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ARI Research Note 92-76

U.S. Army Survey of Nurses and Nursing Students: Sampling Frame and Survey Development

**Pat Lerro, John Morrison,
and Peter Ramsberger**

HumRRO International, Inc.

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for

**Contracting Officer's Representative
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**Manpower and Personnel Policy Research Technical Area
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**Manpower and Personnel Research Division
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August 1992

92 - 25 068



408010

92-25917



86 pg

**United States Army
Research Institute for the Behavioral and Social Sciences**

U.S. ARMY RESEARCH INSTITUTE FOR THE BEHAVIORAL AND SOCIAL SCIENCES

A Field Operating Agency Under the Jurisdiction
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REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour 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 aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.

1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE 1992, August	3. REPORT TYPE AND DATES COVERED Final Sep 91 - Aug 92	
4. TITLE AND SUBTITLE U.S. Army Survey of Nurses and Nursing Students: Sampling Frame and Survey Development			5. FUNDING NUMBERS DAKF-87-D-0144 62785A 791 2106C3	
6. AUTHOR(S) Lerro, Pat; Morrison, John; and Ramsberger, Peter				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) HumRRO International, Inc. 66 Canal Center Plaza, Suite 400 Alexandria, VA 22314			8. PERFORMING ORGANIZATION REPORT NUMBER --	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) U.S. Army Research Institute for the Behavioral and Social Sciences ATTN: PERI-R 5001 Eisenhower Avenue Alexandria, VA 22333-5600			10. SPONSORING/MONITORING AGENCY REPORT NUMBER ARI Research Note 92-76	
11. SUPPLEMENTARY NOTES Contracting Officer's Representative, Tanya J. Guthrie.				
12a. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution is unlimited.			12b. DISTRIBUTION CODE --	
13. ABSTRACT (Maximum 200 words) This report describes the rationale for the study of nurses and the development of the sampling frame and questionnaires for a survey of registered nurses and nursing students. An understanding of the perceptions of the U.S. Army and Army nursing by registered nurses and nursing students is important to U.S. Army policymakers and recruiters. Development of the sampling frame for registered nurses involved the selection of states by cluster sampling, with the selection of respondents randomly within states. Development of the sampling frame for nursing students involved the selection of nursing schools by cluster sampling. The surveys ask a series of questions on education level, employment status, satisfaction with nursing, attitudes about the Army Nurse Corps Active Duty and Reserve programs, and the impact of Desert Storm and similar possible actions on feelings about joining the military.				
14. SUBJECT TERMS Student nurse survey Nurse attitudes Registered nurse survey Nurse sampling frame Nurse recruitment			15. NUMBER OF PAGES 84	
			16. PRICE CODE --	
17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified	20. LIMITATION OF ABSTRACT Unlimited	

ACKNOWLEDGMENTS

HumRRO International, Inc. (HII) wishes to acknowledge the support and contributions of a number of individuals. The team wishes to thank Colonel Terris Kennedy, Army Nurse, and Major Pat Saulsbury, Army Nurse, from the Army Nurse Corps; Lieutenant Colonel Leslie Cormier, Army Nurse, from USAREC; and Tanya Guthrie from the U.S. Army Research Institute for the Behavioral and Social Sciences (ARI). Special thanks go to Naomi Verdugo, formerly at ARI and now on the Department of the Army/Deputy Chief of Staff for Personnel staff for her efforts in support of the project.

Within HII, a number of people contributed to this effort. Pat Lerro served as the project director and, along with Peter Ramsberger, designed the surveys. Gene Drucker and John Morrison contacted each state to obtain the lists of registered nurses. Ani Difazio and Jeff Barnes screened the state tapes. Bruce Belden and Emayeneme Gbemiye-Etta developed the mailing lists. Charles Cowan aided by Brian Waters developed the sampling methodology. Susan Cuddy and Pam Croom prepared the surveys. Cuddy administered the prototype surveys to nurses and nursing students. Special thanks go to Emma James for typing and editing this report.

**U.S. ARMY SURVEY OF NURSES AND NURSING STUDENTS: SAMPLING
FRAME AND SURVEY DEVELOPMENT**

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U.S. ARMY SURVEY OF NURSES AND NURSING STUDENTS:
SAMPLING FRAME AND SURVEY DEVELOPMENT

Introduction

Nurse Prototype Survey Objectives

This report describes the activities associated with preparing a nationally representative survey of registered nurses and nursing students. The activities included

- Methodology to provide data on the perceptions of the nursing profession and of Army nursing by private sector registered nurses and nursing students.
- A statistically valid sampling frame of registered nurses and nursing students and preparation of mailing labels for registered nurses and schools of nursing selected for the survey.
- Prototype survey instruments of registered nurses and nursing students that include perceptions of the Regular Army and Army Reserves.
- A package for OMB approval of the surveys.

Background

In private and public institutions, registered nurses compose the largest group of professionals in the health care delivery system. Demographic trends referred to as the "greying of America" and increased demand across all health care settings have contributed significantly to a shortage of nurses.¹ The shortage was reported as real, widespread, and of significant magnitude.² Other factors contributing to the shortfall involve the percentage of nurses who work only part-time and a high rate of turnover among hospital nurses. Often, nurse turnover in hospitals is due to nurses leaving the profession, rather than transferring to another facility or agency.

¹ Recruiting and Retaining Nurses: An Annotated Bibliography. B. Roberts, I. Kocher, and G.W. Thomas. The Naval Postgraduate school, Monterey, CA, December 1990, contains abstracts of approximately 115 studies and articles that provide a broad information base for identifying nurse labor market supply and demand factors as well as attitudinal information such as job satisfaction.

² A full discussion of the national shortages, their causes, and proposed remedies are found in the Secretary's Commission on Nursing: Volume I - Final Report, Department of Health and Human Services, Washington, DC, December 1988.

To attract more individuals to the nursing profession, bring back a number who have left the profession, and retain those already employed, health care institutions have incorporated initiatives that address the role, prestige, and compensation of registered nurses. Actions taken include involving nurses more in the clinical decision process, providing nurses a greater degree of autonomy, and increasing wages significantly.

The U.S. Army is examining the role of the Army nurse in its health care delivery system. In addition to examining factors similar to those in the civilian sector, the Army is addressing three additional factors that affect the Army's ability to recruit and retain nurses. The first factor is economics. Today, civilian wage scales for nurses, at least in hospital and agency settings, and for certain specialties, are equal to or much higher than those offered by the military.

A second factor is related to the Army's primary mission. It is not known the degree to which combat activities such as Operation Just Cause (Panama) and Operation Desert Storm affected attitudes of nursing prospects or the double-digit declination rate of nurse applicants. The two military operations brought to the forefront that separation from loved ones, deployment to hostile environments, and the reality of being placed in harm's way are all a part of Service life. Army nurse recruiters must respond to such questions from applicants.

A third factor involves nurses' perceptions of the working environment, types of clinical assignments, clinical authority, training opportunities, and other medical policies and practices in the Army. Army Nurse Corps (ANC), personnel policy, and recruiting managers want to measure the breadth and depth of such perceptions.

The surveys of registered nurses and nursing students will help the Army increase its understanding of their perceptions and beliefs about the Army. That knowledge will be an important aspect to designing and communicating the programs that will attract civilian nurses to Army nursing.

This report provides the sample design, sample selection procedures, and describes the activities associated with obtaining tapes, disks, and hard-copy name lists of registered nurses and schools of nursing. Finally, the report describes the process through which the survey instruments were developed. Copies of the survey instruments and other information are contained in the appendices.

Sample Design

The methodology used to derive the sampling frames for Registered Nurses and student nurses is described below. For both populations, HumRRO International, Inc. (HII) designed a representative sample using a self-weighting cluster technique. HII derived sample sizes and procedures for weighting. Two mail-

out samples of nurses were selected -- 10,860 registered and 4,000 nursing students. These should result in returns of 3,000 registered and 2,000 student nurse surveys.

Registered Nurse Sample

Sampling frame of registered nurses. The 50 states and the District of Columbia were contacted to ascertain the number of registered nurses in their jurisdictions. Table 1 displays the state-provided data, ordered by number of nurses in each state. The total number of nurses (excluding New Hampshire which would not provide the information due to state law) was 2,533,300. The project sampling frame includes all registered nurses in the U. S. who are currently working as a full-time nurse, and who are 45 years old or less, and thus are eligible for entry into the military.

Sampling strategy for registered nurses. A representative sample of registered nurses in the United States is required. Conceptually, the easiest approach would be to construct a list of all 2.5+ million nurses and randomly select from this list. Unfortunately, the cost of constructing this list is very high.

An efficient way to achieve this goal is by employing a self-weighting³ methodology. To construct a self-weighting sample, the population must be defined in terms of primary sampling units and ultimate (or secondary) sampling units. In this instance, the primary sampling units are States, and the ultimate sampling units are individual nurses. In a self-weighting cluster sample, the product of the probability of selecting a primary sampling unit and the probability of selecting an ultimate sampling unit, given a primary sampling unit, is the same across all clusters. That is, all ultimate sampling units are equally likely to be selected into the sample. To implement this procedure, we must determine the number of primary sampling units to include, randomly select the primary sampling units (i.e., state lists), and then randomly select an equal number of nurses from each state list.

The methodology calls for a final sample of 3,000 registered nurses. To determine how many surveys need to be mailed to achieve this figure, a response rate of 50 percent was assumed (with follow-up). The response rate from a 1988 national Nurse Survey of the same population yielded a return rate of 80.7 percent.⁴ Thus, the 50 percent expectation is considered conserva-

³ A self-weighting sample is a special form of a cluster (or area) sample where the probability of any ultimate sampling unit (i.e., nurses) entering the sample is the same.

⁴ Moses, E. (1988). The Registered Nurse Population: Findings from the National Sample Survey of Registered Nurses. Washington, DC: Public Health Service, U. S. Department of Health and Human Services.

TABLE 1
STATE SAMPLING OF REGISTERED NURSES

STATE	NUMBER NURSES	CUMULATIVE FREQUENCY	RANDOM NUMBER	$t = Nr$	SELECTION PROBABILITY
NY	225,000	225,000		207	0.000429
CA	220,000	445,000	231575	203	0.000429
PA	178,000	623,000	484905	164	0.000429
OH	127,000	750,000	738235	117	0.000429
TX	125,000	875,000		115	0.000429
FL	120,000	995,000	991565	110	0.000429
IL	108,000	1,103,000		99	0.000429
MI	102,000	1,205,000		94	0.000429
NJ	102,000	1,307,000	1244895	94	0.000429
MA	93,000	1,400,000		86	0.000429
VA	65,000	1,465,000		60	0.000429
NC	63,000	1,528,000	1498225	58	0.000429
IN	61,000	1,589,000		56	0.000429
GA	57,000	1,646,000		52	0.000429
MO	57,000	1,703,000		52	0.000429
WS	55,000	1,758,000	1751555	51	0.000429
MD	52,000	1,810,000		48	0.000429
WA	50,000	1,860,000		46	0.000429
MN	47,000	1,907,000		43	0.000429
TN	46,000	1,953,000		42	0.000429
AZ	40,000	1,993,000		37	0.000429
CT	39,000	2,032,000	2004885	36	0.000429
LA	32,000	2,064,000		29	0.000429
AL	31,000	2,095,000		29	0.000429
KY	31,000	2,126,000		29	0.000429
OR	31,000	2,157,000		29	0.000429
CO	30,000	2,187,000		28	0.000429
IA	30,000	2,217,000		28	0.000429
KS	26,000	2,243,000	2258215	24	0.000429
OK	24,000	2,267,000		22	0.000429
SC	24,000	2,291,000		22	0.000429
HI	23,000	2,314,000		21	0.000429
AR	21,000	2,335,000		19	0.000429
WV	20,000	2,355,000		18	0.000429
DC	19,000	2,374,000		17	0.000429
MS	19,000	2,393,000		17	0.000429
ME	18,000	2,411,000		17	0.000429
NE	17,000	2,428,000		16	0.000429
RI	14,000	2,442,000		13	0.000429
UT	14,000	2,456,000		13	0.000429
DE	10,000	2,466,000		9	0.000429
MT	9,900	2,475,900		9	0.000429
NV	9,900	2,485,800		9	0.000429
NM	9,800	2,495,600		9	0.000429
SD	8,000	2,503,600		7	0.000429
ID	7,800	2,511,400		7	0.000429
ND	7,100	2,518,500	2511545	7	0.000429
VT	7,000	2,525,500		6	0.000429
AK	4,000	2,529,500		4	0.000429
WY	4,000	2,533,500		4	0.000429
NH	---	2,533,500		0	0.0000
TOTAL	2,533,300				

START = 251,575

* State included in Sample

tive. Based on the results of this same 1988 study, it was assumed that 85 percent of the nurses on the state rosters would be actively working in nursing and that 65 percent would be 45 or younger. These estimates are used in calculating the required size of each of the state mailout samples.

Sampling procedures for registered nurses. The following steps were taken to identify the sample.

First, we determine the size of the mail/out sample. Our lists consist of all registered nurses licensed to practice. The mailout sample must be sufficiently large to account for screening loss (those not active and not age qualified for military service) and non-response. The following formula was used to derive the size of the mailout required to achieve a final sample size of 3,000:

$$\frac{3,000}{.50 * .85 * .65} = 10,860$$

Second, we determine the number of states to select. There are several criteria to consider when determining the number of clusters to include. Ideally, we want to ensure that the number of clusters is less than or equal to the maximum number that guarantees that a primary sampling unit can enter the sample once. In addition, we want to select enough to ensure that the sampling rate from a state is not excessively high (greater than 25 percent). To determine the maximum number, we divide the total population of nurses by the nurse population of the biggest sampling block (New York with 225,000 nurses). Without splitting lists into smaller components, the maximum number of state lists is 11. The smallest states have 4,000 nurses. To ensure a sampling rate of no more than 25 percent requires at least 10 states.

One can also calculate the optimum number of clusters based on the precision desired and cost of including additional clusters.⁵ Based on experience with similar state-based cluster samples, 10 states was optimal. Using these criterion, the number of states to include in the sample should be either 10 or 11. We chose to include 10 states. In addition to satisfying the aforementioned criterion, this would ensure that the sample would include large and small states, as well as achieve reasonable geographic representation.

Third, we determine the states from which the nurses will be sampled. First, the total number of nurses was divided by the number of states to be selected, as follows:

⁵ Cochran, William G., Sampling Techniques, John Wiley, New York, NY, 1963.

$$\frac{2,533,300}{10} = 253,330$$

In essence, this number reflects the fact that, if we wanted to include one nurse from each of 10 states we would have to pick every 253,330th nurse. The ten primary sampling units can be determined from the list of states.

The states are rank ordered by number of nurses registered in each, as shown in Table 1. The cumulative frequency of nurses is shown in the third column. We could have randomly ordered the states as well. However, by ordering by size, we guarantee that states of every size will be included in the sample. In addition, we avoid including two or more of the smaller states where the probability of being included in the sample is relatively high.

If each of the nurses is thought of as having a number, then nurses 1 through 225,000 are in New York, nurses 225,001 through 445,000 are in California, and so on. Next we select a random number between 1 and 253,330 as a starting point. The number selected in this case (by random number generator) was 231,575. This means that nurse 231,575 (our random number) is in California, which will be included in the sample of states. To select nurses from ten states, we then select nurse $231,575 + 253,330$, or nurse 484,905 who would be from Pennsylvania. Thus Pennsylvania is included in the sample. This process continues until adding 253,330 to the last number exceeds the total number of registered nurses in the country. Thus, North Dakota is the final state included, because nurse $2,511,545$ falls in this state and $2,511,545 + 253,330$ exceeds 2,533,300. This process, known as a take-every strategy, resulted in the selection of 10 states, as shown in Table 1.

By employing a take-every strategy, we created 253,330 "necklaces" of 10 primary sampling units (i.e., states). The probability of any state entering the sample was the nurse population of the state divided by 253,330. Please note that ordering the states by size does not change the probability that a state will enter the sample. It just ensures that the sample will not consist entirely of states with large nurse populations or have an unrepresentative number of states with small nurse populations.

Next, we determine number of nurses to be selected from each state. To be self-weighting, the number of ultimate sampling units (i.e., nurses) from each primary sampling unit (i.e., states) must be the same. Accordingly, the number of nurses to be sampled from each state (n) is:

$$n = \frac{10,860}{10} = 1,086$$

Finally, we draw the sample. The order of nurses on each of the selected 10 state lists is randomized. To obtain 1,086 nurses from each state, we must select every t_i th nurse, where t_i equals:

$$t_i = \frac{\text{Total Number of Nurses within State}}{1,086}$$

So, using New York as an example, to obtain 1,086 nurses, we must select:

$$t_{NY} = \frac{225,000}{1,086} = 207$$

or every 207th nurse from New York (t_{NY}). Operationally, this can be achieved by assigning a large random number to each nurse in a list, sorting the list by this random number in either ascending or descending order, and selecting the first 1,086 nurses in the sorted list. This procedure is equivalent to randomly selecting a "starting point" from 1 to t_i and then selecting every t_i th nurse until 1,086 nurses have been identified for each of the 10 states.

The probability of any nurse being selected into the sample is:

$$\frac{N_i}{N_t / 10} * \frac{1,086}{N_i} = \frac{10 * 1,086}{N_t}$$

where N_i = Nurse population of State_{*i*}

and where

$$N_t = \sum_{i=1}^{51} N_i$$

Let us consider an example. New Jersey has an estimated nurse population of 102,000. Using the take-every strategy, the probability of New Jersey being included in the sample is:

$$\frac{N_i}{N_t / 10} = \frac{102,000}{2,533,300 / 10} = 0.402$$

Assuming that 1,086 nurses will be selected from New Jersey, the probability of an individual nurse being selected is:

$$\frac{1,086}{N_i} = \frac{1,086}{102,000} = 0.0106$$

Since the selections of states and individual nurses are independent, the joint probability of selecting an individual nurse from New Jersey is the product of the probabilities. That is:

$$\frac{102,000}{2,533,300/10} * \frac{1,086}{102,000} = 0.000429$$

As shown in Table 1, this probability is the same across all states.

Weights for all nurses are the inverse of the sampling probabilities. That is:

$$\frac{N_t}{10,860}$$

The sampling probabilities and weights are equivalent to those of a simple random sample. We are planning a single non-response adjustment across the 10 states. The weighting equation shown earlier will appropriately weight the entire sample.

Student Nurse Sample

The desired sample for nursing students is 2,000 juniors and seniors from colleges across the U.S. with accredited nursing programs leading to a bachelors degree in nursing.

Sampling frame of student nurses. According to the 1990-1991 Enrollment & Graduations in Baccalaureate & Graduate Programs in Nursing (American Association of Colleges of Nursing, 1991), in

the Fall of 1990 there were 389 generic bachelors programs with 37,613 full-time junior/senior students.

Sampling strategy for student nurses. As with the registered nurses, a self-weighted sample of student nurses is desired. This is more difficult with the students, however, since college nursing directors have to approve participation and data collection for the study. This may result in a non-random sample within colleges, given that participation is voluntary.

Sampling procedures for student nurses. In determining the size of the mailout student sample, a 50 percent return rate was assumed. With a desired final sample of 2,000 completed surveys, the following calculation was made:

$$\frac{2,000}{.50} = 4,000 \text{ (Required Mailout Sample)}$$

First, we solicited support from colleges and universities. Six hundred and fifteen Deans of Schools of Nursing were sent a package requesting the school's participation in the study. For those colleges agreeing, the number of junior/senior nursing students (P_i) was requested. These numbers will be used, as in the registered nurse sampling, to weight the returned survey data. No participating college is expected to have less than 25 student nurses within the sampling frame. Therefore, student nurses per school was set at 25, yielding a requirement for 160 schools to be sampled ($4000/25$).

Second, we order the primary sampling units. The primary sampling units (i.e., nursing schools) will be ordered from largest to smallest using the population data provided by the participating schools. A random "starting point" from 1 to $S_t/160$ (S_t = Total number of student nurses) will be selected. Using the cumulative frequency distribution of the ordered list of colleges, colleges will be selected in the same manner described for registered nurses. That is, beginning with the starting point, schools will be included which correspond to the take-every $S_t/160$ student.

Third, we identified the number of students (n) to be sampled from each college:

$$n = \frac{4,000}{160} = 25$$

Each college selected will be mailed 25 surveys for distribution to a sample of its student nurse juniors and seniors. They

will be returned in one package per college. Instructions will be provided to ensure students are selected on a random basis. We assume that nursing students in schools participating are like those in colleges not participating in the project, thus producing a self-weighting sample. Sample probabilities are:

$$\frac{P_i}{\sum_{i=1}^E P_i / 160} * \frac{25}{P_i}$$

Weights for the student nurses are the inverse of sample probabilities. That is:

$$\frac{1}{\sum_{i=1}^E P_i} = \text{Weight}$$

Estimation Procedures and Accuracy Obtained

Special procedures will be employed to assure that the sampling process adequately represents the full range of schools over the entire nation. Particular care will be given to the replacement of schools that are initially selected, but unwilling or unable to cooperate in the subsequent second stage selection of students.

Total samples of approximately 3,000 registered nurses and 2,000 nursing students will allow the estimation of questionnaire responses for these populations with better than 95 percent accuracy (within .05 standard deviation).

Obtaining Lists of Registered Nurses

This chapter discusses the procedures used and results obtained in obtaining the names and addresses of nurses currently eligible to practice in the 50 states and the District of Columbia.

Method

This study compiled comprehensive name listings from the nurse licensing departments in each state and the District of Columbia to define the sampling frame. ARI asked the Nursing Data and Analysis unit within the Bureau of Health Professions of the Public Health Service (PHS) to jointly sponsor the development of a name and address listing of working nurses. This unit of PHS

Public Health Service (PHS) to jointly sponsor the development of a name and address listing of working nurses. This unit of PHS has been charged to satisfy legislation requiring periodic data on the number and distribution of nurses by type of employment and location of practice; on the activity status of nurses; on the rates of compensation for nurses; and on the number with advanced training by specialty.⁶ PHS conducted surveys in 1976, 1980, 1984, and 1988, and was preparing for its next survey. PHS opted not to share their listings. Subsequently, HII established procedures to contact each state and the District of Columbia to acquire lists of civilian nurses. The first step involved obtaining a list of the office, address, and phone number for each State Board of Nursing. An up-to-date mailing list, sans the name of the Executive Directors, was provided to HII by the Quality Assurance office of the Office of the Army Surgeon General.

HII used a five step process used to obtain the names and address lists of registered nurses: (a) introductory letters were sent to each state board, (b) callers were trained, (c) State Boards were contacted, (d) notebooks to document contact and discussion with each state were prepared, and (e) lists were ordered using state procedures.

Introductory letters. A letter was prepared with enclosures to the Executive Director of each State Board of Nursing under the letterhead of the Surgeon General for the Department of the Army. The letter was co-signed by the Chief of the Army Corps of Nurses and the Director of the Manpower and Personnel Research Division of ARI. The letter explained the objectives of the research, solicited the State Board's cooperation, assured full confidentiality of the data, and alerted the Director that an HII representative would contact the Board at a later date. The enclosures to the letter included an abstract providing background on the project, and a summary of the information requirements of the research. The letter and enclosures are presented at Appendix A.

Train callers. Two senior researchers were trained as callers. They contacted the State Boards by telephone to solicit support and to determine procedures for obtaining the lists of RNs. The callers were briefed on the goals of the research project and the specific purpose of this phase of the research. The briefing included instructions on making the initial contacts with the State Boards, making follow-up contacts with technical personnel, and recording the information obtained from the phone

⁶ As reported in the Final Technical Report on Sampling and Statistical Methods (Research Triangle Institute, N.C., March 1989, p.1) for the fourth national sample of registered nurses, Public Laws 94-63 and 94-484 in Title VII of the Public Health Service Act, require continual updates regarding the number, status, earning, and specialties of those in the nursing profession.

been available to researchers in previous surveys, unique features in each state system, and the types of problems encountered in each state.

One specific objective of the training was to warn callers about differences among the different State Boards in terms used to identify RNs eligible to practice. First, the term "active" nurses usually denoted only those actually in practice as an RN. At other times, however, the term "active" nurses was meant to include those who were not currently working as RNs, but were eligible to do so if they desired. Second, the term "currently licensed" usually referred only to RNs whose licenses were currently valid. On the other hand, some states permanently license RNs with the stipulation that their license be periodically certified or registered in order to practice. Thus, in many instances, the terms "active" nurses or "currently licensed" accurately denoted the targeted population, that is "nurses eligible to practice." In other cases, however, the terms may have included RNs outside of the specified population--specifically, those who were not working as RNs or whose licenses were not currently valid. Callers were trained to recognize and avoid these terms when they were not strictly in accordance with the technical definition of the target population.

Call State Boards. All 51 State Boards of Nursing were contacted in October and November of 1991. A number of calls were made in December 1991 and January 1992 to follow-up on initial calls or to request more current data.

An initial call was made to the Executive Director of the State Board of Nurses. If the Director was not available, the callers tried to contact a staff person at the Board who could provide the required information. The caller's questions during the initial call were guided by forms that are presented at Appendix B. The purposes of the initial calls were to:

- Determine whether the state would release the name, address, license number, and other data for all RNs licensed in the state;
- Identify procedures for obtaining the requested information;
- Review the license renewal process to determine the best time for obtaining the most current list of RNs;
- Identify a contact (if not the Director) for obtaining the lists; and,
- Obtain an estimate of the number of RNs licensed in the state.

The callers sought technical information about the content and form of computer-based data to facilitate retrieval from automated sources. Sometimes, this information was obtained from the contact person at the State Board during the initial call.

In many cases, however, a subsequent call was required to obtain the additional information from another staff person at the State Board or from personnel at other state agencies or state universities that maintained RN licensing data for the boards. The data requirement form for this additional information is also presented at Appendix B.

A review of prior surveys indicated that the names and addresses of nurse practitioners were sometimes kept in separate files. Therefore, one specific purpose of the subsequent calls was to establish whether separate files were kept for nurse practitioners or other advanced practitioners (e.g., nurse anesthetists). If the data for advanced practitioners were not included on the RN data base, the callers made a note to order the separate files.

Prepare notebooks. Data requirement forms were developed to remind callers to ask for critical information and to provide a convenient record of conversations. Completed forms were inserted in the notebooks. The callers compiled, maintained, and updated two notebooks that consolidated all information pertaining to the lists. Included in the notebooks were logs of all telephone calls, completed forms, and copies of written correspondence between the caller and the states. Each notebook was organized into sections according to state and contained information on 25 or 26 State Boards (counting the District of Columbia).

Order lists. Once they obtained preliminary information about the lists, the callers then obtained the lists themselves. Because of the higher than anticipated costs of some of the lists (a number of states increased their cost from \$100 to \$5,000), the development of the sampling plan was accelerated. The intent was to order additional data only from states that would be included in the sample. Once the plan was finalized, the callers purchased remaining lists only from the states selected into the sample.

Results of Contact With the States

Lists of RNs were not purchased from every state. However, detailed information on those lists was obtained from the State Boards of 49 states and the District of Columbia. This section summarizes the information from the 50 boards, plus New Hampshire (the only state that could not provide name lists).

Available information. Table 2 summarizes the information available on the RNs. The extent of information differed from state to state. At a minimum, every state with the exception of New Hampshire provided the names and addresses of RNs eligible to practice in their state. The Attorney General of New Hampshire ruled that names and addresses of RNs constituted privacy information and could not be released. Not all states maintained the license number of registered nurses as part of the license renewal database. Some were willing to provide license

numbers for research purposes, whereas other states would not release it. Finally, a few states provided information such as work setting, certifications, position, basic nursing education, and highest education level attained. Unfortunately, they were the exception rather than the rule.

Procedures for obtaining lists. Table 3 summarizes the specific procedures for obtaining names and addresses of RNs from the 50 Boards of Nursing. Most states treated the requests as routine, usually requiring only a written request and prepayment for the data. Some states required the request to be approved by an entity outside of the administrative office of the State Boards--usually a Board of Directors. Some required special forms for ordering or releasing the documents. This documentation sometimes included notarized agreements or affidavits to assure that researchers handled the data in a confidential manner. Although most states required prepayment for the information, some states billed HII for the data. A number of states requested blank replacement tapes.

License renewal procedures. Table 4 summarizes (a) the length of renewal periods, (b) the date when licenses are renewed, and (c) any "grace period" during which RNs could renew their licenses.

In most states, RN licenses are for a two-year period with some states stipulating shorter (one-year) or longer (three-year) renewal periods. In 19 states, the date of renewal is specified according to a pseudo-random procedure, such as renewing in accordance with birth dates or RN license numbers. In practice, this procedure requires states to constantly renew RN licenses throughout the year. In most of these cases, names and addresses are entered into an on-line database that is constantly updated as new information about RNs is received. The callers concluded that the information from these states was sufficiently current for the study purposes.

The remaining 31 states and the District of Columbia renew RN licenses in batches. The callers identified those states renewing licenses during or soon after the period during which the lists were being obtained (i.e., October-November 1991). Of particular interest were the four states that had two-year renewal periods: Delaware, Indiana, New Jersey, and Utah. If the callers had obtained the lists for those states during that period, the information would have been almost two years old. Consequently, the callers delayed their requests until after the files had been updated.

Numbers of nurses eligible to practice. Another specific objective of the phone calls was to estimate the number of RNs currently eligible to practice in each state. Some of the contacts at the State Boards cautioned that their estimates varied widely from month-to-month and even from day-to-day. This was particularly true for the states that renew licenses on a year-round basis and continuously update their data bases.

Table 2
Information Available on RNs

State	Name	Address	License Number	Work Setting	Position	Certifications	Basic Education	Education Level
Alabama	Yes	Yes	NR	Yes	No	No	No	No
Alaska	Yes	Yes	Yes	No	No	No	No	No
Arizona	Yes	Yes	NR	Yes	Yes	No	No	Yes
Arkansas	Yes	Yes	No	No	No	No	No	Yes
California	Yes	Yes	Yes	No	No	No	No	No
Colorado	Yes	Yes	Yes	No	No	No	No	No
Connecticut	Yes	Yes	Yes	No	No	No	No	No
Delaware	Yes	Yes	NR	No	No	No	No	No
District of Columbia	Yes	Yes	Yes	No	No	No	No	No
Florida	Yes	Yes	Yes	No	No	No	No	No
Georgia	Yes	Yes	NR	No	No	No	No	No
Hawaii	Yes	Yes	Yes	No	No	No	No	No
Idaho	Yes	Yes	No	No	No	No	No	No
Illinois	Yes	Yes	Yes	No	No	No	No	No
Indiana	Yes	Yes	Yes	No	No	No	No	No
Iowa	Yes	Yes	NR	Yes	Yes	No	Yes	Yes
Kansas	Yes	Yes	No	No	No	No	No	No
Kentucky	Yes	Yes	NR	NR	No	No	Yes	NR
Louisiana	Yes	Yes	NR	No	No	No	No	No
Maine	Yes	Yes	NR	No	No	No	NR	No
Maryland	Yes	Yes	Yes	No	No	No	No	No
Massachusetts	Yes	Yes	Yes	No	No	No	No	No
Michigan	Yes	Yes	Yes	No	No	No	No	No
Minnesota	Yes	Yes	Yes	No	No	No	Yes	No
Mississippi	Yes	Yes	NR	No	No	No	No	No
Missouri	Yes	Yes	NR	Yes	Yes	Yes	Yes	Yes

(table continues)

Table 2 (cont.)

State	Name	Address	License Number	Work Setting	Position	Certifications	Basic Education	Education Level
Montana	Yes	Yes	NR	Yes	Yes	Yes	Yes	Yes
Nebraska	Yes	Yes	Yes	No	No	No	No	No
Nevada	Yes	Yes	NR	No	No	No	No	No
New Hampshire	No	No	No	No	No	No	No	No
New Jersey	Yes	Yes	No	No	No	No	No	No
New Mexico	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
New York	Yes	Yes	Yes	No	No	No	No	No
North Carolina	Yes	Yes	NR	Yes	Yes	Yes	Yes	Yes
North Dakota	Yes	Yes	No	No	No	No	No	No
Ohio	Yes	Yes	No	No	No	No	No	No
Oklahoma	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Oregon	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
Pennsylvania	Yes	Yes	Yes	No	No	No	No	No
Rhode Island	Yes	Yes	Yes	No	No	Yes	Yes	Yes
South Carolina	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
South Dakota	Yes	Yes	No	No	No	No	No	No
Tennessee	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Texas	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Utah	Yes	Yes	Yes	No	No	No	No	No
Vermont	Yes	Yes	No	No	No	No	No	No
Virginia	Yes	Yes	Yes	No	No	No	No	No
Washington	Yes	Yes	Yes	No	No	No	No	No
West Virginia	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Wisconsin	Yes	Yes	Yes	No	No	No	No	No
Wyoming	Yes	Yes	No	No	No	No	No	No

Note. Table entries indicate whether a state maintained the information and could release (Yes), maintained the information but would not release it (NR), or did not maintain the information on the nurses as part of the lists or data bases (No).

Table 3
Summary of Procedures Required to Obtain Lists of RNs

State	External Approval Required	Special Documentation	Prepayment Required	Blank Tape ^a Requested
Alabama	No	Request Form	Yes	N/A
Alaska	No	No	Yes	N/A
Arizona	No	Order Form	Yes	No
Arkansas	No	No	Yes	No
California	No	List Request	Yes	No
Colorado	No	No	Yes	Yes
Connecticut	No	No	Yes	No
Delaware	No	No	Yes	N/A
District of Columbia	No	No	Yes	Yes
Florida	No	No	Yes	No
Georgia	No	No	Yes	Yes
Hawaii	No	No	Yes	N/A
Idaho	No	No	Yes	N/A
Illinois	No	No	Yes	Yes
Indiana	No	Agreement Release	No	Yes
Iowa	No	Purchase of Roster Agreement	No	No
Kansas	No	Request for Record	No	No
Kentucky	No	No	Partial	No
Louisiana	No	No	Yes	N/A
Maine	No	No	No	N/A
Maryland	No	No	Yes	Yes
Massachusetts	No	No	Yes	No
Michigan	No	No	Yes	No
Minnesota	No	No	Yes	No
Mississippi	No	Order Form	Yes	N/A
Missouri	Board	No	No	Yes

(table continues)

Table 3 (cont.)

State	External Approval Required	Special Documentation	Prepayment Required	Blank Tape ^a Requested
Montana	Board	Waiver	No	N/A
Nebraska	No	Order Form	Yes	No
Nevada	No	No	No	N/A
New Hampshire	--- ^b	--- ^b	--- ^b	--- ^b
New Jersey	Board	No	Yes	Yes
New Mexico	No	No	Yes	N/A
New York	NYS Ed. Dept.	Affidavit	Yes	Yes
North Carolina	Board	Letter of Agreement	Yes	No
North Dakota	No	No	No	N/A
Ohio	Board	No	No	No
Oklahoma	No	Contract Letter	Yes	No
Oregon	No	Order Form	Yes	No
Pennsylvania	No	No	No	No
Rhode Island	No	Release of Records	Yes	N/A
South Carolina	Board	No	Yes	Yes
South Dakota	No	No	Yes	No
Tennessee	No	No	Yes	No
Texas	No	No	Yes	Yes
Utah	No	Confidentiality	Yes	Yes
Vermont	No	Invoice	Yes	N/A
Virginia	No	No	Yes	No
Washington	No	No	Yes	Yes
West Virginia	Yes	No	Yes	N/A
Wisconsin	No	No	No	No
Wyoming	No	Order Form	Yes	N/A

a. This question is not applicable (N/A) for those states that provided the information on diskette or on a paper printout.

b. Names and addresses of RNs in New Hampshire were not releasable.

Table 4
Summary of License Renewal Process by State

State	Length of Renewal Period	Date of Renewal	Grace Period
Alabama	2 years	Oct even years	None
Alaska	2 years	Dec 1 even years	2-3 months
Arizona	2 years	Dec 31 even years	None
Arkansas	2 years	IAW birth date & year	None
California	2 years	IAW birth date	None
Colorado	2 years	Sep 30 every year	None
Connecticut	1 year	IAW birth month	90 days
Delaware	2 years	Dec 31 odd years	1 month
District of Columbia	2 years	Jul 1 even years	2 months
Florida	2 years	April odd years	None
Georgia	2 years	Dec 31 even years	None
Hawaii	2 years	June 30 odd years	None
Idaho	2 years	Aug 31 odd years	None
Illinois	2 years	May 31 even years	None
Indiana	2 years	Oct 31 odd years	2 months
Iowa	3 years	IAW birth month & year	30 days
Kansas	2 years	IAW birth month & year	None
Kentucky	2 years	Oct 31 even years	None
Louisiana	1 year	Dec 31 every year	None
Maine	1 year	IAW birth date	None
Maryland	1 year	IAW birth month	30 days
Massachusetts	2 years	IAW birth date even years	None
Michigan	2 years	Mar 31 every year	None
Minnesota	2 years	IAW birth month & year	None
Mississippi	2 years	Dec 31 even years	None
Missouri	1 year	Apr 30 each year	30 days (table continues)

Table 4 (cont.)

State	Length of Renewal Period	Date of Renewal	Grace Period
Montana	1 year	Dec 31 every year	None
Nebraska	2 years	Dec 31 even years	30 days
Nevada	2 years	IAW birth month & year of original license application	None
New Hampshire	2 years	IAW birth day & year of original license application	None
New Jersey	2 years	Dec 31 odd years	None
New Mexico	2 years	IAW birth month	None
New York	3 years	Apr 30 1989, 92, 95	None
North Carolina	2 years	Oct 31 every year	Dec 31
North Dakota	1/2 years ^a	Dec 31 every year/year of original license application	None
Ohio	2 years	Aug 31 odd years	None
Oklahoma	2 years	Jun 30 even years	None
Oregon	2 years	IAW birth date & year	None
Pennsylvania	2 years	Apr 30/Oct 31 every year	None
Rhode Island	2 years	Mar 1 on odd/even years IAW license numbers	1 month
South Carolina	1 year	Jan 31 every year	None
South Dakota	2 years	IAW birth date & year of original license application	None
Tennessee	2 years	Dec 31 even years	Mar 1
Texas	2 years	IAW birth date & year	None
Utah	2 years	Dec 31 odd years	30 days
Vermont	2 years	Mar 31 odd years	None
Virginia	2 years	IAW birth month & year	None
Washington	1 year	IAW birth date	None
West Virginia	1 year	Nov 30 every year	None
Wisconsin	2 years	Mar 1 even years	None
Wyoming	2 years	Jun 30 even years	Aug 29

Note. "IAW birth month/day & year" means renewed by end of birth month on odd or even year corresponding to year of birth.

a. ND is currently in transition from 1- to 2-year renewal period.

However, HII found the differences over a four month period were fairly minor. The numbers provided telephonically in November added to 2,533,300; the numbers derived primarily from the obtained lists in late December and January totaled 2,532,267 -- a difference of 1,033, or only 0.04 percent.

The numbers compiled from the lists are summarized in Table 5 and compared with 1988 estimates. The numbers indicate that RNs eligible to practice increased from 1988 to 1991 by 7.1 percent nationwide. Larger increases were seen in the West (particularly in the Northwest) and in the Southeast. Decreases in RN populations were experienced in a few of the New England states (Connecticut, Massachusetts, and New Hampshire) and in the Midwest (Illinois and Iowa). This pattern of change is largely consistent with recent demographic trends. Exceptions to these trends were:

- Alabama and Wyoming, which showed smaller than average gains in RN licenses; and,
- Alaska and Colorado, which showed actual declines in RN populations.

Cost and format of data. The preferred method was to obtain state data on tapes. However, as shown in Table 6, only 32 states were able to supply the data on tapes. Five states provided data on floppy diskette, and 13 provided some form of printed output. North Dakota, included in the sample, provided hardcopy only. This required HII to select the nurse addresses to include in the nurse sample and keystroke in the names and addresses of 1,086 nurses.

Based on information obtained from the State Boards, the total cost for obtaining information would have been \$22,709. This represents a striking increase in the \$11,988 paid by Research Triangle Institute (RTI) to obtain the same data in 1988. Although some increase in cost was expected, the size of the increase was not.

If data were ordered from every state, three states (California, Massachusetts and Minnesota) would have accounted for about 40% of the 1991 total. Conversely, three states (Hawaii, Indiana, and Maine) provided the information free of charge. The fees that State Boards charged for the data ranged from \$0 to \$4,800, with the median fee being \$174. Because we also purchased lists from states not included in the survey, actual costs were \$12,834.

One obvious source of variance in the costs was the large differences among states in their RN populations. To compute charges independent of the size of states, the costs were computed per individual name. This prorated value still showed considerable variability, ranging from 0.0¢ to 5.2¢ per name with a median value of 0.8¢.

Table 5
Comparison of Estimated Number of Nurses in 1988 and 1991

State	1988	1991	Percent Change
Alabama	29,840	31,261	4.8
Alaska	4,568	4,400	-3.7
Arizona	32,782	40,000	22.0
Arkansas	17,428	20,758	19.1
California	206,358	219,848	6.5
Colorado	33,730	32,588	-3.4
Connecticut	49,326	39,134	-20.7
Delaware	8,438	10,000	18.5
District of Columbia	15,783	18,500	17.2
Florida	103,736	115,000	10.9
Georgia	46,672	56,850	21.8
Hawaii	8,732	10,397	19.1
Idaho	7,387	8,636	16.9
Illinois	122,064	108,401	-11.2
Indiana	50,034	57,843	15.6
Iowa	30,609	30,000	-2.0
Kansas	22,840	26,664	16.7
Kentucky	25,987	30,713	18.2
Louisiana	26,999	32,000	18.5
Maine	13,690	14,521	6.1
Maryland	48,769	52,000	6.6
Massachusetts	113,816	93,000	-18.3
Michigan	94,413	102,168	8.2
Minnesota	42,501	47,000	10.6
Mississippi	16,457	19,086	16.0
Missouri	50,906	57,000	12.0

(table continues)

Table 5 (cont.)

State	1988	1991	Percent Change
Montana	8,300	9,848	18.7
Nebraska	16,525	16,870	2.1
Nevada	7,219	9,891	37.0
New Hampshire	17,117	16,000	-6.5
New Jersey	88,966	106,000	19.1
New Mexico	9,682	11,300	16.7
New York	219,898	225,000	2.3
North Carolina	51,196	62,967	23.0
North Dakota	6,636	7,050	6.2
Ohio	111,920	127,000	13.5
Oklahoma	22,453	24,000	6.9
Oregon	26,850	31,000	15.5
Pennsylvania	168,551	178,134	5.7
Rhode Island	13,322	14,500	8.8
South Carolina	19,841	23,500	18.4
South Dakota	7,503	8,290	10.5
Tennessee	40,811	46,000	12.7
Texas	111,174	125,000	12.4
Utah	9,672	13,112	35.6
Vermont	6,828	7,000	2.5
Virginia	57,279	63,487	10.8
Washington	45,262	49,588	9.6
West Virginia	16,904	19,962	18.1
Wisconsin	50,647	55,000	8.6
Wyoming	3,746	4,000	6.8
TOTALS	2,339,714	2,532,267	8.2

Table 6
Format and Cost of Data Provided by State Boards

State	Format	Cost (in Dollars)	Cost/Name (in Cents)	Ordered	Date Received
Alabama	Printout	640	2.0	Y	12/06/91
Alaska	Directory	20	0.5	Y	11/06/91
Arizona	Tape	430	1.1	Y	12/04/91
Arkansas	Tape	55	0.3	Y	11/19/91
California	Tape	2,238	1.0	Y	12/23/91
Colorado	Tape	785	2.4	Y	12/23/91
Connecticut	Tape	90	0.2	Y	12/03/91
Delaware	Printout	40	0.4	Y	
District of Columbia	Tape	183	1.0	Y	12/01/91
Florida	Tape	190	0.2	Y	11/26/91
Georgia	Tape	573	1.0	Y	12/23/91
Hawaii	Printout	0	0.0	Y	
Idaho	Diskette	75	0.9	Y	11/26/91
Illinois	Tape	216	0.2	Y	11/25/91
Indiana	Tape	0	0.0	Y	12/21/91
Iowa	Tape	53	0.2	Y	01/02/92
Kansas	Tape	290	1.1	Y	12/23/91
Kentucky	Tape	49	0.2	Y	11/27/91
Louisiana	Labels	640	2.0	N	
Maine	Printout	0	0.0	Y	12/01/91
Maryland	Tape	35	0.1	Y	12/11/91
Massachusetts	Tape	4,800	5.2	N	
Michigan	Tape	763	0.7	Y	11/27/91
Minnesota	Tape	2,000	4.3	N	
Mississippi	Diskette	600	3.1	Y	01/02/92
Missouri	Tape	818	1.4	N	
Montana	Diskette	293	3.0	N	
Nebraska	Printout	115	0.7	Y	11/19/91

(table continues)

Table 6 (cont.)

State	Format	Cost (in Dollars)	Cost/Name (in Cents)	Ordered	Date Received
Nevada	Printout	79	0.8	Y	11/18/91
New Hampshire ^a	... ^a	-- ^a	N	
New Jersey	Tape	165	0.2	Y	01/06/92
New Mexico	Diskette	478	4.2	Y	
New York	Tape	30	0.0	Y	11/27/91
North Carolina	Tape	794	1.3	Y	11/22/91
North Dakota	Printout	120	2.0	Y	02/15/92
Ohio	Tape	150	0.1	Y	01/29/92
Oklahoma	Tape	55	0.2	Y	11/27/91
Oregon	Tape	70	0.2	Y	12/11/91
Pennsylvania	Tape	987	0.6	Y	11/12/91
Rhode Island	Printout	140	1.0	Y	12/01/91
South Carolina	Tape	500	2.1	Y	12/09/91
South Dakota	Tape	90	1.1	Y	11/18/91
Tennessee	Tape	100	0.2	Y	11/20/91
Texas	Tape	200	0.2	Y	12/06/91
Utah	Tape	150	1.1	N	
Vermont	Diskette	75	1.1	Y	
Virginia	Tape	505	0.8	Y	11/12/91
Washington	Tape	800	1.6	Y	02/10/92
West Virginia	Labels	898	4.5	N	
Wisconsin	Tape	247	0.4	Y	11/05/91
Wyoming	Printout	64	1.6	Y	11/22/91

Total for lists ordered \$ 12,834.
(as of Jan. 31, 1991)

^a. Information from New Hampshire was not releasable in any format or at any cost.

These marked increases in costs were probably due to pressure from the state either (a) to bring the costs of the services in line with actual costs, or (b) for the service to generate revenues for the state. With the present economic conditions, there is no reason to expect that these pressures will lessen. In terms of future surveys, the costs will probably continue to increase; but the present data indicate that the amount or pattern of increase will be difficult to predict.

Screening the State Tapes. Upon receipt, the tapes were processed and screened. Standard tape analysis (STANALS) verified tape characteristics. Original tapes were copied onto scratch tapes. Outputs of the copy were reviewed to determine potential problems with the tapes (e.g., bad tracks) and the number of observations.

Initial read programs were written and executed for each state on 100 observations to test the program and produce the dataset. Since the original population is of tremendous importance when drawing samples, special care was taken to ensure that the data included all cases of analytic interest. This was done by reviewing the documentation accompanying each tape, discussing questions with points-of-contact, and, where necessary, running frequencies on relevant variables. The tapes from the state of California were rejected twice. Its first tape excluded nurse practitioners and nurse anesthetists. The second tape included only nurses who resided in California, as opposed to nurses registered in California. HII contacted the technician in California to quite specifically explain what was required. With the exception of California, final read programs were written and executed for each state. A random sample of 1,086 observations was drawn for each state and written onto tape. These observations were converted to the survey mailing list.

Mailing Labels for Registered Nurses. HII produced mailing labels for the primary samples, and supplemental samples to compensate for non-respondents. Pressure-sensitive mailing labels were produced along with hard copy and floppy disks using WordPerfect 5.1.

Mailing Lists of Schools of Nursing. Obtaining individual names and addresses of student nurses was not feasible. The most efficient manner to gain access to nursing students was through the nursing school administrations. As a first step, mailing labels addressed personally to the Deans of Nursing from over 600 colleges and universities was obtained from the American Association of Schools of Nursing. Letters were sent on 14 March 1992 to the schools of nursing. The letter asked each school to complete a short questionnaire indicating its willingness to participate in the program. A copy of the letter is contained in Appendix D.

Through the end of April 1992, 80 percent of the approximately 300 schools who responded indicated they would permit administration of the survey. A follow-up letter was sent on 18 May 1992 to non-respondants, requesting their response and support. Upon receipt of the final set of responses, the sampling plan outlined previously will be used to select schools that will participate in the survey.

Developing the Survey Instruments

A major task was to develop a survey instrument that would facilitate comparisons with an in-Service nurse survey, and that would meet the needs of Active and Reserve Components managers of nursing programs. A meeting was held on the 16th of September, 1991 at ARI with representatives from ARI, USAREC, the Army Nurse Corps, and nursing representatives from the Army Guard, Army Reserve, Walter Reed Army Medical Center, Department of the Army (DA) staff, and HII. A decision was made that the survey should help determine what attracted an individual to nursing, his or her level of satisfaction with various aspects of the nursing profession, awareness and perceptions of Army nursing, and what might attract him or her to the Army.

Prior to developing survey questions, HII gathered information on issues affecting nursing in the civilian and military sector. Examples of information collected included:

- Briefings and reports. Copies of the Nurse Action Plan published by the ANC and briefings prepared by ANC and USAREC were collected. We also gathered the Health and Human Services (HHS) "Seventh Report . the President and Congress on the Status of Health Personnel in the United States" (1990), the HHS "Secretary's Commission on Nursing" report (1988) and the Naval Postgraduate School's report, "Recruiting and Retaining Army Nurses: An Annotated Bibliography, 1990" (Thomas, et. al, 1990). In addition, HII obtained a bibliography of health professional reports filed in the Defense Technical Information Center (DTIC), and the Center for Naval Analyses' report, "Medical and Nurse Corps Strategy" (Cooke, 1990).
- Results of Surveys. We reviewed survey reports and survey instruments for surveys such as the USAR Nurse Satisfaction and Retention Survey, the HHS Survey of the Registered Nurse Population (1988), The Army Nurse Survey (TANS). The Survey of Total Army Military Personnel) (STAMP), the physicians and dentists survey "Desert Storm and Military Medicine", and the Air Force Health Professions Officer Survey Report (1989).

After reviewing the literature, we met separately with ARI, ANC, and USAREC nurse recruiting officials to gain a deeper appreciation of nursing issues. We then developed an item data bank for the nurse and student nurse survey instruments. The data banks were forwarded for review and comment to USAREC, ARI, and the ANC. The purpose of the review was to remove those

The time to ranged from 22 to 30 minutes. The students were quite candid and helpful in suggesting changes to the survey. Most suggestions dealt with clarifying terminology. Subsequently, a modified version was administered to the Catholic University students. They felt comfortable with the second prototype and made a number of suggestions to further strengthen the instrument.

Arrangements for administering the prototype survey to registered nurses were more complex. Local hospitals were contacted to solicit their support in obtaining volunteers to take the survey. None of the hospital directors of nursing had the authority to grant immediate approval. The Nursing Director at each hospital obtained permission from the governing boards through the various hospital administrators... a process that took a number of months. Approval was eventually given at the two hospitals. The nurses completed the survey in under 30 minutes. They were satisfied with the prototype survey questions and format. Only three suggestions were made that clarified the question or added responses to a question. Copies of the nurse and nurse student prototype surveys are at Appendix E and F.

Preparing the OMB Package

A draft Office of Management and Budget (OMB) approval package was prepared and submitted to the points-of-contact in ARI, USAREC, and the Army Nurse Corps. Standard Form 83A instructions, "Request for OMB Review" was used in completing the package.

The OMB package consisted of a full description of the justification for the conducting survey. The justification included a description of why other sources of the information were not available. The OMB package explained attempts to reduce the burden on respondents by using improved technology. It also explained how we proposed to avoid duplication with other sources and obtain information as efficiently as possible.

The OMB package provided a description of the technical abilities of the people who developed the sampling plan, designed the survey, and analyzed the data. The experience of the personnel cited served to testify to the technical capabilities of the staff, as well as the study's ability to provide the information required for program evaluation. In addition, we completed all the required paperwork that accompanies the approval package, including calculation of burden per respondent and total burden hours.

As required by OMB, a copy of the registered nurse and nursing student prototype survey instruments were enclosed in the package. The final draft of the OMB package was approved for submission in mid-May 1992. Submittal of the OMB package completed requirements for this phase of the project. Documentation of study completion and results will be in an ensuing technical report.

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APPENDIX A

LETTER TO STATE BOARDS OF NURSE LICENSING



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
OFFICE OF THE SURGEON GENERAL
5100 LEEBURG PIKE
FALLS CHURCH, VA 22041-3288



Office of the Chief
Army Nurse Corps

7 October 1991

Executive Director

Dear Executive Director:

The United States Army Research Institute for the Behavioral and Social Sciences (ARI), in conjunction with the Army Nurse Corps, is conducting a national survey of registered nurses (RNs) and nursing students. In addition to demographic and employment characteristics gathered in prior surveys of RNs, this survey will solicit information about attitudes and perceptions toward the nursing profession and perceptions of Army nursing. The data will provide information at the national and State levels. The information will provide a baseline for comparative analyses as part of an overall review of Army Nurse Corps programs and compensation levels. The study report will be available to interested parties in the private and public sectors.

We are now requesting your assistance in identifying the sample for the survey. An effective sample requires a list of all actively licensed RNs in each State. As with past national surveys we have conducted, the data will be used only to fulfill the requirements of the study. No other uses will be made of the information. The data will be kept confidential and handled in accordance with the Privacy Act. When the requirements of the study have been met, all individual survey questionnaires will be destroyed.

The state listings and appropriate supporting information will be collected by the Human Resources Research Organization, International, Inc. (HRI). HRI and its parent nonprofit company (HumRRO) have been involved in numerous human resource studies over the past 40 years. There are two enclosures to this letter. The first outlines the information we are seeking; the second provides an abstract that explains the purpose of the survey.

-2-

We sincerely appreciate your cooperation on this important effort. If you have any questions, please contact either Mr. Pat Lerro, the HRI Project Director at (703) 706-5649, or the ARI contractor monitor Dr. Naomi Verdugo, of the Manpower and Personnel Policy Research Group (ARI), at (703) 274-5610.

Nancy R. Adams
Nancy R. Adams
Colonel(P), AN
Chief, Army Nurse Corps
(Designee)

Lita M. Simutis
Lita M. Simutis
Director, Manpower and Personnel
Research Laboratory, U.S. Army
Research Institute

2 Enclosures (w/d)

APPENDIX B

FORM FOR OBTAINING ADDITIONAL TECHNICAL INFORMATION

1. Today's date: _____
2. State: _____
3. Organization supplying data:
Name: _____

Address: _____

Telephone: _____
4. In what form will the list of RNs be provided? (*Check one.*) (If the state says hard-copy, ask whether the data is also on disk or tape and try to obtain a copy in that mode.)
 Computer tape Computer printout Disk
 Other (specify): _____
5. What type of currently licensed RNs are on the file? (*Check all that apply.*)
 Renewals
 Reinstatements
 First-time licenses
 Nurses licensed in state but living out-of-state
6. Does the file contain any non-RNs or RNs who are not currently eligible to practice? Yes No
If yes, how are those currently eligible to practice identified?

7. What is your best estimate of the number of RNs currently eligible to practice in your state? _____
8. Do you have a grace period for late renewals? Yes No
If yes, what is it? _____
9. As of what date is your file of RNs current? _____
10. How frequently is the file updated? _____

11. Are the RNs' license numbers on the file? Yes No

IF THE FILE IS ON COMPUTER TAPE, PLEASE COMPLETE THE FOLLOWING.

12. Please provide the following information concerning your tape.

- a. Tape label (external, VOL=SER): _____
- b. Density (BPI): 6250 1600 800
- c. Recording Mode: EBCDIC ASCII BCD
- d. Internal labeling: none labelled
- e. Number of Tracks: _____
- f. Logical record length: _____ Number of records per block: _____
Block size: _____
- g. Record format (FB, for fixed block, for example): _____
- h. Sequential tape label on which file is located: _____
- i. Data set name (DSN), if any: _____

13. How are RN records ordered on the file?

- Alphabetically, by the last name and then by first name for nurses
with same last name
- License number
- Social Security Number
- Other (please describe): _____

14. How are RN names formatted?

- Last and first (or last, first and middle) names in separate
fields (i.e., formatted)
- Free form with last name first
- Free form with first name first
- Other (please describe): _____

15. How are names of member of religious order kept in the file?

- Kept under "Sister," "Brother," "Mother," or "Father" or similar
abbreviation
- Kept by first name
- Kept by last name
- Other (specify): _____

16. Which of the following abbreviations for members of religious orders appear on your file? (*Check all that apply.*)

br broth sis sr mo

fr Other (please describe): _____

17. Are there any other special titles on the file that we need to be aware of? Yes No

18. Are names ever recorded with commas, apostrophes, dashes, imbedded blanks, or similar punctuation? Yes No

19. Is a printout of sample records enclosed? Yes No

20. Is tape documentation enclosed? Yes No

21. Please provide the name and phone number of the data processing person to contact if questions about the tape file arise:

Name: _____

Phone: _____

THANK YOU FOR YOUR COOPERATION.

APPENDIX C

FORM FOR OBTAINING INFORMATION FROM INITIAL CONTACT

STATE: _____

1. Name & Title of Executive Director, State Board of Nursing:

2. Received letter from U.S. Army Surgeon General's office? YES NO

3. Person Preparing Data:

Name: _____

Title: _____

Phone: _____

4. No. of RNs who are currently eligible to practice in the state: _____

5. Are the following data (a) in files and (b) releasable?

	In Files	Releasable
Name	YES NO	YES NO
Address	YES NO	YES NO
License No.	YES NO	YES NO
Work Setting	YES NO	YES NO
Position	YES NO	YES NO
Certifications	YES NO	YES NO
Basic Education	YES NO	YES NO
Highest Ed Level	YES NO	YES NO
Are Nurse Practitioners included in the file?		YES NO

6. Any special procedures for obtaining the data?

7. Are the data available on tape or disk? TAPE DISK

8. Is there a charge for the data? YES (\$_____) NO

9. To whom should the check be made out?

Name: _____

Address: _____

10. Do we need to send a blank tape? YES NO

If yes, to whom?

Name: _____

Address: _____

11. Is a purchase order required? YES NO

If yes, to whom should it be sent?

Name: _____

Address: _____

12. Do you require a confidentiality statement? YES NO

13. Does the board need to approve the release of this information? YES NO

If yes, when do they meet? _____

14. Please describe the licensing and renewal process in your state with respect to the licensing period.

Length of licensing period: _____

Date of renewal: _____

15. Is there a grace period? YES NO If yes, how long? _____

16. Verify the mailing address.

APPENDIX D

LETTER TO DEANS OF SCHOOLS OF NURSING



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
OFFICE OF THE SURGEON GENERAL
5109 LEESBURG PIKE
FALLS CHURCH, VA 22041-3258



Office of the Chief
Army Nurse Corps

12 March, 1992

Donna Hartweg, PhD, Director
Illinois Wesleyan University
School of Nursing
Box 2900
Bloomington, IL 61702

Dear Dr. Hartweg:

The United States Army Research Institute for the Behavioral and Social Sciences (ARI), in conjunction with the Army Nurse Corps, is planning to conduct separate national surveys of registered nurses (RNs) and nursing students. Depending upon clearances from the Office of Management and Budget (OMB), the surveys will be conducted during the Fall 1992 time-frame. In addition to demographic and employment characteristics, the surveys will provide national and State level information about attitudes and perceptions toward the nursing profession, as well as toward Army nursing. The information will provide a sound baseline to those involved in researching nursing issues. The information will also form the basis for comparative analyses for the Office of the Army Surgeon General in its review of Army Nurse Corps programs and compensation levels. The study report will be available at no charge to interested parties in the private and public sectors.

As with past national surveys we have conducted, the data will be used only to fulfill the requirements of the study. The data will be kept confidential and handled in accordance with the Privacy Act. When the requirements of the study have been met, all individual survey questionnaires will be destroyed.

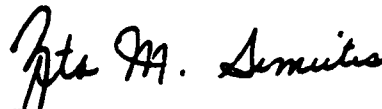
Directors of State Boards of Nursing Registration/Certification have cooperated in this effort by providing a list of all actively licensed RNs in each state. Schools of Nursing at a number of universities have helped in developing the nurse student survey instrument. We are now soliciting your support in developing the sample of nursing students. The sample will include juniors, seniors, and those nursing students who have four-year degrees in other disciplines, but are now enrolled in a nursing program.

There are three enclosures to this letter. The first is a short questionnaire we ask you to complete. It outlines the data we seek to structure the sample and the survey, and it requests your opinion of two alternative ways to collect the data. The second is an abstract that explains the purpose of the survey. The third is a prototype of the survey. The data will be collected by the Human Resources Research Organization, International, Inc. (HRI).

We sincerely appreciate your cooperation on this important effort. If you have any questions, please contact either Mr. Pat Lerro, the HRI project director at (703) 706-5649, or the ARI contract monitor Dr. Tanya Guthrie, of the Manpower and Personnel Policy Research Group of the Army Research Institute (ARI), at (703) 274-5610.



Nancy R. Adams
Brigadier General, AN
Chief, Army Nurse Corps



Zita M. Simutis
Director, Manpower and Personnel
Research Laboratory, U. S. Army Research
Institute

3 Enclosures (kw/d)

APPENDIX E

THE U.S. ARMY SURVEY OF REGISTERED NURSES

HumRRO International, Inc.
66 Canal Center Plaza, Suite 400
Alexandria, VA 22314

APPROVED OMB NUMBER _____
EXPIRES: _____

The U.S. Army Survey of Registered Nurses

Public reporting burden for this collection of information is estimated to average 30 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 this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (_____-_____), Washington, DC 20503. Please DO NOT RETURN your (form/questionnaire) to either of these addresses. Send your completed (form/questionnaire) to:

**HumRRO International, Inc.
66 Canal Center Plaza, Suite 400
Alexandria, VA 22314.**

AUTHORITY: Public Law 93-573, called the Privacy Act of 1974, requires that you be informed of the purpose and uses to be made of the information that is collected. The Federal Government may collect the information requested in the 1992 Survey of Registered Nurses under the authority of 10 United States Code 137, 503, 2358.

PRINCIPAL PURPOSE: This survey is being conducted to help the Federal Government learn more about the beliefs of nurses regarding various aspects of their profession, as well as their knowledge and views of the Army Nurse Corps (ANC). Your responses will aid the ANC as it evaluates various programs and policies. In addition, the results of this survey will provide insight into a number of work-related and professional issues confronting nurses today.

DISCLOSURE: Providing information in this questionnaire is voluntary. You do not have to answer particular questions if you choose not to. The information you give us is protected under the Privacy Act of 1974. Your answers will be kept confidential and your identity will never be known to anyone. This is not a test. There are no right or wrong answer, so please be as honest as you can about your feelings.

ROUTINE USES: Information on individual respondents will not be released to other agencies or institutions. Only group statistics will be reported in the findings from this project. Copies of the final report will be provided to the Office of the Army Surgeon General, the Army Nurses Corps, and Army personnel and research agencies. The contractor and the Army will produce in-house publications on overall results. In some cases manuscripts of findings will be presented at conferences, symposia, scientific meetings, and in professional journals.

APPROVED OMB NUMBER _____
EXPIRES: _____

Public reporting burden for this collection of information is estimated to average 30 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 this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project, Washington, DC 20503. Please DO NOT RETURN your (form/questionnaire) to either of these addresses. Send your completed (form/questionnaire) to:

**HumRRO International, Inc.
66 Canal Center Plaza, Suite 400
Alexandria, VA 22314.**

INSTRUCTIONS FOR MARKING

- Use only a soft lead pencil (a standard No. 2 is ideal.)
- Make heavy marks that fill the circle.
- Erase cleanly any answer you wish to change.
- Make no stray markings of any kind. Please write any comments on a separate sheet of paper.
- Fill in only one circle for each question unless you are told to "mark all that apply"
- Where numbers are called for in an answer, first write your answer in the boxes provided and then fill in the circles underneath which represent the numbers you have placed in the boxes.

EXAMPLE A:

How old were you on November 4, 1992?

2	1
<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>

Years

EXAMPLE B:

Will marks made with ballpoint pen or felt-tip pen be properly read?

- Yes No

Background

1. Are you ?

- Female
- Male

2. What is your month and year of birth?

Month	<input type="radio"/>	<input type="radio"/>	Year 19	<input type="radio"/>	<input type="radio"/>
	①	①		①	①
	①	①		①	①
		②		②	②
		③		③	③
		④		④	④
		⑤		⑤	⑤
		⑥		⑥	⑥
		⑦		⑦	⑦
		⑧		⑧	⑧
		⑨		⑨	⑨

6. What race do you consider yourself? (Mark only one)

- White
- Black
- Indian (American)
- Eskimo or Aleut
- Asian or Pacific Islander
- Other

7. Are you of Spanish/Hispanic origin?

- No
- Yes (Mexican, Mexican-American, Chicano)
- Yes (Puerto Rican)
- Yes (Cuban)
- Yes (Other Spanish, Hispanic)

3. Are you a US citizen (native born or naturalized)?

- No (Skip to end of survey)
- Yes

4. What is your current marital status?

- Married
- Widowed
- Divorced or separated
- Never married

5. Do you have a child or children living at home with you on a full- or part-time basis?

NO

YES \longrightarrow 5a. Are these children

- All less than 6 years old?
- All 6 years old or older?
- Both younger and older than 6 years?

Education

8. Are you currently enrolled in a formal education program leading to a Baccalaureate or higher degree in nursing?

No (Skip to Question 9)

Yes

8a. Are you considered a full-time or part-time student?

- Full-time student
 Part-time student

8b. What degree are you currently working toward?

- Baccalaureate Doctorate
 Master's Other (Specify)
-

8c. How are your tuition and fees being financed? (Mark all that apply)

- Personal and family resources State or local government loan or scholarship
 Employer tuition reimbursement plan (including Veterans Administration tuition) Non-government scholarship, loan, or grant
 Federal traineeship, scholarship, or grant University teaching or research fellowship
 Federally assisted loan Other sources (Specify)
-

9. What nursing degree did you have when you first became a registered nurse?

- 2 year Associate degree Baccalaureate degree
 3 year Diploma Master's degree

10. Please fill in the circles corresponding to the month and year that you received this degree.

Month	<input type="radio"/>	<input type="radio"/>	Year 19	<input type="radio"/>	<input type="radio"/>
	0	0		0	0
	1	1		1	1
	2	2		2	2
	3	3		3	3
	4	4		4	4
	5	5		5	5
	6	6		6	6
	7	7		7	7
	8	8		8	8
	9	9		9	9

11. Since graduating from the nursing program you described in Question 9, have you earned any additional degrees?

- No
 Yes

12. What is your highest level of education?

- 2 year Associate degree
- 3 year Diploma
- Baccalaureate degree (BA, BS, or equivalent)
- Master's degree in nursing
- Master's degree, non-nursing
- Doctorate in nursing
- Doctorate, non-nursing
- Other

13. What is the one primary focus of your highest nursing degree? *(Mark only one answer)*

- Clinical practice
- Education
- Supervision/administration
- Research
- Other

14. If the primary focus of your highest degree was not clinical practice, skip to question 15. If the primary focus of your highest degree was clinical practice specify the type. *(Mark only one answer)*

- Focus was not clinical practice
- Community/Public health
- Maternal-child
- Midwifery
- Geriatrics/Gerontology
- Medical/Surgical
- Anesthesia Nursing (RNA)
- Psychiatric-mental health
- Family practice
- Critical care
- Operating Room
- Other

15. Are you professionally certified by a national accrediting body in a defined functional or clinical area of nursing?

- No
 - Yes
- 15a. Are you certified as a: *(Mark all that apply)*

- Certified registered nurse anesthetist
 - Certified nurse-midwife
 - Clinical specialist, adult psychiatric/mental health
 - Clinical specialist, child, adolescent psychiatric/mental health
 - Clinical specialist, community health nursing
 - Clinical specialist, gerontological nursing
 - Clinical specialist, medical-surgical nursing
 - Neonatal nurse clinician practitioner
 - Adult nurse practitioner
 - Family nurse practitioner
 - Gerontological nurse practitioner
 - Ob-Gyn nurse practitioner
 - Pediatric nurse practitioner
 - School nurse practitioner
 - Other *(Specify)*
-

16. Please fill in the circle in column 1 that corresponds to your most important reason for becoming a nurse. In column 2 fill in the circle corresponding to your 2nd most important reason, and in column 3 your third most important reason. (There should be one mark in each column.)

1 Most Important Reason	2 2nd Most Important Reason	3 3rd Most Important Reason	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	To care for/help people
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Professional respect
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Job security
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Interesting job
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Wanted active hands on profession
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	To gain technical experience
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	To gain leadership experience
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Sense of independence
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Degree of decision making authority
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Broad range of practice opportunities
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Improve salary level
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Other (Specify) _____

17. If you were employed full-time before entering the nursing program, in what way(s) did you think nursing would be better than the job you had? (Mark all that apply.)

- Not Applicable, I wasn't employed full-time
- Better salary
- Better work schedule
- Better benefits
- More autonomy
- More interesting
- More authority
- More rewarding
- More meaningful
- More involving
- Other

18. How much influence did each of the following have on your decision to pursue a nursing career?

	Positive Influence	No Influence	Negative Influence	Does Not Apply
High school teacher.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
High school counselor	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nursing professor.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Friend(s).....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nurse recruiter (military).....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nurse recruiter (hospital).....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Positive influence	No influence	Negative influence	Does Not Apply
Nurse counselor.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Parent(s).....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Child(ren).....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Spouse or significant other.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Brother(s)/sister(s).....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
College professor (non-nursing).....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Media advertisement.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Family tradition.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other influences.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

19. When were you issued your first U.S. license to practice as a registered nurse (by one of the 50 States or the District of Columbia)

Year of first U.S. license: 19

0	0
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9

20. Are you currently employed in the nursing profession?

- No (skip to Question 32)
- Yes

Employment

21. Indicate the city/county, state and zip code of your primary nursing employment as of September 8, 1992.
Note: If you were not employed in a fixed location (e.g., you were a private duty nurse or worked through temporary employment service) consider the area where you are employed as a nurse.

City/county _____

- STATES**
- Alabama
 - Alaska
 - Arizona
 - Arkansas
 - California
 - Colorado
 - Connecticut
 - Delaware
 - Dist. of Columbia (DC)
 - Florida
 - Georgia
 - Hawaii
 - Idaho
 - Illinois
 - Indiana
 - Iowa
 - Kansas
 - Kentucky
 - Louisiana
 - Maine
 - Maryland
 - Massachusetts
 - Michigan
 - Minnesota
 - Mississippi
 - Missouri
 - Montana
 - Nebraska
 - Nevada

- New Hampshire
- New Jersey
- New Mexico
- New York
- North Carolina
- North Dakota
- Ohio
- Oklahoma
- Oregon
- Pennsylvania
- Rhode Island
- South Carolina
- South Dakota
- Tennessee
- Texas
- Utah
- Vermont
- Virginia
- Washington
- West Virginia
- Wisconsin
- Wyoming

- U.S. TERRITORIES**
- Puerto Rico
 - Virgin Islands
 - American Samoa
 - Guam
 - Other

Zipcode

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
0	0	0	0	0
1	1	1	1	1
2	2	2	2	2
3	3	3	3	3
4	4	4	4	4
5	5	5	5	5
6	6	6	6	6
7	7	7	7	7
8	8	8	8	8
9	9	9	9	9

22. Is your primary nursing position full-time or part-time?

- Full-time
- Part-time

23. How many hours are you usually scheduled to work during a normal work week at your principal nursing position? If you do not work on a routine schedule, how many hours do you usually work during a week at your principal nursing position?

- Less than 10
- 11 - 20
- 21 - 30
- 31 - 40
- 41 - 50
- 51 - 60
- 61 or more

24. For your principal nursing position, please enter the approximate percentage of your time spent in the following areas during a usual work week.

	Percent of Time Spent			
	0-24	25-49	50-74	75-100
Administration _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Consultation with agencies and/or professionals _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Direct patient care, not including staff supervision _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Research _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Supervision _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teaching nursing or other students in health care occupations _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

25. Using the following list, please mark the one entry that best describes the TYPE OF SETTING in which you were working as of September 8, 1992 in your principal nursing position (if your employment is that of a private duty nurse or you work through a temporary employment service, circle the one setting in which you spend most of your working time).

- Hospital (includes private, public, military, or VA hospital)
- Nursing home/Extended care facility
- Public health/community health setting
- Student health service
- Employment health service
- Out patient facility (e.g. doctor's office, clinic, HMO)
- Prison or jail
- Nursing education
- Agency (Government, regulatory, or advocacy)
- Self-employed
- Other

26. Using the list below, please mark the one item that best corresponds to the position title of your primary nursing position.

- | | |
|---|--|
| <input type="radio"/> Administrator or assistant administrator | <input type="radio"/> Nurse coordinator |
| <input type="radio"/> Certified nurse anesthetist | <input type="radio"/> Nurse midwife |
| <input type="radio"/> Charge nurse | <input type="radio"/> Nurse practitioner |
| <input type="radio"/> Clinical nurse specialist | <input type="radio"/> Patient care coordinator |
| <input type="radio"/> Consultant | <input type="radio"/> Private duty nurse |
| <input type="radio"/> Dean, director or assistant/associate director of nursing education | <input type="radio"/> Public health nurse |
| <input type="radio"/> Director or assistant/associate director of nursing service | <input type="radio"/> Researcher |
| <input type="radio"/> General duty nurse | <input type="radio"/> School nurse |
| <input type="radio"/> Head nurse or assistant head nurse | <input type="radio"/> Staff nurse |
| <input type="radio"/> In-service education director or instructor | <input type="radio"/> Supervisor or assistant supervisor |
| <input type="radio"/> Nurse clinician | <input type="radio"/> Team Leader |
| | <input type="radio"/> Other (specify) _____ |

27. Does your principal nursing position involve direct care in a hospital setting during a usual work week?

NO (skip to question 28)

YES → 27a. In what type of unit do you work more than half of your patient care time during a usual work week?

- | | |
|--|---|
| <input type="radio"/> Intensive care unit (Adult, Pediatrics, NICU, CCU) | <input type="radio"/> Home health care |
| <input type="radio"/> General bed unit | <input type="radio"/> Hospice unit |
| <input type="radio"/> Specialty (other than intensive care) bed unit | <input type="radio"/> Pediatrics |
| <input type="radio"/> Operating room | <input type="radio"/> Nursery |
| <input type="radio"/> Recovery room | <input type="radio"/> Obstetrics |
| <input type="radio"/> Labor/delivery room | <input type="radio"/> Other specific type of area |
| <input type="radio"/> Outpatient department | <input type="radio"/> No specific type of assigned area |
| <input type="radio"/> Emergency department | |

28. Do you have a secondary job in nursing?

No

Yes → 28a. If you are employed by more than one nursing employer, please indicate the type of work you do in your other nursing position(s) for pay. (Mark all that apply)

- | | |
|---|--|
| <input type="radio"/> Private duty nursing | <input type="radio"/> Research |
| <input type="radio"/> Work through temporary employment service | <input type="radio"/> Community Health |
| <input type="radio"/> Hospital staff nurse | <input type="radio"/> Other |
| <input type="radio"/> Teaching | <input type="radio"/> Does not apply |
| <input type="radio"/> Consultation | |

29. Listed below are different aspects of a nursing career. Please review this list and indicate which aspects are important to you by marking the circle in the column on the left. Then, for those that are important, indicate how satisfied you are with this element in your current position.

	Important	Neutral	Not Important	1 Very Satisfied	2 Satisfied	3 Neutral	4 Dissatisfied	5 Very Dissatisfied
1. PERSONAL/LIFESTYLE								
Opportunity to serve others.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stable Employment.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Employment opportunities for spouse.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Availability of child care.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Time for personal/family life.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Salary.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Adequacy of preceptorship program.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. WORKING CONDITIONS								
Number of hours at work each day.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Flexibility of schedule.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Morale in work area.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nurse supervisor abilities/support.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Assigned patient-load.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Amount of paper work.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quality of patient care.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Frequency of floating to other clinical units.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. PROFESSIONAL ISSUES								
Acknowledgement/appreciation for job performance.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Opportunity to work in clinical area or role of choice.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Opportunity to make administrative decisions in work setting.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Preparation for current position (i.e., orientation, training).....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Opportunity for supervisory/managerial experience.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Variety of nursing experiences available.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Incentives/support to utilize, conduct, and publish research.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Authority to make patient-care decisions.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nurse-doctor collaboration.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Important	Neutral	Not Important	1 Very Satisfied	2 Satisfied	3 Neutral	4 Dissatisfied	5 Very Dissatisfied
4. EDUCATION ISSUES								
Opportunity to gain continuing education units (CEUs) _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Opportunity to continue education funded by me _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Opportunity to continue education funded by employer _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Opportunity to attend specialty courses, such as ICU course, practitioner courses _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

30. Overall, how satisfied are you with nursing?

- Very satisfied
- Somewhat satisfied
- Neither satisfied nor dissatisfied
- Somewhat dissatisfied
- Very dissatisfied

31. Please specify the annual earnings for your nursing positions. Provide your current gross salary before deductions for taxes, social security, etc. If you do not have a set annual salary, (for example, you are part-time, private-duty, or self-employed) provide an estimate of your annual earnings for 1992.

- \$5,000 or less
- \$5,001 to \$10,000
- \$10,001 to \$15,000
- \$15,001 to \$25,000
- \$25,001 to \$30,000
- \$30,001 to \$35,000
- \$35,001 to \$40,000
- \$40,001 to \$45,000
- \$45,001 to \$50,000
- \$50,001 to \$55,000
- \$55,001 to \$60,000
- More than \$60,000

Please skip to question 34

32. How long has it been since you last worked for pay as a registered nurse?

- Less than a year
- One year or more

33. Are you actively seeking employment as a registered nurse (e.g., making inquiries as to availability of employment, answering advertisements, having interviews)?

No (skip to question 34)

Yes _____ → 33a. Indicate the number of weeks during which you have been actively seeking a nursing position.

Less than two weeks

Two weeks or more

33b. Are you looking for a full-time or part-time nursing position?

Full-time

Part-time

Either full- or part-time

34. Are you presently in the military?

No

Yes, Active Duty _____ →

Yes, Reserves (Active or Inactive)

Yes, National Guard _____

34a. Which branch?

Army

Navy

Air Force

Marine Corps

35. Have you ever been in the military?

No

Yes, Active Duty _____ →

Yes, Reserves (Active or Inactive)

Yes, National Guard _____

35a. Which branch?

Army

Navy

Air Force

Marine Corps

If you answered YES to either 34 or 35 skip to question 38

36. For this section, please answer by marking the answer that best describes your opinions or feelings.

	1 Definitely Yes	2 Probably Yes	3 No Opinion	4 Probably Not	5 Definitely Not
Before Operation Desert Storm, I would have been interested in serving on active duty as a military nurse.....	①	②	③	④	⑤
Before Operation Desert Storm, I would have been interested in serving as a nurse in the military reserves.....	①	②	③	④	⑤
Since Operation Desert Storm, I have been interested in serving on active duty as a military nurse.....	①	②	③	④	⑤
Since Operation Desert Storm, I have been interested in serving as a nurse in the military reserves.....	①	②	③	④	⑤

37. Please read the following before answering question 37.

The Active Duty Army Nurse Corps is a full-time job with a 3 to 5 year commitment. After initial military training, you may receive additional specialty training either at your assigned duty station or at a temporary duty station. Reserve and National Guard military service allows people to keep their civilian, full-time jobs and attend school while serving part-time in the military. Reservists and National Guardsmen normally train one weekend a month, in addition to two weeks a year on active duty training. In the event of a national emergency—for example, a natural disaster or military threat—Reservists and Guardsmen can be called up for extended periods of active duty military service.

With this in mind, the following list contains factors other than nursing duties that any nurse considering joining the military would need to consider. Please indicate what effect these factors have on the likelihood that you would enlist in either the Active Duty or Reserve forces.

	1 Very Positive	2 Somewhat Positive	3 Neutral	4 Somewhat Negative	5 Very Negative
Active Duty & Reserves					
Salary.....	①	②	③	④	⑤
Availability of continuing education and specialty training.....	①	②	③	④	⑤
Educational loan repayment program.....	①	②	③	④	⑤
Availability of life insurance benefits.....	①	②	③	④	⑤
Entry bonuses.....	①	②	③	④	⑤
Retirement benefits.....	①	②	③	④	⑤
Availability of military benefits (PX, commissary).....	①	②	③	④	⑤
Free travel on military aircraft when available.....	①	②	③	④	⑤
Obtaining officer status upon admission.....	①	②	③	④	⑤
Opportunity to serve country.....	①	②	③	④	⑤
Availability of child care.....	①	②	③	④	⑤
Time for personal/family life.....	①	②	③	④	⑤
Scheduling flexibility.....	①	②	③	④	⑤
Opportunity for leadership positions.....	①	②	③	④	⑤
Possibility of being sent to a combat zone.....	①	②	③	④	⑤
Having to work/train in the field.....	①	②	③	④	⑤
Military lifestyle.....	①	②	③	④	⑤
Amount of personal freedom.....	①	②	③	④	⑤

	1 Very Positive	2 Somewhat Positive	3 Neutral	4 Somewhat Negative	5 Very Negative
Amount of paper work _____	① _____	② _____	③ _____	④ _____	⑤ _____
Length of commitment _____	① _____	② _____	③ _____	④ _____	⑤ _____
Active Duty Only					
Possibility of being relocated _____	① _____	② _____	③ _____	④ _____	⑤ _____
Number of hours spent at work per day _____	① _____	② _____	③ _____	④ _____	⑤ _____
Stable employment _____	① _____	② _____	③ _____	④ _____	⑤ _____
Reserve or National Guard Only					
Opportunity for second income _____	① _____	② _____	③ _____	④ _____	⑤ _____
Yearly two-week active duty training _____	① _____	② _____	③ _____	④ _____	⑤ _____
Having to report for weekend duty _____	① _____	② _____	③ _____	④ _____	⑤ _____

38. Do you know any individuals who served on Active Duty in the Army Nurse Corps?

- No
 Yes

39. Have any of the registered nurses you worked with been a Nurse in the Army Reserve or National Guard?

- No
 Yes

• If you answered "NO" to **BOTH** questions 38, & 39, skip to Question 41.

40. Indicate how much you agree or disagree with the following statements. Mark one response for each statement from the following scale.

	1 Agree Completely	2 Agree Somewhat	3 Neither Agree Nor Disagree	4 Disagree Somewhat	5 Disagree Completely	0 Not enough Knowledge to Respond
NURSES WITH ARMY NURSE CORPS EXPERIENCE:						
Are dependable _____	① _____	② _____	③ _____	④ _____	⑤ _____	①
Display enthusiasm _____	① _____	② _____	③ _____	④ _____	⑤ _____	①
Use good judgment in setting work priorities _____	① _____	② _____	③ _____	④ _____	⑤ _____	①
Are able to define a problem and determine the solution _____	① _____	② _____	③ _____	④ _____	⑤ _____	①
Display self-confidence _____	① _____	② _____	③ _____	④ _____	⑤ _____	①
Adjust priorities in light of new circumstances _____	① _____	② _____	③ _____	④ _____	⑤ _____	①
Recognize potential problems and take corrective action _____	① _____	② _____	③ _____	④ _____	⑤ _____	①

	1	2	3	4	5	0
	Agree Completely	Agree Somewhat	Neither Agree Nor Disagree	Disagree Somewhat	Disagree Completely	Not enough Knowledge to Respond
NURSES WITH ARMY NURSE CORPS EXPERIENCE:						
Display dedication and loyalty.....	①	②	③	④	⑤	⑥
Stick with a task until it is completed in spite of distractions.....	①	②	③	④	⑤	⑥
Participate as team members.....	①	②	③	④	⑤	⑥
Strive to take on increased responsibility	①	②	③	④	⑤	⑥
Make it a practice to follow up on things to be sure they get done.....	①	②	③	④	⑤	⑥
Are willing to put in extra time at work	①	②	③	④	⑤	⑥
Ask pertinent questions which yield the information needed.....	①	②	③	④	⑤	⑥
Are punctual in getting to work.....	①	②	③	④	⑤	⑥
Are organized and able to handle many things at once.....	①	②	③	④	⑤	⑥
Recognize when help or advice from others is needed.....	①	②	③	④	⑤	⑥
Provide helpful, friendly service to others who may be impatient or indecisive	①	②	③	④	⑤	⑥
Show respect for peers, subordinates, and supervisors....	①	②	③	④	⑤	⑥

41. Overall, how do you think military nursing compares to nursing in the civilian sector?

- Military nursing is much more rewarding
- Military nursing is somewhat more rewarding
- Military nursing is much the same as civilian nursing
- Military nursing is somewhat less rewarding
- Military nursing is much less rewarding
- Not sure

42. In your estimate, how do the starting pay and allowances (such as non-taxable insurance, housing allowance, and retirement contributions) you do/would receive as a military nurse compare to what you would/do expect to receive in a starting civilian nursing position?

- Military substantially higher
- Military moderately higher
- About the same
- Military moderately lower
- Military substantially lower
- Not sure

43. In your estimate, how do the total pay and allowances you would receive as a career Army officer (20 or more years of service) compare to what you could expect in a civilian nursing career spanning 20 or more years?

- Army substantially higher
- Army moderately higher
- About the same
- Army moderately lower
- Army substantially lower
- Not sure

44. Did either of your parents ever serve in the military?

- No
 - Don't Know/
Not sure
- (Skip to Question 45)

- Yes → 44a. Did they serve on:
 - Active Duty
 - Reserves

- 44b. In which service? (mark all that apply)
- Air Force
 - Army
 - Navy
 - Marine Corps
 - Coast Guard

- 44c. Is(are) your parent(s) either now on duty or retired from the military?
- No
 - Yes, now on duty
 - Yes, now retired from the military
 - One retired, one on duty

- 44d. If you ever lived on any military installation(s) while growing up, what did you think of it?
- Not applicable, never lived on military installation
 - I was too young to remember much about it
 - I liked it a lot
 - I disliked it a lot
 - No strong feelings

45. Did a brother(s) and/or sister(s) ever serve in the military?

- Not applicable,
No brothers or sisters
- No
- Yes

45a. In which Service?

(Mark all that apply)

- Army
- Air Force
- Navy
- Coast Guard
- Marine Corps

46. What was your original source of information about the Army Nurse Corps? (Mark only one)

- Journal ad
- Newspaper ad
- School paper ad
- Mail
- Career day/job fair
- Convention exhibit
- Symposium/workshop
- American Nursing Coffee Review
- ANC officer
- Don't know
- Instructor/professor
- Family/friend
- Recruiter at recruiting station
- School visit by Army nurse recruiter
- School visit by other Military recruiter
- Prior service
- Other

47. Have you discussed joining the Army Nurse Corps?

- No (Go to question 47)
- Yes

47a. Who else did you discuss it with?

(Mark all that apply)

- Mother
- Father
- Sibling
- Spouse or significant other
- Counselor/teacher
- Civilian nurse who is an Army reservist
- Army nurse
- Other
- Military recruiter

47b. If you discussed joining the Army Nurse Corps with a military recruiter, how did the recruiter's approach affect you?

- Very negative
- Somewhat negative
- Neutral
- Somewhat positive
- Very positive
- Does not apply

(Question 47 continued)

47c. If you discussed joining the Army Nurse Corps, what was your impression of the Army program and offerings?

- Very negative
- Somewhat negative
- Neutral
- Somewhat positive
- Very positive
- Does not apply

48. The Defense Department has ads on TV, radio, in magazines, on billboards, etc., which cover "Army, Navy, Air Force, and Marine Corps." Do you remember seeing/hearing these ads?

- No
- Yes, and they greatly increased my interest in joining
- Yes, and they moderately increased my interest in joining
- Yes, and they slightly increased my interest in joining
- Yes, and they did not increase my interest in joining

49. Do you remember seeing, reading or hearing any ads on TV, on radio, in magazines, on billboards, etc. which were specifically about the Army Nurse Corps?

- No (skip to question 50)
- Yes, and they greatly increased my interest in the Army
- Yes, and they moderately increased my interest in the Army
- Yes, and they slightly increased my interest in the Army
- Yes, and they did not increase my interest in the Army

49a. In which media did you first see, read, or hear advertising about the Army Nurse Corps?

- | | |
|--|---|
| <input type="radio"/> Magazines | <input type="radio"/> Television |
| <input type="radio"/> Newspapers | <input type="radio"/> Dinner or luncheon seminar |
| <input type="radio"/> Unsolicited brochures/pamphlets/letters sent from local recruiters | <input type="radio"/> Literature/presentation at a convention |
| <input type="radio"/> Other Army recruiting letter | <input type="radio"/> Nursing journals |
| <input type="radio"/> Billboards | <input type="radio"/> Recruiter school visit - Army |
| <input type="radio"/> Radio | <input type="radio"/> - Other services |
| <input type="radio"/> School paper | |
| <input type="radio"/> Career Day | |
| <input type="radio"/> Literature requested from recruiter | |

50. What type of TV programs do you most prefer to watch? (Mark one or more)

- | | | |
|---|--|--|
| <input type="radio"/> I rarely watch TV | <input type="radio"/> Music/variety | <input type="radio"/> Movies on regular TV |
| <input type="radio"/> Game shows | <input type="radio"/> Sports events | <input type="radio"/> Movies on pay/cable TV |
| <input type="radio"/> Educational | <input type="radio"/> Situation comedy | <input type="radio"/> Public Television |
| <input type="radio"/> Daytime soaps | <input type="radio"/> Action/adventure | <input type="radio"/> Other |
| <input type="radio"/> Evening drama | <input type="radio"/> News/special reports | |

51. What type of radio station do you listen to most often? *(Mark one or more)*

- | | | |
|--|--------------------------------------|--|
| <input type="radio"/> I rarely listen to the radio | <input type="radio"/> Classical | <input type="radio"/> Country/western |
| <input type="radio"/> Rock | <input type="radio"/> News/talk show | <input type="radio"/> Gospel/religious |
| <input type="radio"/> Soul | <input type="radio"/> Easy listening | <input type="radio"/> Other |
| <input type="radio"/> Jazz | | |

Thank you for the time and effort you have taken to complete this survey. If you have any comments or suggestions, please feel free to use the "REMARKS" section below.

If you would like to receive a copy of the final report of this survey, please include your name and mailing address. You may mail the part of the form with your name and address in separately if you wish. This will assure that your anonymity with respect to the specific survey responses is absolute.

REMARKS:

APPENDIX F

THE U.S. ARMY SURVEY OF NURSING STUDENTS

HumRRO International, Inc.
66 Canal Center Plaza, Suite 400
Alexandria, VA 22314

APPROVED OMB NUMBER _____
EXPIRES: _____

The U.S. Army Survey of Nursing Students

Public reporting burden for this collection of information is estimated to average 30 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 this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (_____-_____), Washington, DC 20503. **Please DO NOT RETURN your (form/questionnaire) to either of these addresses.** Send your completed (form/questionnaire) to:

HumRRO International, Inc.
66 Canal Center Plaza, Suite 400
Alexandria, VA 22314.

AUTHORITY: Public Law 93-573, called the Privacy Act of 1974, requires that you be informed of the purpose and uses to be made of the information that is collected. The Federal Government may collect the information requested in the 1992 Survey of Nursing Students under the authority of 10 United States Code 137, 503, 2358.

PRINCIPAL PURPOSE: This survey is being conducted to help the Federal Government learn more about the beliefs of nursing students regarding various aspects of their profession, as well as their knowledge and views of the Army Nurse Corps (ANC). Your responses will aid the ANC as it evaluates various programs and policies. In addition, the results of this survey will provide insight into a number of work-related and professional issues confronting nurses today.

DISCLOSURE: Providing information in this questionnaire is voluntary. You do not have to answer particular questions if you choose not to. The information you give us is protected under the Privacy Act of 1974. Your answers will be kept confidential and your identity will never be known to anyone. This is not a test. There are no right or wrong answer, so please be as honest as you can about your feelings.

ROUTINE USES: Information on individual respondents will not be released to other agencies or institutions. Only group statistics will be reported in the findings from this project. Copies of the final report will be provided to the Office of the Army Surgeon General, the Army Nurses Corps, and Army personnel and research agencies. The contractor and the Army will produce in-house publications on overall results. In some cases manuscripts of findings will be presented at conferences, symposia, scientific meetings, and in professional journals.

APPROVED OMB NUMBER _____
EXPIRES: _____

Public reporting burden for this collection of information is estimated to average 30 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 this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project, Washington, DC 20503. Please DO NOT RETURN your (form/questionnaire) to either of these addresses. Send your completed (form/questionnaire) to:

HumRRO International, Inc.
66 Canal Center Plaza, Suite 400
Alexandria, VA 22314.

INSTRUCTIONS FOR MARKING

- Use only a soft lead pencil (a standard No. 2 is ideal.)
- Make heavy marks that fill the circle.
- Erase cleanly any answer you wish to change.
- Make no stray markings of any kind. Please write any comments on a separate sheet of paper.
- Fill in only one circle for each question unless you are told to "mark all that apply"
- Where numbers are called for in an answer, first write your answer in the boxes provided and then fill in the circles underneath which represent the numbers you have placed in the boxes.

EXAMPLE A:

How old were you on November 4, 1992?

2	1
<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>

Years

EXAMPLE B:

Will marks made with ballpoint pen or felt-tip pen be properly read?

- Yes No

Background

1. Are you ?

- Female
- Male

2. What is your month and year of birth?

Month	<input type="radio"/>	<input type="radio"/>	Year 19	<input type="radio"/>	<input type="radio"/>
	①	①		①	①
	①	①		①	①
		②		②	②
		③		③	③
		④		④	④
		⑤		⑤	⑤
		⑥		⑥	⑥
		⑦		⑦	⑦
		⑧		⑧	⑧
		⑨		⑨	⑨

6. What race do you consider yourself? (Mark only one)

- White
- Black
- Indian (American)
- Eskimo or Aleut
- Asian or Pacific Islander
- Other

7. Are you of Spanish/Hispanic origin?

- No
- Yes (Mexican, Mexican-American, Chicano)
- Yes (Puerto Rican)
- Yes (Cuban)
- Yes (Other Spanish, Hispanic)

3. Are you a US citizen (native born or naturalized)?

- No (Skip to end of survey)
- Yes

4. What is your current marital status?

- Married
- Divorced or separated
- Widowed
- Never married

5. Do you have a child or children living at home with you on a full- or part-time basis?

NO

YES \longrightarrow 5a. Are these children

- All less than 6 years old?
- All 6 years old or older?
- Both younger and older than 6 years?

Education

8. What school year are you?

- Freshman
- Sophomore
- Junior
- Senior
- Post Baccalaureate
- Degree in another academic discipline, pursuing a BSN degree
- RN pursuing a BSN degree

9. Are you considered a full-time or part-time student?

- Full-time student
- Part-time student

10. What degree are you currently working toward in this program? (Mark only one answer)

- Associate degree
- Baccalaureate
- Master's
- Doctorate
- Other

11. What was the approximate tuition charge by your school last semester?

- less than \$500
- \$501 to \$1,500
- \$1,501 to \$2,500
- \$2,501 to \$5,000
- \$5,001 to \$7,500
- \$7,501 to \$10,000
- \$10,001 to \$15,000
- \$15,001 to \$20,000
- more than \$20,000

12. By the time you finish this degree, what would you estimate the total cost will be (including tuition, books, fees, room and board, and incidentals)?

- less than \$5,000
- \$5,001 to \$10,000
- \$10,001 to \$15,000
- \$15,001 to \$20,000
- \$20,001 to \$25,000
- \$25,001 to \$30,000
- \$30,001 to \$35,000
- \$35,001 to \$40,000
- \$40,001 to \$45,000
- \$45,001 to \$50,000
- \$50,001 to \$55,000
- more than \$55,000

13. How are your tuition and fees being financed? (Mark all that apply)

- Personal savings
- Your own personal earnings from employment
- Spouse's earnings from employment
- Parental contributions
- Employer tuition reimbursement plan
(including Veterans Administration employer tuition plan)
- Non-military Federal traineeship, scholarship, or grant
- Non-military Federally-assisted loan
- State or local government loan or scholarship
- Non-government scholarship, loan or grant
- University teaching or research fellowship
- Other sources
- Military loan/scholarship program
If military, which service - Army
 Navy
 Air Force

14. In terms of the degree which you are currently pursuing; how much financial aid (e.g., loans, scholarships, grants) have you received to date?

- None
- less than \$5,000
- \$5,001 to \$7,500
- \$7,501 to \$10,000
- \$10,001 to \$12,500
- \$12,501 to \$15,000
- \$15,001 to \$17,500
- \$17,501 to \$20,000
- more than \$20,000

15. How much money did/will you still owe after graduation?

- None
- less than \$5,000
- \$5,001 to \$7,500
- \$7,501 to \$10,000
- \$10,001 to \$12,500
- \$12,501 to \$15,000
- \$15,001 to \$17,500
- \$17,501 to \$20,000
- more than \$20,000

16. What was your primary status at the time you applied to the school of nursing?

- Student/resident
- Looking for a job
- Employed as a registered nurse

- Employed full-time in other than nursing
- Employed part-time in other than nursing

16a. If you were employed full-time in some career other than nursing before entering a nursing program, in what way did you think nursing would be better than the job you had?

- Not applicable, I wasn't employed full-time
- Better salary
- Better work schedule
- Better benefits
- More autonomy
- More interesting
- More authority
- More rewarding
- More meaningful
- More involving

17. Please fill in the circle in column 1 that corresponds to your most important reason for wanting to become a nurse. In column 2 fill in the circle corresponding to your 2nd most important reason, and in column 3 your third most important reason. (There should be one mark in each column.)

1 Most Important Reason	2 2nd Most Important Reason	3 3rd Most Important Reason	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	To care for/help people
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Professional respect
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Job security
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Interesting job
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Wanted active hands-on profession
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	To gain technical experience
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	To gain leadership experience
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Sense of independence
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Degree of decision making authority
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Broad range of practice opportunities
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Salary level
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Other

18. How much influence did each of the following have on your decision to pursue a nursing career?

	Positive Influence	No Influence	Negative Influence	Does Not Apply
High school teacher	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
High school counselor	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nursing professor	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Friend(s)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nurse recruiter (military)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nurse recruiter (hospital)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nurse counselor	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Parent(s)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Child(ren)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Spouse or significant other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Brother(s)/sister(s)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
College professor (non-nursing)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Media advertisement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Family tradition	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

19. Using the list below, please indicate the one item which best corresponds to the position which you desire. (Mark only one for each of the three time periods)

	Upon Graduation	Five Years After Graduation	Ten Years After Graduation
Patient Care			
Certified nurse anesthetist.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Charge nurse.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Clinical nurse specialist.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
General duty nurse.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nurse clinician.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nurse coordinator.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nurse midwife.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nurse practitioner.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Private duty nurse.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Public health nurse.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
School nurse.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Staff nurse.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Management/Administration			
Administrator or assistant administrator.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Director or assistant/associate director of nursing service.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Head nurse or assistant head nurse.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Patient care coordinator.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Supervisor or assistant supervisor.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Team leader.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Education			
Dean, director, or assistant/associate director of nursing education.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In service education director or instructor.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Instructor.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Professor or assistant/associate professor.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other			
Consultant.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Researcher.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

20. When seeking employment upon graduation: (1) rate the importance of the following factors, and (2) rate the sector where each may be BEST achieved.

	Important	Neutral	Not Important	Best Achieved in Equally			Don't Know
				Civilian	Military	In Both	
1. PERSONAL/LIFESTYLE							
Opportunity to serve others _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stable Employment _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Employment opportunities for spouse _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Availability of child care _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Time for personal/family life _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Salary _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Adequacy of preceptorship program _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. WORKING CONDITIONS							
Length of working hours _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Flexibility of schedule _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Morale in work area _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nurse supervisor abilities/support _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Assigned patient-load _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Amount of paper work _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quality of patient care _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Frequency of floating to other clinical units _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. PROFESSIONAL ISSUES							
Acknowledgement/appreciation for job performance _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Opportunity to work in clinical area or role of choice _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Opportunity to make administrative decisions in work setting _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Preparation for current position (i.e., orientation, training) _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Opportunity for supervisory/managerial experience _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Variety of nursing experiences available _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Incentives/support to utilize, conduct, and publish research _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Authority to make patient-care decisions _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nurse-doctor collaboration _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Important	Neutral	Not Important	Best Achieved in			
				Civilian	Military	Equally In Both	Don't Know
4. EDUCATION ISSUES							
Opportunity to gain continuing education units (CEUs).....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Opportunity to continue education funded by me.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Opportunity to continue education funded by employer.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Opportunity to attend specialty courses, such as ICU course, practitioner courses.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

21. For this section, mark the answer that best describes your opinions or feelings.

	1 Definitely Yes	2 Probably Yes	3 No Opinion	4 Probably Not	5 Definitely Not
Before Operation Desert Storm, I would have been interested in serving on <u>active duty</u> as a military nurse.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Before Operation Desert Storm, I would have been interested in serving as a nurse in the <u>military reserves</u>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Since Operation Desert Storm, I have been interested in serving on <u>active duty</u> as a military nurse.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Since Operation Desert Storm, I have been interested in serving as a nurse in the <u>military reserves</u>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

22 Please read the following before answering question 22.

The Active Duty Army Nurse Corps is a full-time job with a 3 to 5 year commitment. After initial military training, you may receive additional specialty training either at your assigned duty station or at a temporary duty station. Reserve and National Guard military service allows people to keep their civilian, full-time jobs and attend school while serving part-time in the military. Reservists and National Guardsmen normally train one weekend a month, in addition to two weeks a year on active duty training. In the event of a national emergency—for example, a natural disaster or military threat—Reservists and Guardsmen can be called up for extended periods of active duty military service.

With this in mind, the following list contains factors other than nursing duties that any nurse considering joining the military would need to consider. Please indicate what effect these factors have on the likelihood that you would enlist in either the Active Duty or Reserve forces.

	1 Very Positive	2 Somewhat Positive	3 Neutral	4 Somewhat Negative	5 Very Negative
Active Duty & Reserves					
Salary.....	①	②	③	④	⑤
Availability of continuing education and specialty training.....	①	②	③	④	⑤
Educational loan repayment program.....	①	②	③	④	⑤
Availability of life insurance benefits.....	①	②	③	④	⑤
Entry bonuses.....	①	②	③	④	⑤
Retirement benefits.....	①	②	③	④	⑤
Availability of military benefits (PX, commissary).....	①	②	③	④	⑤
Free travel on military aircraft when available.....	①	②	③	④	⑤
Obtaining officer status upon admission.....	①	②	③	④	⑤
Opportunity to serve country.....	①	②	③	④	⑤
Availability of child care.....	①	②	③	④	⑤
Time for personal/family life.....	①	②	③	④	⑤
Scheduling flexibility.....	①	②	③	④	⑤
Opportunity for leadership positions.....	①	②	③	④	⑤
Possibility of being sent to a combat zone.....	①	②	③	④	⑤
Having to work/train in the field.....	①	②	③	④	⑤
Military lifestyle.....	①	②	③	④	⑤
Amount of personal freedom.....	①	②	③	④	⑤
Amount of paper work.....	①	②	③	④	⑤
Length of commitment.....	①	②	③	④	⑤
Active Duty Only					
Possibility of being relocated.....	①	②	③	④	⑤
Number of hours spent at work per day.....	①	②	③	④	⑤
Stable employment.....	①	②	③	④	⑤
Reserves & National Guard Only					
Opportunity for second income.....	①	②	③	④	⑤
Yearly two-week active duty training.....	①	②	③	④	⑤
Having to report for weekend duty.....	①	②	③	④	⑤

23. Do you know any individuals who are serving or have served on Active Duty in the Army Nurse Corps?

- No
- Yes

24. Overall, how do you think military nursing compares to nursing in the civilian sector?

- Military nursing is much more rewarding
- Military nursing is somewhat more rewarding
- Military nursing is much the same as civilian nursing
- Military nursing is somewhat less rewarding
- Military nursing is much less rewarding
- Not sure

25. In your estimate, how does the starting pay and allowances (such as non-taxable housing allowance, insurance, and retirement contributions) you do/would receive as a military nurse compare to what you would/do expect to receive in a starting civilian nursing position?

- Military substantially higher
- Military moderately higher
- About the same
- Military moderately lower
- Military substantially lower
- Not sure

26. In your estimate, how does the total pay and allowances you would receive as a career Army officer (20 or more years of service) compare to what you could expect in a civilian nursing career of 20 or more years?

- Army substantially higher
- Army moderately higher
- About the same
- Army moderately lower
- Army substantially lower
- Not sure

27. Did either of your parents ever serve in the military?

- No (Skip to Question 28)
- Don't Know/
Not sure

Yes 

27a. Did they serve on:
 Active Duty
 Reserves

27b. In which service? (Mark all that apply)
 Air Force
 Army
 Navy
 Marine Corps
 Coast Guard

27c. Is(are) your parent(s) either now on duty or retired from the military?
 No
 Yes, now on duty
 Yes, now retired from the military
 One retired, one on active duty

27d. If you ever lived on any military installation(s) while growing up, what did you think of it?
 Not applicable, never lived on military installation
 I was too young to remember much about it
 I liked it a lot
 I disliked it a lot
 No strong feelings

28. Did your brother(s) and/or sister(s) ever serve in the military?

- Not applicable,
No brothers or sisters
- No

Yes 

28a. In which Service?
(Mark all that apply)
 Army Air Force
 Navy Coast Guard
 Marine Corps

29. What was your original source of information about the Army Nurse Corps? (Mark only one)

- | | |
|--|--|
| <input type="radio"/> Journal ad | <input type="radio"/> Instructor/professor |
| <input type="radio"/> Newspaper ad | <input type="radio"/> Family/friend |
| <input type="radio"/> School paper ad | <input type="radio"/> Recruiter at recruiting station |
| <input type="radio"/> Mail | <input type="radio"/> School visit by Army nurse recruiter |
| <input type="radio"/> Career day/job fair | <input type="radio"/> School visit by other Military recruiter |
| <input type="radio"/> Convention exhibit | <input type="radio"/> Prior service |
| <input type="radio"/> Symposium/workshop | <input type="radio"/> Other |
| <input type="radio"/> American Nursing Coffee Review | |
| <input type="radio"/> ANC officer | |
- Don't know

30. Have you discussed joining the Army Nurse Corps?

- No (Go to question 31)
 Yes

30a. Who else did you discuss it with?
(Mark all that apply)

- | | |
|---|---|
| <input type="radio"/> Mother | <input type="radio"/> Civilian nurse who is an Army reservist |
| <input type="radio"/> Father | <input type="radio"/> Army nurse |
| <input type="radio"/> Sibling | <input type="radio"/> Other |
| <input type="radio"/> Spouse or significant other | <input type="radio"/> Military recruiter |
| <input type="radio"/> Counselor/teacher | |

30b. If you discussed joining the Army Nurse Corps with a military recruiter, how did the recruiter's approach affect you?

- Very negative
 Somewhat negative
 Neutral
 Somewhat positive
 Very positive
 Does not apply

30c. If you discussed joining the Army Nurse Corps, what was your impression of the Army program and offerings?

- Very negative
 Somewhat negative
 Neutral
 Somewhat positive
 Very positive
 Does not apply

31. The Defense Department has ads on TV, radio, in magazines, on billboards, etc., which cover "Army, Navy, Air Force, and Marine Corps." Do you remember seeing/hearing these ads?

- No
- Yes, and they greatly increased my interest in joining
- Yes, and they moderately increased my interest in joining
- Yes, and they slightly increased my interest in joining
- Yes, and they did not increase my interest in joining

32. Do you remember seeing, reading or hearing any ads on TV, on radio, in magazines, on billboards, etc. which were specifically about the Army Nurse Corps?

- No (skip to question 33)
- Yes, and they greatly increased my interest in the Army
- Yes, and they moderately increased my interest in the Army
- Yes, and they slightly increased my interest in the Army
- Yes, and they did not increase my interest in the Army

32a.

In which media did you first see, read, or hear advertising about the Army Nurse Corps?

- | | |
|--|---|
| <input type="radio"/> Magazines | <input type="radio"/> Television |
| <input type="radio"/> Newspapers | <input type="radio"/> Dinner or luncheon seminar |
| <input type="radio"/> Unsolicited brochures/pamphlets/letters sent from local recruiters | <input type="radio"/> Literature/presentation at a convention |
| <input type="radio"/> Other Army recruiting letter | <input type="radio"/> Nursing journals |
| <input type="radio"/> Billboards | <input type="radio"/> Recruiter school visit - Army |
| <input type="radio"/> Radio | <input type="radio"/> - Other services |
| <input type="radio"/> School paper | |
| <input type="radio"/> Career Day | |
| <input type="radio"/> Literature requested from recruiter | |

33. What type of TV programs do you most prefer to watch?(Mark one or more)

- | | | |
|---|--|--|
| <input type="radio"/> I rarely watch TV | <input type="radio"/> Music/variety | <input type="radio"/> Movies on regular TV |
| <input type="radio"/> Game shows | <input type="radio"/> Sports events | <input type="radio"/> Movies on pay/cable TV |
| <input type="radio"/> Educational | <input type="radio"/> Situation comedy | <input type="radio"/> Public Television |
| <input type="radio"/> Daytime soaps | <input type="radio"/> Action/adventure | <input type="radio"/> Other |
| <input type="radio"/> Evening drama | <input type="radio"/> News/special reports | |

34. What type of radio station do you listen to most often?(Mark one or more)

- | | | |
|--|--------------------------------------|--|
| <input type="radio"/> I rarely listen to the radio | <input type="radio"/> Classical | <input type="radio"/> Country/western |
| <input type="radio"/> Rock | <input type="radio"/> News/talk show | <input type="radio"/> Gospel/religious |
| <input type="radio"/> Soul | <input type="radio"/> Easy listening | <input type="radio"/> Other |
| <input type="radio"/> Jazz | | |

Thank you for the time and effort you have taken to complete this survey. If you have any comments or suggestions, please feel free to use the "REMARKS" section below.

If you would like to receive a copy of the final report of this survey, please include your name and mailing address. You may mail the part of the form with your name and address in separately if you wish. This will assure that your anonymity with respect to the specific survey responses is absolute.

REMARKS: