                            | Enlisted** | Male*** | 6,177    | 2,725    | 2,786    |
| Teceiveu                   |            | Female  | 1,425    | 621      | 543      |
| VGLI<br>application<br>not | Officers*  | Male*** | 8,557    | 1,975    | 1,034    |
|                            |            | Female  | 1,551    | 377      | 241      |
|                            | Enlisted** | Male*** | 89,703   | 15,407   | 8,021    |
| received                   |            | Female  | 15,168   | 2,791    | 1,399    |

Table 1: Number of sampling-frame records assigned to each stratum

\* Includes warrant officers

\*\*Includes unknown rank

\*\*\*Includes unknown gender

Table 2 contains the allocation of the 1,200 completed questionnaires to the 24 strata.

|                     |          |        | Not      | 10%-40%  | 50%+     |
|---------------------|----------|--------|----------|----------|----------|
|                     |          |        | disabled | disabled | disabled |
| VGLI<br>application | Officers | Male   | 11       | 6        | 15       |
|                     |          | Female | 2        | 2        | 3        |
|                     | Enlisted | Male   | 101      | 48       | 144      |
| received            |          | Female | 25       | 11       | 28       |
| VGLI<br>application | Officers | Male   | 114      | 26       | 22       |
|                     |          | Female | 21       | 5        | 5        |
| not                 | Enlisted | Male   | 210      | 104      | 145      |
| received            |          | Female | 99       | 25       | 27       |

Table 2: Allocation for completed questionnaires

This allocation contains oversampling for females, officers, VGLI-application received, and for both10%-to-40% disabled and 50%+ disabled. This oversampling produces samples sizes for low-frequency categories that are larger than that which would result from proportionately allocating the 1,200 completed questionnaires to the 24 strata. Because proportional allocation will not be used, however, the effective sample size for an analysis domain may be smaller than the domain's actual completed sample size. Table 3 contains for various domains the expected

completed sample size, the expected effective completed sample size, and the expected maximum margin of error for an estimated domain proportion.

| <b>I</b>                               | Actual completed | Effective completed | Maximum margin of error <sup>*</sup> |
|--|------------------|---------------------|--------------------------------------|
| Domain                                 | sample size      | sample size         | for domain proportion                |
| Overall                                | 1,200            | 578                 | 0.041                                |
|  | 200              | 225                 | 0.054                                |
| 50%+ disabled                          | 388              | 325                 | 0.054                                |
| 10%-40% disabled                       | 228              | 200                 | 0.060                                |
| Not disabled                           | 584              | 364                 | 0.051                                |
| Application received                   | 397              | 325                 | 0.054                                |
| received                               | 803              | 480                 | 0.045                                |
| Officer                                | 233              | 220                 | 0.066                                |
| Enlisted                               | 255              | 106                 | 0.000                                |
| Linisteu                               | 907              | 400                 | 0.044                                |
| Female                                 | 255              | 200                 | 0.069                                |
| Male                                   | 945              | 447                 | 0.046                                |
| 50%+ disabled and application received | 190              | 200                 | 0.069                                |
| 50%+ disabled and                      |                  |                     |                                      |
| application not                        | 198              | 202                 | 0.069                                |
| received                               |                  |                     |                                      |
| Age: 0-29                              | 459              | 312                 | 0.055                                |
| A go: $20\pm$                          | 7/1              | 512                 | 0.055                                |
| Age. 30 *                              | /41              | 210                 | 0.000                                |
| Age: 0-25                              | 228              | 85                  | 0.106                                |
| Age: 26-29                             | 231              | 146                 | 0.081                                |
| Age: 30-34                             | 161              | 80                  | 0.110                                |
| Age: 35+                               | 580              | 136                 | 0.084                                |

 Table 3: Domain completed sample sizes and maximum margin of errors

\* Half width of 95-percent confidence interval

In addition to the sampling frame's including the stratification variables, it will also include pay grade at separation. Within each stratum, the sampling frame will be sorted by pay grade, and systematic sampling will be used to select the sample from the stratum. The size of the sample to be selected from each stratum will be the number of completed surveys allocated to the stratum divided by the product of the stratum's expected response rate and its expected proportion of mailed-out surveys that are not returned due to being undeliverable.

We do not foresee any unusual problems that would require specialized sampling procedures. This will be a one-time data collection and currently there are no plans to conduct periodic data collections.

B3. Describe methods to maximize response rates and to deal with issues of nonresponse. The accuracy and reliability of information collected must be shown to be adequate for intended uses. For collections based on sampling, a special justification must be provided for any collection that will not yield "reliable" data that can be generalized to the universe studied.

#### Maximizing Response Rates

Steps to minimize nonresponse are built into the mailing protocol. These include the following:

- **– Household Advance Letters.** Advance materials will be sent to the households of the sampled veterans. The advance letters will describe the study's goals and objectives and will give assurances of confidentiality. Letters will be sent to households approximately 1 week before the household is mailed the survey.
- **Multiple Follow-ups for the Mail Survey.** If a survey is not received from a designated household 2 weeks after it is sent, a postcard reminder will be sent. If a survey has not been received 2 weeks after the postcard, a final re-mailing of the surveys will be sent.

We expect that 30 percent of the sampled veterans who receive a mailed survey will complete it and mail it back.

#### Addressing Nonresponse

Response rates will be calculated for the entire population and for the subpopulations used to determine the sample allocation. A nonresponse bias study will be carried out on the effect of pay grade on conversion because pay grade and conversion status are on the sampling frame (and hence known for non-respondents) and because pay grade will not be one of the variables used to adjust the sampling weights for nonresponse. Table 4 shows that conversion rates differ by pay grade.

|                 | E1<br>through<br>E3 | E4<br>through<br>E6 | E7<br>through<br>E9 | W1<br>through<br>W4 | O1<br>through<br>O9 | Total |
|-----------------|---------------------|---------------------|---------------------|---------------------|---------------------|-------|
| Conversion rate | 5.1%                | 7.7%                | 16.3%               | 14.9%               | 8.6%                | 8.1%  |

Table 4: Conversion rates by pay grade calculated from the sampling frame

Sample weights will be calculated for each completed survey to allow for unbiased estimation of parameters for both the study population and various sub-populations. The sample weights are products of the base weight and a nonresponse raking adjustment. The *base weight is* the reciprocal of the probability of selection of each sampled veteran. The *nonresponse raking adjustment* is designed to reduce the potential bias caused by differences between the responding and non-responding population. The nonresponse raking adjustment modifies the base weights so that sample-based estimates of population frequencies will equal to sampling-frame frequencies for the stratification variables, plus additional categorical variables based on age, years-in-service at separation, and branch of service at separation.

B4. Describe any tests of procedures or methods to be undertaken. Testing is encouraged as an effective means of refining collections of information to minimize burden and improve utility. Tests must be approved if they call for answers to identical questions from 10 or more respondents. A proposed test or set of test may be submitted for approval separately or in combination with the main collection of information.

The instrument contains questions adapted from other national surveys. The questionnaire was reviewed by those who have experience working with this population. Additionally, prior to beginning data collection, the survey will be tested with up to nine veterans. Veterans identified for testing of the survey instrument will represent a convenience sample.

B5. Provide the name and telephone number of individuals consulted on statistical aspects of the design and the name of the agency unit, contractor(s), grantee(s), or other person(s) who will actually collect and/or analyze the information for the agency.

| Name           | Affiliation | <b>Telephone Number</b> |  |
|----------------|-------------|-------------------------|--|
| Richard Sigman | Westat      | 240-453-2783            |  |
| John Helmick   | Westat      | 301-294-2010            |  |
| Carol Cober    | Westat      | 301-610-4837            |  |
| Stephanie Fry  | Westat      | 301-294-2872            |  |
| Terry Savage   | Westat      | 301-610-8731            |  |