# Nonresponse Followup (NRFU) Enumerator Training

FINAL REPORT

This evaluation reports the results of research and analysis undertaken by the U.S. Census Bureau. It is part of a broad program, the Census 2000 Testing, Experimentation, and Evaluation (TXE) Program, designed to assess Census 2000 and to inform 2010 Census planning. Findings from the Census 2000 TXE Program reports are integrated into topic reports that provide context and background for broader interpretation of results.

Geraldine Burt and Ruth Mangaroo

Field Division and Foreign Trade Division

### USCENSUSBUREAU

Helping You Make Informed Decisions

### CONTENTS

ЕХ	ECUTIVE SUMMARY iv
1.	BACKGROUND11.1NRFU1.2Evaluation of NRFU Training in the Census 2000 Dress Rehearsal1.3Census 2000 NRFU Enumerator Training2
2.	METHODS32.1 Review of Census 2000 Training Materials42.2 Observation of Classroom Training and Field Enumeration42.3 Debriefings of Enumerators and Crew Leaders52.4 Post Employment Telephone Survey62.5 System Data on Enumerator Characteristics and Enumerator Performance62.6 Applying Quality Assurance Procedures6
3.	LIMITATIONS63.1Heavy Reliance on Observation Data63.2Observations Were Not Based on A Scientifically Selected Sample73.3Enumerators Were Aware They Were Being Observed73.4Some Performance Data from Census Systems Were Unavailable and/or Inaccurate7
4.	RESULTS       7         4.1       Were the Recommendations for Improvement from the Census 2000 Dress Rehearsal Evaluation Incorporated into the 2000 Training?       8         4.2       Did the Census 2000 Trainees Gain the Knowledge Intended?       13         4.3       Were the Trainees Able to Effectively Do the Job after Completing Training?       15         4.4       Did Trainees Find the Training Effective, Useful, and Enjoyable?       22
5.	RECOMMENDATIONS
Re	erences
Ap	bendix A: Additional Tables       31         Table A-1.       The Evaluation Model for Assessing Training Effectiveness       32         Table A-2.       Census 2000 Training Materials Evaluated in this Report       33         Table A-3.       Number of Enumerators/Interviews Observed       34         Table A-4.       Census Employment Status by Satisfaction with Length of Training       35         Table A-5.       Difficulty of Finding Proxy Respondents by When Training Was       36         Table A-6.       Difficulty of Performing Specific Job Tasks by Satisfaction With Length of       37         Table A-7.       Overall Satisfaction with Training by Satisfaction with Length of       37

	Training	38
Table A-8.	Difficulty of Meeting Supervisors' Expectations (Interim Survey) 3	39
Table A-9.	Difficulty of Meeting Supervisors' Expectations (Post-Operation Survey) 4	10
Table A-10.	Inclusion of Practice Field Work by When Training Was Attended 4	1
Table A-11.	Satisfaction with Guidance and Training Received by Whether Practice	
	Field Work was Included in Training4	12
Table A-12.	Difficulty of Specific Job Tasks by Whether Practice Field Work was	
	Included in Training	13
Appendixx B: Imple	ementation of Census 2000 Dress Rehearsal Recommendations 4	14
Table B-1.	Disposition of Census 2000 Dress Rehearsal Recommendations4	15
Table B-2.	Decision Criteria for the Census 2000 Dress Rehearsal Recommendations 4	19

### LIST OF TABLES

Table 1.	Contents of NRFU Enumerator Training 3
Table 2.	Percentage of Enumerators Who Demonstrated Specific Knowldege of Concepts Covered in Training
Table 3.	Percentage of Interviews Where Enumerators Demonstrated Correct On-the-Job Behaviors: Introductions
Table 4.	Percentage of Interviews Where Enumerators Demonstrated Correct On-the-Job Behaviors: Determining Unit Status on Census Day
Table 5.	Percentage of Interviews Where Enumerators Demonstrated Correct On-the-Job Behaviors: Relationships
Table 6.	Percentage of Interviews Where Enumerators Demonstrated Correct On-the-Job Behaviors: Hispanic Origin
Table 7.	Percentage of Interviews Where Enumerators Demonstrated Correct On-the-Job Behaviors: Race
Table 8.	Percentage of Interviews Where Enumerators Demonstrated Correct On-the-Job Behaviors: Coverage
Table 9.	Percentage of Observed Interviews Where Enumerators Demonstrated Correct On- the-Job Behaviors: Other
Table 10.	Enumerators' Overall Satisfaction with Training 23
Table 11.	Enumerators' Job Performance by Overall Satisfaction with Training
Table 12.	Enumerators' Satisfaction with Guidance and Training on Specific Job Tasks 24
Table 13.	Enumerators' Rating of Training on Specific Job Tasks
Table 14.	Enumerators' Assessment of the Difficulty of Specific Job Tasks
Table 15.	Enumerators' Job Performance by Difficulty of Meeting Performance Goals 26
Table 16.	Enumerators' Assessment of How Well Trained They Were When Starting Their First Assignment

### **EXECUTIVE SUMMARY**

Nonresponse Followup is a door to door enumeration in which census workers attempt to collect information from households that do not return their census forms. Given an expected national mail response rate of 61 percent, Census planners knew the overall success of Census 2000 would be intricately tied to the success of the Nonresponse Followup operation. The success of the Nonresponse Followup operation would, in turn, be highly dependent on the Census Bureau's ability to quickly develop skilled employees who were able to effectively perform the tasks of Nonresponse Followup enumeration.

During Census 2000, the U.S. Census Bureau hired more than one-half million temporary workers to conduct its Nonresponse Followup operation. This report examines the effectiveness of the Census 2000 Nonresponse Followup enumerator training program. The evaluation used the Kirkpatrick training assessment model to evaluate the trainees' satisfaction with the training program, their knowledge following training, and their on-the-job performance.<sup>1</sup> The methodology included a content review of the training materials, observation reports on training delivery and Nonresponse Followup enumeration, and surveys and debriefings of enumerators and crewleaders. The results provide answers to four (4) major questions.

## Were the recommendations for improvement from the Census 2000 Dress Rehearsal evaluation incorporated into the 2000 training?

Yes. About half of the recommendations from the Census 2000 Dress Rehearsal evaluation were incorporated into the 2000 training package, either completely or partially. The recommendations that were incorporated contributed to an improved training program. The recommendations that were not incorporated did not seem to significantly impact the effectiveness of the training in preparing the enumerators to collect Census information.

#### Did the Census 2000 trainees gain the knowledge intended?

Yes. Most enumerators were knowledgeable of census concepts. With the exception of reading questions as worded, enumerators consistently demonstrated effective interviewing skills.

#### Were the trainees able to effectively do the job after completing training?

Yes. Evaluation results indicate that the training did prepare the Nonresponse Followup enumerators to effectively perform their job and to carry out the tasks they were trained to do. Almost all of the enumerators displayed their Census ID at each household, properly identified themselves and the purpose of their visit, and determined Census Day residency status. Most consistently confirmed that they were at the correct address and provided a Privacy Act Notice. The majority of Nonresponse Followup enumerators recorded answers accurately and legibly. A

<sup>&</sup>lt;sup>1</sup>Kirkpatrick, Donald L. *Evaluating Training Programs: The Four Levels*, San Francisco, CA: Berrett-Koehler, 1998.

sizable proportion of Nonresponse Followup enumerators, however, did not always read the questions exactly as worded, and frequently did not use the flashcards provided. The two major areas in which enumerators seemed less likely to follow procedures taught in training were asking about Hispanic origin and race.

#### Did trainees find the training effective, useful, and enjoyable?

Yes. Overall, enumerators were satisfied with the amount and content of the training they received.

#### Recommendations

The evaluation results indicate that the Census 2000 Nonresponse Followup training program was well received by trainees and did produce enumerators who could effectively collect needed Census data. The results also suggest some areas the Census Bureau should focus on in developing Nonresponse Followup enumerator training for 2010.

- Increase the training time allotted to areas in which enumerators' feedback indicated they felt less well prepared, with particular emphasis on interacting with reluctant respondents and refusals.
- Continue to place emphasis on reading all of the questions exactly as worded, adding additional explanations on why reading questions verbatim is so important to data quality. Create a video that focuses on the importance of reading questions exactly as worded, especially ethnicity and race questions.
- Conduct debriefings of enumerator and crewleaders in the 2004 Census Test to get insight on how to improve the use of flashcards and other job aids. During training, explain the importance and value of using these items as prescribed.
- Continue to provide an opportunity for the field work component of Nonresponse Followup training and enforce inclusion of field work in all training sessions. To help ensure inclusion of field work as part of the training, require trainers to record and "sign-off" when each enumerators has completed the field practice portion of training.
- Restructure the Nonresponse Followup enumerator manual to be more consistent with the training guide in terms of organization and content.
- Add to the training materials a "Frequently Asked Questions" job aid, outlining potentially difficult question that respondents might ask and appropriate responses.
- Use additional media such as audio tapes, videos, flip charts, posters, and slides in training and assure they are used.
- Increase the use of role playing, varying the situations to include reluctant respondents

and refusals. Add additional videos which depict a variety of enumeration environments and responses, including a refusal.

- Use a trainer and training assistant to model interviewing skills, techniques and styles. This implicitly implies better preparation of crewleaders or whoever trains.
- Conduct debriefings of enumerator and crewleaders in the 2004 Census Test to get insight on how to make improvements on preparing enumerators to ask the ethnicity and race questions exactly as worded. During the practice interviews, demonstrate a variety of effective techniques for interacting with people of different racial and ethnic backgrounds.
- Conduct debriefings and/or focus groups with enumerator and crewleaders during the 2004 Census Test to get insight on why, despite emphasis in training, we continue to experience critical problems regarding issues such as interactions with reluctant respondents and refusals, reading questions as worded, and the use of flashcards. Use the insights gained from these debriefings to suggest solutions to these problems for 2010.

### **1. BACKGROUND**

Based on the results of its Census 2000 Dress Rehearsal, the U.S. Census Bureau estimated that about 40 percent of the U.S. households would not return their Census 2000 questionnaires. Households that did not return their questionnaires would require a personal visit by a Census enumerator during the nonresponse followup (NRFU) operation. Census 2000 planners recognized that a key determinant of the success of NRFU would be the Census Bureau's ability to provide adequate training to a large number of newly hired, temporary employees, many of whom would have no previous Census or data collection experience. This research study, one of several conducted as part of the Census Bureau's official Census 2000 Evaluation Program, evaluates the overall effectiveness of the Census 2000 NRFU training program. The objectives of this evaluation were to determine: (1) the extent to which suggested Census 2000 Dress Rehearsal improvements were made to the 2000 training program, and (2) whether the 2000 training program resulted in skilled employees who were able to effectively perform the job of enumeration. Results will be used to help plan the NRFU training programs for Census 2010.

#### **1.1 NRFU**

Nonresponse Followup (NRFU) is the door-to-door enumeration of households which do not return their census questionnaire. If a Census 2000 form was not received in a data capture center prior to April 11, the household became part of the initial Nonresponse Followup universe.

During Census 2000, the U.S. Census Bureau recruited and trained approximately one-half million enumerators to work in its NRFU operation. NRFU enumerators received 14<sup>3</sup>/<sub>4</sub> hours of classroom training and four hours of on-the-job field training. Once trained, these enumerators visited each nonresponding household and attempted to collect the needed census information. NRFU enumerators were required to make up to six contacts with a household (three personal and three telephone) prior to seeking information from a proxy respondent.

At the end of each day of the NRFU operation, enumerators met with their crew leaders to turn in their completed work. Crewleaders reviewed the day's work, and, where necessary, corrected, and then forwarded completed forms to the Local Census Office (LCO) for review and check-in. Some cases were selected for further quality assurance review. Questionnaires that passed the LCO review were shipped to the appropriate data capture center.

#### 1.2 Evaluation of NRFU Training in the Census 2000 Dress Rehearsal

In planning for Census 2000, the Census Bureau recognized that adequate employee training would be the cornerstone of the success of NRFU. Thus, as part of its Census 2000 Dress Rehearsal, extensive resources were invested in designing and implementing a quality NRFU enumerator training program. Also, as part of the Dress Rehearsal, research was undertaken to evaluate the effectiveness of the NRFU training program.<sup>2</sup> The 1998 study concluded that the

<sup>&</sup>lt;sup>2</sup>The Dress Rehearsal evaluation was conducted by an outside contractor working with Census Bureau

Dress Rehearsal NRFU enumerators were successfully and effectively trained. The evaluation also identified several areas for improvements in composition and delivery in the NRFU training program that would help ensure a highly successful enumeration effort in 2000.

#### 1.3 Census 2000 NRFU Enumerator Training

The Nonresponse Followup operation began on April 27, 2000 and was completed June 26, almost two weeks ahead of schedule.<sup>3</sup> Training was scheduled to take place nationally starting April 24, with replacement training sessions conducted as needed.

Upon arriving at training, each trainee received a trainee kit containing an enumerator's manual, a classroom workbook, several job aids, and a quantity of needed forms and supplies. The NRFU enumerator manual was the major source of information on the basic responsibilities of the job and the role of the enumerator. The manual was supplemented with several job aids designed to serve as resources to the enumerators while out in the field. These job aids provided step-by-step instructions on everything from preparing for work to submitting completed work. The trainees also received several "flash cards" to show to respondents during the course of interviewing.

Table 1 shows the suggested schedule for NRFU enumerator training. The NRFU training sessions were usually conducted by a crewleader, preferably one who would later become the trainees' first line supervisor. Crewleaders were temporary workers who, for the most part, had little or no previous census experience. In many cases, the crewleaders, themselves, had been trained on the NRFU operation only a few weeks earlier, and had little or no experience as trainers.

To help ensure uniformity and consistency, the NRFU training program used verbatim lectures and standard videos. Practice interviews and roleplays were interspersed throughout training. A good portion of the training focused on effective interviewing skills.

The training also included a learning module in which trainees went out into the community to do interviews using their "live" cases, and then came back to the classroom to discuss their experiences. At the end of training, the trainees completed a multiple choice test to assess their comprehension. The answers to the test were then discussed and the trainees were graded on their performance. Once trained, these Census 2000 NRFU enumerators were immediately sent out to collect census data from approximately 42,000,000 nonresponding households.

training experts.

<sup>&</sup>lt;sup>3</sup>The original NRFU schedule anticipated that the operation would run for nine and one-half weeks, through July7.

Section	Торіс	Time Allowed
А.	Appointment and Orientation	1 ½ hours
В.	Payroll Training	¹∕₂ hour
C.	Preparing for Work	1 3/4 hours
D.	Completing the Short Form for an Occupied Unit	1 ½ hour
E.	Completing the Long Form for an Occupied Unit	1 ¼ hour
F.	Completing Continuation Forms and Practice Interviews	2 ¼ hours
G.	Completing Questionnaires for Vacant Units	3/4 hours
Н.	Completing Questionnaires for Nonexistent Units	<sup>1</sup> /2 hours
I.	No One Home and Refusals	½ hour
J.	Distribution of Assignments	1 hour
	Field Work	4 hours
K.	Review of Field Work	1 hour
L.	Other Interviewing Situations	1 hour
М.	Progress Reporting and Work Review	¼ hour
N.	Final Review Exercise	1 hour

Table 1 Contents of NRFU Enumerator Training

#### **2. METHODS**

The overall objective of this evaluation was to examine the quality of the Census 2000 NRFU enumerator training program and the enumerators' preparedness following training. Specific questions to be answered included:

- 1) Were the recommendations for improvement from the Census 2000 Dress Rehearsal evaluation incorporated into the 2000 training?
- 2) Did the Census 2000 trainees gain the knowledge intended?
- 3) Were the trainees able to effectively do the job after completing training?
- 4) Did trainees find the training effective, useful, and enjoyable?

The study used the Kirkpatrick model of training evaluation as a basis for assessing the effectiveness of the NRFU training program. The Kirkpatrick model assesses employee training programs on four levels: reaction, learning, application, and organizational performance. In this evaluation, we analyzed results from level 1 (reactions to the training), level 2 (learning), and

level 3 (on-the-job performance).<sup>4</sup>

The methodology consisted of:

- A comprehensive content analysis and review of the Census 2000 NRFU training package;
- Development and implementation of classroom training and field enumeration observation protocols;
- Development and implementation of enumerator and crewleader debriefing protocols;
- Post-employment surveys of enumerators and crewleaders;
- Collection of data on enumerator performance;
- A review and analysis of the data collected during the evaluation process; and
- Preparation of the final research report.

#### 2.1 Review of Census 2000 Training Materials

One of the major objectives of this evaluation was to analyze the extent to which recommendations from the Census 2000 Dress Rehearsal evaluation report were incorporated into the Census 2000 training package and the impact of the implementation or nonimplementation of these recommendations on the quality of the 2000 training materials in tandem with the Census 2000 Dress Rehearsal evaluation report recommendations.<sup>5</sup> We hired a contractor with expertise in employee training and the extent to which these changes were consistent with basic tenets of adult learning theory and instructional systems design. The contractor also observed NRFU enumerator training sessions conducted throughout the United States in order to assess the impact of inclusion and/or exclusion of the recommendations on Census 2000 training implementation and delivery.

#### 2.2 Observation of Classroom Training and Field Enumeration

We developed multiple structured observation guides for use by persons observing NRFU classroom training and enumeration. We asked all persons who went out to observe either NRFU training or NRFU enumeration to complete the observation protocols and submit a comprehensive written report.

The training observation protocol collected data on the observers' perception of the quality of the

<sup>&</sup>lt;sup>4</sup> In level four, the focus is on evaluating whether there have been improvements in overall organizational performance which can be tied back to the training program. Level four will not be addressed in this evaluation. Refer to Table A-1 in Appendix A. The table shows how the Kirkpatrick training evaluation model was implemented for this evaluation.

<sup>&</sup>lt;sup>5</sup>Broadnax, et. al., Evaluation Study of Nonresponse Followup and Quality Check Personal Interview Enumerator Training Programs. Refer to Table A-2 in Appendix A for a list of training material included in this review.

trainer, training delivery, and training materials. The enumeration observation protocol collected data on observers' perception of the enumerators' on-the-job performance, their attitudes toward the work, and their feelings about how well the training prepared them to do their job.<sup>6</sup> The training observation protocol assessed each section of the training separately, and then required an overall assessment. The enumeration observation protocol assessed enumerator performance in six key skill areas: introductions, reference to Census Day, asking about household relationships, asking about ethnicity, asking about race, and checking coverage. Other skills and knowledge important to the maintenance of data quality were also included on the enumeration protocol.

Observations of training were conducted between April 20 and May 3, 2000. Observations of enumeration were conducted between April 27, 2000 and June 14, 2000. Observations were conducted in all twelve of the Census regions, in varying enumeration environments.

Some observers observed only one training class or only one actual interview. Others observed multiple training sessions and trainers and as many as 12 interviews with the same interviewer. A total of 170 enumerators was observed conducting nearly 500 NRFU household interviews.<sup>7</sup> Observations were made of both short and long form visits.<sup>8</sup> Census Bureau staff, along with contractors hired to help evaluate the effectiveness of the training materials, conducted the observations.

Using the observation data, we produced Kirkpatrick's Level 1 measures of the adequacy of the training content and format. We also used the observation protocol data to produce Kirkpatrick Level 2 measures of enumerators' knowledge of Census 2000 concepts and procedures. Additionally, we produced Kirkpatrick's level 3 enumerator performance statistics from the observation data.

#### 2.3 Debriefings of Enumerators and Crew Leaders

This evaluation is the only one within the Census 2000 Evaluation Program specifically examining NRFU enumerator training. Other studies, however, examined various aspects of the NRFU operation, and many of these included post-enumeration debriefings. In an attempt to prevent duplication of effort, we worked collaboratively with these other researchers to ensure the inclusion of relevant training questions in their debriefings. We collected additional data on reactions to the training from Field Division's enumerator and crewleader debriefing questionnaires and focus groups.

<sup>&</sup>lt;sup>6</sup>Both protocols were developed by staff from the Center for Survey Methods Research (CSMR), Field Training and Career Development Office (FTCDO), and Field Division (FLD) based on input from the decennial areas regarding which work behaviors would have the greatest impact on Census data quality.

<sup>&</sup>lt;sup>7</sup> Refer to Table A-3 in Appendix A for the number of interviews per enumerator in the final enumeration observation data set.

<sup>&</sup>lt;sup>8</sup> After consulting with NRFU experts and researchers within the Census Bureau, the observation protocol was designed to focus on those items common to both the short and long forms. About 30percent of the observations included in the evaluation were with long forms.

#### 2.4 Post Employment Surveys

To supplement observation and debriefing data, we included a set of questions on training in a post-employment telephone interview of NRFU enumerators and crewleaders conducted by a contractor. The survey included interviews with 1,194 NRFU enumerators who had completed an average of 91 NRFU short forms and 28 NRFU long forms. We also obtained data on satisfaction with training from a survey given to 4,896 enumerators during the NRFU operation

#### 2.5 System Data on Enumerator Characteristics and Enumerator Performance

We collected data on overall on-the-job performance (e.g., production, tenure) for a sample of enumerators from the decennial database warehouses. Performance data reviewed for this evaluation include:

- length of time on-the-job
- percent of assignments that were long forms
- percent of assignments that were short forms
- cases per hour
- cases per day
- average number hours worked
- average number days worked

We analyzed job performance variables at the end of the second and fourth week that the enumerators were on the job, and at the end of the NRFU operation.

#### 2.6 Applying Quality Assurance Procedures

We applied quality assurance procedures throughout the creation of this report. They encompassed how we determined evaluation methods, created specifications for project procedures and software, designed and reviewed computer systems, developed clerical and computer procedures, analyzed data, and prepared this report.

#### **3. LIMITATIONS**

#### 3.1 Heavy Reliance on Observation Data

A major limitation of this research is its heavy reliance on observation data. Despite the use of a very structured observation protocol, the final assessments of the quality of classroom training and the enumerators' on-the-job performance were based on the subjective judgements of individual observers. The reliability and validity of these judgements are highly correlated with the accuracy and consistency of the observers' skills as observers, and also, to some extent, on their knowledge of the NRFU operation. These skills varied among the observers, and thus, the study's reliance on observation data may have introduced bias. Heavy reliance on observation data also reduces generalizability of results due to the relatively small number of observed

interviews.

#### 3.2 Observations Were Not Based on a Scientifically Selected Sample

The fact that the training classes that were observed and the enumerators who were observed formed "informal" samples, rather than predefined, statistically representative samples also limit the generalizability of the study's results.

#### 3.3 Enumerators Were Aware They Were Being Observed

Although enumerators were told the observations would have no impact on their job, it is likely that they were on their best behavior while being observed. We cannot determine the extent to which the actual observation influenced observed performance, which might impact the overall reliability of the results.<sup>9</sup>

# 3.4 Some Performance Data from Census Systems Were Unavailable and/or Inaccurate

A major limitation in the Census 2000 Dress Rehearsal research was the unavailability and inaccuracy of the secondary data on enumerator performance from the Dress Rehearsal production databases. Similar problems reoccurred during 2000. There were problems obtaining needed data from existing databases and in some cases needed data were not recorded or retained by the LCO and thus were unavailable for this evaluation. The payroll and personnel database did not capture any enumerator performance appraisal data nor performance on reinterview.

#### 4. RESULTS

Study results indicate that improvements were made to the 2000 training based on the Census 2000 Dress Rehearsal evaluation results. Enumerators were satisfied with the amount and content of the training they received and NRFU enumerator training did prepare enumerators to effectively perform their job and carry out the tasks covered in training. Nearly all enumerators conducted NRFU in a competent and efficient manner.

#### 4.1 Were the recommendations for improvement from the Census 2000 Dress Rehearsal evaluation incorporated into the 2000 training?

<sup>&</sup>lt;sup>9</sup>We told observers to tell enumerators they were being observed as part of an evaluation of NRFU training and results would not be used to evaluate enumerators' performance. We also told enumerators being observed by headquarters staff and external contractors that observation results would not be shared with their crewleader or other LCO staff.

The Census 2000 Dress Rehearsal evaluation of NRFU training identified specific areas for improvement in both the composition and delivery of the Census 2000 NRFU training program. Census 2000 training developers based their decision on whether to incorporate the 1998 recommendations into the 2000 training program on: (1) which proposed changes would have the greatest positive effect on Census 2000 enumeration activities, and (2) which changes could be implemented either fully or partially in time to be integrated with training plans for Census 2000 enumeration. (Refer to Table B-2 in Appendix B) Sections 4.1.1 through 4.1.3 discuss the degree to which the recommendations put forth in the Census 2000 Dress Rehearsal Evaluation Report were implemented in the Census 2000 training program. Study results indicate that many improvements were made to the 2000 training based on the 1998 evaluation recommendations that were not fully implemented in 2000.

#### 4.1.1 Dress Rehearsal Training Recommendations That Were Fully Implemented

The Bureau fully implemented the following seven 1998 recommendations for use with Census 2000 NRFU Enumerator training.

- Include trainer hints on how to conduct specific activities within the body of the script formatted to differentiate them from the script itself.
- Increase the emphasis on reading the questions as written and explain the importance of these procedures in the context of collecting accurate data.
- Increase and clarify the discussion on using continuation forms, emphasizing the importance of accurately copying identification information on continuation forms.
- Increase the discussion on interviewing skills, especially those dealing with reluctant respondents and refusal avoidance.
- *Provide time in the crew leader training for trainers to practice effective training techniques.*
- Include suggestions of alternative training schedules in the training manual which allow for flexible scheduling of training.
- Ensure that packages of materials are sent to the appropriate destination. If necessary use color coding schemes to differentiate materials (i.e., for rural and urban sites).

These recommendations were fully implemented because they met the criteria of importance and timing. As will be shown in the discussion of the effectiveness of the enumerators in Section 4.3, however, the incorporation of these recommendations did not necessarily result in significant changes in the on-the-job behavior of the trainees.

#### 4.1.2 Dress Rehearsal Training Recommendations That Were Partially Implemented

Another ten of the Census 2000 Dress Rehearsal recommendations were partially implemented. The degree to which some of the partially implement recommendations was implemented and their impact on the training is described below.

• Match organization and content of the Enumerator Manual with the Guide for Training NRFU Enumerators

The design of the 2000 NRFU Manual was not wholly aligned with the NRFU Enumerator Training Guide in terms of organization and content. Although they were realigned from 1998 to be roughly consistent in terms of the order in which information is presented, inconsistent labeling and page layouts still made it difficult for trainees and trainers to be certain they were "on the same page."

• Consolidate and organize all trainee materials in one binder

Enumerator training materials were consolidated and all materials were usually delivered at the beginning of training. Trainees, however, were not provided with binders. This made it more difficult for trainees to keep all of their materials in an organized and handy manner.

• Add clearer and more consistent labeling of examples and forms

Labeling of examples and forms in both the urban and rural versions of the Nonresponse Followup Enumerator Classroom Workbook was made clearer and more consistent in terms of location and label size. An aid, Prep Memo 99-D-26, also was provided to assist trainees in deciphering the maze of official Census forms in their training packets. The format of many forms, however, remained inconsistent in size, color, location of title, and location of number codes.

• Include more clearly identified references to page numbers or other identifying features of participant materials as they are covered by specific sections of the script in the Guide for Training NRFU Enumerators.

There are clear references provided to the page number of supporting trainee materials within the Training Guide. This cross referencing could be enhanced by the use of icons representing each trainee resource. For example, using a "workbook" icon, next to a reference to the enumerator workbook would visually cue the trainer to remind trainees to refer to the workbook for this portion of the training.

• Increase and clarify the discussion on reading and using the census maps

Only one and three-quarters hours were allocated to the entire 'Preparing for Work' section of enumerator training of which the discussion about census maps and how to use them was only a small part. More training time still needs to be allocated to this entire section, and specifically, to the use of census maps. In many of the training sessions that

were observed, the 'Preparing for Work' section required nearly 2<sup>1</sup>/<sub>4</sub> hours to complete, a half hour more than was allotted, which sometimes resulted in other sections being shortened.

#### • Increase the discussion on the long form

The amount of time spent on training enumerators to use the long form either was too short, and in some cases underutilized. Observations and debriefing data indicated that after this portion of the training, enumerators had varying levels of skill in filling out the long form, with few feeling fully prepared. One training delivery evaluator observed, "Some trainees could have used more practice . . . and more feedback to be sure all were getting it right." Training observers also noted training sessions where trainers spent only 15 to 20 minutes covering the long form, and in many cases, devoting more time to verbatim instruction than to practice interviews.

• Include a list of the most frequently asked questions from respondents and suggested answers to the job aid

There was no specific Job Aid provided to learners that listed respondents' most frequently asked questions and the suggested answers. However, a useful chart presented in the enumerator manual did outline frequent objections to the census and provides possible responses which could be given by enumerators in these situations.

• Include additional training on interviewer safety while in the field and add a "Dos and Don'ts" fact sheet on protocol and safety issues to hand out during training

There was no standard safety fact sheet provided to trainees. In some of the training sessions observed, trainees were provided with "local" instructions regarding safety issues. In addition, Chapter 4 of the Field Nonsupervisory Census Employee Handbook contained information on personal safety and encouraged trainees to be safety-minded and conscious of their work surroundings.

• Supplement reading of verbatim script, including more use of visuals, flip charts, and posters. Develop posters of forms.

The NRFU training guide references the use of such materials as posters and videos. For example, the 'Preparing for Work' section prompts trainers to utilize the Enumerator Skills video. Observers reported, however, that not all of the training sessions utilized the training video. There were no visuals such as flip charts or posters utilized in any of observed training sessions.

• Develop a more thorough end of training assessment which is closely tied to defined training objectives

At the close of their training experience, enumerators were asked to complete two types of assessment, a "live" field practice evaluation and a written Final Review Exercise.

However, training objectives were not clearly defined in the training materials. A clear statement of what enumerators will be able to do at the end of the training needs to be provided to trainees so that they are aware of their defined learning objectives for the training. Failure to provide fully documented training objectives made it difficult to assess whether the final review exercise adequately covered the most critical knowledge, skills, and abilities from the training.

#### 4.1.3 Dress Rehearsal Training Recommendations That Were Not Implemented

Sixteen recommendations listed in the Census 2000 Dress Rehearsal Report were not implemented. Census 2000 training developers indicated that these recommendations were not implemented because it was not believed that they would have any impact on the effectiveness of the training or because implementation was not feasible. Feasibility was assessed based on whether there was adequate time to incorporate the changes and/or on the ability of the Census Bureau to effectively address the logistics of ensuring full incorporation in all training sites. For example, several of the recommendations that were not implemented were related to the format of the training materials. Extensive rewrites of materials would have required more resources than were available in order to get the revised materials ready for print in a timely manner for shipment to all of the LCOs. Additionally, these format-related recommendations were considered of minor importance in terms of their potential impact on the overall quality of the training.

We provide below a listing of all of the recommendations that were not implemented, giving a more in-depth discussion of those which appeared to have an impact on the overall effectiveness of the training.

- Identify major topics in the Nonresponse Followup (NRFU) Enumerator Manual with indexes for quick reference.
- Add a table of contents to the Classroom Workbook to help improve navigation.
- Improve the "Points to Review" part of each "Practice Interview" exercise in the Classroom Workbook by encouraging participants to address each item one-by-one by adding slightly more white spaces between each item, placing a check-box next to each item instead of a bullet, and including an instruction to take a minute to evaluate the interviewer.
- Include chapter sub-headings to clarify the flow from topic to topic within a chapter.
- Increase left-hand margins of each scripted page to allow for marginal references to topics, training materials, activities and other features to make the script easier to read and to provide additional road maps to the trainer.
- Include more opportunity for interpersonal skill development between enumerators and the public during training.

- Increase the amount of emphasis placed on the importance and usefulness of being able to answer respondents' questions about census concepts and NRFU.
- Ask participants questions reflective of the content or the prospective job rather than merely factual responses.
- Extend the video to include examples of skilled and unskilled interviewers.
- Create audio tapes to include examples of skilled and unskilled interviewers.
- Include time for a "dry run" in the crew leader classroom training.
- Ensure timely delivery of training supplies including accurate maps for locating housing units.
- Ensure that crew leaders who conduct enumerator training have on-the-job training that includes field work before actually training.

Many NRFU crewleaders were trained a few weeks before enumerator training. The crewleaders training did not include a field work component so many NRFU trainers had no practical experience to share with trainees. This recommendation was not implemented in 2000 because of the timing conflicts between when the NRFU workload was available and when crewleaders were trained and when we trained enumerators.

• Modify (Increase) the amount of time spent on practice interviews

In the Census 2000 training materials, trainers are instructed to conduct in-class practice interviews with enumerators who role-play the part of respondents. Trainees also participated in paired practice interviews where they alternated between the role of enumerator and respondent in scripted practice interview situations. The amount of time allocated for these activities in 2000, however, was somewhat lessened, despite data from the Census 2000 Dress Rehearsal evaluation which indicated that trainees perceived practice interviewing as important. This resulted in many Census 2000 enumerators saying they felt insufficiently prepared to conduct interviews immediately following classroom training.

• *Modify (Increase) the amount of time spent on field work* 

Both the Census 2000 Dress Rehearsal and the Census 2000 training schedules had four hours allocated to field work. The time allotment was not modified. However, based on observations of enumerator training sessions conducted for Census 2000, and the resulting skills displayed by the enumerators in actual field work, the amount of time allocated to field work in enumerator training is adequate. Enumerators, however, asked that more time be spent on field work and subsequent discussion of their experiences during the field work.

• Provide more opportunity for participants to observe examples of skilled interviewing style. Have the trainer take the role of interviewer more often.

The NRFU Enumerator Training Guide prompted trainers to instruct trainees to pair off and begin the practice interviews without the benefit of first observing the trainer in the role of interviewer at least once. Observing such models would give trainees a clearer image to emulate and would also provide a broad variety of example and techniques, words, and phrases they could use in on-the-job situations.

#### 4.2 Did the Census 2000 trainees obtain the knowledge intended?

During NRFU classroom training, we devoted substantial time to ensuring trainees' understanding of census concepts. Training emphasized the importance of internalizing answers to commonly asked questions about the census and about the use of census data. NRFU enumerators were trained on the importance of the census and provided with information to help them answer respondent questions and concerns about participating in Census 2000. We believed that knowledge of Census 2000 would help enumerators persuade reluctant and refusing respondents. NRFU enumerators were trained not to be pushy, but to explain clearly the importance of the census for their communities, and the confidentiality of all responses provided.

We also provided training on effective interviewing techniques. Among the interviewing techniques covered in training were:

- asking all questions exactly as worded,
- asking questions in the order shown on the census form,
- asking all questions on the form
- recording responses accurately and legibly
- probing to clarify unclear answers, and
- never suggesting the "correct" answer to respondents.

Enumeration observers indicated that most enumerators were knowledgeable of census concepts. The data indicate that, with the exception of reading questions as worded, enumerators consistently demonstrated effective interviewing skills. Table 2 shows that:

• Ninety-seven percent of the enumerators were able to follow skip patterns on the short form, and 91 percent were able to follow skip patterns on the long form.

During training, considerable attention was paid to appropriately following skip patterns on the long form. Although not as much attention was paid to skip patterns on the short form, short form training did stress the importance of following skip pattens during the introductory section of the form. Observers noted that the majority of enumerators were able to correctly following skip patterns not only on the short form, but the long form as well.

• Ninety-four percent of the enumerators recorded responses accurately and legibly. Table 2. Percentage of Enumerators Who Demonstrated Specific Knowledge of

#### **Concepts Covered in Training**

Did the enumerator:	Percent of Enumerators (n=170)	
know how to complete a census form for a vacant unit?		98.6
know how to add a person to the household roster as a result of the response to the C1 question "I need to make sure I have counted everyone who lived or stayed here on April 1, 2000. Did I miss?"?		98.0
know how to add a unit when an extra housing unit was found?		97.3
know how to follow the appropriate skip patterns on the short form?		97.2
know how to complete a continuation sheet?		96.4
know how to read the bar code label on the questionnaire to fill out the label on the continuation form?		96.0
know how to delete a person from the household roster as a result of the response to the C2 question" <i>The Census Bureau has already counted certain people so I don't want to count them again here. On April 1, 2000, were any of the people you told me about?</i> "		95.1
know how to handle situations where the household moved in after census day?		94.4
know how to use the census maps to locate addresses needing followup?		93.4
know how to delete a unit address when the unit was nonexistent on Census Day or a duplicate address?		92.2
know how to follow the appropriate skip patterns on the long form?		91.2
ever provide any misleading or incorrect information when answering respondent questions?		4.2
complete a record of contact each time a residence was visited?		94.2
win the cooperation of respondents who initially appeared reluctant to cooperate?		93.9
record responses accurately and legibly?		93.8
probe to clarify unclear responses?		93.3
have difficulty answering any of the respondents questions?		10.5
ask all required questions on the form?		87.9
leave a Notice of Visit, form D-26, when no one was home at an address visited?		83.0
seem <u>un</u> comfortable or have difficulty asking any of the questions as written?		26.8
ever ask leading questions or suggest answers when probing?		28.9
always ask questions exactly as written?		60.1

Training emphasized the importance of completing the census forms legibly. Observers noted that enumerators were concerned that they use the appropriate pencils and that their writing was readable.

- Ninety percent of the enumerators never had any difficulty answering respondent questions. They were knowledgeable of the Census, reasons for conducting the Census, and the uses of Census data. Observers reported that most enumerators were able to respond to any concerns raised and give correct and appropriate answers to respondent questions.
- Sixty percent of the enumerators always read the questions exactly as worded.

The Dress Rehearsal training evaluation suggested the need for more emphasis on the importance of reading questions as written. The evaluation recommended that further explanations be given on how not reading questions verbatim affects the quality of the data. While this 1998 recommendation was fully implemented and the amount of time allotted for discussions of reading the questions verbatim was significantly increased, many Census 2000 NRFU enumerators had difficulty always asking questions exactly as written.

# 4.3 Were the Census 2000 NRFU trainees able to effectively do the job after completing training?

The best indicator of the effectiveness of employee training programs is the degree to which the skills taught in training are demonstrated on the job. Evaluation results indicate that the training did prepare the NRFU enumerators to effectively perform their job in several key skills' areas including: introductions, determining unit status on Census Day, asking about household relationships, asking about ethnicity, asking about race, and checking coverage.

#### 4.3.1 Introducing Oneself to the Household

Enumerator training stressed that once a respondent answered the door, the interviewer should introduce him or herself by stating his/her name, show the census ID, confirm that he or she was at the correct address, explain the purpose of the visit and how long the interview would take, and hand the respondent a Privacy Act Notice, D-31. Training stressed that each of these steps must be done at each address. Training placed particular emphasis on the importance of the introduction, and on how to deal with the concerns of people reluctant to provide information. During the training, time was set aside for practicing and perfecting the introduction. Table 3 shows that in most cases, the enumerators did follow standard procedures for introducing themselves and going though the introductory part of the census form.

• In 94 percent of the observed interviews, enumerators introduced themselves and showed their census ID.

- In 93 percent of the observed interviews, enumerators confirmed they were at the right address.
- In 89 percent of the observed interviews, enumerators gave out the privacy notice.

# Table 3. Percentage of Interviews Where Enumerators Demonstrated Correct On-the-Job Behaviors: Introductions

Did the Enumerator:	Percent of Interviews Where the Behavior was Observed (n=474)	
introduce him/herself to the respondent and show his/her Census Bureau ID?	93.8	
confirm that he/she was at the correct address?	92.5	
provide the respondent with a copy of the Privacy Act Notice, D-31?	88.8	

In commenting on what enumerators did who did not consistently demonstrate the required behaviors during the introductions, one observer noted "it was unusual for the interviewer to introduce himself and show his official ID first, preferring instead to delve immediately into confirming the address." Another observer reported that the enumerator he observed "often forgot to provide the Privacy Act Notice at the beginning of the interview, but would usually remember later into the interview and give it to the respondent."

It is of note that in about 7 percent of the interviews, enumerators failed to consistently confirm that they were at the correct address, which could ultimately affect the quality of the Census data.

#### 4.3.2 Determining Unit Status on Census Day (April 1, 2000)

One of the most important tasks of the NRFU enumerator is to determine the Census Day unit status. It was critical to the accuracy of the Census 2000 data that once the enumerator confirmed she/he was at the correct address, that she/he determine whether the unit was occupied by the current household, occupied by a different household, vacant, or nonexistent on April 1, 2000. Training emphasized the importance of the enumerator knowing and applying Census 2000 residency rules. The back of the one page job aid (D-547.1) also displayed the residency rules for use in the field.

If the current household lived at the address on census day, the enumerator was supposed to interview a household member and complete the census questionnaire. Having an entry in S5 determined whether the enumerator should proceed through the rest of the Census form. Most interviewers followed correct procedures for determining unit status on Census Day. The data in Table 4 show:

• In about 97 percent of the observed interviews, enumerators asked question S2, making

sure to emphasize that they were referring to unit status as of Census Day, April 1, 2000.

• Enumerators asked Question S5 (expected household population) 94 percent of the time.

#### Table 4. Percentage of Interviews Where Enumerators Demonstrated Correct Onthe-Job Behaviors: Determining Unit Status on Census Day

Did the Enumerator:	Percent of Interviews Where the Behavior was Observed (n=474)
ask question S2 which establishes census day residency (" <i>Did you or anyone in this household live here on Saturday, April 1, 2000?</i> "), making sure to cite April 1, 2000 as the reference date.	97.3
follow the appropriate skip patterns after asking question S2	90.5
ask question S5 which establishes an expected household population (S5), "How many people were living or staying in this (house/apartment/mobile home) on April 1, 2000?" making sure to cite April 1, 2000 as the reference date.	94.4
tell the respondent, if necessary, that only persons living in the household on Census Day, April 1, 2000, should be listed on the household roster.	89.9

#### 4.3.3 Asking about Relationships Within the Household

Question 2 on the census forms asks for the relationship of each household member to the person listed as "Person 1" on the census form. We trained enumerators to show the respondent the flashcards which lists various types of relationships when asking the relationship question. Data in Table 5 show:

- Enumerators asked the relationship question in about 81 percent of the observed interviews.
- Enumerators used the relationship flashcard 34 percent of the time.
- Enumerators probed on the nature of relationships (e.g., natural born vs. adopted vs. foster child) in about 74 percent of the observed interviews.

Observers pointed out that enumerators seldom used the relationship flashcard. Several reported that the enumerators who did not use the flash card to allow the respondent to choose the appropriate relationship category seemed to have difficulty recording the relationship of a common-law spouse and/or a live-in boyfriend or girlfriend.

Did the Enumerator:	Percent of Interviews Where the Behavior was Observed (n=474)
ask the relationship question (#2) for each person on the household roster, <u>ensuring</u> to insert the name of person 1 each time the question was asked? "Which of these categories best describes how each person is related to (read name of person 1)?",	80.5
show Flashcard A (relationship) to the respondent when asking the relationship question?	34.3
probe, where necessary, for more detailed responses to the relationship question (e.g., natural-born child, adopted child, foster child, stepchild)?	74.1

# Table 5. Percentage of Interviews Where Enumerators Demonstrated Correct On-the-Job Behaviors: Relationships

#### 4.3.4 Asking about Hispanic Origin

Training heavily stressed that enumerators must ask respondents Question 5 (Hispanic origin) for every household member. Enumerators were told they should show the flashcards which lists various Hispanic/Latino ethnic origins when asking Question 5. Scenarios were given in both the practice interviews and the interviewers' skills video to demonstrate that within a single household, different household members may have different ethnic origins. Training repeatedly emphasized that nothing regarding ethnicity and origin should be assumed. Table 6 shows the observation results on asking about Hispanic origin. The data show that:

- Despite the emphasis in training, the Hispanic origin question was read exactly as worded in only about 75 percent of the observed interviews.
- In about 84 percent of the interviews, enumerators asked the question on Hispanic origin for every member of the household, though not necessarily as worded.
- The Hispanic origin flashcard was shown in about 42 percent of the interviews.

## Table 6. Percentage of Interviews Where Enumerators Demonstrated Correct On-the-Job Behavior - Hispanic Origin

Did the Enumerator:	Percent of Interviews Where the Behavior was Observed (n=474)
read the question on Hispanic origin (#5) <u>EXACTLY AS WORDED</u> "Are any of the persons that I have listed Mexican, Puerto Rican, Cuban or of another Hispanic or Latino group?"	75.3
ask the question on Hispanic origin for every household member?	83.5
show Flashcard B (ethnicity) to the respondent when asking the question on Hispanic origin ?	41.8

Comments from observers suggest that a few enumerators did not ask the question on Hispanic origin at all. One observer reported asking the enumerator why she did not ask the Hispanic origin question and the enumerator explained "she could tell if she needed to ask this question or not and when she didn't, she didn't ask it because she didn't want to insult anyone." Another observer noted that the enumerator said that she did not consistently ask the Hispanic origin question "because she assumed the obvious, that is, the ethnicity of the relative was identical to the respondent." In other cases, observers provided several examples of enumerators knowingly rewording the Hispanic origin question. One observer noted that an enumerator never asked the Hispanic origin question exacted as worded, restating it instead as "You're not Spanish are you," or "No one here is Spanish, Hispanic or Latino." The training had emphasized that this should not be done. Another observer noted the potential impact of these deviations from procedure on the quality of census data. She reported that the enumerator she observed consistently reworded Question 5. This observer relayed that in one case this enumerator simply asked the respondent if he was Spanish. The respondent said "yes" and the interviewer did not probe further. They later found out the respondent was Mexican, although that was not what had been entered on the census form by the enumerator.

#### 4.3.5 Asking about Race

As with the Hispanic origin question, enumerators were trained to ask respondents the race question (question 6) for each person in the household. Trainees were told to show the flashcard which lists the census race categories in conjunction with asking the question. Census 2000 was the first time that respondents could choose more than one race and the census form was worded to state this. Thus, it was extremely important that the enumerators read the race question exactly as worded. If a person selected American Indian or Alaskan Native as his/her race, the enumerator was trained to ask the name of the person's tribe. Similarly, if the respondent selected other Asian, other Pacific Islander or some other race, the enumerator was trained to re-ask "what race."

Training observers noted that during training, many trainees had difficulty asking about race, so we would expect enumerators would have similar difficulties in the field. The observation data indicate that enumerators were less likely to correctly follow training procedures when asking about race than any other census procedure. Table 7 shows that:

- In 63 percent of the observed interviews, enumerators read the "race" question exactly as worded.
- Enumerators read all of the race categories about 41 percent of the time.
- Enumerators who interviewed a person who identified a household member as American Indian or Alaskan Native asked the required name of the tribe in 70 percent of the observed interviews.
- Enumerators who interviewed a person who identified a household member as other Asian or other Pacific Islander asked the required what race in 81 percent of the observed interviews.

• The race flashcard was shown in about 46 percent of the observed interviews.

### Table 7. Percentage of Interviews Where Enumerators Demonstrated Correct On-the-Job Behavior:Race

Did the Enumerator:	Percent of Interviews Where the Behavior was Observed (n=474)
read the race question (#6) <u>EXACTLY AS WORDED</u> "Now choose one or more races for each person. Which race or races does each person consider himself/herself to be"?	62.6
read all of the race categories when asking the race question	40.8
show Flashcard C (race)to the respondent when asking the race question?	45.5
tell the respondent s/he <u>could pick more than one race category</u> ? (NOTE: UNLESS THE RESPONDENT ASKS, THE ENUMERATOR IS NOT REQUIRED TO ADD THIS COMMENT.)	44.5
ask the name of the enrolled or principal tribe if the respondent answered American Indian or Alaska Native to the race question?	70.1
ask "What is the race" if the respondent answered other Asian, other Pacific Islander, or some other race to the race question?	81.4

Observers provided many comments on the enumerators handling of the race question. Many observers noted that the enumerators often restated the race question, with one observer reporting that instead of asking the race question, the enumerator said to the respondent "You're Chinese aren't you." Another observer reported that when she asked the enumerator why she didn't read the race question as worded, the enumerator said she chose to change the question in an attempt to defuse what she believed would be respondents' reluctance to answer. One observer noted that the enumerator told her the reason she reworded both the ethnicity and race questions was to help "speed up the interview."

In commenting on whether all of the racial categories were always read, several observers explained that in most of these cases the enumerator would begin to read the categories and the respondent would interrupt when a category was read and say "yes." In most instances, when they were interrupted, the enumerator would not continue reading the remaining categories. Situations such as this had not been adequately addressed in training nor in the scripted role plays.

#### 4.3.6 Checking Coverage

Two questions on both the short and long forms verified that an accurate and complete household roster had been obtained in Question 1. The roster was supposed to list all household members who should be counted as living at that address on Census Day. These two coverage questions are asked to help reduce the population undercount. Data in Table 8 show that:

• Enumerators asked if they had missed anyone (question C1) in 85 percent of the observed

interviews.

• Enumerators asked if they had included anyone who should not be included (question C2) in 82 percent of the observed interviews.

#### Table 8. Percentage of Interviews where Enumerators Demonstrated Correct Onthe-Job Behaviors: Coverage

Did the Enumerator:	Percent of Interviews Where the Behavior Was Observed (n=474)
ask question C1 to determine if anyone who should have been included, was missed on the household roster, making sure to read all of the listed categories "I need to make sure I have counted everyone who lived or stayed here on April 1, 2000. Did I miss any children, including foster children? anyone away on business or vacation? any roomers or housemates? —anyone else who had no other home?"	85.3
ask question C2 to determine if anyone was included on the household roster who should not have been, making sure to read all of the listed categories "The Census Bureau has already counted certain people so I don't want to count them again here. On April 1, 2000, were any of the people you told me about -away at college? away in the armed forces, in a nursing home, in a correctional facility?"	82.2

Asking these two questions was important to Census data quality and failure by enumerators to always ask these coverage questions could affect within household coverage measurements.

#### 4.3.7 Demonstration of Other Skills and Knowledge from Training

Other skills and knowledge important to the maintenance of data quality were also included on the enumeration protocol. Both Census 2000 enumerator forms asked for household members' name, age and date of birth, race, Hispanic origin, relationship, and owner/rental status. In addition to being important pieces of census data, information on household member's name and age are used to help quality check the census results. Enumerators were trained to ask for each household member's name, age and date of birth. The data in Table 9 show that enumerators asked the questions on name, and age/date of birth about 90 percent of the time.

Once the enumerators finished asking the respondents all of the questions on the form, they were told in training that they must complete the respondent information section, the interview summary section, the record of contact and certification. Completing Question R3, a question in the respondent information section, was emphasized in training. Question R3, which indicated whether the interview was conducted with a household member or a proxy, was considered particularly important for evaluating the impact of the use of proxies on data quality. Evaluation results indicate that section R3 was completed for 91 percent of the interviews.

Did the Enumerator:	Percent of Interviews Where the Behavior was Observed (n=474)
ask Question #1 "What is each person's name? Start with the name of a person who owns, is buying, or rents this (house/apartment/mobile home), explaining to the respondent, if necessary, that the person listed under person 1 should be a household member who owns, is buying, or rents the housing unit.	94.4
ask the age/date of birth questions (Question #4) for <b>every</b> household member? "What was each person's age on April 1/What is this person's date of birth?"making sure to cite April 1, 2000 as the reference date.	91.1
ask Question H1 (short form only) "Is this (house/apartment/mobile home): — owned by you or someone in this household with a mortgage or loan, — owned by you or someone in this household free and clear (without a mortgage or loan), – rented for cash rent, or — occupied without payment of cash rent?"	93.0
complete R3 in the respondent information section to indicate whether the respondent was a member of the household or not (i.e., proxy/nonproxy)?	90.6

## Table 9. Percentage of Observed Interviews Where Enumerators Demonstrated Correct On-the-Job Behaviors: Other

#### 4.4 Did the trainees find the training effective, useful and enjoyable?

NRFU enumerator training could be scheduled to take place over three full days or over four to five evenings. As stated in the methods section, a post enumerator telephone survey was conducted with a sample of 1,194 NRFU enumerators to obtain information on the trainees' views of the training program. The enumerators who participated in the telephone survey reported they received an average of 24 hours<sup>10</sup> of training. About 75 percent of the trainees attended training during regular business hours; 19 percent were trained in the evenings; and about 5 percent participated in weekend training sessions. The majority of enumerators (about 71 percent ) felt the amount of time they spent in training was just right. About 14 percent of the enumerators thought the training was too short; 15 percent said it was too long. Enumerators who quit or were asked to leave before the operation was over were significantly more likely to say the training was too short than those who completed their NRFU assignment(s). (Refer to Table A-4 in Appendix A).<sup>11</sup>

Training observers reported that in about half of the training sessions observed, the trainers completely followed the verbatim training guide. In those sessions where the trainer deviated from what was in the verbatim guide, observers reported that, in most cases, the failure to follow the guide either had no apparent impact on the quality of training or, in some cases, seemed to have a positive impact.

<sup>&</sup>lt;sup>10</sup>The training program was 18<sup>3</sup>/<sub>4</sub> hours or an average of 6 hours per day over 3 days. However, we paid travel time to and from the training and enumerators were allowed to charge up to 8 hours per day during the 3 days of training.

<sup>&</sup>lt;sup>11</sup>Chi square tests of statistical significance were used. All statistical tests were performed at the .05 level.

A mail survey of 4,896 NRFU enumerators, conducted one week into the NRFU operation, asked how satisfied enumerators were with the training they'd received. Table 10 shows that about 76 percent of the enumerators who participated in this interim survey, reported they were moderately or very satisfied with the NRFU training.

How satisfied are you with training?	Percent Enumerators Reporting (N=4800)		
Very Dissatisfied	4.2		
Somewhat Dissatisfied	8.3		
Neither Satisfied Nor Dissatisfied	11.4		
Moderately Satisfied	29.4		
Very Satisfied	46.8		

#### Table 10. Enumerators' Overall Satisfaction with Training

Percentages may not sum to 100 due to rounding

Table 11 displays enumerator performance data by the enumerators ratings of their overall satisfaction with training on the interim survey. While average cases per hour did not differ significantly for week 2 and week 4 of the operation based on overall satisfaction with training, by the end of the operation enumerators who had not been satisfied with training had stopped work.

How satisfied are you with	Average Cases/Hour				
training? (n=4800)	End of Week 2	End of Week 4	End of NRFU		
Very Dissatisfied	1.5	1.4			
	(0.1)	(0.1)			
Somewhat Dissatisfied	1.4	1.6			
	(0.1)	(0.1)			
Neither Satisfied Nor Dissatisfied	1.4	1.5			
	(0.1)	(0.1)			
Moderately Satisfied	1.4	1.6	1.1		
	(0.0)	(0.1)	(0.7)		
Very Satisfied	1.5	1.5	2.3		
	(0.0)	(0.1)	(0.3)		

 Table 11. Enumerators' Job Performance by Overall Satisfaction with Training

Standard errors are shown in the parentheses.

When asked at the end of the NRFU operation how satisfied they were with the overall guidance and training they received on specific job tasks, most enumerators reported they were very satisfied or somewhat satisfied with the guidance and training they received. Table 12 shows that between 46 percent and 64 percent of the enumerators indicated they were very satisfied with training on specific job tasks.

How satisfied or Dissatisfied were you with the guidance and training you received to help you(n=1194)	Very Satisfied	Somewhat Satisfied	Somewhat Dissatisfied	Very Dissatisfied
Locate a household	55.0	32.3	9.4	3.3
Conduct an interview	63.6	28.4	5.3	2.8
Complete the questionnaire	62.6	28.6	5.7	3.1
Solve job related problems	46.4	35.5	12.1	6.0
Be effective at your job	57.0	32.3	7.4	3.4

Table 12. Enumerators' Satisfaction with Guidance and Training on Specific JobTasks

Percentages may not sum to 100 due to rounding

Table 13 shows that at the end of the NRFU operation, most enumerators rated the training on different aspects of the job satisfactory or better, with between 16 percent and 43 percent finding it outstanding for some tasks. The task for which the largest percentage of enumerators felt the training needed improvement (17.2 percent) was getting respondents to cooperate. This finding is consistent with Bureau interviewers' suggested areas for improvements to training for ongoing surveys

Tasks	Percent of Enumerators who Rated Training on the Task (n=1194)			
	Outstanding	Good	Satisfactory	Needed Improvement
Determining which household needed followup	22.8	42.4	23.3	11.6
Using a map to locate an address	24.8	35.9	22.9	16.3
Determining unit status on census day	26.0	41.2	23.6	9.3
Getting respondents to cooperate	15.6	40.7	26.4	17.2
Completing a form for an occupied unit	33.1	41.3	20.6	5.0
Determining when to take a proxy	16.8	41.1	26.8	15.3
Explaining the purpose of the census	33.7	37.5	20.8	8.0
Filling out your time sheet	42.9	37.3	17.9	1.9
Filling out the long form	26.5	38.3	20.3	15.0

Table 13. Enumerators' Ratings of Training on Specific Job Tasks

Percentages may not sum to 100 due to rounding

Table 14 displays enumerators' assessment of the difficulty of performing various NRFU job tasks based on survey results at the end of the operation. The job task which the largest percentage of enumerators (79 percent) found "very easy" was completing their time sheets. The job task which the largest percentage of enumerators found "very difficult" (28 percent) was

getting respondents to answer all the questions on the long form. Finding proxy respondents was the second most difficult task for enumerators. There was a statistically significant relationship between when enumerators attended training and their rating of the difficulty of finding proxy respondents . Enumerators who attended evening or weekend training were much more likely to find locating proxies difficult than those who attended training during the day. (Refer to Table A-5 in Appendix A.) One possible explanation, which is supported by observers' comments, is that certain topics, such as proxies, may have not been as well covered in the evening classes.

	Percent of Enumerators who Rated the Task (n=1186)				
Tasks	Very Easy	Somewhat Easy	Somewhat Difficult	Very Difficult	
Locating household	42.4	37.7	17.1	2.8	
Getting respondents to cooperate	17.6	43.7	31.2	7.6	
Finding proxy respondents	16.8	39.3	33.7	10.2	
Getting respondents to provide accurate information	26.2	47.4	23.2	3.2	
Entering information on survey forms	65.2	27.9	6.2	0.8	
Getting respondents to answer all long form questions	8.1	23.8	40.5	27.6	
Filling out your time sheet	78.8	18.1	2.4	0.7	
Performing the physical task required (e.g., walking, lifting, etc.)	78.7	18.2	2.6	0.5	
Performing the mental tasks required (e.g., answering questions)	74.6	21.9	3.4	0.0	
Performing the social tasks required (e.g., meeting strangers getting cooperation)	62.7	27.9	8.0	1.4	

Table 14	Enumerators'	Assessment of	the Difficult	v of Snecif	ic Job Tasks
1 april 17.	Linumerators	Assessment of	the Difficult	y or speen	IC JUD LASKS

Percentages may not sum to 100 due to rounding

There was a statistically significant relationship between satisfaction with the length of training and the ratings of the difficulty of certain tasks. Those enumerators who thought training too short were statistically more likely to say job tasks such as finding proxies, entering information on the form, answering questions, getting respondent cooperation, and meeting production and quality goals were more difficult. (Refer to Table A-6 in Appendix A). Enumerators who were Dissatisfied with the length of training were also more likely to have reported on the interim survey that they were not very satisfied with the training they received. (Refer to Table A-7 in Appendix A)

The interim survey, conducted after they had been on the job for a week, asked enumerators how difficult it was for them to meet their supervisors' production goals for quantity of work. About 12 percent said somewhat or very difficult, with an additional 20 percent saying slightly difficult. (Refer to Table A-8 in Appendix A.) We also asked enumerators at the end of NRFU about the difficulty of meeting their supervisor's goals for number of cases completed. About 17

percent said somewhat or very difficult. (Refer to Table A-9 in Appendix A.)

Table 15 shows performance data by the enumerator's perception at the end of the operation of the difficulty of meeting supervisory expectations. The data in Table 15 suggest that by the end of NRFU, only those who had found meeting production goals very easy were still on the job.

Difficulty Meeting Supervisor's	Average Cases/Hour			
Expectation Re Cases Completed (n=1186)	End of Week 2	End of Week 4	End of NRFU	
Very Easy	1.5	1.6	2.3	
	(0.1)	(0.2)	(0.4).	
Somewhat Easy	1.7	1.4		
_	(0.1)	(0.1)		
Somewhat Difficult	1.4	1.4		
	(0.1)	(0.1)		
Very Difficult	1.0	0.9		
2	(0.2)	(0.2)		

Table 15. Enumerators Job Performance by the Difficulty of Meeting PerformanceGoals

Standard errors are shown in the parentheses.

Although the Census 2000 NRFU training program was designed to include a 4-hour field work component, 33 percent of the NRFU enumerators in the telephone survey reported field practice <u>had not</u> been included in their training. Enumerators who had attended training in the evenings were more likely <u>not</u> to have participated in the field work portion of the training. (Refer to Table A-10 in Appendix A). Among the 67 percent of the NRFU enumerators who received field training, about 89 percent found it useful, with 60 percent saying very usefully. There was a statistically significant positive relationship between whether an enumerator attended a training session that included practice field work and satisfaction with the guidance and training received for specific job tasks.<sup>12</sup> (Refer to Table A-11 in Appendix A) There also was a statistically significant relationship between the enumerators' ratings of the difficulty of meeting supervisors' expectations and whether the enumerators' training had included practice field work. Enumerators who had completed practice field work as a part of training were less likely to find meeting the production and quality goals difficult than those who had not. (Refer to Table A-12 in Appendix A)

The NRFU enumerators were asked to rate how well trained they were when they started their first interviewing assignment. Table 16 shows that about 38 percent of the enumerators reported they felt "very well trained" going out on their first assignment, with only 4 percent reporting they felt "not well trained." Enumerators who had participated in field work as part of their training were more likely to say they felt very well trained when starting their first assignment.

<sup>&</sup>lt;sup>12</sup>All statistical tests were performed at the .05 level.

How well trained were you on your first	Percent of Enumerators (n=1186)			
assignment?	Training included Field Work	Training Did not Include Field work	All	
Very Well Trained	40.6	32.2	37.8	
Well Trained	43.6	45.3	44.2	
Somewhat Well Trained	12.9	17.5	14.4	
Not Well Trained	2.9	5.1	3.6	

 Table 16. Enumerators' Assessment of How Well Trained They Were When
 Starting Their First Assignment

Percentages may not sum to 100 due to rounding chi square: p=0.0063

About 72 percent of the NRFU enumerators reported they had gained valuable job skills through the NRFU training and work experience, and 90 percent said they would recommend the job to a friend or relative.

#### **5. Recommendations**

The Census 2000 NRFU operation required hiring and training one of the largest peacetime workforces in history -- approximately 500,000 people. With less than 20 hours of formal training, these workers were expected to go out and knock on doors to collect Census data from about 42,000,000 nonresponding households. A major area of concern for the Census Bureau was the quality of the NRFU training material and the effectiveness of the training program in preparing enumerators. This evaluation indicates that the Census 2000 NRFU training program did successfully provide the needed skills and knowledge to the NRFU workforce. The 2000 training program incorporated the recommendations from the Census 2000 Dress Rehearsal research, was well received by trainees and produced enumerators who could effectively collect needed Census data. The results also suggest some areas for improvement in 2010. These recommendations for 2010 training are presented below. These recommendations have implications for both training and preparation costs.

- Restructure the NRFU enumerator manual to be more consistent with the training guide in terms of organization and content. Suggestions for complete alignment include:
  - Presentation of consistent information on title pages of both documents
  - Consistent use of icons in both documents for quick reference
  - Consistent pattern of page labeling
  - More frequent referencing of the Enumerator Manual from the Training Guide
- Increase the training time allotted to areas in which enumerators' feedback indicated they felt less well prepared, with particular emphasis on interacting with reluctant respondents and refusals

- Continue to place emphasis on reading all of the questions exactly as worded, adding additional explanations on why reading questions verbatim is so important to data quality. Create a video that focuses on the importance of reading questions exactly as worded, especially ethnicity and race questions.
- Continue to provide an opportunity for the field work component of Nonresponse Followup training and enforce inclusion of field work in all training sessions. To help ensure inclusion of field work as part of the training, require trainers to record and "sign-off" when each enumerators has completed the field practice portion of training.
- Increase the use of role playing, varying the situations to include reluctant respondents and refusals. Add additional videos which depict a variety of enumeration environment and responses, including a refusal.
- Conduct debriefings of enumerator and crewleaders in the 2004 Census Test to get insight on how to improve the use of flashcards and other job aids. During training, explain the importance and value of using these items as prescribed.
- Add to the training materials a "Frequently Asked Questions" job aid outlining potentially difficult question and appropriate responses.
- Conduct debriefings of enumerator and crewleaders in the 2004 Census Test to get insight on how to make improvements on preparing enumerators to ask the ethnicity and race questions exactly as worded. During the practice interviews, demonstrate a variety of effective techniques for interacting with people of different racial and ethnic backgrounds.
- Use a trainer and training assistant to model interviewing skills, techniques and styles. This implicitly implies better preparation of crewleaders or whoever trains.
- Use additional media such as audio tapes, videos, flip charts, posters, and slides in training and assure they are used.
- Conduct debriefings and/or focus groups with enumerator and crewleaders during the 2004 Census Test to get insight on why, despite emphasis in training, we continue to experience critical problems regarding issues such as interactions with reluctant respondents and refusals, reading questions as worded and the use of flashcards. Use the insights gained from these debriefings to suggest solutions to these problems for 2010.

#### References

- Acorps. Evaluation of the Enumerator Training and Field Observation of the Census 2000 Nonresponse Followup Enumerator Training Program, October 2000.
- Acorps. Evaluation Study of 1998 Dress Rehearsal Recommendations Present in the Census 2000 Nonresponse Followup Enumerator Training Program and Enumerator Training Observation for Census 2000, October 2000.
- Alliger, G.M., and Janak, E.A., "Kirkpatrick's Levels of Training Criteria: Thirty Years Later", In C. E. Schneider, C.J. Russell, R.W. Beatty, and L.S. Baird (Eds.) *The Training and Development Sourcebook*, Human Resource Development Press, 1994
- Billiet, J. and Loosveldt, G (1988). "Improvement of the Quality of Responses to Factual Survey Questions by Interviewer Training". *Public Opinion Quarterly*, (52)2, 190-211.
- Broadnax, A., Mangaroo, R., Yangas, R., Burt, G., & Eggert, J. "Evaluation Study of Nonresponse Followup and Quality Check Personal Interview Enumerator Training Programs." Census 2000 Dress Rehearsal Evaluation Results, Memorandum No çG-10. July 1999.
- Camburn, Donald P, Gunther-Mohr, Carol & Lessler, Judith "Developing New Models of Interviewer Training." Paper Presented at the International Conference on Survey Nonresponse, October 28-31, 1999.
- Cruz, B.J. "Measuring the Transfer of Training". *Performance Improvement Quarterly*, 10(2), 83-97.
- Gagne, R., Briggs, L. & Wager, W. (1992). *Principles of Instructional Design (4th Ed.)*. Fort Worth, TX: HBJ College Publishers.
- Geis, G. L., and Smith, M.E., "The Function of Evaluation", In H. Stolovich and E. Keeps (Eds.) Handbook of Human Performance Technology, San Francisco, CA: Jossey-Bass Publishers, 1992
- Groves, Robert M. & McGonagle, Kate "A Theory-Guided Training Protocol Regarding Survey Participation: Replicated Experiments in Production Settings" October 1998.
- Gustafson, Kent L. & Branch, Robert M. Survey of Instruction Development Models. Syracuse, NY, Syracuse University May 1997.
- Kirkpatrick, Donald L. *Evaluating Training Programs: The Four Levels*. San Francisco, CA: Berrett-Koehler, July 1998.

- Phillips, J., Handbook of Training Evaluation and Measurement Methods, Houston, TX: Gulf Publishing Company, 1991
- Roberts, A., "Evaluating Training Programs", International Trade Forum, (26)4, 1990
- Sims, A., "Evaluating Public Sector Training Programs," *Public Personnel Management*, (22)4, 1993
- U.S. Census Bureau, *Nonresponse Followup Enumerator Manual*, US Department of Commerce, Economics and Statistics Administration, Bureau of the Census, July, 1999. (D-547 (U/M))
- U.S. Census Bureau, NRFU Enumerator Quick Reference, US Department of Commerce, Economics and Statistics Administration, Bureau of the Census, July, 1999. (D-547.1 (U/M))
- U.S. Bureau of the Census, 2000c, *Nonresponse Followup Program Master Plan*, Decennial Management Division, July 19, 2000.
- U.S. Census Bureau, Census 2000 Informational Memorandum No. 26 Revision 1: Program Master Plan - Nonresponse Followup, May 7, 2001.
- U.S. Census Bureau, Management Study of Nonresponse Followup Enumeration, October 2000.

www.census.gov

Appendix A -- Additional Tables

KIRKPATRICK EVALUATION LEVEL	WHAT DO WE WANT TO KNOW?	MEASURES	DATA SOURCE			
REACTION	Did trainees find the training effective, useful, and enjoyable?	<ul> <li>attitude about the job</li> <li>reactions to the trainer</li> <li>reactions to the training materials</li> <li>reactions to the training</li> <li>satisfaction with knowledge gained</li> </ul>	<ul> <li>enumerator debriefings</li> <li>post-employment telephone survey</li> <li>crewleader debriefings</li> <li>classroom training observations</li> </ul>			
LEARNING	Did the trainees gain the knowledge intended? Were training objectives met?	<ul> <li>knowledge of Census concepts</li> <li>knowledge of Census procedures</li> <li>attitudes toward job</li> <li>knowledge of effective interviewing skills</li> </ul>	<ul> <li>classroom training observations</li> <li>enumeration observations</li> <li>enumerator debriefings</li> <li>crewleader debriefings</li> <li>tests</li> </ul>			
APPLICATION/ On-the-Job BEHAVIOR	Can the trainees effectively do the job after completing training?	- productivity - on-the-job performance - operation completion rates	<ul> <li>enumeration observations</li> <li>enumerator debriefings</li> <li>crewleader debriefings</li> <li>employee performance records</li> </ul>			
ORGANIZATIONAL PERFORMANCE	What impact has the training had on the agency's overall performance	N/A	N/A			

 Table A-1.
 The Evaluation Model for Assessing Training Effectiveness

Form Number	Form Name
D- 647(U) (7/99)	Nonresponse Followup Enumerator Training Guide
D-1(E)	Enumerator Short Form Questionnaire
D-1(E)SUPP	Continuation Form for Enumerator Short Form Questionnaire
D-1(F)	Enumerator Job Aid – English and Spanish Flashcards Booklet
D-2(E)	Enumerator Long Form Questionnaire
D-26	Notice of Visit
D-31	Privacy Act Notice
D-62 A/B(S)	Enumerator Job Aid – Spanish Translation of Enumerator Questionnaires
D-225	INFO-COMM
D-308	Daily Pay and Work Record
D-547(U) (7/99) D-547(M) (7/99)	Nonresponse Followup Enumerator Manual
D-547.1(U)	Enumerator Quick Reference
D-590	Field Non-Supervisory Census Employee Handbook
D-647.1(U) (7/99) D-647.1(M) (7/99)	Nonresponse Followup Enumerator Workbook
D-1210	Questionnaire Reference Book
D-653 (8/99)	Nonresponse Followup Crew Leader Training Guide
D-553	Nonresponse Followup Crew Leader Manual
D-653.1	Nonresponse Followup Crew Leader Classroom Workbook
Training Video	Getting Started: Practical Skills for Enumerators

 Table A-2.
 Census 2000 Training Materials Evaluated in this Report

	# Enumerators	Number of Interviews Observed	percent Enumerators
	149	1-3	87.7
	18	4-6	10.6
	0	7-9	0.0
	3	10-12	1.7
Total	170	474	100.0

### Table A-3. Number of Enumerators/Interviews Observed

	Which most closely describes your employment status with Census? (n=1088)							
Satisfaction with Length of Training	Completed Assignment /Not Asked to Perform Additional Work	Completed Assignment/ Turned Down Offer to Perform Additional Work	Quit Before Assignment was Completed	Asked to Leave before Assignment Completed				
Too Short	12.9	9.7	21.5	19.4				
Too Long	14.1	20.9	12.6	13.9				
Just Right	73.1	69.3	66.0	66.7				

## Table A-4. Census Employment Status by Satisfaction with Length of Training

chi square : p=0.0040

	How would you rate the difficulty of finding proxy respondents? (n=1194)								
When Training Was Attended	Very Easy	Somewhat Easy	Somewhat Difficult	Very Difficult					
Regular Business Hours	18.9	37.8	32.9	10.4					
Evenings	8.9	42.4	38.8	9.8					
Weekends	18.3	48.3	23.3	10.0					

# Table A-5. Difficulty of Finding Proxy Respondents by When Training wasAttended

chi square : p=0.0108

How would you rate the difficulty of n=1194)	Too Short				Too Long				Right Le	ength			
	Very Easy	Some what Easy	Some what Diffi- cult	Very Diffi- cult	Very Easy	Some what Easy	Some what Diffi- cult	Very Diffi- cult	Very Easy	Some what Easy	Some what Diffi- cult	Very Diffi- cult	chi sq p=
Finding Proxy Respondents	11.3	34.0	37.7	17.0	18.6	36.2	33.3	11.9	17.5	41.0	33.0	8.5	.0107
Entering Information on survey forms	52.2	36.2	10.4	1.2	68.3	25.7	4.9	1.1	67.1	26.7	5.7	0.5	.0095
Performing the mental task required (e.g., answering questions)	66.5	28.7	4.9	0.0	82.0	15.3.	2.7	0.0	74.7	22.0	3.3	0.0	.0251
Performing the social tasks required (e., meeting strangers, getting cooperation)	59.2	25.6	14.0	1.2	72.1	22.4	4.4	1.1	61.4	29.5	7.6	1.6	.0089
Meeting your supervisor's goals for the number of cases completed	42.1	32.7	20.1	5.0	61.4	26.7	7.4	4.6	48.0	35.3	14.2	2.6	.0006
Meeting your supervisor's goals for the accuracy of cases completed	42.9	34.8	16.2	6.2	64.1	27.6	5.0	3.3	56.2	35.4	7.0	1.4	<.0001

#### Table A-6. Difficulty of Performing Specific Job Tasks by Satisfaction with Length of Training

Do you think the amount of time allocated for NRFU training was too short, too long, or about right?

Satisfaction with Training? (n=1194)										
Amount of Training Was:	Very Dissatisfied	5		Moderately Satisfied	Very Satisfied					
Too Short	18.5	17.5	3.1	18.1	11.4					
Too Long	22.2	25.0	24.6	12.5	12.5					
Just Right	59.3	57.5	72.3	69.4	76.1					

Table A-7.Overall Satisfaction with Training by Satisfaction with Length ofTraining

chi square : p=0.0056

How would you rate the difficulty of meeting your supervisors expectations with respect to : (n=4896)	Very Difficult	Somewhat Difficult	Slightly Difficult	Moderately Easy	Very Easy
quantity of work	2.1	10.2	19.6	43.5	24.5
accuracy of work	1.3	6.0	15.9	49.4	27.4
speed of work	2.2	9.0	21.6	44.8	22.4
hours of work	2.0	6.2	15.7	45.9	30.2

Table A-8. Difficulty of Meeting Supervisors' expectations (Interim Survey)

How would you rate the difficulty of meeting your supervisors expectations with respect to : (n=1186)	Very Difficult	Somewhat Difficult	Somewhat Easy	Very Easy
Number of cases completed	3.3	13.9	33.7	49.1
Accuracy of cases completed	2.5	7.9	34.2	55.4

 Table A-9.
 Difficulty of Meeting Supervisors' Expectations (Post -Operation Survey)

	Practice V of Your T		
When Training Was Attended	Yes	No	
Regular Business Hours		70.0	30.0
Evenings		54.4	45.7
Weekends		65.0	35.0
chi square: p<0.0001			

## Table A-10. Inclusion of Practice Field Work by When Training Was Attended

Table A-11. Satisfaction with Guidance and Training on Specific Job Tasks by Whether Practice Field Work wasIncluded in Training

Did training includeYesNpractice field work?					No					
How satisfied or Dissatisfied were you with the guidance and training you received to help you(n==1194)	Very Satisfied	Somewhat Satisfied	Somewhat Dissatisfied	Very Dissatisfied	Very Satisfied	Somewhat Satisfied	Somewhat Dissatisfied	Very Dissatisfied		
Locate a Household	59.0	30.0	8.4	2.7	47.2	36.8	11.4	4.6	.0012	
Conduct an interview	67.8	25.5	4.6	2.2	55.6	33.8	6.6	4.1	0.00004	
Complete the questionnaire	65.9	26.1	5.6	2.4	56.1	33.5	5.8	4.6	0.0045	
Solve job related problems	49.0	35.8	10.2	5.0	41.3	34.9	15.9	8.0	0.0026	
Be effective at your job	58.9	32.3	6.0	2.9	53.5	32.0	10.2	4.4	0.0239	

Training included practice field work	Yes				No				
How satisfied or Dissatisfied were you with the guidance and training you received to help you(n==1194)	Very Easy	Somewhat Easy	Somewhat Difficult	Very Difficult	Very Easy	Somewhat Easy	Somewhat Difficult	Very Difficult	chi sq p=
Meeting your supervisor's goals for the number of cases completed	48.6	36.4	13.1	1.9	50.1	28.0	15.8	6.1	0.0002
Meeting your supervisor's goals for the accuracy of case completed.	56.2	35.5	7.0	1.3	53.7	31.6	9.8	4.9	0.0006

Table A-12. Difficulty of Specific Job Tasks by Whether Practice Field Work was Included in Training

Appendix B – Implementation of Census 2000 Dress Rehearsal Recommendations

Ref. #	Recommendation from the 1998 DR Evaluation of NRFU Enumerator Training	Disposition in 2000
4.1.1a	• Include trainer hints on how to conduct specific activities within the body of the script formatted to differentiate them from the script itself.	Fully Implemented
4.1.1b	• Increase the emphasis on reading the questions as written and explain the importance of these procedures in the context of collecting accurate data.	Fully Implemented
4.1.1c	• Increase and clarify the discussion on using continuation forms, emphasizing the importance of accurately copying identification information on continuation forms.	Fully Implemented
4.1.1d	• Increase the discussion on interviewing skills, especially those dealing with reluctant respondents and refusal avoidance.	Fully Implemented
4.1.1e	• <i>Provide time in the crew leader training for trainers to practice effective training techniques.</i>	Fully Implemented
4.1.1f	• Include suggestions of alternative training schedules in the training manual which allow for flexible scheduling of training.	Fully Implemented
4.1.1g	• Ensure that packages of materials are sent to the appropriate destination. If necessary use color coding schemes to differentiate materials (i.e., for rural and urban sites).	Fully Implemented
4.1.2a	• Match organization and content of the Enumerator Manual with the Guide for Training NRFU Enumerators	Partially Implemented
4.1.2b	• Consolidate and organize all trainee materials in one binder	Partially Implemented
4.1.2c	• Add clearer and more consistent labeling of examples and forms	Partially Implemented

 Table B-1.
 Disposition of Census 2000
 Dress Rehearsal Recommendations

Ref. #	Recommendation from the 1998 DR Evaluation of NRFU Enumerator Training	Disposition in 2000		
4.1.2d	• Include more clearly identified references to page numbers or other identifying features of participant materials as they are covered by specific sections of the script in the Guide for Training NRFU Enumerators.	Partially Implemented		
4.1.2e	• Increase and clarify the discussion on reading and using the census maps	Partially Implemented		
4.1.2f	• Increase the discussion on the long form	Partially Implemented		
4.1.2g	• Include a list of the most frequently asked questions from respondents and suggested answers to the job aid, use of visuals, flip charts, and posters. Develop posters of forms.	Partially Implemented		
4.1.2h	• Include additional training on interviewer safety while in the field and add a "Dos and Don'ts" fact sheet on protocol and safety issues to hand out during training	Partially Implemented		
4.1.2i	• Supplement reading of verbatim script, including more use of visuals, flip charts, and posters. Develop posters of forms.	Partially Implemented		
4.1.2j	• Develop a more thorough end of training assessment which is closely tied to defined training objectives	Partially Implemented		
4.1.3a	• Identify major topics in the Nonresponse Followup (NRFU) Enumerator Manual with indexes for quick reference.	Not Implemented		
4.1.3b	• Add a table of contents to the Classroom Workbook to help improve navigation.	Not Implemented		

Ref. #	Recommendation from the 1998 DR Evaluation of NRFU Enumerator Training	Disposition in 2000		
4.1.3c	• Improve the "Points to Review" part of each "Practice Interview" exercise in the Classroom Workbook by encouraging participants to address each item one-by-one by adding slightly more white spaces between each item, placing a check-box next to each item instead of a bullet, and including an instruction to take a minute to evaluate the interviewer.	Not Implemented		
4.1.3d	• Include chapter sub-headings to clarify the flow from topic to topic within a chapter.	Not Implemented		
4.1.3e	• Increase left-hand margins of each scripted page to allow for marginal references to topics, training materials, activities and other features to make the script easier to read and to provide additional road maps to the trainer.	Not Implemented		
4.1.3f	• Include more opportunity for interpersonal skill development between enumerators and the public during training.	Not Implemented		
4.1.3g	• Increase the amount of emphasis placed on the importance and usefulness of being able to answer respondents' questions about census concepts and NRFU.	Not Implemented		
4.1.3h	• Ask participants questions reflective of the content or the prospective job rather than merely factual responses.	Not Implemented		
4.1.3i	• Extend the video to include examples of skilled and unskilled interviewers.	Not Implemented		
4.1.3j	• Create audio tapes to include examples of skilled and unskilled interviewers.	Not Implemented		
4.1.3k	• Include time for a "dry run" in the crew leader classroom training.	Not Implemented		
4.1.31	• Ensure timely delivery of training supplies including accurate maps for locating housing units.	Not Implemented		
4.1.3m	• Ensure that crew leaders who conduct enumerator training have on-the-job training that includes field work before actually training.	Not Implemented		
4.1.3n	• Modify (Increase) the amount of time spent on practice interviews	Not Implemented		

Ref. #	Recommendation from the 1998 DR Evaluation of NRFU Enumerator Training	Disposition in 2000
4.1.30	• Modify (Increase) the amount of time spent on field work	Not Implemented
4.1.3p	• Provide more opportunity for participants to observe examples of skilled interviewing style. Have the trainer take the role of interviewer more often.	Not Implemented

Ref # for the Recommendations					Decis	ion Crit	eria					Disposition in 2000			
from the Census 2000 DR Evaluation of NRFU Enumerator Training	resourc availab fully co of	implementation		esources resources vailable to to word ally cover costs implen f nplementation		Are staffing resources available to work on implementation?		Can this change be implemented within needed time frame for training rollout?		Is it logistically feasible to implement in all potential training sites (appro. 30,000)?		Will implementing this change lead to "new" problems which would affect quality of training?		potential the ss of	-
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	MAJOR	MINOR			
4.1.1a	Х		Х		Х		Х			Х		Х	Fully Implemented		
4.1.1b	Х		Х		Х		Х			Х	Х		Fully Implemented		
4.1.1c	Х		Х		Х		Х			Х	Х		Fully Implemented		
4.1.1d	Х		Х		Х		Х			Х	Х		Fully Implemented		
4.1.1e	Х		Х		Х		Х			Х	Х		Fully Implemented		
4.1.1f	Х		Х		Х		Х			Х		Х	Fully Implemented		
4.1.1g	Х		Х		Х		Х			Х	Х		Fully Implemented		
4.1.2a		Х		Х		Х	Х			Х		Х	Partially Implemented		
4.1.2b		Х		Х		Х		Х		Х		Х	Partially Implemented		
4.1.2c		Х		Х		Х	Х			Х		Х	Partially Implemented		
4.1.2d		Х		Х		Х	Х			Х		Х	Partially Implemented		
4.1.2e		Х		Х		Х	Х		Х		Х		Partially Implemented		
4.1.2f		Х		Х		Х	Х		Х		Х		Partially Implemented		
4.1.2g		Х		Х		Х	Х			Х		Х	Partially Implemented		
4.1.2h		Х		Х		Х	Х			Х		Х	Partially Implemented		
4.1.2i		Х		Х		Х		Х		Х		Х	Partially Implemented		

#### Table B-2. Decision Criteria for the Census 2000 Dress Rehearsal Recommendations

Ref # for the Recommendations			Disposition in 2000										
from the Census 2000 DR Evaluation of NRFU Enumerator Training	Are financial resources available to fully cover costs of implementation ?		able to to work on cover costs implementation?		Can this change be implemented within needed time frame for training rollout?		Is it logistically feasible to implement in all potential training sites (appro. 30,000)?		Will implementing this change lead to "new" problems which would affect quality of training?		What is the potential impact on the effectiveness of training?		-
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	MAJOR	MINOR	
4.1.2j		Х		Х		Х	Х			Х		Х	Partially Implemented
4.1.3a		Х		Х		Х	Х			Х		Х	Not Implemented
4.1.3b		Х		Х		Х	Х			Х		Х	Not Implemented
4.1.3c		Х		Х		Х	Х		Х			Х	Not Implemented
4.1.3d		Х		Х		Х	Х		Х			Х	Not Implemented
4.1.3e		Х		Х		Х	Х		Х			Х	Not Implemented
4.1.3f		Х		Х		Х	Х			Х	Х		Not Implemented
4.1.3g		Х		Х		Х	Х			Х		Х	Not Implemented
4.1.3h		Х		Х		Х	Х			Х		Х	Not Implemented
4.1.3i		Х		Х		Х	Х			Х		Х	Not Implemented
4.1.3j		Х		Х		Х		Х		Х		Х	Not Implemented
4.1.3k		Х		Х		Х	Х			Х	Х		Not Implemented
4.1.31		Х		Х		Х	Х			Х	Х		Not Implemented
4.1.3m		Х		Х		Х		Х		Х	Х		Not Implemented
4.1.3n		Х		Х		Х	Х			Х	Х		Not Implemented
4.1.30		Х		Х		Х	Х			Х	Х		Not Implemented

Ref # for the Recommendations		Disposition in 2000											
from the Census 2000 DR Evaluation of NRFU Enumerator Training	Are financial resources available to fully cover costs of implementation 2		Are staffing resources available to work on implementation?		Can this change be implemented within needed time frame for training rollout?		Is it logistically feasible to implement in all potential training sites (appro. 30,000)?		Will implementing this change lead to "new" problems which would affect quality of training?		impact on the		
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	MAJOR	MINOR	
4.1.3p		Х		Х		Х	Х			Х	Х		Not Implemented

\* All final decisions to implement or not implement a DR recommendation were made by Field Division management staff.