

March 2012

Translation Review and Cognitive Testing of ACS Language Assistance Guides in Multiple Languages

Final Report

Prepared for

U.S. Census Bureau
Department of Commerce
Washington, DC 20233

Prepared by

RTI International
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Hyunjoo Park
U.S. Census Bureau
Yuling Pan

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EXECUTIVE SUMMARY

ES-1. Introduction

The U.S. Census Bureau has undertaken efforts to translate the American Community Survey (ACS) supporting documents into non-English languages. As a part of these efforts, they conducted three phases of cognitive testing of the ACS Language Assistance Guide (LAG) that were translated into Chinese (using simplified Chinese characters) and Korean. Assisted by RTI International, the purpose of this project was to pretest the LAG translations and examine whether Census Bureau translation requirements are met, whether the LAG translations deliver the intended message, and whether there are possible revisions to the guides. A total of 258 cognitive interviews were completed with native Chinese- and Korean-speaking respondents who speak little or no English. They included 129 Chinese language and 129 Korean language interviews. Because the entire LAG is too long for examination in one cognitive interview, a phased approach was designed. There were three phases, and each phase tested a portion of the LAG and two rounds of interviews were conducted in each phase. The work included translation review, interview protocol guides development and their translation, respondent recruitment, cognitive interviews, and data analysis and reporting, which were conducted by RTI under the direction of the U.S. Census Bureau. This report documents the final findings of the research program.

ES-2. Methodology

Advised by sociolinguist Dr. Yuling Pan of the Census Bureau, a team of Chinese and Korean language experts served on the Expert Panel for this project. The language experts participated in all research activities, including conducting a translation Expert review prior to cognitive testing, developing cognitive interview protocol guides and their Chinese and Korean translations, recruiting eligible participants, conducting cognitive interviews, writing interview summary reports, reviewing and discussing findings, and making recommendations for alternative translations. All staff members were cleared to work by the Security Officer at the Census Bureau.

In each phase, two versions of interview protocols were developed to cover the LAG questions. In addition, to lessen contextual ambiguity, Person Questions 1 through 6 were included, and in subsequent phases respondents were instructed to treat reference to "this person" as the respondent himself or herself. Although they were not tested cognitively, detailed interviewer observations were documented. Based on lessons learned from Phase 1, we administered concurrent probing in round 1 and retrospective probing in round 2 of the subsequent phases.

Interviewer training sessions were developed to address the specific research objectives and needs of this task order. Training was conducted in person for round 1 and included group instruction on project goals, question-by-question discussion of the LAG, data security, informed consent procedures, and proper probing techniques. Interviewers conducted paired and group practice cases and were given detailed guidance on writing summary reports. A refresher training was conducted via videoconference and telephone in advance of round 2 of data collection.

Respondents were recruited from three locations: Illinois, North Carolina, and the District of Columbia/Virginia/Maryland metropolitan areas. RTI used a combination of recruiting methods that had been effective in the past with similar target populations: leveraging community organizations, posting flyers at a variety of public places, and issuing advertisements in ethnic newspapers and media outlets. All potential respondents were screened over the telephone or in person, using a scripted series of screening questions. To be eligible for participation, respondents had to be native Chinese or Korean speakers and speak little to no English. All efforts were made to recruit a diverse group that represented a wide array of demographics approved in the recruiting plan: age, gender, and educational attainment were considered, as were place of birth and length of time living in the United States. The recruitment period spanned from December 2009 to July 2011.

In total, 129 cognitive interviews were conducted in Chinese and 129 interviews were conducted in Korean. The Chinese language interviews were administered in Mandarin and Cantonese with respondents who represent a diverse range of Chinese dialects, such as Shanghainese, Fukian, and Toishan. Only adult men and women aged 18 years or older were interviewed. The main challenges encountered during the recruiting process were recruiting individuals with less than a high school education, recruiting younger (18–34 years of age) Chinese-speaking respondents, and recruiting older (65+ years of age) Korean-speaking respondents. Additional challenges were identifying workers and family members of U.S. military personnel. At the end of the recruitment, we were successful in fulfilling the recruitment criteria set forth by the Census Bureau.

A rigorous research design was implemented, and every case of this study followed a consistent flow of events: recruitment, interview preparation, conduct of cognitive interviews, and reporting of results. Two rounds of testing took place during each phase. The first round of interview focused on identifying problematic issues. In the second round, we tested the recommended changes based on findings from the first round.

During each cognitive interview, informed consent for participation was obtained before the interview started. If the respondents agreed to be audio recorded, their consent for recording was also obtained in writing. At the completion of the interview, respondents participated in a debriefing session with their interviewer to elicit additional feedback. After the debriefing, a \$40 incentive payment was given to the respondents. The average time to

complete an interview was 60 to 90 minutes. The language expert team leader reviewed all the interview summary reports after interviews were completed in each round, and regular interviewer debriefings were held to share and review the findings. Recommendations for wording changes and translations were made accordingly, based on the discussed results and agreed-upon solutions.

ES-3. Findings and Recommendations

Because of the advance translation Expert review step, few translation errors were identified during pretesting. The cognitive interviews uncovered linguistic and sociocultural issues that may only be observed through testing with monolingual respondents. They can be grouped in three categories according to the research framework set forth by Pan and Fond (2012):

- Linguistic rules
 - Complex sentence structure
 - Korean: Hancha-rooted words and phonetic expression
- Cultural norms
 - Ways of communication. For example, Chinese way of responding is to have the response follow the verb used in the question.
 - Reasoning and cultural conventions, such as confusion about “last get married” because multiple marriages are traditionally not culturally desirable.
- Social practice
 - No equivalent concept
 - Lack of knowledge of financial terms and U.S. government programs
 - Inexperience with self-administered survey questionnaires
 - Questionnaire layout
 - Item nonresponse and process estimation
 - Use of terminology, such as “house, apartment, and mobile home”; “property”; or questionnaire routing instructions
 - Concept of an LAG.

Detailed question-by-question assessment can be viewed in Chapter 3; results are presented by phase and are grouped by LAG section and the order in which the questions appear. Findings for the questions are discussed in the descriptive text, and the recommended wording for Chinese and Korean translations are presented in a tabular format to facilitate reading the summary results.

After completing the cognitive interviews, the Census Bureau sociolinguist conducted a usability test of the Chinese LAG. Findings and recommendations are documented in Appendix B.

ES-4. Lessons Learned

This large-scale translation pretesting effort has generated numerous lessons about respondent recruitment, study design, and pretesting techniques that will benefit future studies. For example, we found that when recruiting monolingual Chinese and Korean populations, ethnic newspaper advertisements have the dominant advantage in reaching a larger number of respondents, while less time is spent by the recruiters. Word-of-mouth recruitment approach has the highest rate of rendering qualified respondents. However, the demographic characteristics of participants differ by recruitment strategies.

When devising recommendations according to interview findings, we learned to observe Chinese and Korean linguistic practices in devising translations, add appropriate contextual details, develop descriptive phrases for difficult concepts, and not limit translation possibilities by trying to “fit” a concept into one word. We also recommend conducting cognitive interviews in the source language and crossreferencing the findings across test languages to confirm if the issues are shared.

In terms of study design, our experience supports a translation review prior to cognitive testing if the translation and pretesting design teams are different. Similar observations from previous translation pretesting were made, including using the vignette technique to measure certain translations, producing detailed interview summary reports, and developing a coding scheme for the analysis. However, many issues merit further investigation, such as the utility of practice questions before starting the interview, effect of questionnaire layout and formatting, and usability of the LAG. In addition, some of the respondent difficulties simply cannot be “fixed” within the parameters of the translation and must be addressed at the source language questionnaire level.

1. INTRODUCTION

The U.S. Census Bureau has undertaken efforts to translate the American Community Survey (ACS) supporting documents into non-English languages. As part of these efforts, they conducted a research study, *Translation Review and Cognitive Testing of ACS Language Guides in Multiple Languages*. The aim of this research study was to conduct a translation expert review followed by 240 to 288 in-depth cognitive interviews to pretest the Chinese and Korean translations of the ACS Language Assistance Guide (LAG). The LAG provides translation for the English version of the ACS-1 (2010) KFI form that respondents use to complete the survey. Respondents read the questions, instructions, and answer categories in their language from the LAG and then recorded the answer on the English version of the form and mailed the English version into the Census Bureau.

Because the entire LAG is too long for examination in one cognitive interview, a phased approach was designed. This report documents the final findings from three phases of the research program, including two rounds of cognitive interviews in each phase. The work included translation expert review and protocol development and its translation, recruitment, cognitive interviews, and analysis of data, which were conducted by RTI International under the direction of the U.S. Census Bureau. Specific LAG translations tested in each phase were as follows:

- Phase 1 covered instructions on the LAG cover page and instructions on the questions from the Start Here box and the Housing Section.
- Phase 2 covered the opening instructions and Questions 7 to 28 of the Detailed Person pages. Per Census Bureau's request, we also tested a parental birthplace question that is not currently in the LAG.
- Phase 3 covered Questions 29a to 48 of the Detailed Person pages. Per Census Bureau's request, we also tested instructions at the end of the LAG as well as the mailing instructions on the back page.

1.1 Study Objectives

The following specific objectives for the LAG translations were examined.

- 1) Whether the Census Bureau translation requirements are met for the following components:
 - reliability—the message in the source text is accurately transferred into the target text
 - fluency—the translation reads well and makes sense in the target languages
 - appropriateness—the style, tone, and function of the source text are appropriately transferred into the target text.

- 2) Whether respondents of the target languages can understand the intended messages the same way as English-speaking respondents do with the English version of these materials.
- 3) Whether there are possible revisions to the guides as a result of this research.

1.2 Research Activities and Schedule

The specific research activities were

- organizing a panel of language experts;
- reviewing the translated LAGs before cognitive testing and making recommendations for revision;
- developing and testing protocols for cognitive interviewing;
- preparing the interview package, including the translation of the interview protocols, consent forms, and incentive receipts into target languages;
- providing an initial 2-day training to language experts and a subsequent 1-day training for each round of interviewing;
- recruiting and screening potential respondents;
- conducting two rounds of cognitive interviews in Korean and Chinese and writing interview summary reports; and
- reviewing findings through group discussions upon the completion of cognitive interviews and recommending alternative translations.

Following protocol development, each round of cognitive interviewing for a phase took place within a 4-week period. All related tasks were carried out, such as training interviewers, recruiting respondent, conducting cognitive interviews, preparing summary reports, and presenting findings. The presentation of results from each round was given at the Census Bureau, followed by the analysis and submission of a report for each phase. This final report documents the issues discussed at each meeting and their resolutions, as well as recommendations for final wording for the translations and their justifications.

2. METHODOLOGY

2.1 Overview

A total of 258 in-depth cognitive interviews were conducted with respondents who speak little or no English. They included 129 Chinese language and 129 Korean language interviews over three phases. Each phase consists of two rounds of interviewing. To obtain respondents for these interviews who had the desired characteristics, more than 1,000 Chinese and Korean speakers were contacted in three states and 1,084 screener records were completed.

Based on the geographic proximity of the language experts, the three sites selected for the cognitive interviews were Illinois, North Carolina, and the District of Columbia/Virginia/Maryland metropolitan areas. These sites also have sufficient concentrations of Chinese- and Korean-speaking populations to represent the target language groups, and this site selection approach helped to control overall costs.

This chapter outlines the methodology employed in this study, which was built upon established pretesting methodology of Chinese and Korean survey materials (Pan, Hinsdale, Schoua-Glusberg, & Park, 2006; and Pan, Sha, Park, & Schoua-Glusberg, 2009).

2.2 Panel of Language Experts

In addition to Census Bureau sociolinguist, Dr. Yuling Pan, the panel of language experts is composed of five Chinese language experts and four Korean language experts. The qualifications and experience sought in the team of language experts were (1) native-level Chinese and Korean language expertise, (2) education and work experience in the target culture, (3) experience as professional translators and with cross-cultural methodology, and (4) experience in cognitive interviewing. All staff members were cleared to work on Census Bureau projects by the Security Officer at the Census Bureau. The language experts in Chinese and Korean teams are listed in Table 2-1.

Table 2-1. Panel of Chinese and Korean Language Experts

Chinese Language Team	Korean Language Team
<ul style="list-style-type: none">• Ms. M. Mandy Sha, Lead• Ms. Lu Liu• Ms. Grace Chan McKibben• Ms. Qinghui Guo• Ms. Guangya Liu (Phase 1 round 1 and Phase 3 round 1 only)• Dr. Virginia Wake (Phase 1 only)• Ms. Michelle Yuan (Phase 3 round 2 only)	<ul style="list-style-type: none">• Ms. Hyunjoo Park, Lead• Ms. Jiyoung Son• Ms. Younhee Harm• Ms. Suzie Kim

The two teams of language experts received intensive training about this project and participated in all research activities, including reviewing translation and testing materials, developing protocols, recruiting eligible participants, conducting cognitive interviews, writing interview summary reports, reviewing and discussing findings, and making recommendations for alternative translations.

2.3 Translation Review of LAG

The LAGs were translated into Chinese and Korean by another contractor. Prior to cognitive testing, the panel of Chinese and Korean language experts conducted a detailed Expert review of the translation.¹ After the review, they provided comments, corrections, and suggestions on the translations in addition to justification for the suggested corrections.

Two methods were used: (1) a translation appraisal system (TAS²) developed by Sha, Park, and Pan (2010) and (2) the traditional expert review. Half of the panel was assigned to one of the methods and the other half was assigned to the other. The TAS group examined each translated sentence by considering preidentified specific categories of translation issues in a step-wise fashion and decided whether a translated item exhibited features that were likely to cause problems at each step. Those in the Expert Review Group did not follow such a system. After the language experts completed their reviews using the two different methods, they met to discuss their findings and to reconcile issues. For example, the team discussed the level of edits that should be made to long and complex sentences that were documented during the translation reviews. Obvious problems were edited, but others were noted for cognitive testing to observe their sociocultural effect.

A noteworthy but easily overlooked area is formatting the translation in the LAG. The English language ACS questionnaire uses a variety of formatting to express visually the emphasis for part or all of the question text. For example, text can be bold, italicized, or in all caps as response stimuli to the respondents. Bold and italicized Chinese and Korean text do not stand out when they are kept at the same font size as regular text. A larger issue has to do with expressing text in caps; because Chinese and Korean languages are not alphabet based, it is not possible to capitalize the text. In consultation with the Census Bureau sociolinguist, we decided to underline Chinese and Korean text that is capitalized in the English source language items and use the same formatting for italics and bold in the translated materials.

¹ Due to project needs, the lead researchers had conducted a preview focusing on errors due to translators' misinterpretation of the English source language questionnaire wording, layout and format, or context.

² The TAS provides a systematic appraisal of translation and helps spot potential problems in the wording (lexical error) and structure (syntactical error) of the questions that may lead to difficulties in respondent comprehension, miscommunication, or other failings.

2.4 Development of Cognitive Interview Protocol

Two versions of interview protocols were developed for administration in each phase. Detailed interviewer observation guidelines were also embedded in the interview protocols for documentation.

For Phase 1, Protocol A tested the cover page and Questions 1 to 11 of the Housing Section (Table 2-2). Protocol B covered Questions 12 to 21 of the Housing Section. In addition, Person Questions 1 through 6 were included in the cognitive interviews to lessen contextual ambiguity because they determine who Person 1 is. In Phase 1, round 2, the translation for the “Chinese” race category was probed with Chinese-speaking respondents.

Table 2-2. Phase 1 Protocol Testing per Interview Round

	Protocol Type	Round 1 Interviews	Round 2 Interviews
Phase 1	Protocol A	11 in Chinese	11 in Chinese
	Cover Page + Housing Questions 1–11	11 in Korean	11 in Korean
	Protocol B	11 in Chinese	10 in Chinese
	Housing Questions 12–21	11 in Korean	10 in Korean

For Phase 2, Protocol C tested the Detailed Person page instructions and Questions 7 to 15 of the Detailed Person pages (Table 2-3). Per Census Bureau’s request, we also tested a parental birthplace question that is not currently in the LAG. This question was tested in round 1 only. Protocol D covered Questions 16 to 28 of the Detailed Person pages. As with Phase 1, Person Questions 1 through 6 were included in the cognitive interviews to alleviate contextual ambiguity, but respondents were instructed to treat reference to “this person” as the respondent himself or herself.

Table 2-3. Phase 2 Protocol Testing per Interview Round

	Protocol Type	Round 1 Interviews	Round 2 Interviews
Phase 2	Protocol C	11 in Chinese	11 in Chinese
	Detailed Person page instructions + Detailed Person Questions 7–15 + parental birthplace question (not in LAG)	11 in Korean	11 in Korean
	Protocol D	11 in Chinese	10 in Chinese
	Detailed Person Questions 16–28	11 in Korean	10 in Korean

For Phase 3, Protocol E tested Questions 29a to 40 of the Detailed Person pages and Protocol F covered Questions 41 to 48 of the Detailed Person pages (Table 2-4). Per Census Bureau’s request, we also tested mailing instructions shown on page 16 of the LAG with Protocol E and instructions on the bottom of pages 11 and 12 of the LAG with Protocol F in

round 1 only, on a time-permitting basis (we were able to test them with a majority of the respondents). To lessen contextual ambiguity, respondents were instructed to treat “this person” as the respondent himself or herself.

Table 2-4. Phase 3 Protocol Testing per Interview Round

	Protocol Type	Round 1 Interviews	Round 2 Interviews
Phase 3	Protocol E	13 in Chinese	10 in Chinese
	Detailed Person Questions 29a–40	11 in Korean	10 in Korean
	Protocol F	11 in Chinese	10 in Chinese
	Detailed Person Questions 41–48	12 in Korean	11 in Korean

The protocol guides were developed in English and then translated into Chinese (using simplified characters) and Korean, as were the consent forms for participation and incentive receipt forms. Even though they were developed first in English, the design took into account issues related to language and culture appropriateness for when the survey would be conducted in the target languages with Chinese- and Korean-speaking respondents. Additional culture-specific probes were added. The cognitive interview protocols documented the process for completing the interviews, including interviewing administration details, informed consent procedures, and the guide for cognitive interviewing. Informed consent forms were presented to respondents before the start of the interviews.

The interview protocol guide concentrated on probing the understanding of the translated survey questions. It incorporated structured or scripted probes, while giving interviewers the flexibility to use spontaneous emergent probes when needed. The scripted probes included comprehension probes, paraphrasing probes, and process estimation probes. Emergent or spontaneous probing was used based on respondents’ behavior or prior answers. To examine the naturalness of a term, phrase, sentence, or paragraph, the respondents were asked to read it to themselves and express their impressions and opinions. At the end of the interview, a series of debriefing questions were administered to obtain specific information regarding the respondents’ survey experience and the interviewers’ feedback.

Based on the issues identified in the interview protocols from the round 1 cognitive interviews, several revisions were implemented and introduced in the round 2 interviews, following discussions with and approval by the U.S. Census Bureau. Cognitive probes that were found to be less effective were deleted, and probes that were found to be necessary or beneficial in eliciting useful information from the respondents were added. Analyses of the findings of the first round yielded a set of recommended changes to questions. These recommended changes were then tested in the second round of each phase. The proposed changes were, in some cases, cultural adaptations. For example, when a commonly used

measurement unit for land 평 (pyoung) is provided, Korean speakers may be able to appreciate the acreage of a lot. Also in the second round, show cards were used to compare the original and revised wording of several survey questions. Revisions to the LAG were implemented upon approval from the Census Bureau, and the modified version was used for testing in round 2.

A team approach was used to translate the interview protocol guides and consent forms. Each language expert was assigned one part of the interview protocol text for translation and worked independently. This ensured that all language experts familiarized themselves with the different topics covered in the original text. The translation team worked on the individual translations simultaneously, and an aggregate completed translation was prepared for group review and discussion. An in-language meeting was held among the language experts to review the translated interview protocol as a whole. Every translated item was reviewed by the group and each language expert contributed to the discussion, with the aim of improving and refining the first translation, ensuring that it reflected the intent of the English texts and flowed well in Chinese and Korean. The review meeting was refereed by the team lead, although changes to the protocol guides were edited by individuals only.

2.5 Cognitive Interview Training

After developing Phase 1 round 1 interview protocols, a formal 2-day group training was provided for all language experts. The in-person training was conducted in Chicago, Illinois, on January 15 and 16, 2010. In addition to the Chinese and Korean language experts, Census Bureau sociolinguists attended the training. In this training, the interviewing teams were presented with information on study background, cognitive interviewing methodology, and a question-by-question walk-through of the LAG. Intensive interview practice sessions were also included. The detailed activities were as follows:

Day 1

- Welcome and training overview
- Study and research overview
- Project expectations
 - Data security
 - Informed consent
 - Administrative issues
- Language Assistance Guides
- Mock interview #1—Round robin
- Interview summary report
- Question and answer

Day 2

- Recap of Day 1 and agenda overview
- Mock interview #2
- Mock interview #3
- Respondent recruitment
- Mock interview #4
- Questions, answers, and closing.

The training was designed to provide an overview of this research project with regard to its significance and goals, to reinforce the importance of data security and the informed consent procedures, and to provide opportunities for language experts to enhance their cognitive interviewing skills and culturally appropriate probing. Two detailed training modules were presented on writing effective interview summary reports.

During mock interview sessions, trainees were not only able to familiarize themselves with the interview procedures and materials, but they gained practice in anticipating the possible difficulties in administering certain probes and potential questions or concerns respondents may raise. Language experts were also trained on working with respondents who have concerns regarding certain terms and phrases, and the teams discussed and recommended solutions accordingly. In general, this training served as a key element in preparing interviewers to conduct the cognitive interviews in a professional manner.

A similar approach was taken Phases 2 and 3. After developing the interview protocols for the first round, a 1-day group training was provided to all language experts. In this training, the interviewing teams were presented with a review on study background and data security procedures and a question-by-question walk-through of the Phases 2 and 3 questions. Intensive interview practice sessions were also included, followed by writing effective interview summary reports.

A subsequent training was held by videoconference and telephone for all round 2 interviews. This training served as a refresher to reinforce the concepts learned at the initial training, and to highlight the revisions that were implemented to the protocols following the conclusion of the round 1 interviews.

2.6 Respondent Screening, Recruitment, and Profile

Between December 2009 and July 2011, the Chinese and Korean language team recruited native Chinese- and Korean-speaking respondents who spoke little or no English from Illinois, North Carolina, and the District of Columbia/Virginia/Maryland metropolitan areas. Drawing from experience gained in previous studies, the teams conducted recruitment through diverse channels. For example, ethnic media outlets were used to ensure that the

recruitment message reached the target population on a broad scale. Disseminating recruitment information by electronic approaches (e.g., e-mail lists, online forums, etc.) was another viable method in reaching potential respondents, as well as by posting flyers at various locations frequented by potential respondents. This includes, for example, Asian grocery stores, salons, and ethnic restaurants. A snowball recruiting approach (i.e., word of mouth) also helped to gain cooperation. A discussion on what worked, what did not, and the implications for future research is presented in Chapter 4, Lessons Learned.

The recruitment effort adhered to the guidelines demonstrated in the recruiting plan. The recruitment target is a combination of individuals whose characteristics fall into the expected categories. This plan included recruiting Chinese- and Korean-speaking respondents of various education levels (i.e., less than high school, high school graduates, and college graduates), of both genders, and from a variety of age groups. To be eligible for recruitment, the majority of the respondents needed to have lived in United States for at least a year. For Chinese speakers, the recruitment plan also included populations from diverse origins: those who were born in mainland China, Taiwan, or United States or other countries and those who spoke Mandarin and Cantonese dialects.

The respondent recruitment in Phases 2 and 3 included additional requirements. In Phase 2, we recruited monolingual respondents who are familiar with the military terminology used in Questions 26, 27, and 28 that ask about household persons' active-duty service. Because English speaking and writing are required to serve in the U.S. military, we did not actively attempt to recruit monolingual respondents who served on active duty. In consultation with the Census Bureau, we instead recruited four monolingual family members of current or past U.S. military service persons. This way, these questions could be tested with those who are more likely to be familiar with specific military terminology used in Phase 2 questions. Priorities were given to these respondents, resulting in an adjustment of recruitment targets for the educational attainment and age for Phase 2, round 1 only.

In Phase 3, we tested questions that included specific topics related to working experience. We recruited monolingual respondents who were currently working or had past working experience. Particularly for Protocol E, Detailed Person Questions 29 to 40, we recruited half of the respondents who had worked the last week and half who had not, asking about labor force status, work status of the last year, place of work, and commuting to work. For Protocol F, which includes Questions 41 to 48 that ask about class of worker, industry/occupation, and income, we recruited those with work experience only. The majority of participants had to have worked in the past 5 years, although we did allow some who had not worked in the past 5 years, but had worked before then.

To find eligible monolingual respondents, we developed an English version of a screening questionnaire and translated it into Chinese and Korean. Language experts reviewed the initial translation as a group and made modifications. The screening questionnaire consisted

of a series of scripted questions that were administered by the language experts over the phone to the respondents. A respondent's qualification for the cognitive interview was determined based upon his or her responses to the screening questions. These potential respondents were native Chinese or Korean speakers who were at least 18 years old, spoke little or no English, and (for Chinese only) were able to read simplified Chinese characters. In addition, the screening questionnaire collected basic demographic information so that a diverse range of demographics were included. We also excluded individuals who had participated in the ACS interviews in the past 2 years.

Since Phase 1, RTI screened a total of 404 potential Chinese-speaking respondents and 680 potential Korean-speaking respondents. Of these, 351 Chinese speakers and 423 Korean speakers were eligible. From this pool of potential respondents, RTI identified qualified respondents to fulfill the specific target categories, which included educational attainment, place of birth, year of entry, gender, age, and preferred dialects.

While fulfilling the recruitment targets, RTI faced some challenges in locating respondents for certain categories, such as those with less than a high school education. In general, we found that females and college graduates were easier to recruit. Recruiting monolingual Chinese speakers was also challenging in the younger demographics; that is, those who were aged 18 to 34 years. However, the reverse was true for recruiting monolingual Korean speakers. It was more challenging to recruit in the mature demographics (55 years or older). Generally, recruiting male respondents was relatively more difficult compared with recruiting female respondents.

We were successful in fulfilling all recruitment criteria in Phase 1. In Phase 2, however, a challenge was to recruit monolingual family members of U.S. military service personnel to test the questions that ask about household persons' active-duty service. At the end of Phase 2, we successfully recruited four Chinese-speaking respondents and seven Korean-speaking respondents for these interviews, and were successful in fulfilling the recruitment criteria set forth by the Census Bureau for Phase 2.

In Phase 3, we encountered another challenge: recruiting working respondents. We needed these types of respondents to obtain directly relevant answers for Questions 29 to 34, which ask about job location and commuting. Perhaps because of conflicts with their work schedules, currently working respondents, especially those who were middle aged men working full time, were hard to recruit. They were mostly identified through word-of-mouth. This additional requirement resulted in fewer respondents with less than a high school education; respondents aged younger than 35 years old; or respondents aged 55 years or older in Phase 3 compared with Phase 1, but we were successful in fulfilling the Phase 3 recruitment criteria set forth by the Census Bureau.

In the following tables, the demographic characteristics of the Chinese- and Korean-speaking participants are presented by phase and rounds.

Phase 1

Table 2-5 provides the demographic characteristics of the 43 Chinese-speaking participants from both rounds 1 and 2. Table 2-6 provides the demographic characteristics of the 43 Korean-speaking participants for both rounds.

Table 2-5. Demographics of Chinese Language Participants in Phase 1

Characteristics	Completed Interviews— Round 1		Completed Interviews— Round 2	
	Male 10	Female 12	Male 10	Female 11
Educational Attainment				
Less than high school graduate	5	4	4	6
High school graduate and no college degree	3	6	4	4
College graduate	2	2	2	1
Place of Birth				
Born in China	8	9	9	7
Born in Taiwan	1	1	0	2
Born in United States, HK, or Other	1	2	1	2
Year of Entry				
Living in United States 1 year ago	9	11	9	11
Not living in United States 1 year ago	1	1	1	0

(continued)

**Table 2-5. Demographics of Chinese Language Participants in Phase 1
(continued)**

Characteristics	Completed Interviews— Round 1		Completed Interviews— Round 2	
	Male 10	Female 12	Male 10	Female 11
Age				
34 or younger	2	1	2	1
35–54	2	7	4	5
55 or older	6	4	4	5
Language of Administration				
Mandarin	8	8	6	9
Cantonese	2	4	4	2
Total Number of Participants	22		21	

Table 2-6. Demographics of Korean Language Participants in Phase 1

Characteristics	Completed Interviews— Round 1		Completed Interviews— Round 2	
	Male 10	Female 12	Male 10	Female 11
Educational Attainment				
Less than high school graduate	0	3	1	2
High school graduate and no college degree	6	4	4	6
College graduate	4	5	5	3
Place of Birth				
Born in Korea	10	12	10	11
Born in United States or Other	0	0	0	0
Year of Entry				
Living in United States 1 year ago	9	11	9	11
Not living in United States 1 year ago	1	1	1	0
Age				
34 or younger	0	3	2	1
35–54	6	3	2	6
55 or older	4	6	6	4
Total Number of Participants	22		21	

Phase 2

Table 2-7 provides the demographic characteristics of the 42 Chinese-speaking participants from both rounds 1 and 2. Table 2-8 provides the demographic characteristics of the 42 Korean-speaking participants for both rounds.

Table 2-7. Demographics of Chinese Language Participants in Phase 2

Characteristics	Completed Interviews— Round 1		Completed Interviews— Round 2	
	Male 10	Female 10	Male 10	Female 12
Educational Attainment				
Less than high school graduate	7	2	8	2
High school graduate and no college degree	2	4	2	7
College graduate	1	4	0	3
Place of Birth				
Born in China	9	7	9	8
Born in Taiwan	0	2	0	3
Born in United States, HK, or Other	1	1	1	1
Year of Entry				
Living in United States 1 year ago	10	10	9	12
Not living in United States 1 year ago	0	0	1	0
Age				
34 or younger	2	1	2	1
35–54	3	5	3	6
55 or older	5	4	5	5
Language of Administration				
Mandarin	8	6	7	9
Cantonese	2	4	3	3
Total Number of Participants	20		22	

Table 2-8. Demographics of Korean Language Participants in Phase 2

Characteristics	Completed Interviews— Round 1		Completed Interviews— Round 2	
	Male 10	Female 10	Male 11	Female 11
Educational Attainment				
Less than high school graduate	1	2	0	3
High school graduate and no college degree	3	4	5	6
College graduate	4	6	6	2
Place of Birth				
Born in Korea	8	12	11	10
Born in United States or Other	0	0	0	1
Year of Entry				
Living in United States 1 year ago	8	12	10	11
Not living in United States 1 year ago	0	0	1	0
Age				
34 or younger	0	2	1	2
35–54	3	3	4	5
55 or older	5	7	6	4
Total Number of Participants	20		22	

Phase 3

Table 2-9 provides the demographic characteristics of the 44 Chinese-speaking participants from both rounds 1 and 2. Table 2-10 provides the demographic characteristics of the 44 Korean-speaking participants for both rounds.

Table 2-9. Demographics of Chinese Language Participants in Phase 3

Characteristics	Completed Interviews— Round 1		Completed Interviews— Round 2	
	Male 11	Female 13	Male 10	Female 10
Educational Attainment				
Less than high school graduate	0	4	1	1
High school graduate and no college degree	5	5	3	7
College graduate	6	4	6	2
Place of Birth				
Born in China	7	12	6	7
Born in Taiwan	1	1	1	2
Born in United States, HK, or Other	3	0	3	1

(continued)

Table 2-9. Demographics of Chinese Language Participants in Phase 3 (continued)

Characteristics	Completed Interviews— Round 1		Completed Interviews— Round 2	
	Male 11	Female 13	Male 10	Female 10
Year of Entry				
Living in United States 1 year ago	11	13	10	10
Not living in United States 1 year ago	0	0	0	0
Age				
34 or younger	3	3	1	3
35–54	4	7	7	4
55 or older	4	3	2	3
Language of Administration				
Mandarin	7	10	6	7
Cantonese	4	3	4	3
Total Number of Participants	24		20	

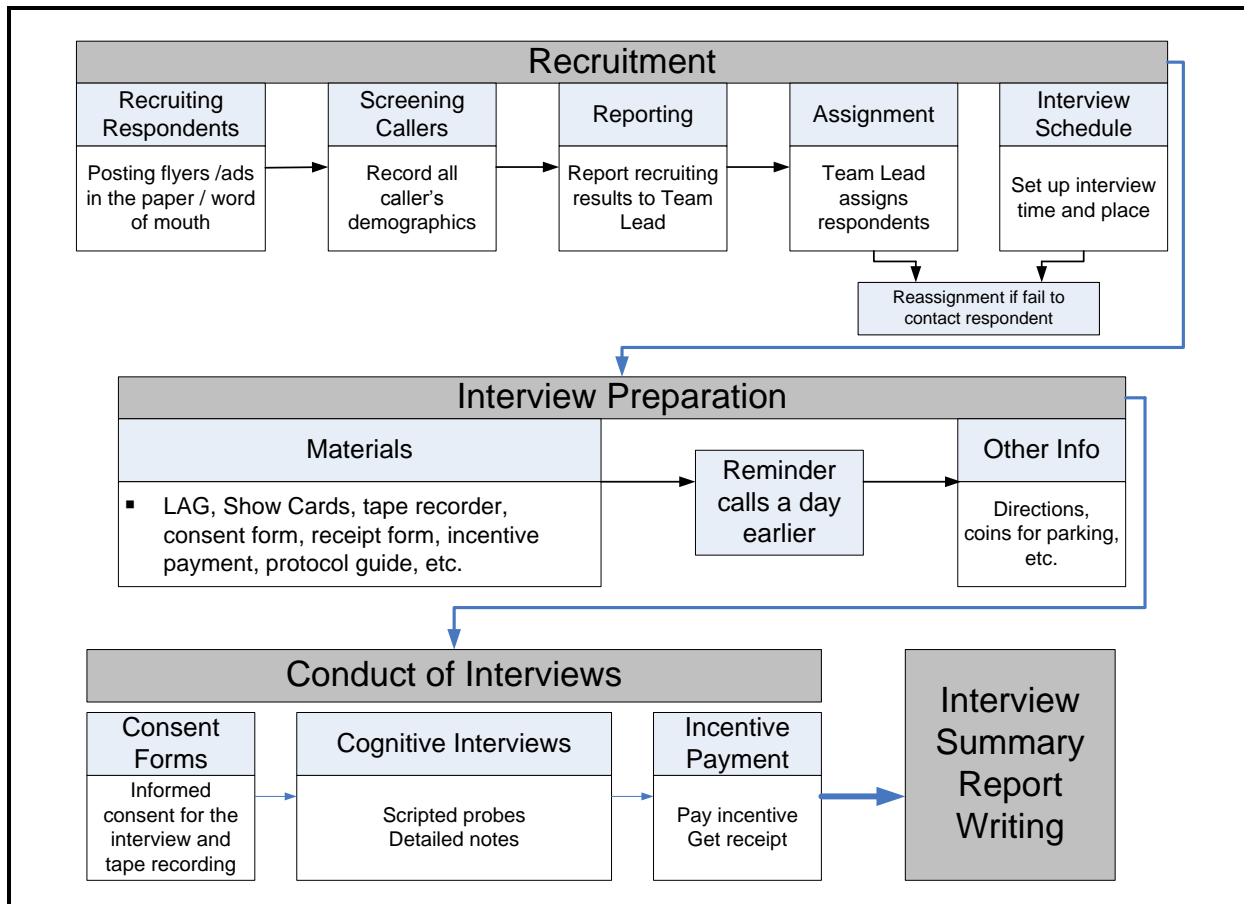
Table 2-10. Demographics of Korean Language Participants in Phase 3

Characteristics	Completed Interviews— Round 1		Completed Interviews— Round 2	
	Male 11	Female 12	Male 11	Female 10
Educational Attainment				
Less than high school graduate	1	0	1	1
High school graduate and no college degree	3	3	3	3
College graduate	7	9	7	6
Place of Birth				
Born in Korea	11	12	11	10
Born in United States or Other	0	0	0	0
Year of Entry				
Living in United States 1 year ago	10	12	10	11
Not living in United States 1 year ago	1	0	1	0
Age				
34 or younger	1	1	1	0
35–54	7	8	4	9
55 or older	3	3	6	1
Total Number of Participants	23		21	

2.7 Cognitive Interview Procedures and Conduct

As illustrated in Figure 2-1, each case of this study followed a rigorous design and a consistent flow of events: recruiting, preparing interviews, conducting cognitive interviews, and reporting results.

Figure 2-1. Case Flow of Events



At the beginning of the interview, the interviewers were required to read the informed consent statements to the respondents and ask for the approval to proceed and also for permission to audio record the interview. The interviewer would not initiate the interview, nor would the tape recorder be turned on until the respondents gave their approval by signing the informed consent form. Once the respondent's approval was obtained, the interviewer read a paragraph statement in the target language to help the respondent understand the research and its purpose.

Following the informed consent process, the interviewer let the respondent independently answer the survey questions while they observed and recorded any signs of confusion or difficulty the respondent expressed or when respondent left items blank or did not follow the instructions as intended. Based on lessons learned from Phase 1, we administered concurrent probing in round 1 and retrospective probing in round 2 of the subsequent phases.

Specifically, in round 1 of Phases 2 and 3, we divided the LAG into a set of questions with one theme and had respondents answer one set of questions at a time followed by

concurrent probing. This administration approach allowed better control of the length and flow of the interview, and helped identify issues the respondents had when they were actually answering the questions compared to the retrospective probing approach. Throughout the interview, the interviewer applied spontaneous probes to follow up on any observed problems, issues, or questions brought up by the respondent. In round 2, we used the retrospective probing approach—once the respondent finished filling out the LAG, the interviewer consulted the interview protocol, administered the scripted probes, and discussed the specific statements, phrases, or terms with the respondent question by question. Spontaneous probing was also used.

A debriefing section was administered at the end. At the conclusion of the interview, the interviewer followed the procedures set forth for the incentive payment to the respondent.

Summary reports for each interview were prepared and delivered to the Census Bureau on a flow basis. A half-day debriefing was held for each language team following the completion of all round 1 cognitive interviews. Chinese and Korean language experts reviewed the findings, discussed the translation problems, and suggested solutions to improve the translation by correcting the problematic wordings or syntactic structures. The recommendations were reported to the Census Bureau for review and final approval in a report. The report documented the findings identified in round 1 and the recommended modifications in the translation along with the justification for the changes. An in-person meeting was held at the Census Bureau after each round of interviewing.

All of the respondents interviewed were monolingual.³ Most interviews were conducted in the respondent's residence. Some respondents, however, preferred to be interviewed in other locations, such as a restaurant, a shopping area, or the library. Korean language interviews were conducted by two interviewers located in Illinois, and the remaining by another two interviewers in the District of Columbia/Virginia/Maryland metropolitan areas.

Chinese language interviews were conducted in Mandarin or Cantonese. All Cantonese interviews⁴ were conducted by the same interviewer located in Illinois, and the remaining interviews were conducted in Mandarin in Illinois, North Carolina, and the District of Columbia/Virginia/Maryland metropolitan areas. A variety of dialects are represented by the respondents, including Toishan, Shanghainese, Taiwanese, Fukian, Hakka, Sichuan, Tianjin, Yangzhou, Shanxi, Wenzhou, Dongbei, Shandong, Wenzhou, Hubei, Anhui, Wuhan, Chongqing, Shenyang, Yiwu, Zhejiang, and Fuzhou.

³ These respondents self-reported their English reading skills as "not well" or "not at all."

⁴ In Phase 1, a total of 12 of 43 respondents were interviewed in Cantonese. Among them, seven of them did not speak any Mandarin, three respondents spoke limited Mandarin, and two spoke Mandarin fluently. In Phase 2, 42 respondents participated in a Chinese language interview and 12 were interviewed in Cantonese: four of them did not speak any Mandarin, six respondents spoke limited Mandarin, and two spoke Mandarin fluently. In Phase 3, among the 44 Chinese-speaking respondents, 14 were interviewed in Cantonese. Among them, two did not speak any Mandarin, seven respondents spoke limited Mandarin, and five spoke Mandarin fluently.

3. FINDINGS AND RECOMMENDATIONS

This chapter summarizes the findings from the cognitive interviews. Results are grouped by the phase, LAG section, and the order the questions appear. The English source text is listed at the beginning of a section. The original translation (tested in the first round)⁵ and recommended wording based on the findings are presented in a tabular format, followed by a detailed discussion. In some instances, for space saving reasons, only relevant parts of the LAG question and corresponding translations may be shown.⁶

In reviewing the findings presented in this chapter, the reader is reminded that the sample of respondents is not statistically representative. Every effort was made to maximize the diversity of Chinese and Korean speakers that were recruited for this study; however, the results are qualitative in nature.

3.1 Overall Assessment of the Chinese and Korean Translations

Because of the “translation expert review” step, few translation errors were identified during pretesting. The cognitive interviews uncovered linguistic and sociocultural issues that may only be observed through testing with monolingual respondents. They were categorized according to the research framework set forth by Pan and Fond (2012):

- Linguistic rules
 - Complex sentence structure
 - Korean: Hancha-rooted words⁷ and phonetic expression
- Cultural norms
 - Ways of communication. For example, Chinese way of responding is to have the response follow the verb used in the question.
 - Reasoning and cultural conventions, such as confusion about “last get married” because multiple marriages are traditionally not culturally desirable.
- Social practice
 - No equivalent concept
 - Lack of knowledge of financial terms and U.S. government programs

⁵ The original translation used for round 1 testing in Phases 2 and 3 were edited prior to testing to adopt global changes that had been accepted in Phase 1.

⁶ A table that documents changes that affect multiple questions as well as minor changes can be viewed in Appendix A.

⁷ The Korean language may be written using Chinese characters, known as Hancha; and Korean script, known as Hangul. However, in the modern Korean language, Hangul is almost always exclusively written, as in the ACS LAG translation. Because some Korean vocabulary is derived from the Chinese language, even when it is written in Hangul, it may be unintelligible to the readers. In this report, we will discuss such words as “Hancha-rooted words.” We will refer to those words that are not derived from Chinese as Hangul. Although not every Hancha-rooted word is difficult because some Hancha-rooted words are immersed in Korean language and are commonly used, some Hancha-rooted words are considered more difficult compared to Hangul and some of them are only used as legal terms, not in everyday conversation.

- Inexperience with self-administered survey questionnaires
 - Questionnaire layout
 - Item nonresponse and process estimation
 - Use of terminology, such as “house, apartment, and mobile home”; “property”; or questionnaire routing instructions
 - Concept of an LAG.

After the completion of the cognitive interviews, Census Bureau sociolinguist conducted a usability testing of the Chinese LAG. Based on this testing, Census Bureau decided to modify the instructions about using the LAG in two places: on the cover page and on page 12. Findings and recommendations are documented in Appendix B.

3.2 Question-by-Question Assessments and Recommendations: Phase 1

Phase 1 covered instructions on the LAG cover page the Start Here box, and the Housing Section. Some items were also tested in Phase 2, but are discussed as a whole in this section.

Cover Page Instructions below Title

- This guide provides the translation of the American Community Survey questions, instructions, and answer categories that appear on your English version of the American Community Survey questionnaire.
- Find your answers in this guide, but then mark your response in the same question on your English version of the American Community Survey questionnaire.

	Chinese	Korean
Original Wording	<ul style="list-style-type: none"> • 本指南翻译英文版美国社区问卷调查表中的问题、说明和答案选项。 • 请在本指南中找到您的答案，然后再跟英文版美国社区问卷调查表对照，把答案标示在英文版内同一题号之下。 • This guide translates English version of the American Community Survey questionnaire’s questions, instructions, and answer categories. • Please find your answers in this guide, and compare it with English version of the American Community Survey questionnaire, and mark the answers in the same question on the English version. 	<ul style="list-style-type: none"> • 이 안내서는 미국 지역사회 조사를 위한 영문 설문지에 나오는 설문 문항, 작성 안내 및 응답 보기를 한국어로 제공하고 있습니다. • 이 안내서에서 자신의 답변을 찾아 미국 지역사회 조사 영문설문지의 동일한 질문에 대해 답변을 표시해 주십시오. • This guide provides the Korean language survey questions, instructions, and answer categories that appear on your English version of the American Community Survey questionnaire. • Please find your answers in this questionnaire and mark your responses on the identical question of the English version of the American Community Survey Questionnaire.

	Chinese	Korean
Recommended Wording	<ul style="list-style-type: none"> • 这是一份中文版指南。这份指南翻译了英文版美国社区问卷调查表中的问题、说明和回答选项。 • 请看中文版的题目并找到您的回答，然后对照两个版本，将您的答案写在英文版内同一题号之下。 • This is the Chinese version of a guide. This guide translates English version of the American Community Survey questionnaire’s questions, instructions, and answer categories. • Please look at the questions in the Chinese version and find your answers. And then compare the two versions, and mark your answers in the same question on the English version. 	<ul style="list-style-type: none"> • 이 안내서는 미국 지역사회 조사를 위한 영문 설문지에 나오는 설문 문항, 작성 안내 및 응답 보기를 한국어로 제공하고 있습니다. • 이 한국어 안내서를 참고하셔서 설문에 답하시되, 귀하의 응답은 이 안내서가 아닌 미국 지역사회 조사 영문 설문지에 표시해 주십시오. • This guide provides the Korean language survey questions, instructions, and answer categories that appear on your English version of the American Community Survey questionnaire. • Please fill out the survey by referring to this Korean language guide. Mark your responses onto the English version of the American Community Survey questionnaire, not onto this guide.

Chinese Language Interviews

In round 1, most respondents were confused by the original wording. It was not clear to them that it is the English version of the questionnaire on which respondents are asked to record their responses and that the Chinese LAG is provided for reference only. In round 2, we tested an alternative translation version to clarify the purpose of the LAG. In the first bullet point, the alternative translation attempts to establish first that there is a Chinese version of a guide, and only then does it introduce the Chinese version as the translation of the ACS in English. The second bullet point directs respondents to review the Chinese version first, rather than simply directing them to find their answers. This way, it is more logical to introduce the concept of marking the answers in a different version (the English version).

In general, the new translation worked well, and we recommend implementing it in the LAG. All respondents understood the first bullet point—that there are English and Chinese versions and that the Chinese version is a translation. Although most respondents understood that the second bullet is saying to mark their answers on the English version, some had trouble doing what the instructions say. They assumed that their responses would have to be marked on the translated LAG, which is written in their language, since they are not proficient enough in the English language. One respondent explained: “If you do not know English, you still have to fill out the form in Chinese in this Chinese form, because you

do not know how to write in English in the English version of the form.” It seems that the concept of the LAG is not natural to some respondents. This is more a pragmatic issue than a translation issue.

Korean Language Interviews

As with the Chinese findings, most respondents were confused by the original translation, so we presented an alternative translation for the second bullet point on a Show Card in round 2. When asked whether they preferred seeing the original or the alternative translation, most respondents pointed to the alternative translation: 이 안내서를 참고하셔서 미국 지역 사회 조사 영어 설문지에 귀하의 응답을 표시해 주십시오. (Please mark your responses onto the American Community Survey English questionnaire by referring to this guide.)

Respondents uniformly said that the alternative translation presented on the Show Card was easier to understand than the original translation. However, there was still some confusion. For example, a few respondents in round 2 pointed out that although the Show Card version was much easier to understand, it was not clear what they were supposed to do “by referring to this guide.” Our final recommended wording (shown in the table above) attempts to clarify the concept. It directs respondents to the presence of a Korean LAG and explains that responses should be marked on the English version of the questionnaire and not on the guide. However, modifying the translation may not necessarily communicate the concept of the LAG. As with the findings from the Chinese language interviews, this concept is not germane to non-English speakers. It made more sense to them to mark their answers in the version that they could read.

Start Here Box Instructions

How many people are living or staying at this address?

- INCLUDE everyone who is living or staying here for more than 2 months.
- INCLUDE yourself if you are living here for more than 2 months.
- INCLUDE anyone else staying here who does not have another place to stay, even if they are here for 2 months or less.
- DO NOT INCLUDE anyone who is living somewhere else for more than 2 months, such as a college student living away or someone in the Armed Forces on deployment.

	Chinese	Korean
Original Wording	<p>有多少人目前在这个地址居住或暂住？</p> <ul style="list-style-type: none"> • 请计算在此处居住或暂住超过2个月的人。 • 如果您在此处居住超过2个月，请把您自己计算在内。 • 如果有人没有其它固定住处，即使他们在此住不到2个月，也请把他们的计算在内。 • 请不要计算在其它地方居住超过2个月的人，例如离家上大学或者参军的人。 <p>How many people currently live or stay at this address?</p> <ul style="list-style-type: none"> • Please count people who live or stay in this place for over 2 months. • If you live at this place for over 2 months, please count yourself. • If someone doesn't have a fixed residence, even though they have not lived here for over 2 months, please count them. • Please don't count people who live at another place for more than 2 months, for example, those who left home to attend college or the military. 	<p>이 주소지에 살거나 머물고 있는 사람은 모두 몇 명입니까?</p> <ul style="list-style-type: none"> • 이 곳에서 2개월 넘게 살거나 머물고 있는 사람을 모두 포함하십시오. • 귀하께서 이 곳에서 2개월 넘게 살거나 머물고 있다면 본인도 포함하십시오. • 달리 있을 곳이 없어서 이 곳에 머무는 사람이 있을 경우, 그 기간이 2개월 이하라 하더라도 그 사람을 포함하십시오. • 집을 떠나 생활하는 대학생 또는 군복무 중인 사람 등 2개월 넘게 다른 곳에서 살고 있는 사람은 포함하지 마십시오. <p>How many people in total are living or staying at this address?</p> <ul style="list-style-type: none"> • <u>Please include</u> everyone who is living or staying here for more than 2 months. • <u>Please include</u> yourself if you are living or staying here for more than 2 months. • <u>Please include</u> anyone else who does not have another place to stay, even if they are here for 2 months or less. • <u>Please do not include</u> anyone who is living somewhere else for more than 2 months, such as a college student living away or someone in the Armed Forces on deployment.

	Chinese	Korean
Recommended Wording	<p>在这个地址的住宅目前有多少人居住或者暂住？</p> <p>请按照以下方法计算人数：</p> <ul style="list-style-type: none"> • 请计算在此居住或者暂住超过2个月的人。 • 如果您也在此居住超过2个月，请把您自己计算在内。 • 如果有人在此居住不到2个月，但是没有其他固定的住处，请仍然把他们计算在内。 • 请不要计算在其它地方居住超过2个月的人，例如离家上大学或参军的人。 <p>At this zhu zhai residence’s address, how many people currently live or stay? Counting people method:</p> <ul style="list-style-type: none"> • Please count people who live or stay in this place (ci) for over 2 months. • If you also live at this place (ci) for over 2 months, please count yourself.) • If someone doesn’t have a fixed residence, even though they have not lived here (ci) for over 2 months, please still count them. • Please don’t count people who live at another place for more than 2 months, for example, those who left home to attend college or the military. 	No changes recommended.

Chinese Language Interviews

When seeing the translation for “how many people are living or staying at this address,” many round 1 respondents interpreted “this address” to mean the area in which they lived. Thus, they provided the population for the entire neighborhood. In round 2, we tested an alternative translation that clarified that “this address” meant the residence at the address. Because the location was the point of confusion, we restructured the sentence to mention address earlier: 在这个住所的地址目前有多少人居住或者暂住？ (At this zhu suo residence’s address, how many people currently live or stay?) Chinese sentences usually show emphasis up front, so this topicalization (moving elements to topic position) may better communicate the idea. To denote residence at the address, this round 2 version was tested using 在这个住所的地址 (at this zhu suo residence’s address), but it read awkwardly to the respondents. Instead, 在这个地址的住宅 (at this address’s zhu zhai residence) sounded more

natural to round 2 respondents. Our final recommended wording incorporated this modification.

The inclusion/exclusion criteria were challenging to respondents with lower educational attainment. In round 1, we found that they understood each criterion on its own but not together. For example, a respondent thought that the second criterion (count self) superseded the first criterion (count all) because she did not know that the criteria build on one another. The recommended wording added grammatical particles to better connect the later bullet points to what had been described in a previous bullet points. For example, we used particles like “also” and “still.” We also recommend adding a title “counting method” before introducing the criteria so respondents will know that this information serves to count their household members. The vast majority of the respondents had no prior experience with self-administered questionnaires or surveys. The recommended wording may help “train” them to understand the difference between a question and an instruction.

In round 2, we were able to collect more respondent suggestions on making the translation sound more natural. For example, it would be sufficient to say 此 (ci) to mean “here,” rather than 此处 (ci chu); adding a 的 makes the phrase “another place to stay” sound more complete. Census Bureau sociolinguist also contributed to revising the third bullet point for naturalness.

Korean Language Interviews

No changes were recommended.

Person 1 Instruction

Person 1 is the person living or staying here in whose name this house or apartment is owned, being bought, or rented. If there is no such person, start with the name of any adult living or staying here.

	Chinese	Korean
Original Wording	<p>第一位人士是指拥有、购买或者租赁这所房子或公寓，并且住在这里的户主。如果拥有人或租赁人居住或暂住在其它地方，请将这所房子里住的任何一位成年人填写为第1个人。</p> <p>Person 1 is the head of household who owns, is going to buy, or rents this house or apartment, and also lives here. If the owner or renter lives or stays in some other places, please write down any adults who lives here as Person 1.</p>	<p>가구원 1이란 본인 이름으로 이 주택 또는 아파트를 소유, 구입 또는 임대(렌트)하여 이 곳에 살거나 머물고 있는 사람을 말합니다. 그런 사람이 없는 경우, 이 곳에 살거나 머물고 있는 성인 한 사람의 이름을 적어주십시오. 그 사람이 가구원 1이 됩니다.</p> <p>Person 1 here means the person living or staying here in whose name this house or apartment is owned or rented. If there is no such person, start with the name of any adult living or staying here. Then that person is regarded as Person 1.</p>

	Chinese	Korean
Recommended Wording	<p>注：第一位人士是指拥有、付贷款购买或者租赁这所房子或者公寓，并且住在这里的户主。如果拥有人或者租赁人不住在这里，请将这所房子里住的任何一位成年人填写为第1位人士。</p> <p>Person 1 is the head of household who owns, pays mortgage to buy, or rents this house or apartment, and also lives here. If the owner or renter does not live here, please write down any adults who lives here as person 1.</p>	<p>가구원 1이란 본인 이름으로 이 주택 또는 아파트를 소유하거나, 모기지를 내고 있거나, 혹은 임대(렌트)하여 이 곳에 살거나 머물고 있는 사람을 말합니다.</p> <p>Household member 1 is the person living or staying here in whose name this house or apartment is owned, paying mortgages, or rented (<i>rent</i> – phonetic translation).</p>

Chinese Language Interviews

The translation for Person 1 instructions was tested in both Phases 1 and 2. In the Phase 1 cognitive interviews, we noticed that respondents often referred to Person 1 as “the most important person” or “the first person [who lives here].” Although Person 1 could be the first resident or the most important person in the household, that is not the purpose of the instruction. Respondents likely made this interpretation because the concept of Person 1 had not crystallized for them, and they were just reacting to the translation 第一位人士. Person 1 is a constructed concept and one that needs to be consciously followed in answering the ACS questions. This concept can be challenging for respondents because they need to think of Person 1 in the third person, even though the respondent is Person 1. However, through two rounds of cognitive interviewing in Phase 1, we realized that the original translation could have contributed to respondent comprehension problems.

The original translation for the Person 1 instruction was adopted from the translation used on the decennial census form, including the use of the term 户主 (head of household) to describe the owner or renter who lives here. The sentence structure used here in the ACS differs from the decennial census form because the ACS’s structure refers to the *home* as “owned, being bought, or rented” and in the name of the owner or renter.

Following Phase 1, we recommended the following revised translation to make the information easier to digest: 请首先填写第 1 位人士，即是居住或者暂住在这里的户主。这所房子或公寓就是以这位户主的名义拥有、付贷款购买或者租用的。如果这个人本人不住在这里，请将在这个房子居住或者暂住的任何一位成年人填写为第 1 位人士。(First please fill out Person 1, who is the head of household living or staying here. This house or apartment is owned, being bought, or rented in this head of household’s name. If this person him or herself does not live here, then please write down any adult living or staying here as Person 1.).

This version restructures the original translation by breaking it into shorter sentences and reflects the home being owned, bought, or rented. It also starts the instruction by saying “please fill out Person 1.” That is the way Chinese speakers would expect to read an instruction, rather than the direct style in the English source text. Finally, we added the term “this person” to connect the “this person” reference in Question 2 of the Person 1 question that asks “How is this person related to Person 1” (see discussion in Person 1 Page Question 2).

We tested this version in the first round of Phase 2, and no major improvement was found. Thus, we recommended continuing to use the original wording, but make two modifications:

1. Translation for “being bought,” 购买 (buys), should be changed to 付贷款购买 (pays mortgage to buy). Similar phrasing “is buying” appears in Routing Instruction C, and Census Bureau confirmed that it does not mean “buying,” in general, but a person who is buying the home with a mortgage.
2. The end of the instruction says 填写为第 1 个人 (write down... as the first person), we suggested changing it to 填写为第 1 位人士 (write down... as Person 1) so that the translation for “Person 1” 第 1 位人士 is used consistently.

Testing in the second round showed that respondent’s comprehension about the Person 1 concept is greatly affected by whether he or she understands the “third-person reference.” Oftentimes, it is natural for the cognitive interview respondent to put him or herself down as Person 1 since the respondent is the person who is filling out the form. The respondent’s frame of reference comes from a first-person perspective, but he or she must refer to him or herself in the third person, a Person 1. In addition, lack of familiarity with survey conventions certainly contributed to respondent difficulties. For example, a respondent identified himself as Person 1 and acknowledged that his wife lived in the same household, but did not list her as Person 2. He reasoned that because his wife was a co-owner of the house, she was also Person 1 and therefore did not need to be listed separately. We are not sure how to ameliorate this type of issue within the parameters of translations. They are related to “social practice” in nature. The original English wording would need to be rewritten, but this is not an option at this time.

Our final recommendation is to use the original version, with the two modifications that have already been tested, and also revise the translation for “if there is no such person.” The translation for this phrase was: 如果拥有人或者租赁人居住或者暂住在其它地方 (if the owner or renter lives or stays in some other place). We recommended this revision: 如果拥有人或者租赁人不住在这里 (if the owner or renter does not live here). This recommendation was accepted.

Korean Language Interviews

No changes were recommended in Phase 1 testing. However, to be consistent with the changes accepted for the Chinese translation, the Korean translation was modified and further tested in Phase 2.

Based on the Census Bureau’s confirmation that “being bought” means “is paying mortgage to buy,” we modified the Korean translation of the Person 1 instruction and Routing Instruction C so that the revised translation clearly stated “구입을 위해 모기지를 내고 (is paying mortgage to buy).” However, the revised translation introduced new confusion. Out of 22 respondents who read these instructions in the second round of Phase 2 testing, two thirds of them commented that the revised wording was unclear about whether Person 1 lived “here,” and they said the wording contained two conflicting concepts. That is, the phrase 구입을 위해 모기지를 내고 (is paying mortgage to buy) means paying mortgages for purchase, but respondents considered that it was only possible for those who had already purchased homes to pay mortgage. Therefore, this phrase was not logical; it meant paying for something not yet purchased. In the respondent’s mind, when one owned a home with a mortgage, he or she had already purchased the home.

We recommended taking out 구입을 위해 (for purchase) from the round 2 translation since it was the source of confusion, and this recommendation was accepted. Because the same wording appears in Routing Instruction C, this revision was applied there. In addition, a few respondents complained that the phrase 가구원 1 (Household Member 1) is problematic, but not because of its translation. The phrase 가구원 1 is followed by a syllable 이 (postpositional particle), and the letter “o” in the Korean alphabet looks very similar to the digit “0.” Together, this phrase reads 가구원 1 이, which can look like Person 10, not Person 1. To avoid undue confusion, we underlined the word 가구원 1 (Household Member 1) and applied the underline in other questions that had the same phrase structure.

Person 1 Page Question 2

How is this person related to Person 1?

Person 1

	Chinese	Korean
Original Wording	这个人 与 第1位 人士 是什么 关系 ?	이 사람은 가구원 1과 어떤 관계입니까?
	<input checked="" type="checkbox"/> 第1位 人士	<input checked="" type="checkbox"/> 가구원 1
	How is this person related to Person 1?	How is this person related to Person 1?
	<input checked="" type="checkbox"/> Person 1	<input checked="" type="checkbox"/> Person 1

	Chinese	Korean
Recommended Wording	<p>这个人与第1位人士是什么关系？</p> <p><input checked="" type="checkbox"/> 这个人就是第1位人士（这一题不用答）</p> <p>How is this person related to Person 1?</p> <p><input checked="" type="checkbox"/> This person is Person 1 (There is no need to answer this question).</p>	<p>이 사람은 가구원 1과 어떤 관계입니까?</p> <p><input checked="" type="checkbox"/> 이 사람이 <u>가구원 1</u>이 됩니다(응답할 필요 없음)</p> <p>How is this person related to Household member 1?</p> <p><input checked="" type="checkbox"/> This person is <u>Household Member 1</u> (there is no need to answer this question).</p>

Chinese Language Interviews

The translation for Person 1 Page Question 2 was tested in both Phases 1 and 2. We found that it was a source of confusion for many respondents during our Phase 1 testing because it refers to a third person (“this person”) and Person 1 (another third-person reference) that they had identified earlier. The presence of the premarked box was also a surprise to them, especially those who were not familiar with this survey convention. Because the question cannot be altered at this time, we tested changing the label of the answer category from “Person 1” to “This person is Person 1.” We reasoned that this change could at least explain to whom “this person” refers. However, our testing of this change in the first round of the Phase 2 testing showed no major improvement. Only a few respondents were able to understand what this change intended to clarify. We also found that the reference to “this person” was generic to many respondents, and they did not know to whom it referred.

In the second round, we added a phrase in parentheses to inform respondents *not* to consider Question 2, like this: (这一题不用答) (There’s no need to answer this question). This strategy was effective in the sense that respondents knew that the question could be ignored, thus providing little chance for confusion. However, it is important to note that this is a pragmatic solution and is not rooted in any translation changes. It seems that no amount of “tweaking” could inform respondents about the right way to interpret this question in a third-person reference. Being able to interpret this question in a third-person reference might be a skill that not all respondents have. Because the question cannot be altered, adopting a pragmatic solution like this was accepted.

Korean Language Interviews

Like the Chinese translation, the Korean translation for Person 1 Page Question 2 was also tested in both Phases 1 and 2. The majority of the Korean-speaking respondents in Phase 1, including those who understood the Person 1 instruction, also reported difficulty with this question. They were perplexed by the premarked answer category “Person 1” and did not know to whom “this person” referred. As with the findings from the Chinese language

interviews, Korean-speaking respondents could not make sense of the third-person use of “this person” and did not associate it with Person 1. It made sense to them only when they assumed that “this person” referred to themselves—the person who was filling out the form. We observed that several respondents wrote “self,” “father,” or “spouse” as their answer here, and indicated that they did not understand the purpose of the premarked box. A few respondents were so confused that they were unable to proceed to the next question or commented that the premarked box was a printing error.

For Phase 2 round 1 testing, we adopted the same approach that was recommended for the Chinese translation, which was to change the translation of the answer category label to say “This person is Person 1.” We found some improvement. However, five out of 20 respondents were still unable to figure out what this question meant. Some pointed out that a relationship is something between people, not with oneself. Similar to the recommendations made for the Chinese translation, we recommended adding the pragmatic solution informing respondents not to answer this question 응답할 필요 없음 (There is no need to answer this question), and we tested it in the second round. In that round, six out of 22 respondents were still not able to figure out to whom “this person” referred; however, they understood that they did not have to do anything here, and they were relieved when they were assured that they did not have to answer this question. Since this question itself cannot be modified at this time, we recommended adopting this pragmatic approach of advising respondents not to answer Question 2.

Housing Section Question 1

Which best describes this building?

Include all apartments, flats, etc., even if vacant.

- A mobile home
- A one-family house detached from any other house
- A one-family house attached to one or more houses
- A building with 2 apartments
- A building with 3 or 4 apartments
- A building with 5 to 9 apartments
- A building with 10 to 19 apartments
- A building with 20 to 49 apartments
- A building with 50 or more apartments
- Boat, RV, van, etc.

	Chinese	Korean
Original Wording	<p>哪句话最符合这个住处的情况？</p> <p><i>把所有公寓、单元房等都算上，即使空置的房屋也算。</i></p> <ul style="list-style-type: none"> <input type="checkbox"/> 移动式房屋 <input type="checkbox"/> 独立式房屋 <input type="checkbox"/> 联排房屋 <input type="checkbox"/> 包含两套公寓的建筑物 <input type="checkbox"/> 包含3或4套公寓的建筑物 <input type="checkbox"/> 包含5到9套公寓的建筑物 <input type="checkbox"/> 包含10到19套公寓的建筑物 <input type="checkbox"/> 包含20到49套公寓的建筑物 <input type="checkbox"/> 包含超过50套公寓的建筑物 <input type="checkbox"/> 船只、旅行拖车、面包车等 <p>Which wording best corresponds to this residence's situation?</p> <p><i>Count all apartments, unit houses, etc., even vacant homes should be counted.</i></p> <ul style="list-style-type: none"> <input type="checkbox"/> Building structure includes 2 apartments <input type="checkbox"/> Building structure includes 3 or 4 apartments <p>[The rest of the answer categories are omitted for space-saving reasons.]</p>	<p>다음 보기 중 이 건물의 종류를 가장 잘 설명하고 있는 것은 무엇입니까?</p> <p>빈 아파트 등도 포함해서 응답해 주십시오.</p> <ul style="list-style-type: none"> <input type="checkbox"/> 이동식 주택 <input type="checkbox"/> 다른 주택과 분리되어 있는 1가구 주택 <input type="checkbox"/> 1개 이상의 주택과 연결된 1가구 주택 <input type="checkbox"/> 2가구 아파트 건물 <input type="checkbox"/> 3-4가구 아파트 건물 <input type="checkbox"/> 5-9가구 아파트 건물 <input type="checkbox"/> 10-19가구 아파트 건물 <input type="checkbox"/> 20-49가구 아파트 건물 <input type="checkbox"/> 50가구 이상 아파트 건물 <input type="checkbox"/> 보트, 화장실과 주방이 딸린 차(캠핑카, RV 등), 승합차(밴) 등 <p>Which of the following best describes type of this building?</p> <p><i>Include apartments including vacant ones.</i></p> <ul style="list-style-type: none"> <input type="checkbox"/> A mobile home <input type="checkbox"/> One-family house detached from any other house <input type="checkbox"/> One-family house attached to one or more houses <input type="checkbox"/> An apartment building with 2 units <input type="checkbox"/> An apartment building with 3-4 units <p>[The rest of the answer categories are omitted for space-saving reasons.]</p>

	Chinese	Korean
Recommended Wording	<p>下列哪个选项最能形容这个房屋的类型？ 注：请包括楼房内所有的公寓、单元房等 (空置的也要包括在内)</p> <p><input type="checkbox"/> 移动式房屋</p> <p><input type="checkbox"/> 独立式房子</p> <p><input type="checkbox"/> 联排房子</p> <p><input type="checkbox"/> 一座有2套公寓的楼房</p> <p><input type="checkbox"/> 一座有3套或者4套公寓的楼房</p> <p><input type="checkbox"/> 一座有5套到9套公寓的楼房</p> <p><input type="checkbox"/> 一座有10套到19套公寓的楼房</p> <p><input type="checkbox"/> 一座有20套到49套公寓的楼房</p> <p><input type="checkbox"/> 一座有50套或跟多套公寓的楼房</p> <p><input type="checkbox"/> 船只、旅行拖车、面包车等</p> <p>Which of the following best describes this house home's type? <i>Note: please include a building's entire apartments, flats, etc. (also include vacant ones.</i></p> <p><input type="checkbox"/> One ("zhuo") building that has two apartments</p> <p><input type="checkbox"/> One ("zhuo") building that has 3 or 4 apartments</p> <p>[The rest of the answer categories are omitted for space-saving reasons.]</p>	<p>이 집 건물의 형태를 가장 잘 설명하고 있는 것은 무엇입니까?</p> <p><i>이 건물이 아파트일 경우, 총 몇 가구가 살 수 있는지 응답해 주십시오.</i></p> <p><input type="checkbox"/> 이동식 주택</p> <p><input type="checkbox"/> 단독 주택(싱글 하우스)</p> <p><input type="checkbox"/> 다른 집과 연결된 1가구 주택</p> <p><input type="checkbox"/> 2가구 아파트 건물</p> <p><input type="checkbox"/> 3-4가구 아파트 건물</p> <p><input type="checkbox"/> 5-9가구 아파트 건물</p> <p><input type="checkbox"/> 10-19가구 아파트 건물</p> <p><input type="checkbox"/> 20-49가구 아파트 건물</p> <p><input type="checkbox"/> 50가구 이상 아파트 건물</p> <p><input type="checkbox"/> 보트, 화장실과 주방이 딸린 차(캠핑카, RV 등), 승합차(밴) 등</p> <p>Which best describes the physical shape of this building? <i>If this is an apartment building, please count how many units are there in this building in total.</i></p> <p><input type="checkbox"/> A mobile home</p> <p><input type="checkbox"/> Detached house (Single house)</p> <p><input type="checkbox"/> One-family house attached to other homes</p> <p><input type="checkbox"/> An apartment building with 2 units</p> <p><input type="checkbox"/> An apartment building with 3-4 units</p> <p>[The rest of the answer categories are omitted for space-saving reasons.]</p>

Chinese Language Interviews

Question Text

We did not observe major difficulty in round 1 with the original translation. Two modifications were made, however, for round 2. First, we modified the Chinese wording in the question text so that it is consistent with the translation used in questionnaire Routing Instruction A. Second, the Census Bureau analyst noted that the English term "building" needs to be applied and suggested 楼房. The original translation had used the generic term 住处 (residence) because not all housing types listed are called "buildings" in Chinese. In round 2, several respondents were surprised by the question because they did not consider

their house to be a 楼房. We recommend using 住处 (residence) or 房屋 (house home) to mean building in the question text so that it matches better with respondents' expectations (no major issues were observed in round 1 with the use of 住处 [residence]). Census Bureau approved using 房屋 (house home) to denote the concept of "building" that is in the English wording. However, the translation for the answer categories should not use generic terms, they should use "building" (楼房) since it mentions multiple apartments, thus mentioning a building will make sense to respondents. We also recommend starting the question with 下列哪个选项 (which of the following) to call to respondents' attention that the list of answer categories provides an approximate description for where they live.

Italic Explanation below Question Text

Respondents were confused by the original sentence. First, they read it as part of the question text because they did not know that the italic text is intended to be an additional explanation. We recommended preceding the translation with a header "Note" to alert respondents that it is a notation. The second issue about the original translation was that the sentence is too concise for the Chinese way of communication.

After round 1, we recommended creating more context for the communication pattern among Chinese speakers, and then explain what the respondent needs to do: 注：如果这个住处是公寓或者单元房，请把住处内所有公寓、单元房等都算上（即使空置也算）。(Note: If this residence is an apartment or unit house, please count all apartments, flats, etc. at this residence [even vacant ones should be counted]). However, this recommendation was not accepted. Census Bureau asked that the conditional clause be deleted, and the second half of the sentence be rephrased to say: 请包括楼房内所有公寓单位、单元房（空置房也要包括在内）。(please include the building's entire apartment units, flats [also include vacant rooms]). The word "etc." was omitted.

In round 2, we learned that 公寓单位 (apartment units) can just say 公寓 (apartments) because it is clear that it refers to the individual units because the word 楼房 (building) is used. The wording 空置房 (vacant rooms) needed to be revised because it made some respondents think of the individual vacant rooms in their own home, not for the entire building. Our final recommendation built upon the Census Bureau's suggestion post-round 1, but we revised it to avoid potential misinterpretation. We also added the translation for "etc." that was omitted. 注：请包括楼房内所有的公寓、单元房等（空置的也要包括在内）。(Note: please include the building's entire apartments, flats, etc. [also include vacant ones]).

Answer Categories

No major issues were observed in round 1 with the translation of the answer categories. For round 2 testing, Census Bureau asked that the answer categories for "a building with # apartments" be rephrased to say一座有#套公寓的楼房. The term一座 is a unit that describes the building here, but we learned that it is used to describe a single unit apartment in Hong Kong. We still recommend using this wording because we found that Hong Kong

respondents were able to discern what the translation means from the context and provided a response. We do want to point out that all respondents took a while to make sense of the list of answer categories, especially the description about “attached” or “detached” homes because that is not the way respondents typically talk about homes in their everyday language.

Korean Language Interviews

Question Text

The original translation for this question literally means “which best describes the type of this building.” As a result, some respondents interpreted it to mean whom this building was for, such as for seniors or for low-income residents, or whether this building was privately owned versus government sponsored. To avoid this misunderstanding, we recommended replacing 종류 (type) with 형태 (physical shape). We also observed some respondent difficulty with what “this building” referred to in this question. The confusion resulted because the LAG starts with an instruction that uses 집 (home) to refer to a respondent’s residence but uses 건물 (building) in the Housing Section. This discrepancy made several respondents doubt whether “this building” was elsewhere. To reduce confusion, we recommended inserting 집 (home) in front of 건물 (building), like this: 이 집 건물 (this home building). These changes worked well in round 2.

Italic Explanation below Question Text

The italic explanation text was somewhat problematic. In Korean, 아파트 (*apatu*, originated from apartment) means both a whole apartment building and an individual apartment unit. In most cases, people use 아파트 (*apatu*, apartment) to refer to an apartment building and use 집 (home) to refer to a place that houses themselves, regardless of its form. Because of this linguistic practice, some respondents in round 1 associated 빈 아파트 (vacant apartments) with an empty apartment building in which no one lives. For people to think of “vacant units” in a multihousing building, we tested an alternative translation version using a Show Card in round 2 without the mention of 아파트 (*apatu*, apartment): 이 건물 안에 빈 집이 있다면, 그것도 포함해서 응답해 주십시오 (Include all homes in this building, even if vacant). This worked well to denote “even if vacant” to round 2 respondents, but we learned that using the word “home” was not clear enough in some cases. For example, some respondents thought 빈 집 (vacant home[s]) meant a vacant, second home they own. Another townhouse resident counted the number of vacant townhomes attached to his, thinking that the italic instruction asked him to do so. Our final recommendation combined the original and round 2 versions by specifying that this information is only applied to those living in apartments, and that the question is asking about the number of units in the apartment building like this: 이 건물이 아파트일 경우, 총 몇 가구가 살 수 있는지 응답해 주십시오. (If this is an apartment building, please count how many units are there in this building in total). This recommendation was approved by the Census Bureau.

Answer Categories

The original translation for “a one-family house detached from any other house” was lengthy and contained a lot of information. We tested a simplified version using a Show Card in both rounds, and respondents felt that it was much easier to understand than the original translation. This version consisted of two parts: 단독 주택 (detached house—which is very commonly used to refer to this type of building in Korea) and 싱글하우스 (phonetic translation of “single house”) in parentheses as an example for those who are accustomed to what this type of home is called in the United States.

The original translation for “a one-family house attached to one or more houses” was also problematic in round 1 because of its length and amount of information embedded. Some respondents misunderstood the term and interpreted it as a cottage/guesthouse annexed to a main house building, or a single house with multiple flats where each flat was occupied by different households. When a simplified translation, 다른 집과 연결된 1 가구 주택 (one-family house attached to other homes), was tested in round 2, it worked better than the original version. However, it was not how respondents would describe this type of house. About half of round 2 respondents voluntarily suggested that this term ought to say 타운하우스 or 타운홈 (phonetic translation for townhouse or townhome) or that they should be included in the parentheses. We recommended adding this example to say 다른 집과 연결된 1 가구 주택 (타운하우스 등) (one-family house attached to other homes [townhouse, etc.]); however, this was not accepted by the Census Bureau. Because the recommended wording was not accepted, we suggest implementing the version tested in round 2, with the known limitations in mind.

Housing Section Question 3

When did **PERSON 1** (listed on page 2) move into this house, apartment, or mobile home?

	Chinese	Korean
Original Wording	第一位人士 (见第2页) 何时搬进这所房屋、公寓或移动式房屋?	가구원1 (2쪽에 기록하신 성인) 은 언제 이집(주택, 아파트 또는 이동식 주택)으로 이사했습니까?
	When did PERSON 1 (see page 2) move into this house, apartment or mobile house?	When did Person 1(an adult that you have listed on page 2) move into this home (house, apartment or mobile home)?

	Chinese	Korean
Recommended Wording	<p>第1位人士何时搬进这所房子、公寓或者移动式房屋？（第1位人士是您在第2页所填的人）</p> <p>When did Person 1 move into this house, apartment or mobile home? (Person 1 is the person you wrote in page 2).</p>	<p>2페이지에 기록하신 가구원 1은 언제 이 집(주택, 아파트 또는 이동식 주택)으로 이사했습니까?</p> <p>When did <u>Person 1</u> that you have listed on page 2 move into this home (house, apartment or mobile home)?</p>

Chinese Language Interviews

Some respondents had trouble with the reference to page 2 because they had problems determining who Person 1 was or had forgotten what the term “Person 1” referred to, thinking that it was “the first person” or “the most important person.” To create more context for the respondents, the recommended wording states “(listed on page 2)” in a complete sentence. This wording worked well in round 2.

Korean Language Interviews

As with the findings from the Chinese language interviews, some respondents did not understand the Person 1 definition or had a hard time recalling whom they listed as Person 1 on page 2 and assumed that it was the head of the household or the respondent himself or herself. The recommended wording worked well in round 2. It dropped the word 성인 (an adult) from the original translation and used the phonetic translation for “page” (페이지) because it is more commonly used. The translation was also restructured so that the reference to page 2 was mentioned first.

Housing Section Routing Instruction A

Answer questions 4–6 if this is a HOUSE OR A MOBILE HOME; otherwise, SKIP to question 7a.

	Chinese	Korean
Original Wording	<p>如果这个住处是房屋或移动式房屋，请回答第4题到第6题，否则跳到第7a题。</p> <p>If this residence is a house or mobile house, please answer question 4 to question 6, otherwise skip to question 7a.</p>	<p>이 집이 주택이나 이동식 주택인 경우 질문 4,5,6을 응답해 주십시오. 그렇지 않은 경우, 아래 질문들을 건너 뛰어 질문7a부터 응답해 주십시오.</p> <p>Answer questions 4, 5, 6 if this is <u>a house or a mobile home</u>. Otherwise, <u>skip</u> questions below and answer question 7a and on.</p>

	Chinese	Korean
Recommended Wording	<p>填表说明：如果这个住处是<u>房子或者是移动式房屋</u>，请回答第4题到第6题。如果这个住处是公寓或者其它类型，则<u>跳到第7a题</u>。</p> <p>Form-taking instruction: if this residence is a house or mobile home, please answer question 4 to question 6. If this residence is an apartment or other types, then skip to question 7a.</p>	<p><u>이 집이 주택이나 이동식 주택인 경우 질문 4부터 질문 6까지</u> 응답해 주십시오. 만약 이 집이 아파트나 다른 종류라면, <u>아래 질문들을 건너 뛰어</u> 질문 7a부터 응답해 주십시오.</p> <p><i>Answer question 4 through question 6 if this is a <u>house or a mobile home</u>. If this is an apartment or something else, <u>skip</u> questions below and answer question 7a and on.</i></p>

Chinese Language Interviews

Very few respondents were able to manage questionnaire routing instructions; many did not know what they were or did not notice them. To help respondents better grasp what the instructions are asking them to do, we recommended adding more context. Specifically, instead of saying “otherwise,” state the condition “if this residence is an apartment or other type” for the respondent to heed. We also recommended adding a heading “form-taking instructions” to precede the actual instructions to inform respondents that these are instructions for filling out the form.

In addition, underlining was used to denote words intended to be emphasized when they are shown in all caps in the English original version. (Chinese characters do not use roman letters and therefore cannot be shown in all caps.) We tested whether respondents could interpret the underlining of SKIP as “emphasis,” and most respondents correctly understood the intention of underlining.

In round 2, some respondent difficulties were still observed. These issues may not be readily addressed through translation because they relate to familiarity with survey conventions. For example, a few respondents interpreted the routing instruction to mean that they should NOT answer Question 7 because the routing instruction says only to answer Questions 4 through 6.

Korean Language Interviews

The round 1 translation uses 주택 for a house, which can mean both a one-family house and a generic housing unit in Korean. When it refers to a one-family house only, 단독 주택 (detached house) is often used. Because of this linguistic practice, some respondents had trouble thinking of what could possibly be “otherwise” when they saw 주택 as a generic term that could include all kinds of housing units. As a result, some respondents who lived in an apartment or a condo did not skip Questions 4 through 6 as intended.

For better understanding, we replaced “otherwise” with a more explanatory phrase, 만약 이 집이 아파트나 다른 종류라면 (if this is an apartment or something else) in the round 2 translation. With the revised translation, none of the problems we noted previously were observed in round 2, confirming that stating the “otherwise” condition helped respondents interpret this instruction as intended.

Although our final recommendation retains what was changed in the round 2 translation, we also propose replacing 질문 4, 5, 6 (Questions 4, 5, 6) with 질문 4 부터 질문 6 까지 (Question 4 through Question 6) for natural reading. This change would be consistent with our suggestion to use 질문 16 부터 20 까지 (Question 16 through Question 20) instead of 질문 16–20 에 (Questions 16–20) in Routing Instruction C.

Housing Section Question 4

How many acres is this house or mobile home on?

[skip instruction]

Less than 1 acre → SKIP to question 6

	Chinese	Korean
Original Wording	<p>这所房屋或移动式房屋占地多少英亩？</p> <p>How many acres does this house occupy?</p>	<p>이 주택 또는 이동식 주택(및 토지)이 차지하는 면적은 에이커 단위로 얼마입니까?</p> <p>[skip instruction]</p> <p>→ 아래 질문들을 건너뛰어 질문 6 부터 응답해 주십시오.</p> <p>How many acres is this house or mobile home (including land area) occupies?</p> <p>[skip instruction]</p> <p>→ <u>Skip</u> questions below and answer question 6 and on.</p>
Recommended Wording	<p>这所房子或者移动式房屋占地多少英亩？ (注：一英亩相当于4,000 平方米)</p> <p>How many acres does this house occupy? (Note: 1 acre is about 4,000 square meters)</p>	<p>이 주택 또는 이동식 주택(및 토지)이 차지하는 면적은 에이커 단위로 얼마입니까? (1에이커는 1230평에 해당하는 면적입니다.)</p> <p>[skip instruction]</p> <p>→ 다음 질문을 건너뛰어 질문 6 부터 응답해 주십시오.</p> <p>How many acres is this house or mobile home (including land area) occupies? (1 acre is a unit of area that corresponds to 1,230 pyoung.)</p> <p>[skip instruction]</p> <p>→ <u>Skip</u> the next question and answer question 6 and on.</p>

Chinese Language Interviews

None of the respondents knew how big 1 acre was, so they chose to leave the question blank. In round 2, we tested whether it helped respondents to answer this question when a familiar metric unit was mentioned: “1 acre is approximately 4,000 square meters.” We learned that this wording was helpful only to a handful of respondents because most respondents did not know how big 4,000 square meters was. Consequently, we suggested modifying the phrase about the conversion and using “ares” (公亩) instead of square meters. However, Census Bureau sociolinguist pointed out that “ares” (公亩) may be an obsolete concept and suggested to continue using square feet as a reference point. The main issue with this question was not that respondents needed to know the exact size of an acre, but rather that they needed to be able to appreciate how big it is. The 4,000 square feet cited conveys a sense of a large piece of land and may help respondents appreciate the size of an acre and thus locate an answer category that fits their situation.

Korean Language Interviews

As with the findings in the Chinese language interviews, acreage was not a familiar unit of area to Korean-speaking respondents. We added an example of how big one acre is if it is converted into 평 (pyoung) in parentheses. The unit 평 (pyoung) is commonly used in Korea to measure a piece of land. Although most respondents still did not know how big one acre was, they were able to guess its size with the reference to the 평 equivalent.

In addition, the original translation for “SKIP to Question 6” next to the first answer category gives a false impression that there is more than one question to skip. To correct this translation error, we recommended replacing 아래 질문들 (questions below) with 다음 질문 (the next question).

Housing Section Question 5

IN THE PAST 12 MONTHS, what were the actual sales of all agricultural products from this property?

	Chinese	Korean
Original Wording	在最近12个月中，在这项房地产上实际卖出的所有农产品有多少收入？ <input type="checkbox"/> 无	지난 12개월 동안 이 부동산에서 생산된 농산물의 실제 매출액은 모두 얼마였습니까? <input type="checkbox"/> 없음
	In the past 12 months, on this real estate property, how much income came from all the agricultural products that were actually sold? <input type="checkbox"/> None [The rest of the answer categories are omitted for space saving-reasons.]	<u>In the past 12 months</u> , what were the actual sales of all agricultural products from this property? <input type="checkbox"/> None

	Chinese	Korean
Recommended Wording	<p>在最近12个月中，从这个住宅以及院地出售的所有农产品有多少实际销售额？</p> <p><input type="checkbox"/> 没有农产品或者没有农产品出售</p> <p>In the past 12 months, how much was the actual sale amount of all agricultural products sold at this housing unit and yuan land?</p> <p><input type="checkbox"/> no agricultural products or no sales of agricultural products</p> <p>[The rest of the answer categories are omitted for space-saving reasons.]</p>	<p>지난 12개월 동안 이 집(및 토지)에서 생산된 농산물의 실제 매출액은 모두 얼마였습니까?</p> <p><input type="checkbox"/> 없음</p> <p><i>In the past 12 months</i>, what were the actual sales of all agricultural products from this home (including land area)?</p> <p><input type="checkbox"/> None</p> <p>[The rest of the answer categories are omitted for space saving-reasons.]</p>

Chinese Language Interviews

After round 1, the Census Bureau confirmed that this question focuses on the actual sales, not income as presented in the original translation. We tested an alternative version in round 2: 在最近 12 个月中，在这个住宅以及土地上实际卖出了多少农产品？ (In the past 12 months, how much agricultural products were sold at this housing unit and land?). However, 多少 could mean both “how much” and “how many” in Chinese. If respondents interpreted it to be the latter, there would be a mismatch between the question and the answer categories, which are in a dollar amount. Our final recommended wording attempts to fix this issue: 在最近 12 个月中，从这个住宅以及院地出售的所有农产品有多少实际销售额？ (In the past 12 months, what were the actual sales amount of all agricultural products sold from this property?). We also recommended providing more context in the first answer category. Instead of 无 (none), we tested 没有农产品或者没有农产品出售 (no agricultural products or no sales of agricultural products). We believe this wording will help respondents locate the answer category quicker, especially because the Chinese translation for “none” is displayed in one single character 无. It can be missed inadvertently, leading to potential item nonresponse.

In addition, we learned in round 1 that 房地产 (fang di chan) sounded awkward to respondents even though it was the proper translation for “property.” This difficulty was evidenced by respondents’ saying 房产 (fang chan) or 地产 (land chan) in a vernacular way. It was also confusing because this term is usually used to describe a realtor’s office, as in 房地产公司 (fang di chan company). To communicate the concept of “property” in a pragmatic way, the Census Bureau sociolinguist suggested saying “housing unit and land” because that is what constitutes a property. We tested two versions in round 2: 住宅以及土地 (housing unit and soil land) and 住宅以及院地 (housing unit and yuan land). We recommended implementing 住宅以及院地 (housing unit and yuan land) because respondents almost always described the land attached to the housing unit as a 院 (yuan).

Korean Language Interviews

The original translation for “property” 부동산 was the proper term to use in the translation. However, it became confusing to some respondents in round 1 because the term can have multiple meanings. Depending on contexts, 부동산 could mean “asset” because investing in real estate properties is the most sought-after investment type in Korea. 부동산 could also mean a realtor’s office. In round 2, we replaced it with 이 집(및 토지) (this home [including land area]). Most respondents understood that 이 집(및 토지) referred to their housing unit and the land area, confirming that the recommended translation corrected the problem observed in the first round. We also recommended providing more context in the first answer category: 매출액 없음 (No sales amount). However, Census Bureau instructed that the original wording 없음 for “none” be used.

Housing Section Question 6

Is there a business (such as a store or barber shop) or a medical office on this property?

	Chinese	Korean
Original Wording	这项房地产上是否有任何商家（例如商店或理发店）或医疗机构？	이 부동산에는 사업체(상점, 이발소 등) 또는 병원/의원이 있습니까?
	On this real estate property, is there any business/merchant (for example a store or barbershop) or medical institute?	Is there a business (such as a store or barber shop) or a medical office on this property?
Recommended Wording	是否有人在这个住宅以及院地上开店做生意（例如商店或者理发店）或者开设医疗机构？	이 집(및 토지)에는 사업체(상점, 이발소 등) 또는 병원/의원이 있습니까?
	Is anyone operating a shop to do business (for example store or barber shop) or a medical institute at this housing unit and yuan land?	Is there a business (such as a store or barber shop) or a medical office on this home (including land area)?

Chinese Language Interviews

The round 1 translation worked well. However, the translated term for “business,” 商家, could imply a large-scale business, like a Wal-mart. There are six other ways to say “business” in Chinese, but none of them fit the current question structure in a natural way. When we restructured the translation to say “do business” instead of “[there is] a business,” it fixed the problem observed in round 1 and sounded quite natural. All respondents understood the revised translation in round 2, and we recommended implementing the translation.

Korean Language Interviews

No changes were recommended other than implementing the accepted translation for “property” discussed in Question 5.

Housing Section Question 7a

How many separate rooms are in this house, apartment, or mobile home?

Rooms must be separated by built-in archways or walls that extend out at least 6 inches and go from floor to ceiling.

	Chinese	Korean
Original Wording	<p>这所房屋、公寓或移动式房屋中有多少个房间？必须是由拱门或墙壁隔开的房间，拱门或墙壁的宽度必须为6英寸以上，并且高度是从地板到天花板。</p> <ul style="list-style-type: none"> • 计算卧室、厨房等 • 不计算浴室、门廊、阳台、门厅、走廊或未装修的地下室。 <p>How many rooms are in this house, apartment, or mobile house? <i>It must be separated by archway or wall, archway or wall's width must to be over 6 inches, and height is from floor to ceiling.</i></p> <ul style="list-style-type: none"> • <i>Count bedroom, kitchen, etc.</i> • <i>Don't count bathroom, corridor by door, balconies, hall by door, walking corridor, or unfinished basement.</i> 	<p>이 집(주택, 아파트 또는 이동식 주택)에는 독립된 방이 몇 개 있습니까?</p> <p>독립된 방은 최소 6인치 두께의 바닥에서 천정까지 이어지는 벽이나 불박이 아치길 (archway) 의해 분리되는 공간이어야 합니다.</p> <ul style="list-style-type: none"> • 침실과 주방 등은 포함하시고 • 욕실, 포치, 발코니, 현관 (포이어), 복도 (홀) 또는 완성되지 않은 지하실은 제외하십시오. <p>How many independent personal chambers are in this home (house, apartment, or mobile home)? <i>Independent chambers must be separated by walls that are at least 6 inches thick and go from floor to ceiling or built-in archways).</i></p> <ul style="list-style-type: none"> • <i>Please include bedrooms, kitchens, etc.</i> • <i>Please exclude bathrooms, porches, balconies, foyers (foia), hallways (hol), or uncompleted basements.</i>

	Chinese	Korean
Recommended Wording	<p>这所房子、公寓或者移动式房屋中有多少个单独的房间和厅室？</p> <p>注：房间或者厅室必须由墙壁或者添建的门框隔开才能算是单独的。这里所说的墙，必须从地板延伸到天花板，而且从相邻的墙突出至少6英寸宽（约合15公分）。</p> <ul style="list-style-type: none"> • 计算卧室、厨房等 • 不计算浴室、门外前廊、阳台、门厅、室内过道，或者未装修/毛坯房状态的地下室。 <p>How many separate “fang jian” and “ting shi” are in this house, apartment, or mobile home?</p> <p>Note: “fang jian” and “ting shi” only when separated by wall or built-in frame of passageway can they be counted as separate. By wall, [it] must go from floor to ceiling and also protrude from an adjacent wall for at least 6 inches (approximately 15 centimeters).</p> <ul style="list-style-type: none"> • Count bedroom, kitchen, etc. • Don’t count bathroom, outside corridor by door, balconies, hall by door, inside corridor, or unfinished/maopifang-style basement. 	<p>이 집(주택, 아파트 또는 이동식 주택)에는 분리된 공간이 몇 개 있습니까?</p> <p>분리된 공간이란 최소한 한 개 이상의 벽이나 아치에 의해 다른 공간과 구분되는 공간을 말합니다. 벽은 바닥에서 천장까지 이어져야 하며, 그 폭은 최소한 6인치(약 15cm) 이상이어야 합니다.</p> <ul style="list-style-type: none"> • 침실, 주방 등의 공간은 포함하시고, • 욕실, 포차, 발코니, 현관, 복도 또는 마무리가 안 된 지하실은 제외하십시오. <p>How many separate rooms are in this home (house, apartment, or mobile home)?</p> <p>Separate rooms here mean rooms divided from other areas by at least one wall or an arch. Walls should go from floor to ceiling and be at least 6 inches (approx. 15cm) in width.</p> <ul style="list-style-type: none"> • Please include rooms such as bedrooms, kitchens, etc. • Please exclude bathrooms, porches, balconies, foyers, hallways, or unfinished basements.

Chinese Language Interviews

The challenge of determining an appropriate translation for Question 7a was locating an inclusive Chinese term to mean “rooms” in a residence. In English, the word “room” can indicate many rooms in a residence, such as a living room, a bedroom, or a dining room. However, each room has its own name in Chinese. A room intended for social activities or gathering is usually called a 厅 (ting) or a 堂 (tang), while a room for sleeping or private activities is usually called a 房 (fang) or 室 (shi).

The original translation for “rooms” in this question was 房间 (fang jian), which can be easily associated only with a bedroom. In round 2, we modified the translation to say 厅室 (ting shi), which combined the word 厅 (ting) for a living area and 室 (shi) for a general room. It did help respondents to think of a living room but *not* bedrooms.

These findings suggest that a generic translated term is not sufficient to communicate the concept of “rooms” in a residence. To be inclusive about living spaces in the Chinese translation, we recommend asking about 房间以及厅室 (fang jian and ting shi).

The italic explanation about how rooms must be separated was confusing to many respondents in round 1. There were several issues. First, the explanation was placed right after the question text, which made respondents think it was part of the question and made the entire question look complicated and difficult. In round 2, the italic explanation was preceded with a heading that said “Note,” so respondents were reminded that this notation was separate from the question text. We also put it in its own line, not right next to the question text. This new layout worked well in round 2.

Because the italic explanation contained a lot of information, the bigger challenge was translating the text in a way that was easy to understand. To help respondents digest the information, we modified the original translation to start with a reference to separate rooms, used a simpler sentence structure, and included a note that said “6 inches is equivalent to 15 centimeters.” In general, this approach worked well, but few respondents could visualize how walls can “extend out.” In addition, the Chinese term for “archways” conjures an image of a large arc, but we learned from the Census Bureau that an archway passage in a home does not necessarily have to be curved like an arc. It often looks rectangular.

The final recommended wording attempts to address these issues. Instead of saying “archway,” the translation refers to the frame of a passageway. To convey “extend out,” the translation mentions that the wall protrusion starts from an adjacent wall. Nevertheless, the team of language experts pointed out that there is still a large amount of information to digest, but it comes from the English source text that cannot be changed at this point.

We also tested the translation for porches, foyers, halls, or unfinished basements because they are less common architectural structures in Chinese-speaking countries. When shown a photograph of what we meant by a translated term, nearly all respondents felt that the original translation for individual terms made sense. However, without the photos, the original translation for “porch” was not clear. In addition, some respondents thought the original translation for “unfinished basement” asked whether the basement had been remodeled. We modified these translations for round 2 testing and found that they worked better. For “porch,” the recommended wording uses a term common to the southern part of China, and we added “outside” to describe that it is not an indoor porch. The “outside” descriptor also contrasts with the recommended translation for “hall,” to which we added the descriptor “inside.” For “unfinished basement,” we added a modern term used in China and modified the translation to say: 未装修/毛坯房状态的地下室 (unfinished/maopifang-style basement). Not all round 2 respondents were familiar with 毛坯房 (maopifang), but it reinforced the understanding for several respondents. We recommended adopting this term in the final translation.

Korean Language Interviews

The original translation for “rooms,” 방, is used almost exclusively to describe a closed space surrounded by four walls and connected to an outside area only through a door. In addition, 방 is often associated with a bedroom or a chamber when used in a housing context. For this reason, the original translation caused a great deal of confusion, and most respondents failed to grasp the intended meaning.

To avoid confusion, we replaced 방 (chamber) with 공간 (rooms/spaces) and tested it during round 2. In round 2, more respondents were able to provide a response to this question as intended than they were in round 1. Round 2 respondents counted other rooms in the home in addition to bedrooms and kitchens. However, other respondents still thought that separate rooms should be secluded rooms, and replacing 방 alone was not enough to dispel this misinterpretation. It seems to stem from the translated term 독립된 (independent) to mean “separate.” Therefore, we recommend using 분리된 (separate) instead of 독립된 (independent) to describe this concept. We were able to test this new wording with a few respondents in round 2 and confirmed that this usage was clearer.

The italic explanation was difficult to understand for respondents in both rounds. The original translation was quite problematic because the clause describing the conditions of walls was complicated. It also used a rarely used phrase 불박이 아치길 (built-in archway). In round 2, we replaced this phrase with a more common Korean expression for an arched passageway in houses, 아치 (*aachi*, meaning archway). To better convey “rooms must be separated,” we replaced 분리되는 (separated) with 구분되는 (divided), which describes an area that can be recognized as one with its own function in relation to other areas in the same space, to avoid repetitive use of the word 분리 (separated) to define separated rooms (분리된 공간). Two additional changes were made for round 2 testing. The centimeter equivalent to 6 inches was provided in parentheses. Also, 두께 (thick[ness]) was replaced with 너비 (width), because 너비 better describes “extend out” in Korean.

Even though the translation was greatly improved with these modifications, only one respondent in round 2 understood the text as intended. The rest of the respondents did not even try to make sense of the text. Some chose not to read it at all and complained that it was too difficult or complicated. We recommended the following modifications to simplify the translation further. First, the text was broken into two shorter sentences. The first sentence defines “separate rooms” as rooms divided from other areas by at least one wall or arch. To help respondents focus on the easy-to-understand explanation first, the numeric and technical description of the conditions of walls (“extended out at least 6 inches and should go from floor to ceiling”) is placed later, following the simplified definition of separate rooms. Also, 너비 (width) is replaced with its synonym, 폭 (width), to avoid confusion with a similarly pronounced word 넓이 (area). We expect that this revision will be better received

by respondents, although the translation still contains a lot of information as specified in the English source text.

The bullet points above the response box provide examples of rooms to be included, as well as what to exclude. The first bullet point says to include “bedrooms, kitchen, etc.,” but respondents interpreted this to mean they could only count bedrooms and kitchens. We recommended inserting 등의 공간은 (rooms such as) between “Include” and the examples to make it visibly clearer that the examples provided here are only for the respondents’ reference. No major issues were observed in round 2 with this usage.

We also tested the translation for “porches,” “foyers,” “halls,” and “unfinished basement.” No major issues were observed for “porch,” but we found the phonetic translation used to mean “foyer” and “halls” to be problematic. The original translation for “foyer” consisted of a Korean term, followed by the phonetic expression of the English word “foyer” in parentheses, like this: 현관 (포이어). Most respondents understood the Korean term but not understand the phonetic translation. Similarly, the original translation for “halls” says 복도 (홀), which consists of the Korean term and the phonetic expression of the English word “hall” in parentheses. The phonetic expression did not mean much to respondents. For both of these translated terms, we recommended deleting the parenthesized part that contains the phonetic expression and using the Korean term only. Round 2 testing where these recommendations were implemented did not reveal any problems.

From round 1 interviews, we found that the original translation for “unfinished basement” was often associated with an incomplete basement at a construction stage. For round 2, we tested two revisions. The first version, 마감되지 않은 지하실, uses a Hanja-rooted word to describe “unfinished,” while the second version, 마무리가 안 된 지하실, uses a pure Hangul to describe “unfinished.” More respondents in round 2 preferred seeing the version with Hangul because it is easier to read. We recommended implementing it in the final translation.

Housing Section Question 7b

How many of these rooms are bedrooms? *Count as bedrooms those rooms you would list if this house, apartment, or mobile home were for sale or rent. If this is an efficiency/studio apartment, print "0."*

	Chinese	Korean
Original Wording	<p>其中有多少间卧室？卧室数量相当于您出售或出租这所房屋、公寓或移动式房屋时将列出的卧室数量。如果是独室公寓房，请用正楷填写“0”。</p> <p>How many of these rooms are bedrooms? <i>Bedroom number equals the number you will list when you sell or rent this house, apartment, or mobile home. If it is an independent room apartment, please use block character to fill in "0."</i></p>	<p>이 방들 중 침실은 모두 몇 개입니까? 만약 이 집(주택, 아파트 또는 이동식 주택)을 팔거나 임대할 경우 귀하가 침실로 내놓을 방의 수를 세어 주십시오. 이 집이 원룸형아파트(이피션스/스튜디오)인 경우는 0이라고 써 주십시오.</p> <p>How many of these chambers are bedrooms? <i>Count as bedrooms those rooms you would list if this home (house, apartment, or mobile home) were for sale or rent. If this is a one-room style apartment (efficiency/studio), print 0.</i></p>
Recommended Wording	<p>其中有多少间卧室？</p> <p>注：卧室数量是指您出售或者出租这所房子、公寓或者移动式房屋时会报出的卧室数量。如果这个房子是独室公寓房，请工整地填写“0”。</p> <p>How many of these rooms are bedrooms? <i>Note: Bedroom number equals the number you would list if you sold or rented this house, apartment, or mobile home. If it's an independent room apartment, please neatly write "0."</i></p>	<p>이 공간 중 침실은 모두 몇 개입니까?</p> <p>만약 이 집(주택, 아파트 또는 이동식 주택)을 팔거나 임대로 내놓을 경우, 귀하가 침실의 갯수라고 적어 내실 만한 방의 수를 세어 주십시오. 이 집이 스튜디오 또는 원룸형 아파트인 경우는 “0”이라고 써 주십시오.</p> <p>How many of these rooms are bedrooms? Count as bedrooms those rooms that you would list as number of bedrooms if this home (house, apartment, or mobile home) were for sale or rent. If this is a studio or one-room style apartment, print "0."</p>

Chinese Language Interviews

The original translation in round 1 worked well, although several respondents pointed out that they have no plans to sell or rent and, therefore, could not answer this question. It became clear in round 2 that these comments were made in response to the future tense used in the translation. Instead of the subjunctive tense “rooms you would list if [the home] were for sale or rent,” the translation used the future tense and could be interpreted to mean that the respondents have plans to sell or rent the home. The final recommended wording used the subjunctive tense, and the grammar structure was slightly modified. For consistency with previous recommendations, the italic explanation text for the leading

“Note” indicated “neatly write” meant to “print,” and this text started on its own line so that it was not read as part of the question.

Korean Language Interviews

Common with the Chinese findings, we observed that several respondents thought that this question did not apply to them because they were not planning to sell the home or because they were renting in both rounds. A few other respondents tried to count only unused rooms in their home that could be immediately rentable. We recommended changing 침실로 내 놓을 (you would list as bedrooms) to 침실의 갯수라고 적어 내실 만한 (you would list as number of bedrooms). This way, the translation more closely resembles what Koreans usually say to refer to this type of hypothetical situation. For consistency with the previous recommendation (i.e., “separate rooms” in Housing Question 7a), we recommend using 공간 instead of 방들 to mean “room.”

We also proposed using “this home” in place of “house, apartment, or mobile home” to reduce the length of the sentence. We expect respondents to be able to recall that “this home” in this sentence corresponds to “this home (house, apartment, or mobile home)” because they will have just read about them in the previous question. This recommendation was not accepted by the Census Bureau. Instead, the Census Bureau sociolinguist provided an alternative version that uses “house, apartment, or mobile home.”

The translation for “efficiency/studio apartment” said 원룸형 아파트 (이피션시/스튜디오) in round 1. It consists of the translated term meaning “one-room-style apartment,” plus the phonetic translation of “efficiency” and “studio” in parentheses. Most respondents understood the Korean term 원룸형 아파트 (one-room-style apartment), but not the phonetic translation of “efficiency.” We recommended removing the phonetic translation of “efficiency” from the question. The phonetic translation of “studio,” however, is a widely recognized way to say studio. Thus, we recommended keeping it but not enclosing it in parentheses. In round 2, we tested these recommendations, and they worked well among respondents.

Housing Section Question 8

Does this house, apartment, or mobile home have...

- d. a sink with a faucet?
- e. a stove or range?

	Chinese	Korean
Original Wording	<p>这所房屋、公寓或移动式房屋是否配有...</p> <p>d. 有水龙头的水槽</p> <p>Has this house, apartment or mobile house been rationed...</p> <p>d. “shui cao” sink with faucet [The rest of answer categories are omitted for space-saving reasons.]</p>	<p>이 집(주택, 아파트, 또는 이동식 주택)에는 다음과 같은 시설이 있습니까?</p> <p>e. 요리용 스토브 또는 레인지</p> <p>Does this home (house, apartment or mobile home) have following facilities?</p> <p>e. a cooking stove or range [The rest of answer categories are omitted for space-saving reasons.]</p>
Recommended Wording	<p>这所房子、公寓或移动式房屋是否有...</p> <p>d. 装有水龙头的洗手池/洗碗池</p> <p>Does this house, apartment, or mobile home have...</p> <p>d. a faucet-equipped “chi” sink for washing hands/doing dishes [The rest of the answer categories are omitted for space-saving reasons.]</p>	<p>이 집(주택, 아파트 또는 이동식 주택)에는 다음과 같은 시설이 있습니까?</p> <p>e. 요리용 스토브 또는 레인지 (<i>전자레인지</i>는 제외해 주십시오)</p> <p>Does this home (house, apartment or mobile home) have following facilities?</p> <p>e. a cooking stove or range (<i>Please exclude microwaves.</i>) [The rest of the answer categories are omitted for space-saving reasons.]</p>

Chinese Language Interviews

In round 1, a few respondents noted that the original translation sounded like the infrastructure was part of a ration because it used 配有 to mean “have.” The recommended wording uses the simplest and most common form of “have” in the Chinese language, and no issues were raised by respondents in round 2.

Subitem d says “a sink with a faucet” and 水槽 (shui cao) is used to mean “a sink.” Although it is the most common way to describe a sink, in some regions of China, 水槽 (shui cao) conjures the image of a water bucket for farm animals. We recommended using both 洗手池/洗碗池 (“chi” sink for washing hands/doing dishes), separated by a slash, to mean “a sink.” In combination with the context that the question is asking about a sink for household use, we believe the revision can better deliver the intended meaning.

Korean Language Interviews

Subitem e says “a stove or range,” which does not include a microwave. However, because microwave is called 전자 레인지 (electronic range) in Korean, many respondents thought they were asked to think of the microwave in their homes. To translate “range” only, those respondents needed to be advised not to think of a microwave. We recommended adding an instruction like this: 요리용 스토브 또는 레인지 (전자레인지는 제외해 주십시오) cooking stove or range (Please exclude microwaves). We tested this in round 2 and the added instruction helped respondents exclude microwaves from consideration when they marked their answer. It appears that the additional instruction helps reduce a possible source of misunderstanding and Census Bureau approved this additional phrase.

Housing Section Question 9

How many automobiles, vans, and trucks of one-ton capacity or less are kept at home for use by members of this household?

	Chinese	Korean
Original Wording	<p>家里有几辆车可供家庭使用，像汽车、面包车或装载量为一吨以下的卡车？</p> <p>[At] home, how many cars are for family use, like automobile, minibus, or truck has less than 1 carrying capacity?</p>	<p>이 가구 구성원이 사용하고 유지, 관리하는 자동차, 승합차 및 1 톤 이하 트럭의 수는 몇 대입니까?</p> <p>How many automobiles, vans, and trucks of one-ton capacity or less are kept at home and used and maintained by members of this household?</p>
Recommended Wording	<p>在家里有几辆车可供住户成员使用，像汽车、面包车或装载量为一吨或者一吨以下的卡车？</p> <p>(At home, how many cars are for household members’ use, like automobile, minibus, or truck that has 1 or less than 1 ton of carrying capacity?)</p>	<p>No changes recommended.</p>

Chinese Language Interviews

We noted during round 1 testing that the original translation should be corrected to say “members of this household” rather than “family.” Also, the phrase “one-ton capacity or less” was incomplete. A Census Bureau Analyst also replaced 家里 (home) with 这个住处 (this residence) to mean “home.” This change was made to emphasize “household” over “family.” We found in round 2 that renters in high-rise apartments thought the question asked about cars available to the entire apartment building because 这个住处 (this residence) is vague. It was not clear if it refers to the respondent’s individual residence or the building as a whole.

We were able to test 在家里 (at home) with a few respondents, and it was clearer to them that we were asking about their own home. In this context, 在家里 is shifted to refer to a concrete physical place instead of a family. Therefore, we recommended using 在家里 to mean “at home.”

Korean Language Interviews

No changes were recommended to the original wording.

Housing Section Question 10

Which FUEL is used MOST for heating this house, apartment, or mobile home?

	Chinese	Korean
Original Wording	这所房屋、公寓或移动式房屋使用最多的采暖燃料是什么？ What is the most used heating fuel this house, apartment or mobile house uses?	이 집(주택, 아파트 또는 이동식 주택)의 난방을 위해 주로 사용하는 연료는 무엇입니까? Which fuel is mainly used for heating this home (house, apartment or mobile home)?
Recommended Wording	这所房子、公寓或移动式房屋中，最常用来取暖的燃料是什么？ What is the most frequently used fuel for heating this house, apartment or mobile home?	No changes recommended.

Chinese Language Interviews

A few respondents did not know what the intended meaning was for the original translation of “heating.” Instead, they thought of fuel for cooking. The proposed translation uses another term (取暖) and also restructures the current sentence for a more natural tone. Round 2 testing confirmed its appropriateness. We also confirmed with ACS content experts that the translation would be more appropriate if it were translated to mean “most frequent” rather than “most volume.” Therefore, the Census Bureau sociolinguist suggested modifying the translation to say “most frequently used fuel.”

Korean Language Interviews

The original translation used 주로 (mainly) as translation for “most,” which sounded logical in Korean because it originated from the very common Korean expression 주 난방연료 (main heating source). It is rare to use 가장 많이 (most) to refer to a heating source that is used most frequently. When we tested 가장 많이 (most) in the second round, respondents pointed out that 주로 (mainly) sounded better. We did observe several respondents marking more than one answer, usually gas and electricity, because they felt that they relied on them

about equally. Korean households do tend to use space heaters, but we are not sure if this was the reason that contributed to the response pattern for these respondents. Adding an instruction that says “mark one box” might offer a solution, but Census Bureau indicated that this change cannot be implemented at this time.

Housing Section Question 11d

IN THE PAST 12 MONTHS, what was the cost of oil, coal, kerosene, wood, etc., for this house, apartment, or mobile home?

Included in rent or condominium fee

	Chinese	Korean
Original Wording	<p>在最近12个月中，这所房屋、公寓或移动式房屋的燃油、煤炭、煤油、木柴等费用是多少？</p> <p><input type="checkbox"/> 包含在租金或公寓管理费内</p> <p>In the past 12 months, what was the cost of oil, coal, kerosene, wood, etc., for this house, apartment, or mobile home?</p> <p><input type="checkbox"/> Included in rent or apartment management fee</p> <p>[The rest of the answer categories are omitted for space-saving reasons.]</p>	<p>지난 12개월 동안 이 집(주택, 아파트 또는 이동식 주택)의 난방에 사용된 기름, 석탄, 등유, 나무를 구입하는 데 든 비용은 총 얼마입니까?</p> <p>In the past 12 months, what was the total cost of oil, coal, kerosene, wood, for heating this home (house, apartment or mobile home)?</p>
Recommended Wording	<p>在最近12个月中，这所房子、公寓或移动式房屋的燃油、煤炭、煤油、木柴等费用是多少？</p> <p><input type="checkbox"/> 包含在租金内或者房主共管式(condo)管理费内</p> <p>In the past 12 months, what was the cost of oil, coal, kerosene, wood, etc., for this house, apartment, or mobile home?</p> <p><input type="checkbox"/> Included in rent or included in homeowner joint managing (condo) management fee</p> <p>[The rest of the answer categories are omitted for space-saving reasons.]</p>	<p>지난 12개월 동안 이 집(주택, 아파트 또는 이동식 주택)에서 사용된 석탄, 등유, 기름, 나무 등을 구입하는데 든 비용은 총 얼마입니까?</p> <p>In the past 12 months, what was the total cost of coal, kerosene, oil, wood, etc, for heating this home (house, apartment or mobile home)?</p>

Chinese Language Interviews

The final wording adopted in the checkbox was the translation recommendation for “condominium fee” that was accepted by Census in Question 13. This wording was implemented for the entire Question 11 series. Although the Korean translation had to

rearrange the order in which fuels were presented in the question because of linguistic reasons (see discussion to come), the Census Bureau sociolinguist did not make this request for the Chinese translation. This is because a similar linguistic effect does not appear in the Chinese translation.

Korean Language Interviews

The original translation contained two additional words that the English version does not have: “total” and “heating [this house].” Because of this, it is possible to misunderstand the question as asking about the “total cost of heating fuels” for this residence in past 12 months. To correct this translation error, we recommended dropping 난방 (heating) and 총 (total) in the original translation and modifying the sentence accordingly.

In addition, the Census Bureau sociolinguist asked to move the placement of the word “oil” so that it appears after the word “kerosene.” The order of the terms became: coal, kerosene, oil, wood, etc. The sociolinguist indicated that the Korean word for “oil” could mean cooking oil, and placing it in the middle of the list of terms may lessen the likelihood that it is interpreted that way because respondents will have seen “coal” and “kerosene” first.

Housing Section Question 12

IN THE PAST 12 MONTHS, did anyone in this household receive Food Stamps or a Food Stamp benefit card? *Include government benefits from the Supplemental Nutrition Assistance Program (SNAP). Do NOT include WIC or the National School Lunch Program.*

	Chinese	Korean
Original Wording	<p>在最近12个月中，这个住户中是否有人收到食品券或食品券福利卡？计算来自增补营养补助项目（SNAP）的福利。不计算妇女儿童特殊营养补助项目或全国校园午餐补助计划。</p> <p>In the past 12 months, did anyone in this household get food tickets or food ticket benefit card? <i>Count benefit from supplement nutrition subsidy program (SNAP). Don't count women and children special nutrition subsidy program or national school lunch subsidy plan.</i></p>	<p>지난 12개월 동안 이 가구에서 푸드 스탬프(식료품 구입보조) 또는 푸드 스탬프 혜택 카드를 받은 사람이 있습니까?</p> <p>보충영양 지원프로그램 (SNAP) 의 정부혜택을 포함하십시오. WIC (5세 미 만의 아동 및 임산부를 위한 영양 보조 프로그램) 또는 전국 학교 급식 프로그램은 <u>포함하지 마십시오.</u></p> <p><u>In the past 12 months</u>, did anyone in this household receive Food Stamps (Assistance for food purchasing) or a Food Stamp benefit card?</p> <p><i>Please include government benefits from Supplemental Nutrition Assistance Program (SNAP). Please do not include WIC (Nutrition assistance program for pregnant or nursing women and children under 5 years old) or the National School Lunch Program.</i></p>

	Chinese	Korean
Recommended Wording	<p>在最近12个月中，这个住户中是否有人领取食品券(Food Stamps)或者食品券福利卡？</p> <p>注：包括政府提供的“增补营养补助项目(SNAP)”的福利。但不包括“妇幼补助项目(WIC)”或者“全国校园午餐补助项目”的福利。</p> <p>In the past 12 months, did anyone in this household get food tickets (Food Stamps) or food ticket benefit card?</p> <p><i>Note: Include government-provided benefit from “supplement nutrition subsidy program (SNAP).” Don’t include benefits from “women and children subsidy program (WIC)” or “national school lunch subsidy plan” benefits.</i></p>	<p>지난 12개월 동안 이 가구에서 푸드 스탬프(식료품 구입보조) 또는 푸드 스탬프 혜택 카드를 받은 사람이 있습니까?</p> <p>“식품 영양 지원 프로그램 (SNAP)”의 정부 혜택을 포함하십시오. “WIC (5세 미 만의 아동 및 임산부를 위한 영양 보조 프로그램)” 또는 “전국 학교 급식 지원 프로그램”은 <u>포함하지 마십시오.</u></p> <p><u>In the past 12 months</u>, did anyone in this household receive Food Stamps (Assistance for food purchasing) or a Food Stamp benefit card?</p> <p><i>Please include government benefits from “Nutritional food Assistance Program (SNAP).” Please do not include “WIC (Nutrition assistance program for pregnant or nursing women and children under 5 years old)” or “the National School Lunch Assistance Program”.</i></p>

Chinese Language Interviews

The original translations for the four government programs follow their English names word-for-word and sound correct. Respondents’ knowledge and experience (or lack thereof) with these programs seemed to affect their recognition, even though the translation is descriptive. Most respondents could interpret what the programs might be about, but few had heard of these programs in Chinese or in English, except for the Food Stamps program, possibly because it has been in existence for a few decades.

The original translation for Food Stamps was 食品券 (shi ping juan). However, our research showed that 粮食券 (liang shi juan) was in use to mean Food Stamps in several social service agencies serving immigrants. This term, 粮食券 (liang shi juan), sounds more natural in Cantonese, and its usage probably reflects the fact that earlier immigrants were mostly Cantonese speaking. This wording, however, sounds awkward in Mandarin, which is the most frequently spoken Chinese dialect. We recommended using 食品券 (shi ping juan) and providing the English term “Food Stamps” in parentheses.

For “Supplemental Nutrition Assistance Program,” no respondents associated the translation with the Food Stamps program, but they could discern that it is a program about nutrition. We learned from one of the biggest social service agencies in Illinois that although they do indicate in English “Supplemental Nutrition Assistance Program (SNAP),” they opt to say only 粮食券 (Food Stamps) in the Chinese translation because that is a name that the recipients recognize in Chinese. In round 2, we tested an alternative version: 包括政府提供的

现称为“增补营养补助项目”(SNAP)的食品券福利(include government-provided program, currently named “Supplemental Nutrition Assistance Program [SNAP]” Food Stamps benefits). This version seemed to provide more useful information than simply translating Supplemental Nutrition Assistance Program word for word. However, this recommendation was not accepted by the Census Bureau because the original English wording is limited to solely the SNAP program. Therefore, we recommended using the original translation, but placing the name of the program in quotations to indicate that it is a proper noun (because there are no capital letters in Chinese).

For “WIC” (English source text only lists the acronym “WIC”), the Chinese translation was descriptive about this program, indicating that it is a nutrition subsidy for women and children. Some respondents associated the translation with the WIC program, but only because they had heard of this type of assistance. A few thought it works the same as SNAP because both translations mentioned nutrition. We recommended eliminating the word “nutrition” from the translation for WIC so it does not seem repetitive, and adding the English acronym WIC, enclosing the translated name in quotations.

No major problems were observed with the translation for the National School Lunch Program and no change was recommended in the translation except to enclose the term in quotations. We revised the translation for “receive” so it sounds more like being given benefits, not being given things in general. It worked well in round 2.

Korean Language Interviews

The issues found in the Korean translation for SNAP were similar to those reported for the Chinese language interviews. No respondents associated SNAP with the Food Stamps program, but thought it was a government assistance program providing nutritional supplements, such as vitamin pills, for those who are malnourished or severely ill. Unless the translation is indicative, respondents who had not heard of this program would not know what it was. We tested several alternative versions that might be more indicative of this programs’ meaning. Option 1 specifies the target population (i.e., those with low income) of the SNAP, while retaining the original translation of the term. Option 2 indicates that SNAP is the new name of Food Stamps. Option 3 modifies the original translation to emphasize assistance is provided not for purchasing supplements but for purchasing food, replacing 보충 (supplemental) with 식품 (food) in the original translation.

A little over half of round 2 respondents (7) felt Option 1 (specifying that SNAP serves the low-income population) provided meaning to the translation. Three respondents preferred Option 2 (indicating that SNAP is the new name of Food Stamps). No respondents found the original translation or Option 3 meaningful. Although Option 1 was preferred by more respondents, we recommended using Option 2 because it indicated best what SNAP is by stating that the new term (SNAP) is just a new name of the widely known program, Food Stamps (almost all Korean speakers knew what “Food Stamps” were when they saw the

translation). Census Bureau could not approve this recommendation at this time, so we recommended using Option 3 that replaces “supplemental nutritional assistance” in the original translation with “nutritional food assistance.”

The translation for “National School Lunch Program” was also problematic. In round 1, some respondents thought that the program was universal to all school-aged children across the nation. Others thought that the term meant lunch programs managed by individual schools in the United States. This is partly because the word 프로그램 (program) does not conjure the image of a public assistance program to many Korean monolinguals. To provide clarification, we recommended inserting 지원 (assistance) in the original translation and it worked well when tested in round 2.

Housing Section Question 13

English:

13 Is this house, apartment, or mobile home part of a condominium?

Yes → **What is the monthly condominium fee?** For renters, answer only if you pay the condominium fee in addition to your rent; otherwise, mark the "None" box.

Monthly amount – Dollars

\$.00

OR

None

No

Chinese

Korean

Original Wording

13 这所房屋、公寓或移动式房屋是否属于共同管理性质?

是 → 每月管理费是多少? 如果您是租房房客, 并且在房租之外还需支付管理费, 请填写费用; 否则, 请选择“无”。

每月金额 – 以美元计算

\$.00

或

无

否

13 이 집(주택, 아파트 또는 이동식 주택)은 콘도의 일부입니까?

예 → 월 콘도관리비는 얼마입니까?
임대(렌트)로 살고 있고, 임대료 외에 추가로 돈을 지불하는 경우에만 응답하십시오. 그렇지 않은 경우에는 "없음" 상자에 표시하십시오.

월 액수 - 달러

\$.00

또는

없음

아니오

Does this house, apartment, or mobile house belong to joint management style?

Is this home (house, apartment, or mobile home) part of a condominium?

Yes → What is the monthly management fee? *If you are a renter, and you need to pay management fee in addition to your rent, please write down the fee; otherwise, please choose "no."*

Yes → What is the monthly condominium fee? *If you are renting a condominium, please write the amount of condominium fee that you pay in addition to your rent. Otherwise, mark the "None" box.*

Monthly fee—calculate in dollars

Monthly amount—Dollars

OR

No need to pay condominium fee

OR

No

None

No

	Chinese	Korean
Recommended Wording	<p>这个房子、公寓或者移动式房屋是房主共管式性质(condo)的住处吗？</p> <p><input type="checkbox"/> 是 → 每月房主共管式(condo) 管理费是多少？</p> <p>注：如果您是租房者，并且在房租之外还需支付管理费，请填写金额；否则，请在“不用另付管理费”的框中标选。</p> <p>填入每月金额-以美元计算</p> <div style="border: 1px solid black; width: 100px; height: 15px; margin: 5px 0;"></div> <p>或者标选：</p> <p><input type="checkbox"/> 不用另付管理费</p> <p><input type="checkbox"/> 不是房主共管式</p> <p>Does this house, apartment, or mobile home belong to a homeowner joint managing (condo) style residence?</p> <p><input type="checkbox"/> Yes → What is the monthly homeowner joint managing (condo) management fee? <i>Note: If you are a renter, and you need to pay management fee in addition to your rent, please write the amount; otherwise, please mark in the box marked for "No need to pay management fee."</i></p> <p>Write monthly amount—calculate in dollars OR choose and mark: No need to pay management fee</p> <p>Not homeowner joint managing style</p>	<p>이 집(주택, 아파트 또는 이동식 주택)은 콘도입니까?</p> <p><input type="checkbox"/> 예 → 월 콘도 관리비는 얼마입니까? 콘도에 임대(렌트)로 살고 있다면, 임대료(렌트비) 외에 추가로 내는 콘도 관리비를 적어 주십시오. 그렇지 않은 경우에는 “콘도 관리비 낼 필요 없음” 란에 표시하십시오.</p> <p>월 액수 - 달러</p> <div style="border: 1px solid black; width: 100px; height: 15px; margin: 5px 0;"></div> <p>또는</p> <p><input type="checkbox"/> 콘도 관리비 낼 필요 없음</p> <p><input type="checkbox"/> 아니오</p> <p>Is this home (house, apartment, or mobile home) a condominium?</p> <p><input type="checkbox"/> Yes → What is the monthly condominium fee? <i>If you are renting a condominium, please write the amount of condominium fee that you pay in addition to your rent. Otherwise, mark the space for "No need to pay condominium fee."</i></p> <p>Monthly amount—dollars OR No need to pay condominium fee</p> <p>No</p>

Chinese Language Interviews

Most respondents did not associate the original translation 共同管理 (joint management) to a condominium. From the words, they knew it referred to some kind of joint responsibility. When asked whether they heard of the English word “condo,” many said yes, but not everyone who had heard of it knew what it actually entailed. Most of the time, they referred to a condo as an apartment. In round 2, we tested an alternative version that used the proper dictionary translation for condo, 共管式, and the English word “condo” was added in

parentheses. We also simplified the grammatical structure so it sounded more idiomatic. Many round 2 respondents indicated that the English word “condo” as the reason they knew how to answer this question. However, the Chinese translation 共管式 was still not transparent to respondents. We recommend adding 房主 (homeowner) to convey the ownership in common aspect: 房主共管式. Limitations still exist in the recommended change because “condominium” is a legal term in the United States and is pragmatically called an apartment in Chinese.

The italic explanation for renters was confusing to some respondents in the first round. In round 2, we moved this text to its own line and preceded the italic explanation with a heading “Note” to inform respondents that it is separate from the question text. We also used the translation “amount” rather than “fee” to direct respondents to write in a dollar amount in the space available. We did not observe major issues in round 2, except confusion over the layout of the text (i.e., the italic explanation and management fee question are not part of the main question but a subquestion embedded in the text).

The general layout of this question, which followed the English source file, was quite problematic to respondents in round 1. First, respondents had trouble locating the No response because it is not adjacent to the Yes response. Second, some respondents randomly marked No or None because they are placed close to each other and No and None do not seem too different. The confusion might be compounded by the fact that the original translations for both No and None use a single Chinese character. The None response is also placed right under Or, which is also denoted by a single character. This question layout makes it look like these are free-standing single characters. Because the layout cannot be changed at this point, we recommended labeling these answer categories so that they stand out more from each other and use idiomatic translation. The recommended wording uses “No need to pay management fee” to denote None, “Not a condo” to mean No, and “Or choose and mark” to denote Or.

Korean Language Interviews

As with the Chinese respondents, more than two thirds of respondents in Phase 1 had difficulties with the layout of this question or the question text. They tended to miss the Yes/No answer categories because their eyes were drawn to the large amount of text related to the monthly condominium fee. Because the layout cannot be changed at this time, we attempted to improve the translation to make this question easier to navigate for respondents.

The original translation is the proper way to translate this question. However, many respondents thought the housing types listed, “house, apartment, or mobile home,” were not compatible with the concept of a condominium. When probed further, we learned that respondents did not know that condominium ownership applied to houses, apartments, and mobile homes. All they knew was that ownership is what distinguishes condominiums from

other multi-unit housing structures, such as apartments. Furthermore, some respondents pointed out that “part of a condominium” did not make sense. They figured it meant “an (physically partial) area of a condominium unit.” Even respondents who understood what the question was asking mentioned that 콘도의 일부 (part of a condominium) sounded unnatural or strange. After rounds 1 and 2, we proposed dropping “house, apartment, or mobile home” in parentheses and leaving in “this home” only to reduce confusion. However, Census Bureau noted that the phrase “house, apartment, or mobile home” cannot be replaced because it appears in the English source version of the questionnaire. We also proposed to drop 일부 (part of) from the question and simply ask whether it is a condominium. Because respondents did not know exactly what “condominium” meant, the “part of” phrasing meant very little to them. This recommendation was accepted.

The italic explanation text was also difficult for respondents to interpret. The original translation was misleading because it gave the impression that only renters (not home owners) should answer this question. It said, “임대로 살고 있고, 임대료 외에 추가로 돈을 지불하는 경우에만 응답하십시오. (Answer only if you rented and pay money in addition to your rent.)” Our recommended wording corrected this issue. In addition, it did not specify to what the additional money was paid. We replaced 돈 (money) with 콘도 관리비 (condominium fee). Most round 2 respondents understood and handled the revised translation much better; however, we believe that the layout will continue to be a source of respondent difficulty.

Housing Section Question 14

Is this house, apartment, or mobile home. *Mark (X) ONE box.*

- Owned by you or someone in this household free and clear (without a mortgage or loan)?
 Rented?
 Occupied without payment of rent? *SKIP to C*

	Chinese	Korean
Original Wording	[The question and the rest of the categories are omitted for space-saving reasons.]	[The question and the rest of the categories are omitted for space-saving reasons.] 아래 질문들을 건너뛰어 C 의 질문 16 부터 응답해 주십시오. (Skip questions below and answer question 16 under C and on.)
Recommended Wording	No changes recommended.	아래 질문들을 건너 뛰어 C 라고 쓰여진 곳을 읽어 주십시오. Skip the next question and read where C is written.

Chinese Language Interviews

No changes were recommended to the original wording.

Korean Language Interviews

No changes were recommended to the original wording other than correcting two errors. First, the original current translation directs respondents' attention directly to Question 16, even before they read Routing Instruction C. Second, there should be a space between 건너 and 뛰어. In addition, the final recommendation incorporates findings from Phase 2 regarding the Skip Instruction. (See details in Detailed Person Question 20 discussed in Phase 2 Findings and Recommendations.)

Routing Instruction B

Answer questions 15a and b if this house, apartment, or mobile home is RENTED. Otherwise, SKIP to question 16.

	Chinese	Korean
Original Wording	<p>如果这所房屋、公寓或移动式房屋是租的，请回答第15a题和第15b题。否则请跳到第16题。</p> <p><i>If this house, apartment, or mobile house is rented, please answer question 15a and question 15b. Otherwise please skip to question 16.</i></p>	<p>이 집(주택, 아파트, 또는 이동식 주택)을 임대한 경우 질문 15a 및 15b에 응답해 주십시오. 그렇지 않으면 아래 질문들을 건너 뛰어 질문 16부터 응답해 주십시오.</p> <p><i>If this home (house, apartment, or mobile home) is <u>rented</u>, answer questions 15a and 15b. Otherwise, <u>skip</u> the following questions and answer question 16 and on.</i></p>
Recommended Wording	<p>如果这所房子、公寓或者移动式房屋是租的，请回答第15题a和b项。否则请跳到第16题。</p> <p><i>Form-taking instruction: If this house, apartment, or mobile home is rented, please answer number 15 question a and b item. Otherwise, please skip to question 16.</i></p>	<p>이 집(주택, 아파트, 또는 이동식 주택)을 임대(렌트)한 경우 질문 15a 및 15b에 응답해 주십시오. 그렇지 않으면 아래 질문들을 건너 뛰어 질문 16부터 응답해 주십시오.</p> <p><i>If this home (house, apartment, or mobile home) is <u>rented</u>, answer questions 15a and 15b. Otherwise, <u>skip</u> the following questions and answer questions 16 and on.</i></p>

Chinese Language Interviews

This instruction asked respondents to answer Questions "15a and b." In Chinese, there are several ways to say this phrase:

- (1) 第15a 题和第15b 题 (number 15a question and number 15b question);
- (2) 第15 题a 和第15 题b (number 15 question a and number 15 question b);
- (3) 第15 题a 和b (number 15 question a and b).

Round 1 respondents favored Option 2 because it sounded more natural in Chinese. However, locating Question 15b requires the respondents to understand that the lowercase b is associated with Question 15. Because the purpose of our testing was not usability, we did not have conclusive evidence that locating 15b was a problem. We do know that most respondents did not have prior experience with self-administered questionnaires.

Because the layout cannot change in this LAG, Question 15 cannot be placed next to subitem b to facilitate respondents locating 15b in the form. Thus, adopting the most natural translation for “15a and b” is not the most appropriate solution. In round 2, we used Option 3 but added the word 项 (item) next to the letter b so it is apparent to what “b” refers. This seemed to work well because the majority of round 2 respondents were able to associate 第 15 题 a 和 b 项 (number 15 question a and b item) with Questions 15a and b. We recommended adopting this approach for all other similar questions.

Korean Language Interviews

No changes were recommended except for adding the phonetic translation of “rent” (렌트) in parentheses because the usage is applied in previous LAG questions. We recommended adding it for consistency.

Housing Section Question 15b

Does the monthly rent include any meals?

	Chinese	Korean
Original Wording	每月租金是否包括房客的膳食？ Does the monthly rent include meals for renters?	월 임대(렌트)비에식대가 포함되어 있습니까? Does the monthly rent include any charges for meals?
Recommended Wording	No changes recommended.	월 임대료 (렌트비) 에 식사가 포함되어 있습니까? Are meals included in the rent you pay?

Chinese Language Interviews

No changes were recommended to the original wording.

Korean Language Interviews

The original translation, 월 임대(렌트)비에 식대가 포함되어 있습니까, literally meant “Does the monthly rent include any charges for meals.” Respondents in round 1 believed that 식대 (charges for meals) was interchangeable with 식(료품)비 (abbreviated term for grocery expenses in Korean). As a result, they pointed out that the question sounded strange because grocery expenses are personal and could not be part of the rent. The recommended wording follows what was agreed upon at the post-round 1 interim meeting at the Census Bureau: 월 임대료(렌트비)에 식사가 포함되어 있습니까? (Are meals included in the rent you pay?).

This version clearly worked better because all respondents understood what the question was asking. Another change was a slight modification in how the Korean script is arranged to mean “rent,” changing 임대(렌트)비 to 임대료(렌트비) to be consistent with Question 13.

Routing Instruction C

Answer questions 16–20 if you or someone else in this household OWNS or IS BUYING this house, apartment, or mobile home. Otherwise, SKIP to E on the next page.

	Chinese	Korean
Original Wording	<p>如果您或某位住户成员拥有或即将购买这所房屋、公寓或移动式房屋，请回答第16题到第20题。否则请跳到下一页上标示E的地方。</p> <p>If you or any household member owns or is going to purchase this house, apartment, or mobile house, please answer question 16 to question 20. Otherwise please skip to the place marked E on next page.</p>	<p>귀하 또는 이 가구의 누군가가 이 집(주택, 아파트 또는 이동식 주택)을 소유하고 있다면 질문 16–20에 응답해 주십시오. 그렇지 않으면 아래 질문들을 건너뛰어 다음 쪽의 E의 질문들에 응답해 주십시오.</p> <p>If you or someone else in this household owns this home (house, apartment, or mobile home), answer questions 16–20. Otherwise, skip questions below and answer the questions on the next page E.</p>
Recommended Wording	<p>填表说明：如果您或者某位住户成员拥有或者付贷款购买这所房子、公寓，或者移动式房屋，请回答第16题到第20题。如果这个住处是租的或者其他情况，则跳到下一页上标示 E 的地方。</p> <p>Form-taking instruction: If you or any household member owns or is going to purchase this house, apartment, or mobile home, please answer question 16 to question 20. If the home is rented or some other situation, please skip to place marked E on next page.</p>	<p>귀하 본인이나 이 가구의 구성원이 이 집(주택, 아파트, 또는 이동식 주택)을 소유하고 있거나 모기지를 내고 있다면, 질문 16부터 질문 20까지 응답해 주십시오. 그렇지 않으면 아래 질문들을 건너뛰어 다음 페이지의 E라고 쓰여진 곳을 읽어 주십시오.</p> <p>If yourself or any member of this household owns or is paying mortgage this home (house, apartment, or mobile home), answer question 16 through question 20. Otherwise, skip questions below and read where E is written on the next page.</p>

Chinese Language Interviews

Similar to the recommendation for Routing Instruction A, the intended condition “if the home is rented or some other condition” is stated in place of “otherwise” in the routing instruction. In addition, a heading “form-taking instructions” precedes the actual instructions to inform respondents that these are instructions for filling out the form. After round 1, a Census Bureau Analyst asked that the translation for “IS BUYING” be rephrased to 付贷款购买 (is paying mortgage to buy), and it is included in the final wording.

Korean Language Interviews

After round 1, we recommended replacing the translation for “someone else in this household” (이 가구의 누군가) with 이 집에 사는 다른 가구원 (other household member living in this home). This change was made because the original translation 누군가가 (someone else) was not commonly used, and this made the sentence sound unnatural.

As the revised translation was used and probed in round 2, we encountered another problem. About one third of round 2 respondents misinterpreted the phrase “other household member living in this household” to mean “someone else other than members of this household” or “someone else other than you.” Two issues appeared to contribute to respondent comprehension problems: (1) 또는 for the connecting word “or” seems easily misinterpreted as “not-” or “other than-.” That is, some respondents interpreted 귀하 또는 (you or) as 귀하가 아닌 (다른 사람) ([someone else] other than you); and (2) the misinterpretation of “you or” as “(someone else) other than you” seemed to be reinforced by the next phrase, 다른 가구원 (other household member).

Our final recommendations attempted to address these issues as follows. First, we recommended replacing 귀하 (you) with 귀하 본인 (yourself) to emphasize that “you” in this instruction means no other person but yourself. Second, we suggested replacing the connecting word 또는 for “or” with 이나, for easier recognition and easier reading. We also recommended replacing 이 집에 사는 다른 가구원 (other household member living in this home) with straightforward wording, 이 가구의 구성원 (any member of this household). The phrasing 이 가구의 구성원 (any member of this household) is used in Question 20 of the Housing Section, and was, in general, easily understood by respondents. Therefore, we believe adopting it here will reduce confusion. In addition, to be consistent with the final recommendation from Person 1 instruction, the recommended wording uses 모기지를 내고 있다면 (paying mortgages) to meaning “buying.” Finally, the final recommendation incorporates findings from the Phase 2 about the Skip Instruction. (See details in Detailed Person Question 20.)

Housing Section Question 16

About how much do you think this house and lot, apartment, or mobile home (and lot, if owned) would sell for if it were for sale?

	Chinese	Korean
Original Wording	<p>您认为这所房屋以及用地、公寓、或移动式房屋目前的售价是多少？（如果移动式房屋的用地也归您所有，请把用地的售价也包括在内。）</p> <p>What do you think the current sale price is for this house and its used land, apartment, or mobile house? (If the used land of the mobile house also belongs to you, please also include the sale price of the used land.)</p>	<p>만약 이 집(주택 및 부지, 아파트 또는 이동식 주택 및 부지)을 팔려고 내놓는다면 대략 얼마에 팔릴 것으로 생각하십니까?</p> <p>About how much do you think this home (house and lot, apartment or mobile home and lot) would sell if it were for sale?</p>
Recommended Wording	<p>您认为这所房子以及用地、公寓、或者移动式房屋目前的市价是多少？（如果这个住处是移动式房屋，且用地也归您所有，请把用地的市价也包括在回答内。）</p> <p>What do you think the current market price is for this house and its used land, apartment, or mobile house? (If this residence is a mobile home and the used land also belongs to you, please do include the market price of that land.)</p>	<p>이 집 (주택 및 토지, 아파트 또는 이동식 주택)을 팔려고 내놓는다면 대략 얼마에 팔릴 것으로 생각하십니까?</p> <p>(만약 이 집이 이동식 주택이고, 토지가 귀하의 소유라면, 그 토지의 시세도 포함해 주십시오.)</p> <p>About how much do you think this home (house and land area, apartment, or mobile home) would sell if it were for sale?</p> <p>(If this is a mobile home and the land area belongs to you, please include the market price of that land area.)</p>

Chinese Language Interviews

Although there were no major observations about respondent difficulty, after administering 22 Chinese language interviews in round 1, the team of Chinese language experts felt that the original translation asking for a sale price can be improved. The proposed translation uses “market price” to better capture the original English version of “would sell for if it were for sale.”

Korean Language Interviews

The original translation uses a difficult Hancha-rooted word, 부지 (lot). In round 2, we tested 그에 딸린 땅 (attached lot) and most respondents were able to understand it. An alternative translation version was presented to respondents in a Show Card, which says 토지 (land). It means the land area attached to a house or mobile home. Two thirds of round 2

respondents preferred the alternative translation because it did not use the hard-to-understand Hancha-rooted words and was simpler to understand. We also restructured the sentence to be consistent with the Chinese translation that was approved by the Census Bureau.

Housing Section Question 19a

Do you or any member of this household have a mortgage, deed of trust, contract to purchase, or similar debt on THIS property?

- Yes, mortgage, deed of trust, or similar debt
- Yes, contract to purchase
- No → SKIP to question 20a

	Chinese	Korean
Original Wording	<p>您或某位住户成员是否对这项房地产持有抵押贷款、信托契约、购买合同或类似债务？</p> <p><input type="checkbox"/> 是，有抵押贷款、信托契约或类似 债务</p> <p><input type="checkbox"/> 是，有购买合同</p> <p><input type="checkbox"/> 无 → 跳到第20a题</p> <p>Do you or any member of this household have a [collateral] mortgage loan, trust deed, purchasing contract or similar debt on this property?</p> <p><input type="checkbox"/> Yes, has mortgage, trust deed, or similar debt</p> <p><input type="checkbox"/> Yes, has purchasing contract</p> <p><input type="checkbox"/> None</p>	<p>귀하 또는 이 가구의 구성원은 이 부동산에 대해 모기지론, 담보신탁증서, 구입 계약 등의 부채를 지고 있습니까?</p> <p><input type="checkbox"/> 예, 모기지론, 담보신탁증서 등의 부채</p> <p><input type="checkbox"/> 예, 구입 계약</p> <p><input type="checkbox"/> 아니오 → 아래 질문들을 건너 뛰어 질문 20부터 응답해 주십시오.</p> <p>Do you or any member of this household have such as a mortgage, deed of trust of the collateral, contract to purchase, etc. on this property?</p> <p><input type="checkbox"/> Yes, debt such as mortgage, deed of trust, etc.</p> <p><input type="checkbox"/> Yes, contract to purchase</p> <p><input type="checkbox"/> No → Skip questions below and answer question 20 and on.</p>

	Chinese	Korean
Recommended Wording	<p>您或者某位住户成员目前是否为这个住宅以及院地贷款 (譬如: 有房屋贷款、信托契约、买卖合同或者其他类似贷款) ?</p> <p><input type="checkbox"/> 房屋贷款、信托契约或者其他类似贷款</p> <p><input type="checkbox"/> 买卖合同</p> <p><input type="checkbox"/> 没有 → 跳到第20题a项</p> <p>(Do [mu qian/currently] you or any member of this household have a loan (for example: a housing [mortgage] loan, trust deed, buy sell agreement or similar loan on this housing unit and yuan land)?</p> <p><input type="checkbox"/> Have housing [mortgage] loan, trust deed or other similar loan</p> <p><input type="checkbox"/> Have buy sell agreement</p> <p><input type="checkbox"/> Don't have it</p>	<p>귀하 본인이나 이 가구의 구성원은 이 집(및 토지)에 대해 모기지론이나 주택신탁증서, 또는 주택 구매 계약 등의 부채를 지고 있습니까?</p> <p><input type="checkbox"/> 예, 모기지론이나 주택 신탁 증서 등의 부채</p> <p><input type="checkbox"/> 예, 주택 구매 계약</p> <p><input type="checkbox"/> 아니오 → <u>아래 질문들을 건너 뛰어 질문 20a부터</u> 응답해 주십시오.</p> <p>Do yourself or any member of this household have debt such as a mortgage, or deed of trust of the home, or contract to purchase the home, etc. on this home (including land area)?</p> <p><input type="checkbox"/> Yes, debt such as mortgage or deed of trust of the home, etc.</p> <p><input type="checkbox"/> Yes, contract to purchase the home</p> <p><input type="checkbox"/> No → <u>Skip questions below and answer question 20 and on</u></p>

Chinese Language Interviews

Most respondents did not know what “deed of trust” or “contract to purchase” were, but they could infer from the words what these terms might entail. After hearing the ACS definitions and examples from the interviewer, most respondents understood the concept and felt that the original translation was appropriate.

Some respondents had very negative reactions to the original translation for mortgage. It literally means “[collateral] mortgage loan” and the first part on collateral (抵押) implies having financial trouble, which is highly undesirable. However, it is the correct financial term and the dictionary translation. We recommended deleting 抵押 and saying 房屋贷款 (housing [mortgage] loan) in the translation. This was the term used in the decennial census form and was contextually clear that the term is about a mortgage.

After round 1, we also recommended softening the vocabulary used for “debt” because appearing financially in trouble is highly undesirable. We also restructured the sentence for a more natural tone. The recommended translation emphasizes whether there is a loan on the property, and not what the type of mortgage is (moved to parentheses).

For “contract to purchase,” a number of respondents thought that its translation 购买合同 meant the contract they had to sign to buy the home, which was something everyone had to do. We recommended adding the adverb 目前 (currently) in the translation to communicate that the question is asking about the current status. The English version is

clear because the present tense is used; however, Chinese does not use tenses and requires adverbs to indicate time. When 目前 (currently) is added, only those who have a contract to purchase now should mark that answer category. We also recommended using 买卖合同 (buy sell agreement) to mean “contract to purchase” to convey that it is a contract agreed upon by the seller and the buyer.

Respondent knowledge seemed to affect the understanding of these terms, and it was very difficult to discuss how best to describe them in their own language because these are not simple concepts to grasp. These are technical financial terms with which even English-speaking Americans may not be familiar. Nevertheless, respondents’ unfamiliarity with these terms, in general, did not affect their response in this question.

Korean Language Interviews

Most respondents, including those living in states such as Washington, DC, Maryland, and Virginia where a deed of trust is used in addition to a mortgage, did not understand to what the translation referred. However, after hearing the ACS definition and examples from the interviewer, most respondents understood the concept. In addition, the original translation literally means “deed of trust of the collateral” (담보신탁증서), which can be easily associated with home equity loans or second mortgages. We recommended using 주택 신탁증서 (deed of trust of the home) to avoid this interpretation. When we tested this modification in round 2, most respondents still did not recognize the term. However, fewer respondents associated this term with home equity loans or second mortgages. This confirms that our effort to avoid false impression by revising the original translation was somewhat effective.

We also recommended revising the translation for “contract to purchase.” The original translation had two problems: (1) translation 구입계약 can be used in many situations other than home buying, and (2) it uses a Hancha-rooted word, 구입 (to purchase). This word is an acceptable choice, but is used more often to describe the purchase of consumer goods, rather than for the purchase of expensive durable goods, like a house. For clarification, we recommended adding 주택 (home) at the beginning of the translation and replacing 구입 (to purchase) with 구매 (to purchase, a word used more often for purchasing expensive durable goods). We tested the modifications in round 2 and most respondents were able to understand what the revised translation was trying to convey.

After Phase 1, round 1, we recommended replacing 이 가구의 구성원 (any member of this household) with 이 집에 사는 다른 가구원 (other household member living in this home) for consistency with our wording recommendation in Routing Instruction C. As the proposed translation was used and probed in Phase 1, round 2, we encountered a similar problem that we observed in Routing Instruction C. That is, about one third of round 2 respondents misinterpreted the phrase “other household member living in this household” as meaning “someone else other than members of this household” or “someone else other than you.”

A final recommendation for this phrase is consistent with what we previously recommended for the same phrase in Routing Instruction C. First, we recommended replacing 귀하 (you) with 귀하 본인 (yourself) to emphasize that “you” in this instruction means no other person but yourself. Second, we suggested replacing the connecting word 또는 for “or” with 이나, for easier recognition and reading. Finally, we also recommended replacing 이 집에 사는 다른 가구원 (other household member living in this home) with less confusing wording, 이 가구의 구성원 (any member of this household). 이 가구의 구성원 (any member of this household) appears in Question 20a in the current Korean LAG. As this wording was generally well understood by most respondents, we believe using it here will reduce confusion.

Routing Instruction E

Answer questions about PERSON 1 on the next page if you listed at least one person on page 2. Otherwise, SKIP to page 28 for the mailing instructions.

	Chinese	Korean
Original Wording	<p>如果在第2页上填写了至少一个人，请回答下一页上有关第1位人士的问题。否则跳到第28页，阅读邮寄说明。</p> <p>If you wrote in at least 1 person on page 2, please answer questions about Person 1 on the next page. Otherwise, skip to page 28 to read mailing instruction.</p>	<p>2 쪽에 한 사람 이상 적으셨으면 다음 쪽에서 가구원 1에 대한 질문에 응답해 주십시오. 그렇지 않으면 28쪽의 우편 발송 안내를 읽어 주십시오.</p> <p><i>If you listed one or more people on page 2, answer questions about Person 1 on the next page. Otherwise, read the mailing instructions on page 28.</i></p>
Recommended Wording	<p>填表说明：从下一页开始，请填写有关您住户成员的个人资料。请按照您在前面第2页填写的第1位人士开始。如果您在第2页上没有填写任何人，请直接跳到最后一页，阅读邮寄说明。</p> <p>Form-taking instruction: Beginning from the next page, please write the individual information for your household members. Please start with Person 1 whom you wrote on page 2 in the previous pages. If you did not write down anyone on page 2, please skip to the last page directly to read mailing instructions.</p>	<p>2 페이지에 한 사람이라도 적으셨으면 계속해서 다음 페이지(8 페이지)의 질문들에 응답해 주십시오. 그렇지 않으면 마지막 페이지로 건너뛰어 우편 발송 안내를 읽어 주십시오.</p> <p><i>If you listed at least one person on page 2, please continue and answer questions on the next page (p. 8). Otherwise, skip to the last page and read the mailing instructions.</i></p>

Chinese Language Interviews

The majority of respondents could not follow this routing instruction in round 1. They were confused by the references to page numbers and people. We rearranged the sentences according to Chinese discourse structure, and it worked better in round 2.

Census Bureau asked that the reference to “page 28” be changed to “the final page” because the final page on the LAG says is page 16, while it is page 28 on the ACS. This is because the pages for the Detailed Person are not printed in the LAG, resulting in fewer pages. Interestingly, the placement of the final page was unclear to several respondents. The final page is printed on the back cover of the LAG, but several respondents looked at page 15 as the final page because it made sense to them when they flipped pages from page 7, where Routing Instruction E is, to the end of the booklet, which is page 15. It did not occur to them that the final page should be the back cover. Unless the page number is exact, what the “final page” is could be open to interpretation. Nevertheless, because the instructions do specifically mention reading mailing instructions, we believe that respondents may eventually locate the information. Testing this assumption as part of a usability study may help confirm that respondents can locate the mailing instructions.

Korean Language Interviews

The Korean speaking respondents also were not clear what to do with the two references directing them to a specific page number. In round 1, many respondents had trouble grasping to what the “next page” was referring. Some believed that “next page” meant page 3, because it comes next after page 2, which is mentioned in the instruction. It did not occur to them that the next page should be page 8, since they were reading the instruction on page 7. We recommend inserting a parentheses with the page number (8 페이지) (p.8) after the phrase “next page” so that it is clear what the page is. This worked well in round 2.

In accordance to Census Bureau direction, the Korean language interviews in round 2 changed the reference to page 28 to “the final page.” The revision significantly reduced the respondent difficulties we observed in the previous round. They were able to go to the final page and read the mailing instructions as intended. The remaining issue was the translation for “at least one person,” which was translated to 한 사람 이상 (one or more people). Some respondents misinterpreted this to mean “more than one person” and thought one should skip to the final page only when one household member is listed on page 2. This is the opposite of what the instructions are trying to achieve. We recommended modifying the translation from 한 사람 이상 (one or more people) to 한 사람이라도 (at least one person).

3.3 Question-by-Question Assessments and Recommendations: Phase 2

Phase 2 covered the opening instructions and questions 7 to 28 of the Detailed Person pages.⁸

Detailed Person Instruction

Please copy the name of Person 1 from page 2, then continue answering questions below.

	Chinese	Korean
Original Wording	请依照第2页上第1位人士的姓名进行填写， 然后继续回答下列问题。	2쪽에 적으신 가구원 1의 이름을 옮겨 적으신 다음 계속해서 아래 질문에 응답해 주십시오.
	Please write according to page 2 Person 1's name, and then continue to answer the following questions.	Please write the name of household member 1 that you wrote on page 2 and continue answering the below question.
Recommended Wording	请在下面抄写第2页上第1位人士的姓名， 然后继续回答关于这个人的问题。	No changes recommended.
	Please copy below page 2 Person 1's name, and then continue to answer the questions about this person.	

Chinese Language Interviews

In general, respondents could refer back to the Person 1 answer that they determined moments ago (i.e., Phase 2 cognitive interviewing was designed to include Basic Person and followed directly by Detailed Person). However, when the LAG is in use by actual respondents, they will not come to the Detailed Person page until after the Housing Section. We recommended revising the instruction's translation to say that respondents needed to copy Person 1's name, and to answer the questions that follow. We also added the phrase "this person" as a way to deepen the impression that when the subsequent questions asked about "this person," it referred to Person 1. We made this change because we found that in the first round of Phase 2 testing, consistently referring to "this person" as Person 1 was somewhat problematic. Managing a third-person reference is a skill that not all respondents have. We tested the revisions in round 2 and, in general, did not observe respondents having difficulty in connecting Person 1 with "this person" in the ensuing questions. Thus, this recommendation was accepted.

⁸ Per Census Bureau's request, we also tested a parental birthplace question that is not currently in the LAG. No changes were recommended.

Korean Language Interviews

No changes were recommended other than the global change of 쪽 (page) to 페이지 (page). (See details described in Housing Section Question 3).

Detailed Person Question 7

Where was this person born?

- In the United States – *Print name of state*
 Outside the United States – *Print name of foreign country, or Puerto Rico, Guam, etc.*

	Chinese	Korean
Original Wording	<p>这个人是在哪里出生的？</p> <p><input type="checkbox"/> 美国本土 – 请用正楷填写州名。</p> <p><input type="checkbox"/> 美国本土以外 – 请用正楷填写外国名称，或者填写波多黎各、关岛等。</p> <p>Where was this person born?</p> <p><input type="checkbox"/> US stateside – <i>Print name of state.</i></p> <p><input type="checkbox"/> US stateside exterior – <i>Print name of foreign country, or Puerto Rico, Guam island, etc.</i></p>	<p>이 사람은 어디에서 태어났습니까?</p> <p><input type="checkbox"/> 미국 내 – 주의 이름을 적어 주십시오</p> <p><input type="checkbox"/> 미국 외 – 다른 나라의 이름, 또는 푸에르토리코, 괌 등을 적어 주십시오</p> <p>Where was this person born?</p> <p><input type="checkbox"/> Inside the United States – <i>Please write the state name</i></p> <p><input type="checkbox"/> Outside the United States – <i>Please write the name of a different country or Puerto Rico, Guam, etc.</i></p>
Recommended Wording	<p>这个人是在哪里出生的？</p> <p><input type="checkbox"/> 美国 – 请用正楷填写州名。</p> <p><input type="checkbox"/> 美国以外 – 请用正楷填写国家名称，或者填写波多黎各岛、关岛等。</p> <p>Where was this person born?</p> <p><input type="checkbox"/> US – <i>Print name of state.</i></p> <p><input type="checkbox"/> US exterior – <i>Print name of country, or Puerto Rico island, Guam island, etc.</i></p>	<p>이 사람은 어디에서 태어났습니까?</p> <p><input type="checkbox"/> 미국 내 – 주의 이름을 적어 주십시오</p> <p><input type="checkbox"/> 미국 외 – 그 나라의 이름, 또는 푸에르토리코, 괌 등을 적어 주십시오.</p> <p>Where was this person born?</p> <p><input type="checkbox"/> Inside the United States – <i>Please write the state name</i></p> <p><input type="checkbox"/> Outside the United States – <i>Please write the name of the country, or Puerto Rico, Guam, etc.</i></p>

Chinese Language Interviews

One respondent's comments in the second round of testing prompted the Chinese language expert panel to recommend a revised translation for "outside the United States" to avoid potentially missing data. In the original English text, the two answer categories are distinguished by the preposition that is placed upfront: "in" versus "outside." In the translation, Chinese grammar structure appropriately expresses "outside" at the end of the phrase. This resulted in both answer categories showing "US" first in the original wording. In the case of this round 2 respondent, she saw the word "US" and left the question blank because she assumed the two categories were both about the United States. She did not

read the rest of the phrase and this resulted in missing data. During the Phase 2 meeting, a discussion took place about whether the 本土 (stateside) reference in the original wording could conjure the image of the U.S. mainland only. Our testing did not reveal problems with this term, most likely because all of the respondents were born outside of the United States. We deleted 本土 (stateside) from the final wording to avoid potential confusion about the coverage of “stateside” and to make the two answer categories more visually contrasting.

Most respondents were able to write the country where they were born, such as China. A few respondents admitted that they did not read the italic instructions too closely that asked them to print the name of country, and their intuition told them just to write down where they were born because that is what the question asked. In addition, our team of language experts pointed out that while China, Taiwan, or Hong Kong is a “foreign country” from the U.S. perspective, they are not “foreign” from the respondents’ perspective as these are their home countries. We recommended using “country” instead of “foreign country” to avoid any potential misunderstanding. Round 2 testing confirmed that this modification did not result in other problems.

We also recommended adding the word 島 (island) to describe Puerto Rico. Without a geographic descriptor, respondents may not know that Puerto Rico is an actual location, unless they have heard of it before. For example, one respondent in the first round did not know what 波多黎各 is, and read it as 黎多黎各 (rito rico), which sounded like gibberish to her. No problems were observed in round 2 with the addition of 島 (island); this is consistent with the translation for Guam, which also ends with the word 島 (island).

Korean Language Interviews

In round 1, the term “foreign country” was translated as 다른 나라 (different country) to prevent Korean-speaking respondents from excluding Korea as a foreign country. However, a considerable number of respondents left this question blank because they did not think of Korea as a “different country” or they were confused by unfamiliar words, such as “Puerto Rico” or “Guam,” in the italic instructions.

To mitigate these problems, we tested three versions of revised wording in the second round as alternative translations to “foreign country.”

1. Option 1. 그 나라 (the country)
2. Option 2. 태어난 나라 (the country [where this person was] born).
3. Option 3. 그 나라 (the country) and also added “Korea” in parentheses as an example of countries along with Puerto Rico and Guam.

Our findings showed that all respondents interpreted the question correctly and were able to write “Korea” as their birth place. Among the 3 options, eight out of 12 respondents preferred Option 3. Because all options produced reliable data, Option 1 was accepted by

the Census Bureau because it provided the least deviation from the English text. The same recommendation was proposed and approved by the Census where a similar phrase appears in Question 15b.

Detailed Person Question 8

Is this person a citizen of the United States?

- Yes, born in the United States → *SKIP to 10a*
- Yes, born in Puerto Rico, Guam, the U.S. Virgin Islands, or Northern Marianas
- Yes, born abroad of U.S. citizen parent or parents
- Yes, U.S. citizen by naturalization – *Print year of naturalization*
- No, not a U.S. citizen

	Chinese	Korean
Original Wording	<p>这个人是美国公民吗？</p> <p><input type="checkbox"/> 是，在美国本土出生 → <i>跳到第10a题</i></p> <p><input type="checkbox"/> 是，在波多黎各、关岛、美属维尔京群岛或者北马里亚纳群岛出生</p> <p><input type="checkbox"/> 是，在美国境外出生，父母一方或者双方为美国公民</p> <p><input type="checkbox"/> 否，非美国公民</p> <p>Is this person a United States citizen?</p> <p><input type="checkbox"/> Yes, born in the United States → <i>SKIP to 10a.</i></p> <p><input type="checkbox"/> Yes, born in Puerto Rico, Guam island, the U.S. Virgin Islands, or Northern Marianas Islands.</p> <p><input type="checkbox"/> Yes, born outside of United States, parent or parents were U.S. citizen.</p> <p><input type="checkbox"/> No, not United States citizen.</p>	<p>이 사람은 미국 시민권자입니까?</p> <p><input type="checkbox"/> 예, 미국에서 태어났습니다 → <i>10a로 건너뛰어 질문에 응답해 주십시오.</i></p> <p><input type="checkbox"/> 예, 푸에르토리코, 괌, 미국령 버진아일랜드 또는 북마리아나에서 태어났습니다.</p> <p><input type="checkbox"/> 예, 다른 나라에서 미국 시민권자인 어머니나 아버지(또는 부모)에게서 태어났습니다.</p> <p><input type="checkbox"/> 예, 귀화에 의한 미국 시민권자입니다 – <i>귀화한 년도를 기입해 주십시오.</i></p> <p><input type="checkbox"/> 아니오, 미국 시민권자가 아닙니다.</p> <p>Is this person a U.S. citizen?</p> <p><input type="checkbox"/> Yes, born in the U.S. → <i>SKIP to 10a and answer the question.</i></p> <p><input type="checkbox"/> Yes, born in Puerto Rico, Guam, the U.S. Virgin Islands, or Northern Marianas.</p> <p><input type="checkbox"/> Yes, born in a different county from the U.S. citizen parent(s).</p> <p><input type="checkbox"/> Yes, naturalized U.S. citizen – <i>Please write (Hancha-rooted word) the naturalization year.</i></p> <p><input type="checkbox"/> No, not U.S. citizen.</p>

	Chinese	Korean
Recommended Wording	<p>这个人是美国公民吗？</p> <p><input type="checkbox"/> 是，在美国出生→跳到第10题a项</p> <p><input type="checkbox"/> 是，在波多黎各岛、关岛、美属维尔京群岛或者北马里亚纳群岛出生</p> <p><input type="checkbox"/> 是，在美国境外出生，当时父母一方或者双方已经是美国公民</p> <p><input type="checkbox"/> 是，通过入籍成为美国公民 – 请工整地填写入籍年份</p> <p><input type="checkbox"/> 否，不是美国公民</p> <p>Is this person a United States citizen?</p> <p><input type="checkbox"/> Yes, born in the United States → SKIP to number 10 question a item.</p> <p><input type="checkbox"/> Yes, born in Puerto Rico island, Guam island, the U.S. Virgin Islands, or Northern Marianas Islands.</p> <p><input type="checkbox"/> Yes, born outside of United States, at that time parent or parents were U.S. citizen.</p> <p><input type="checkbox"/> Yes, U.S. citizen by naturalization – Print year of naturalization.</p> <p><input type="checkbox"/> No, is not United States citizen.</p>	<p>이 사람은 미국 시민권자입니까?</p> <p><input type="checkbox"/> 예, 미국에서 태어났습니다→질문 10a로 건너 뛰어 질문에 응답해 주십시오.</p> <p><input type="checkbox"/> 예, 푸에르토리코, 괌, 미국령 버진아일랜드 또는 북마리아나에서 태어났습니다.</p> <p><input type="checkbox"/> 예, 다른 나라에서 미국 시민권자인 어머니나 아버지(또는 부모)에게서 태어났습니다.</p> <p><input type="checkbox"/> 예, 법적인 절차를 통해 미국 시민권을 받았습니다 – 그 년도를 적어 주십시오.</p> <p><input type="checkbox"/> 아니오, 미국 시민권자가 아닙니다.</p> <p>Is this person a U.S. citizen?</p> <p><input type="checkbox"/> Yes, born in the U.S. → SKIP to 10a and answer the question.</p> <p><input type="checkbox"/> Yes, born in Puerto Rico, Guam, the U.S. Virgin Islands, or Northern Marianas.</p> <p><input type="checkbox"/> Yes, born in a different county from the U.S. citizen parent(s).</p> <p><input type="checkbox"/> Yes, obtained the U.S. citizenship through legal procedures – Please write the year.</p> <p><input type="checkbox"/> No, not U.S. citizen.</p>

Chinese Language Interviews

The third answer category, “yes, born abroad of U.S. citizen parent or parents,” is intended for people who were born outside of the United States, but are still U.S. citizens by virtue of one or both parents being U.S. citizens. The original Chinese wording described the two conditions: (1) that place of birth was outside of the United States, and (2) a parent or parents was/were U.S. citizens. However, the translation could still be problematic because of pragmatic issues unique to the immigrant experience. For example, a respondent in the first round marked both the “Yes, U.S. citizen by naturalization” category and “yes, born abroad of U.S. citizen parent or parents.” In this respondent’s situation, she was not born in the United States, and neither were her parents. All three were born in China, but after her parents immigrated and became U.S. citizens, they were eligible to sponsor adult children to immigrate to the United States. That is how this respondent came to the United States and was eventually naturalized. To her, marking “yes, born abroad of U.S. citizen parent or parents” made sense because (1) she was born abroad, and (2) her parents were U.S. citizens. For round 2 testing, we added an adverbial phrase 当时 (at that time) to clarify that the time frame for parents’ citizenship is at the time of the respondent’s birth. However, this

revision did not work as well as we had hoped. Several respondents could only think of the immigrant scenario where parents sponsor children. Some respondents were not sure to what time period “at that time” referred, while it was clear to others. Our final recommendation was to move the adverbial phrase “at that time” closer to “born outside of United States” so the intended time period is clearer. In its place, we recommended inserting “already” as an additional measure to foster the time reference. The descriptor “already” sounds strange if placed in the English text, but serves to anchor the time reference for immigrant respondents who would otherwise not naturally consider the intended scenario.

An additional issue was the translation for the preceding “yes” and “no” in the answer categories. Pan, Craig, and Scollon (2005) reported that using classical Chinese characters “否” (“no”) and “非” (“not”) can be problematic. Classical characters present difficulties to less literate respondents, as they are used to more commonly used characters: 不 for “no” and 不是 for “not.” Our earlier testing in Phase 1 also showed that the translation sounded more natural to respondents when the answer category did not state “否” (no), but used the verb that is associated with the action. For example, when asked if you have something, the response would be 没有 (don’t have), rather than “no” because that is how Chinese respond to a question.

Based on these prior research findings, we designed a Show Card that used the common character for “not” (as noted in Pan, Craig, & Scollon, 2005) and it does not have a preceding “no” 否 (as noted in Housing Section, Question 13). As expected, the majority of the round 1 respondents (seven out of 10) interviewed found the Show Card version more natural. However, several respondents pointed out that having the preceding “no” (否) is helpful in locating the answer category quickly in the long list of answer categories. Many of our respondents were not U.S. citizens and therefore would pick the “no” category.

In the second round, we tested our recommendation that combined elements of the original translation and the Show Card version. The preceding “no” (否) was retained, followed by common Chinese characters 不是 to mean “not.” Previously, we mentioned not retaining the preceding “no” in our recommendations from Phase 1, but those Phase 1 questions had a shorter list of the yes/no answer categories. Detailed Person Question 8, however, has a longer list of answer categories and each contains a lot of information. The preceding “no” (否) could serve to distinguish this answer option and facilitate locating this response. The use of common Chinese characters 不是 for “not” could soften the language and could help to avoid comprehension issues for less literate respondents, like those reported by Pan, Craig, and Scollon (2005). In general, this revision presented no difficulty for respondents and we recommended adopting it.

Note for Consideration. One issue continued to catch our attention. This question is designed with a long list of answer categories. Since many ACS respondents are likely to be

U.S. citizens, it is logical that the order of the answer categories starts with the “yes” categories. However, the “no” category was prominent for our monolingual respondents because some were not U.S. citizens, and thus this order was not as logical. Some did not locate the “no” response that would fit them until further examination. This is a good example of the limitation of translating an instrument that was designed for a general population.

Korean Language Interviews

Half of the Korean-speaking respondents had problems with the word 귀화 (naturalization). Some of them expressed strong aversion to this word because of its negative connotation of abandoning one’s own birth country and cultural identity by becoming a citizen of a new country. Other respondents confused 귀화 (naturalization) with a similarly pronounced word, 귀하 (a respectful term for “you”). To address these issues, we recommended dropping 귀화 (naturalization) and used the neutral expression 법적인 절차를 통해 미국 시민권을 받았습니다 (Obtained the U.S. citizenship through legal procedures). In round 2, we tested this proposed wording (Option 1) along with the wording recommended by the Census Bureau sociolinguist: 미국 시민권을 취득하였습니다 (obtained [Hancha-rooted word] the U.S. citizenship). Six respondents preferred Option 1, saying it clearly showed that people go through necessary procedures to obtain citizenship, while four respondents preferred the Census-proposed wording because of its simplicity. Option 1 was adopted because it was preferred by more respondents, and it eliminates possible confusion related to the difficult Hancha-rooted word 취득 (obtain).

Although the same issue of choosing two answer categories “Yes, U.S. citizen by naturalization” category and “yes, born abroad of U.S. citizen parent or parents” can happen for Koreans respondents because of the common immigration experience, we did not observe such confusion in both rounds and do not have recommendations on this matter.

Detailed Person Question 9

When did this person come to live in the United States?

	Chinese	Korean
Original Wording	这个人何时来到美国生活？ When did person come to live a life in the U.S.?	이 사람은 언제 미국에 살러 왔습니까? When did this person come to live to the U.S.?
Recommended Wording	这个人何时来到美国生活或者定居？ When did this person come to live a life or settle in the U.S.?	No changes recommended.

Chinese Language Interviews

There are two common ways to translate the word “live” in Chinese: (1) to live a life (生活), or (2) to reside (住) as used in the Housing Section. The original wording used was 生活 (to live a life) and this seemed to accurately reflect the English wording’s intent. We observed among our cognitive interview respondents in round 1 and through discussions that there are three general migration patterns. The first scenario is those who came to the United States and never left (i.e., might have visited the United States before or might have left for short periods to visit the home country). Answering this question is easy because the answer is the year they arrived. And since they have taken permanent residence in the United States, they did not consider prior visits or temporary out-of-country periods in their response. There is generally no confusion which year they should write down.

However, the translation could be problematic because of the experience unique to immigrants. Among Chinese immigrants, some come to stay in the United States long enough to satisfy the residency requirement for green-card status, and they then live in the home country the majority of the time or go back and forth between United States and the home country. Non-English-speaking Chinese speakers in the United States also include those who came to the United States to stay temporarily as a visitor at a family’s house (although they could be a regular visitor) or as a student whose residence can be several months to several years. In these scenarios, responding to Question 9 is not a straightforward process. Respondents could answer the year they *first* or *last* came, or decide that they did not “come to live” in the United States at all.

The ACS telephone interviewer manual suggests that the latest year entered should be recorded if someone came to live in the United States more than once, but no such instructions appear in the LAG. Because additional explanation, such as 如果来美国生活多次, 请填写最近一次入境年份 (If came to the United States to live many times, please write in the most recent year that you entered), cannot be added, the potential problem might be that this question creates undue confusion for respondents who take main residence in the United States, but leave to visit their home country. These pragmatic issues may be better dealt with in an interviewer-administered interview than an LAG.

Since this question is used to determine how long foreign-born people have lived in the United States, the most important issue for the translation is to communicate the concept of “come to live.” In addition to the original translation 生活 (live a life), we recommended adding a second term 定居 (settle down). The added term implies long-term living, and can be compared to the current term that includes short-term living. This way, the various scenarios about immigrant living that we discussed previously may be covered. We did not observe respondent difficulty with the revised translation in the second round; however, responses to this question were still heavily dependent on the migration patterns unique to immigrants.

Korean Language Interviews

No changes were recommended.

Detailed Person Question 10a

At any time IN THE LAST 3 MONTHS, has this person attended school or college? Include only nursery or preschool, kindergarten, elementary school, home school, and schooling which leads to a high school diploma or a college degree.

- No, has not attended in the last 3 months → *SKIP to question 11*
- Yes, public school, public college
- Yes, private school, private college, home school

	Chinese	Korean
Original Wording	<p>在最近3个月中，这个人是否上过学？注：只包括托儿所或者学前班、幼儿园、小学、在家中接受教育，以及能够获得高中毕业文凭或者大学学历的教育。</p> <p><input type="checkbox"/> 没有，在最近3个月中没有上过学→跳到第11题</p> <p><input type="checkbox"/> 有，私立学校、私立大学或者在家中接受教育</p> <p><u>In the last 3 months</u>, has this person had schooling? <i>Note: Only include caretaking facility or prelearning preparatory, kindergarten, elementary school, receiving education at home, and education which can allow a high school diploma or college credential.</i></p> <p><input type="checkbox"/> No, has not attended in the last 3 months → <i>SKIP to question 11.</i></p> <p><input type="checkbox"/> Yes, private school, private college, receiving education at home.</p>	<p>지난 3개월 동안 이 사람은 학교에 다닌 적이 있습니까? 놀이방 또는 유아원(널서리, 프리스쿨 등), 유치원 (킨더가든), 초등학교, 홈스쿨 등 졸업장이나 학위를 주는 상급학교로 진학이 가능한 교육기관을 포함해 주십시오.</p> <p><input type="checkbox"/> 아니오, 지난 3개월 동안 학교에 다닌 적이 없습니다 → 질문 11로 건너뛰어 응답해 주십시오.</p> <p><input type="checkbox"/> 예, 공립학교/공립대학에 재학</p> <p><input type="checkbox"/> 예, 사립학교/사립대학, 홈스쿨 재학</p> <p><u>In the last 3 months</u>, has this person attended school? <i>Include education which leads to higher level schools to give a diploma or degree such as playroom or young children’s place (Nursery – phonetic translation, Preschool – phonetic translation, etc.), kindergarten (Kindergarten – phonetic translation), elementary school, home school.</i></p> <p><input type="checkbox"/> No, has not attended school in the last 3 months → <i>SKIP to question 11 and answer it.</i></p> <p><input type="checkbox"/> Yes, attended public school/university.</p> <p><input type="checkbox"/> Yes, attended private school/university, home school.</p>

	Chinese	Korean
Recommended Wording	<p>这个人在最近3个月中有没有上学？注：上学是指接受在最后可以获得高中毕业文凭或者大学学历的教育，包括上托儿所或者学前班 (preschool)、幼儿园大班 (小学预备班)、小学，以及在家接受了正规的学校教育 (home school)。</p> <p><input type="checkbox"/> 没有，在最近3个月中没有上过学→跳到第11题</p> <p><input type="checkbox"/> 有，私立学校、私立大学或者在家接受了正规的学校教育</p>	<p>지난 3개월 동안 이 사람은 학교에 다닌 적이 있습니까? 고등학교 졸업장이나 대학 학위를 받는 데 필요한 정규 교육을 포함해 주십시오. 여기에는 유아원(넬서리 또는 프리스쿨), 유치원 (킨더가든), 초등학교, 홈스쿨 등이 포함됩니다.</p> <p><input type="checkbox"/> 아니오, 지난 3개월 동안 학교에 다닌 적이 없습니다 → 질문 11로 건너 뛰어 응답해 주십시오.</p> <p><input type="checkbox"/> 예, 공립학교/공립대학에 재학</p> <p><input type="checkbox"/> 예, 사립학교/사립대학, 홈스쿨 재학</p>
	<p>Has this person had schooling [shang xue] in the last 3 months? Note: Had schooling [shang xue] means education that ultimately enables getting a high school diploma or a college degree; it also includes caretaking facility or prelearning preparatory (preschool), you-er-yuan kindergarten (kindergarten), grade school, and receiving official school education at home (home school).</p> <p><input type="checkbox"/> No, has not attended in the last 3 months → SKIP to question 11.</p> <p><input type="checkbox"/> Yes, private school, private college, receiving official school education at home.</p>	<p><u>In the last 3 months</u>, has this person attended school? Please include regular formal school education which is necessary to receive a high school diploma or a college degree. It includes young children's place (Nursery – phonetic translation or Preschool – phonetic translation), kindergarten (Kindergarten – phonetic translation), elementary school, home school, etc.</p> <p><input type="checkbox"/> No, has not attended school in the last 3 months → <u>SKIP</u> to question 11 and answer it.</p> <p><input type="checkbox"/> Yes, attended public school/university.</p> <p><input type="checkbox"/> Yes, attended private school/university, home school.</p>

Chinese Language Interviews

In the first round, we found that because the time frame “in the last 3 months” was placed at the beginning of the question, it was the first thing that respondents saw and some were distracted by the time period and focused too much of their attention on determining why this particular time period was asked. We recommended restructuring the sentence by inserting the time period in the middle. Our team of Chinese language experts agreed that the restructuring would make the translation sound more natural. In addition, we learned that it is common for non-English speakers to take noncredit English courses, and they tended to think that they “attended school” as described in the original wording. We recommended adding the word 正式 (officially) to prompt respondents to think about official schooling. But this recommendation was not accepted.

In the second round, the revised translation was still not logical to some respondents, and we believe that the grammar used in the translation could be a source of the problem. The

translation used 上过学 (shang guo xue, meaning “had schooling”) to mean “attended school or college.” In it, the word 过 (guo) indicates a past action, but it could also mean ever doing something. The translation could be interpreted as asking if someone has attended school any time during his or her life, regardless of the specific time frame. We recommended deleting the word 过 (guo), showing just 上学 (shang xue) to indicate a definite past action. Reading the revision in context, the translation sounds much more natural with the specific time period of 3 months.

As mentioned previously, it is common for non-English speakers to take noncredit English courses. Although they may consider their participation in these courses as having “attended school,” noncredit courses are not considered schooling in this question. The original translation communicates this information last (as in the English) and does not clearly convey the phrase “schooling which leads to a diploma” (it says “can allow”). We recommended restructuring this sentence by putting the information at the beginning. The translation was also revised to better convey “leads to.” Because the recommendation “officially had schooling” was not accepted for Question 10a, it was not implemented in this italic instruction, either.

This instruction also included terms that describe the early childhood educational system in the United States: nursery, preschool, and kindergarten. In China, Taiwan, or Hong Kong, children go to 幼儿园 (or 幼稚园), which means kindergarten. There are 幼儿园小班, 中班, and 大班 (kindergarten basic level, median level, and top level) that roughly play the same role and serve a similar age group in China, Taiwan, and Hong Kong as do nursery, preschool, and kindergarten in the United States. But they are all part of 幼儿园 (kindergarten). This is an example where the same word is used but the meaning is different across languages.

Therefore, when the English term “kindergarten” was translated into 幼儿园, to Chinese speakers, it can mean nursery or preschool. On the other hand, the original translation for preschool (学前班, meaning pre-learning preparatory) was thought to be something closer to kindergarten in the United States, because the words indicate that it is a PRE-school.

To mitigate these different social practices, we could have use the Chinese equivalent wording: 幼儿园小班, 中班, 大班 (kindergarten basic level, median level, top level). However, this might have made respondents think that the question asks about education outside of the United States. In the second round, we tested the following:

1. Continue to use 托儿所 to mean nursery. Although round 1 respondents thought of it as a custodial facility, the term is indicative of a place for young children.
2. Continue to use 学前班 to mean preschool, but add the English word “preschool” in parentheses. This way, it may be easier for respondents to identify their own household children in preschool.

3. Use 幼儿园大班 (小学预备班) (kindergarten top level [grade school preparatory]) to mean kindergarten. This phrase emphasizes the function of a kindergarten, which is an aspect unique to the United States.

In addition, translating “homeschool” in Chinese can be challenging because it is common for children to have a tutor outside of school: 家教, which literally means “home teaching.” It sounds just like a homeschool. We also learned that some respondents had actually heard of homeschooling in the United States, but the original wording was just not specific enough to them. We tested a descriptive phrase in round 2: 在家接受了正规的学校教育 (receiving official school education at home) and also added the English word “homeschool” in parentheses to show that it is a concept unique to the United States.

In general, all of these recommendations worked reasonably well in round 2, but it was still challenging to address the limitations of conceptual and social practice issues. For example, we constructed a term 幼儿园大班 (小学预备班) (kindergarten top level [grade school preparatory]) to mean kindergarten. This phrase emphasizes the function of a kindergarten in the United States. Respondents either made sense of the words or they were unable to interpret the words because they had not heard of such a term (because it was a made-up term by us). Based on these findings, we have become convinced that instead of trying to accommodate a different educational system linguistically, we should provide respondents the cues in both languages. Our final recommendation for “kindergarten” was to continue using 幼儿园, but not the constructed term in the parentheses. Instead, we inserted the English word “kindergarten” in parentheses.

In addition, the concept of education leading to a diploma seemed to confuse respondents with less formal schooling (i.e., they probably did not know enough about credit vs. noncredit courses). This is an issue that we were unable to address further within the parameters of the translation. Furthermore, to be consistent with the recommendation for Question 10a, we recommended deleting the word 过 (guo) in this italic instruction, showing just 上学 (shang xue) to indicate a definite past action.

Korean Language Interviews

The original wording of the italic instructions was somewhat inaccurate because “schooling which leads to a high school diploma or a college degree” was translated as 졸업장이나 학위를 주는 상급학교로 진학이 가능한 교육 (education which leads to higher level schools to give a diploma or degree). In addition, some round 1 respondents were not able to interpret the meaning of this italic instruction because it is a long and complicated sentence. Based on the fact that respondents who properly articulated the meaning of this instruction often used 정규 교육 (regular formal school education), we recommended revising the current instruction using this phrase and proposed two options.

Both options use the phrase 정규 교육 (regular formal school education) but differ in the following ways. Option 1 changes the order in which the information is presented so high school/college is mentioned first, rather than having nursery mentioned first, like this: 고등학교 졸업장이나 대학 학위를 받는 데 필요한 정규교육을 포함해 주십시오. 여기에는 유아원(넬서리 또는 프리스쿨), 유치원(킨더가든), 초등학교, 홈스쿨 등이 포함됩니다. (Please include regular formal school education which leads to a high school diploma or a college degree. It includes young children’s place [*nursery* – phonetic translation or *preschool* – phonetic translation], kindergarten [*kindergarten* – phonetic translation], elementary school, home school, etc.). Option 2 replaces the entire phrase, “Schooling which leads to a high school diploma or a college degree” with 정규 교육 (regular formal school education). It reads: 유아원(넬서리 또는 프리스쿨), 유치원(킨더가든), 초등학교, 홈스쿨 등 정규 학교 교육만 포함해 주십시오. (Please include regular formal school education only such as young children’s place [*nursery* – phonetic translation or *preschool* – phonetic translation], kindergarten [*kindergarten* – phonetic translation], elementary school, home school, etc.). Option 2 may seem to be a deviation from the English text, but we believe this revision will deliver the intended message because regular formal school education is education that is necessary to get a high school diploma or a college degree. Option 1 was approved by the Census Bureau.

To translate “Nursery or Preschool,” the round 1 translation used 놀이방 또는 유아원(넬서리, 프리스쿨등) (play room or young children’s place [*nursery* – phonetic translation or *preschool* – phonetic translation]). First, 놀이방 (play room), which was used to translate “nursery,” caused a lot of confusion and most respondents interpreted it as a custodial daycare center. On the other hand, respondents without child-rearing experience in the United States simply did not know the meaning of this translated phrase. We proposed dropping 놀이방 (play room) to address the first issue and adding an explanatory phrase: 3-5 세 아동을 위한 교육 시설 (educational facility for young children aged 3-5) to address the second issue. However, only the recommendation to take out 놀이방 (play room) was approved by the Census Bureau, and we tested this new wording in round 2.

In round 2, only one respondent interpreted the revised translation as a custodial daycare center. A few respondents thought 프리스쿨 (*preschool* – phonetic translation) meant “free school” because phonetically “pre” sounded like “free.” They also reported that they had never heard of 넬서리 (*nursery* – phonetic translation). Nevertheless, 유아원 (young children’s place) was understood, which was placed at the beginning of the same phrase. A few respondents with no child-rearing experience in the United States just did not know the meaning of any of these words, and they thought that these terms referred to kindergarten or elementary school.

Since all respondents who needed to choose the “nursery or preschool” answer category did not demonstrate difficulty with the revised translation in round 2, we recommended retaining this translation and applying it to Questions 10b and 11, where the same phrase also appears. This recommendation was approved by the Census Bureau.

In addition, several round 2 respondents who had not attended school in the last 3 months did not mark any answer categories. They said it was difficult to locate the appropriate answer. This could be because the Korean text looks crowded and possibly hard to read. We recommended keeping only “no” and the skip instruction, but delete the phrase in between (“has not attended in the last 3 months”) since it was already mentioned in the main question. However, this particular recommendation was not approved by the Census Bureau.

Detailed Person Question 10b

What grade or level was this person attending? *Mark (X) ONE box.*

- Nursery school, preschool
- Kindergarten
- Grade 1 through 12 – *Specify grade 1-12*
- College undergraduate years (freshman to senior)
- Graduate or professional school beyond a bachelor’s degree (*for example: MA or PhD program, or medical or law school*)

	Chinese	Korean
Original Wording	<p>这个人上几年级？</p> <p><input type="checkbox"/> 研究生院或者学士学位以上的专业院校 (例如：文学硕士或者博士课程、医学院或者法学院)</p> <p>[The rest of the categories are omitted for space-saving reasons.]</p> <p>What grade is this person attending?</p> <p><input type="checkbox"/> Graduate school or professional school beyond a bachelor’s degree (for example: master’s degree or PhD program, or medical or law school)</p> <p>[The rest of the categories are omitted for space-saving reasons.]</p>	<p>이 사람은 어떤 교육 과정의, 몇 학년에 재학 중입니까? <i>해당하는 응답 하나에만 표시(X)해 주십시오.</i></p> <p><input type="checkbox"/> 놀이방 또는 유아원(넬서리, 프리스쿨)</p> <p>[The rest of the categories are omitted for space-saving reasons.]</p> <p>Which grade, education level is this person attending? <i>Please mark (X) only one appropriate answer.</i></p> <p><input type="checkbox"/> Playroom or young children’s place (<i>Nursery – phonetic translation, Preschool – phonetic translation</i>)</p> <p>[The rest of the categories are omitted for space-saving reasons.]</p>

	Chinese	Korean
Recommended Wording	<p>这个人当时上了哪个年级？</p> <p><input type="checkbox"/> 研究生院或者大学毕业之后上的其他专业院校（例如：文学硕士或者博士课程、医学院或者法学院）</p> <p>[The rest of the categories are omitted for space-saving reasons.]</p> <p>Which grade was this person attending at the time?</p> <p><input type="checkbox"/> Graduate school or other professional school attended after graduating from college (for example: master’s degree or PhD program, or medical or law school)</p> <p>[The rest of the categories omitted for space-saving reasons.]</p>	<p>이 사람은 어떤 교육 과정의, 몇 학년에 재학 중입니까? <i>해당하는 응답 하나에만 표시(X)해 주십시오.</i></p> <p><input type="checkbox"/> 유아원 (넬서리 또는 프리스쿨)</p> <p>[The rest of the categories are omitted for space-saving reasons.]</p> <p>Which grade, education level is this person attending? <i>Please mark (X) only <u>one</u> appropriate answer.</i></p> <p><input type="checkbox"/> Young children’s place (<i>Nursery</i> – phonetic translation or <i>Preschool</i> – phonetic translation)</p> <p>[The rest of the categories omitted for space-saving reasons.]</p>

Chinese Language Interviews

The original Chinese wording only included “grade” and did not translate “level,” the latter of which serves to describe university studies and beyond that have no “grades.” To broaden the parameters of “grades,” we also proposed saying, “*年级或者阶段的学校？* (grade or schooling stage attended),” but the recommendation of adding “school stage” was not accepted.

Another issue with the original translation was that it did not adequately convey the past tense (“was”) from the original English wording. In our revision, we attempted to resolve these issues by adding an adverbial phrase *当时* (at the time), to make it clear that this question is about the past. We also reasoned that it might help a respondent to think about the “last 3 months” time frame that was established in the previous question. Without the adverbial phrase indicating time, the translation could sound like it was asking what grades the respondent had *ever* attended. In the second round of testing, we found that *当时* (at the time) was, in fact, more confusing for some because the time frame “last 3 months” in the previous question simply did not register for many respondents. This could be an result of not being familiar with questionnaire conventions, where specific time periods are a common reference. It was not uncommon for respondents to miss the skip instructions in the previous Question 10a, which would have prompted them to skip Question 10b, and thus respondents were further confused when reading this question (Question 10b) and trying to determine to what “at that time” referred. Nevertheless, we recommended keeping this translation as these are social practice issues that we feel cannot be addressed further in the translation.

This question is another example where there is a fundamental difference in educational systems, and there is a limitation in what can be addressed linguistically. The concept of “professional school” is hard to convey in a straightforward way in Chinese. For example, in China, professional schools beyond a bachelor’s degree are all considered 研究生院 (graduate school). Medical and law school were provided as examples and were supposed to inform respondents about what professional schools are, but in China and Taiwan, medicine and law are part of the undergraduate program. To help differentiate graduate school from post-bachelor professional school, we recommended saying “after graduating from university” and “other professional school.” This way, the schooling coverage was widened. In the second round, the concept of a professional school was still somewhat problematic, but at the very the least, the translation offered respondents guidance on the progression of schooling after a bachelor’s degree.

Korean Language Interviews

No changes were recommended, except to adopt the global change for “nursery school, preschool” discussed in Detailed Person Question 10a.

Detailed Person Question 11

What is the highest degree or level of school this person has COMPLETED? *Mark (X) ONE box. If currently enrolled, mark the previous grade or highest degree received.*

NO SCHOOLING COMPLETED

No schooling completed

NURSERY OR PRESCHOOL THROUGH GRADE 12

Nursery school

Kindergarten

Grade 1 through 11 – *Specify grade 1–11*

12th grade – **NO DIPLOMA**

HIGH SCHOOL GRADUATE

Regular high school diploma

GED or alternative credential

COLLEGE OR SOME COLLEGE

Some college credit, but less than 1 year of college credit

1 or more years of college credit, no degree

Associate’s degree (*for example: AA, AS*)

Bachelor’s degree (*for example: BA, BS*)

AFTER BACHELOR’S DEGREE

Master’s degree (*for example: MA, MS, MEng, MEd, MSW, MBA*)

Professional degree beyond a bachelor’s degree (*for example: MD, DDS, DVM, LLB, JD*)

Doctorate degree (*for example: PhD, EdD*)

	Chinese	Korean
Original Wording	<p>这个人已获得的最高学历是什么？请在<u>一个</u>框中标记 (X)。如果在校，请选择读完的年级或者所获的最高学历。</p> <p><input type="checkbox"/> 没有完成学校教育</p> <p>...</p> <p><input type="checkbox"/> 十二年级 – 没有毕业文凭</p> <p>...</p> <p><input type="checkbox"/> GED (普通教育同等资格证书)</p> <p>...</p> <p><input type="checkbox"/> 学士学位 (例如 : BA, BS)</p> <p>...</p> <p><input type="checkbox"/> 学士学位以上的专业学位 (例如 : MD, DDS, DVM, LLB, JD)</p> <p>[The rest of the categories are omitted for space-saving reasons.]</p> <p>What is the highest degree this person has obtained? Please mark (X) in <u>one</u> box. If still at school, please choose the completed grade or the obtained highest degree.</p> <p><input type="checkbox"/> Didn't complete school education</p> <p><input type="checkbox"/> 12th grade – No diploma</p> <p><input type="checkbox"/> GED (General education equivalent qualification certificate)</p> <p><input type="checkbox"/> Bachelor's degree (for example: BA, BS)</p> <p><input type="checkbox"/> Bachelor's degree and above for professional school degree (for example: MD, DDS, DVM, LLB, JD)</p> <p>[The rest of the categories are omitted for space-saving reasons.]</p>	<p>이 사람의 최종 학력은 어떻게 됩니까? 해당하는 응답 하나에만 표시해 주십시오. 현재 재학 중인 경우 이전 학년 또는 이 사람이 지금까지 받은 학위 중 최고 학위에 표시하십시오.</p> <p>정규교육 받지 않음</p> <p><input type="checkbox"/> 정규교육 받지 않음 (무학)</p> <p>놀이방/유아원부터 12학년까지</p> <p><input type="checkbox"/> 놀이방 또는 유아원(넬서리, 프리스쿨 등)</p> <p><input type="checkbox"/> 유치원(킨더가든)</p> <p><input type="checkbox"/> 1학년-11학년 – 학년을 구체적으로 적어 주십시오</p> <p><input type="checkbox"/> 12학년 – 졸업장 없음</p> <p>[The rest of the categories are omitted for space-saving reasons.]</p> <p>What is this person's last education attainment? Please mark <u>only one</u> appropriate answer. If currently enrolled, mark either the previous grade or the highest degree among the degrees this person has received until now.</p> <p>Never received regular formal school education</p> <p><input type="checkbox"/> Never received regular formal school education (No education)</p> <p>From playroom/young children's place to 12th grade</p> <p><input type="checkbox"/> Playroom or young children's place (Nursery – phonetic translation, Preschool – phonetic translation, etc)</p> <p><input type="checkbox"/> Kindergarten (Kindergarten – phonetic translation)</p> <p><input type="checkbox"/> 1st-11th grade – Please write the grade specifically</p> <p><input type="checkbox"/> 12th grade – No diploma</p> <p>[The rest of the categories are omitted for space-saving reasons.]</p>

	Chinese	Korean
Recommended Wording	<p>这个人已读完的最高年级或者学历是什么？请在<u>一个框中</u>标记 (X)。如果在校，请选择读完的年级或者所获的最高学历。</p> <p><input type="checkbox"/> 没有上过学</p> <p>...</p> <p><input type="checkbox"/> 十二年级 – 没有高中毕业文凭</p> <p>...</p> <p><input type="checkbox"/> GED (普通教育同等资格证书)</p> <p>...</p> <p><input type="checkbox"/> 学士学位/本科毕业 (例如：BA, BS 学位)</p> <p>...</p> <p><input type="checkbox"/> 研究生级别的专业学位 (例如：MD, DDS, DVM, LLB, JD 学位)</p> <p>[The rest of the categories are omitted for space-saving reasons.]</p>	<p>나라에 상관없이 이 사람이 받은 교육을 모두 포함하여 이 사람의 최종 학력은 어떻게 됩니까? 해당하는 응답 <u>하나에만</u> 표시(X)해 주십시오. 현재 재학 중인 경우, 이전 학년이나 이 사람이 받은 최고 학위에 표시해 주십시오.</p> <p>정규 교육 받지 않음</p> <p><input type="checkbox"/> 정규 교육 받지 않음 (무학)</p> <p>유아원부터 12학년까지</p> <p><input type="checkbox"/> 유아원(넬서리, 프리스쿨 등)</p> <p><input type="checkbox"/> 유치원(킨더가든)</p> <p><input type="checkbox"/> 1학년-11학년 – 학년을 구체적으로 적어 주십시오.</p> <p><input type="checkbox"/> 12학년 – 졸업장 없음</p> <p>[The rest of the categories are omitted for space-saving reasons.]</p>
	<p>What is the highest degree or level of credential this person has completed?</p> <p><input type="checkbox"/> Never attended school</p> <p><input type="checkbox"/> 12th grade – No high school diploma</p> <p><input type="checkbox"/> GED (General education equivalent qualification certificate)</p> <p><input type="checkbox"/> Bachelor’s degree/undergraduate graduate (for example: BA, BS degrees)</p> <p><input type="checkbox"/> Professional degree at the graduate school level (for example: MD, DDS, DVM, LLB, JD degrees)</p> <p>[The rest of the categories are omitted for space-saving reasons.]</p>	<p>Including education that this person receives regardless of country, what is this person’s last educational attainment?⁹ If currently enrolled, mark the previous grade or the highest degree this person has received.</p> <p>Never received regular formal school education</p> <p><input type="checkbox"/> Never received regular formal school education (No education)</p> <p>From young children’s place to 12th grade</p> <p><input type="checkbox"/> Young children’s place (Nursery – phonetic translation, Preschool – phonetic translation, etc.)</p> <p><input type="checkbox"/> Kindergarten (Kindergarten – phonetic translation)</p> <p><input type="checkbox"/> 1st-11th grade – Please write the grade specifically</p> <p><input type="checkbox"/> 12th grade – No diploma</p> <p>[The rest of the categories are omitted for space-saving reasons.]</p>

⁹ In the English back translation, “last educational attainment” is used to describe the Korean translation 최종학력. That phrase is the recommended translation to convey “the highest degree or level of school.” Culturally, the word “last” here is interpreted to mean “the last education in the education system,” not the last time in the chronology of education received.

Chinese Language Interviews

To respondents with lower educational attainment, 最高学历 (highest degree) can be intimidating. For example, in the first round of testing, a respondent who did not complete high school thought “highest degree” meant “highest possible degree.” He knew that the highest possible degree that someone can receive is a graduate degree, and since he did not have a graduate degree, he had to check the “no schooling completed” option. The verb used to mean “has completed” is “已获得” (has obtained), and it made the respondent think of an accomplishment, thus deepening his belief that the question asks about the highest possible degree.

We recommended using another verb to communicate “has completed,” but one that is still relevant to receiving education: 已读完 (has concluded studying for). This is a common expression that one would use to describe whether someone is still in school. It is also used in the italic explanation text of this question. Instead of saying “highest degree,” we recommended using “highest grade or degree” to soften the language. (Please note that 最高学历 [highest degree] and “所获” [has obtained] are still in use in the italic explanatory text directly below the question. We expect that these terms will be less problematic because respondents will not see them until after they read the revised translation, and we think this presentation makes it easier to understand question text.)

For this question, the Korean language team made the recommendation of clarifying that education in Korea should be included because some respondents assumed that the education being considered in this question is education obtained in the United States only. Thinking that Question 11 asks only about education in the United States has not been, in general, a problem in our Chinese language testing for either round. However, there is merit in specifying that education in all places should be included, particularly if that recommendation is approved for the Korean LAG. For comparability across languages, we suggested adopting a parallel phrase in the Chinese translation, like this: 包括在美国或者其他地方接受的教育 (including education received in the United States or any other place). However, since the Chinese language respondents did not demonstrate major difficulty, Census Bureau did not accept this recommendation.

In addition, a number of respondents in the first round pointed out that the original wording for “no schooling” said 没有完成学校教育 (didn’t complete school education), and that this could mean any level of education not being completed. The revised translation simply states having never attended school, and this change presented no problems to round 2 respondents.

For “12th grade,” we recommended clarifying that this answer category specifically talks about not having a diploma from high school. In the United States, it is clear that 12th grade is the last year of high school, but this grade numbering system is not practiced in China, Taiwan, or Hong Kong. Although their elementary school is also grades 1 through 6,

high school is renumbered high school grades 1 through 3 (but it is 10 to 12 in the United States). Middle school is also numbered grades 1 through 3 (and is 7 to 9 in the United States). Because of the different numbering conventions, some respondents did not know that 12th grade referred to high school. Clarifying that the diploma here is a high school diploma will likely help respondents mark the correct answer category. We did not observe respondent difficulties in the second round.

For “GED,” meaning General Educational Development or General Education Diploma, the original wording included a Chinese translation in parentheses that explains that a GED is a general education equivalent. But it is not clear to what “general education” refers. We proposed adding the word “high school” so there is no ambiguity that GED is a high school equivalency diploma. Round 2 testing showed little difficulties with the revision. However, during the Phase 2 meeting, a subject expert from Census Bureau’s Social, Economic, and Housing Statistics Division (SEHSD) pointed out that although the round 2 translation is explanatory, it could create a false-positive result in respondents who consider themselves having received high school equivalent education. This is a scenario that we did not encounter during our testing, but agree on its possibility. Census Bureau decided to retain the English acronym GED and the original Chinese wording “general education equivalent” in parentheses.

Furthermore, a respondent’s comments in the second round made the Chinese language expert panel think that a revision in the translation for “professional school beyond a bachelor’s degree” was necessary to avoid potentially missing data. In the English original text, the most important information “professional degree” is mentioned first. However, the original Chinese wording places it at the end of the phrase because of Chinese grammar structure: “bachelor’s degree/undergraduate and above for professional school.” In the case of a round 2 respondent, she saw the word “bachelor’s” and thought that was what this answer category was about, and she did not read the rest of the phrase. If this respondent’s reaction is indicative of how an actual LAG respondent could read this long list of answers in Question 11, the structure of the translation should change or inaccurate or missing data could occur. We recommended modifying the translation so it does not start with “bachelor’s degree.” As reported earlier in the italic instruction of Question 10b, the concept of a professional school is not germane to Chinese speakers because in China, professional schools beyond a bachelor’s degree are all considered 研究生院 (at the graduate school level). Our recommended change uses the term “graduate school” as a cue to anchor professional school, and its wording and grammar structure also sufficiently distinguish this category from the ones above and below this answer in the list.

Acronyms of U.S. degrees, such as MD, are indicated in parentheses following the answer categories; however, these acronyms mean nothing to respondents who have not heard of them before. We suggested adding the word “degree” next to them to give meaning to these English acronyms.

Some Chinese respondents are not familiar with the Chinese phrase 学士学位 (bachelor's degree), so that they did not link this phrase with the bachelor's degree. In modern China, an undergraduate is called 本科. We recommended adding this word next to the current term for bachelor's degree to help respondents understand the content. This seemed to improve understanding in the second round. Census Bureau suggested saying 本科毕业 (undergraduate's graduate), and we incorporated this suggestion in the final recommended wording.

Korean Language Interviews

About one third of round 1 respondents interpreted that this question was asking about educational attainment completed only in the United States. In round 2, we tested two Korean wording options that were designed to clarify that all education degrees or level of school should be included. Option 1 asks respondent to include "education that this person receives regardless of country," while Option 2 specifically asks respondents to include Korea.

They are:

1. Option 1. 나라에 상관없이 이 사람이 받은 교육을 모두 포함하여 이 사람의 최종 학력은 어떻게 됩니까? (Including education that this person receives regardless of country, what is this person's last educational attainment?)
2. Option 2. 한국 등 다른 나라에서 받은 교육을 포함하여, 이 사람의 최종 학력은 어떻게 됩니까? (Including education received in different countries such as Korea, what is this person's last educational attainment?)

In round 2 interviews, we implemented Option 1 in the LAG and presented Option 2 in a Show Card. In round 2, no respondents interpreted this question to be education in the United States only. When they were asked to choose their preference among the two options, eight out of 12 respondents preferred Option 2 to Option 1, saying that it sounded more natural. As a result, we recommended Option 2 that mentions education received in Korea. However, Option 1 was approved by the Census Bureau.

The round 1 translation of the italic instruction is lengthy with redundant words and uses 또는 (either...or), which some respondents found confusing. For easier understanding and smoother reading, we recommended replacing it with 이나 (or), shortening the sentence, and adding a comma to help respondents process the information easily. In round 2, several elderly respondents were still unable to understand this instruction, but their misunderstanding seemed to be rooted in their misinterpretation of the entire education question, not just the italic instruction. They tended to interpret the text arbitrarily by inferring meaning based on randomly selected words. A few elderly respondents said it is asking about one's intellectual capability or total number of years of schooling.

Because the majority of respondents had no issues understanding this question, we did not recommend further text revision. Furthermore, we recommended underlining key words to provide emphasis, but this recommendation was not approved by the Census Bureau.

As reported earlier in Question 10a, 놀이방 (play room), the translation for “nursery (school),” was often mistaken for a custodial daycare center. In Question 11, a similar phrase is used in a header, and we made the same recommendation of dropping this word. However, we did not recommend including a phonetic translation in the green headings for aesthetics and simplicity reasons, and this was approved by the Census Bureau.

Detailed Person Question 12

This question focuses on this person’s BACHELOR’S DEGREE. *Please print below the specific major(s) of any BACHELOR’S DEGREES this person has received. (For example: chemical engineering, elementary teacher education, organizational psychology.)*

	Chinese	Korean
Original Wording	<p>这个问题是着重问这个人的学士学位专业。请在下面用正楷写出这个人已获得的学士学位专业。</p> <p>This question focuses on asking about this person’s bachelor degree’s major. <i>Please print below the major of any bachelor’s degrees this person has received.</i></p>	<p>이 질문은 이 사람의 학사 학위에 초점을 맞춘 것입니다. 이 사람이 받은 학사 학위의 구체적 전공 분야를 아래에 적어 주십시오.</p> <p>This question focuses on this person’s <u>Bachelor’s degree</u>. <i>Please write below the specific major of <u>Bachelor’s degree</u> that this person received.</i></p>
Recommended Wording	<p>这个问题只是问这个人的学士学位/本科的专业。请在下面用正楷写出这个人已获得的学士学位/本科毕业的具体专业。</p> <p>This question only asks about this person’s bachelor degree/ undergraduate’s major. <i>Please print below the specific major of any bachelor degree/undergraduate graduate.</i></p>	<p>이 질문은 이 사람의 학사 학위에 대해서만 묻고 있습니다. 이 사람이 받은 학사 학위 전공을 아래에 구체적으로 적어 주십시오.</p> <p>This question only asks about this person’s <u>Bachelor’s degree</u>. <i>Please write the <u>Bachelor’s degree</u> major that this person received below specifically.</i></p>

Chinese Language Interviews

The round 2 translation did not differ from the original except that the global change for “bachelor’s degree” was applied (i.e., changed from just “bachelor’s degree” to “bachelor’s degree/undergraduate’s major,” see Question 11 discussion; or “bachelor’s degree/undergraduate,” depending on context). The original English text emphasizes listing the major for bachelor’s degree only, but this did not make sense to many respondents. Upon further examination, they did realize that the question is intended for bachelor’s degree. Our final recommendation (see table above) provides a more natural way in guiding

the respondents to consider bachelor’s degree only. To denote the concept of “specific majors,” the Census Bureau sociolinguist suggested saying 具体专业 (concrete major). Although the original English text indicates major(s), meaning that there could be more than one major, the Chinese language is not structured to indicate plurality in this less conspicuous way. Thus, the Census Bureau sociolinguist’s suggestion seemed to be the most appropriate approach.

Note for Consideration. There were some problems with the degree examples. Some respondents thought that they were restricted to the list of examples. This could be a result of respondents not being familiar with questionnaire conventions. We continued to observe similar problems in later phases of the testing. However, Census Bureau accepted the proposed recommendations for Detailed Person Question 43 only (see discussion for that question).

Korean Language Interviews

In round 1, when we asked respondents what they should answer, a couple of elderly respondents said that they should report the major/concentration of the advanced degree rather than that of the bachelor’s degree. To evaluate respondents’ comprehension in round 2, we added a vignette describing a person with a bachelor’s degree in math and a master’s degree in computer science. Ten out of 12 respondents thought they should write down the major/concentration for both degrees, whereas the question is only intended for the bachelor’s degree. When probed further which they should write down, they thought they should write the major/concentration of the master’s degree, not bachelor’s degree, which is not the question’s intention. This tendency toward “noticing” the advanced degree seems to be rooted in Korean culture that highly values higher education. However, the wording 구체적 전공 분야 (specific majors) here and respondents’ disregard of bachelor’s degree in the question also seem to contribute to this error. Therefore, we recommended revising the sentence to emphasize that the question is only about bachelor’s degree and replacing 학사 학위의 구체적 전공분야를 아래에 적어 주십시오 (write the specific major of bachelor’s degree below) with 학사 학위 전공을 구체적으로 적어 주십시오 (write the bachelor’s degree major below specifically). The Census Bureau approved this wording with underlining the phrase “bachelor’s degree” in Korean.

Detailed Person Question 13

What is this person’s ancestry or ethnic origin?

	Chinese	Korean
Original Wording	这个人的祖籍或者族裔是什么？	이 사람의 조상 또는 민족은 무엇입니까?
	What is the place of ancestor’s birth or origin or ethnic descendants of this person?	What is this person’s ancestry or ethnic group?

	Chinese	Korean
Recommended Wording	No changes recommended.	No changes recommended.

Chinese Language Interviews

Between rounds, the cognitive interview respondents wrote the province in China where they were from; the province in China where their ancestors were from, 汉 (“Han” ethnic group); or a combination of these answers. Some respondents wrote “Chinese” (in English or in Chinese) because the examples mentioned different types of people, such as Italian and Jamaican. The majority wrote in their answer to this question using Chinese characters. Our findings are consistent with Pan, Craig, and Scollon (2005). The word “ancestry” (祖籍) has very specific connotation, meaning a location such as a hometown or place where one’s ancestors were born. For “ethnic origin” (族裔), it meant to respondents the different ethnic groups inside of China, such as Han, Manchurian, or Tibetan.

We do not have a recommendation for translation changes. It seems that no amount of “tweaking” in the translation can “fix” how respondents interpret the meaning of terms using a Chinese frame of reference. However, our findings can be used to inform the kind of data that will likely be received during the actual data collection using LAGs.

We do want to note that our cognitive interview respondents wrote their answers directly on the Chinese LAG, thus possibly priming themselves to refer to their own cultural context. When the LAG is in use in the field, respondents will write their answers on the English ACS, and it is possible that their response pattern will change. Although this is out of scope for the current project, a usability study would inform this issue.

Korean Language Interviews

In both rounds of interviews, respondents interpreted ancestry and ethnic group as two different concepts, and most respondents interpreted 조상 (ancestry) as “forefathers of his/her linear family members.” Despite this confusion, only one respondent wrote the origin of his/her family name in the answer box, and all others wrote 한국인 (Korean) because it is included as one of the examples on the LAG form.

We had recommended dropping 조상 (ancestry) and keeping 민족 (ethnic group) only to avoid confusion; however, this recommendation was not accepted. Round 2 testing showed similar findings, and we do not have recommendations within the parameters of translation.

Detailed Person Question 14a

a. Does this person speak a language other than English at home?

	Chinese	Korean
Original Wording	这个人在家中是否讲英语以外的另一种语言?	이 사람은 집에서 영어 이외의 다른언어를 사용합니까?
	Does this person at home speak English outside another language?	Does this person speak a different language other than English at home?
Recommended Wording	这个人在家中是否讲 <u>英语以外</u> 的另一种语言?	이 사람은 집에서 <u>영어가 아닌</u> 다른 언어를 사용합니까?
	Does this person at home speak <u>English outside</u> another language?	Does this person use a different language <u>which is not English</u> at home?

Chinese Language Interviews

Although we did not observe major difficulty with this question in general, the Chinese language expert panel reviewed the translation and recommended a revision in the translation for “other than [English].” In the original Chinese wording, the phrase “speak English” comes before “other than” because of Chinese language structure. Our recommended changes restructure the translation so that the concept of “other than” is introduced earlier. We believe this makes the question clearer. This type of improvement is consistent with the issues reported earlier about Chinese language structure (see discussion on “in” versus “outside” in Question 7 and “Professional school beyond a bachelor’s degree” in Question 11). Census Bureau decided not to adopt this recommendation, but underline 英语以外 (“English outside,” translation for “other than English”) to emphasize this concept.

Korean Language Interviews

Round 1 translation uses 영어 이외의 다른 언어 (a different language other than English) to translate “a language other than English.” About half of the respondents were confused with this question because some Korean monolinguals have a tendency to rule out the possibility that the Korean language could be perceived as 다른 언어 (a different language). Some respondents completely misunderstood this question and interpreted that it was asking if this person speaks a language *other than Korean*. This is because they ignored “English” in the text and unconsciously replaced it with “Korean,” which sounded more natural to them. This confusion may originate from cultural centrism. To reduce confusion, we proposed two options for testing in round 2. Option 1 keeps 다른 (different) but revises the remaining part to clearly indicate the question is asking about a language, which is *not* English. It says: 이 사람은 집에서 영어가 아닌 다른 언어를 사용합니까? (Does this person also use a different language which is not English at home?). Option 2 simply drops 다른 (different), as it may

help respondents to include “Korean” in their answer. The wording is: 이 사람은 집에서 영어 이외의 언어를 사용합니까? (Does this person use a language other than English at home?) When we implemented Option 1 in the LAG and presented Option 2 using a Show Card in round 2, all respondents were able to answer this question as intended. This shows that our revision eliminated the source of confusion. Between two options, eight respondents preferred Option 1 because it is clearer, while two respondents preferred Option 2. We recommended adopting Option 1, and the Census Bureau concurred.

Detailed Person Question 14c

c. How well does this person speak English?

- Very well
- Well
- Not well
- Not at all

	Chinese	Korean
Original Wording	这个人讲英语的程度如何？ <input type="checkbox"/> 一窍不通 [The rest of the categories are omitted for space-saving reasons.] How is this person’s spoken English level? <input type="checkbox"/> Know nothing about [The rest of the categories are omitted for space-saving reasons.]	이 사람은 영어로 말을 어느 정도로 잘 합니까? How well does this person speak English? [The rest of the categories are omitted for space-saving reasons.]
Recommended Wording	这个人讲英语的程度如何？ <input type="checkbox"/> 完全不会讲 [The rest of the categories are omitted for space-saving reasons.] How is this person’s spoken English level? <input type="checkbox"/> Doesn’t know how to speak at all [The rest of the categories are omitted for space-saving reasons.]	No changes recommended.

Chinese Language Interviews

In the first round, we presented respondents with alternative translations for “not at all” in a Show Card: 完全不会 (doesn’t know at all) and 一点不讲 (doesn’t speak a bit). They were compared with the original Chinese wording 一窍不通 (know nothing about). We also asked respondents which version sounded better to describe someone who was not English speaking. Most respondents prefer the Show Card versions because they were more

idiomatic. Since the question asks about speaking ability, we recommended combining the two Show Card versions and use: 完全不会讲 (doesn't know how to speak at all). It worked well in the second round.

Korean Language Interviews

No changes were recommended.

Detailed Person Question 15a

Did this person live in this house or apartment 1 year ago?

- Person is under 1 year old → *SKIP to question 16*
- Yes, this house → *SKIP to question 16*
- No, outside the United States and Puerto Rico – *Print name of foreign country, or U.S. Virgin Islands, Guam, etc., below; then SKIP to question 16*
- No, different house in the United States or Puerto Rico

	Chinese	Korean
Original Wording	<p>这个人1年前是否居住在这所房子或者公寓内？</p> <p><input type="checkbox"/> 否，在美国本土和波多黎各以外 – 请在下面用正楷写出外国名称或者美属维尔京群岛、关岛等；然后跳到第16题</p> <p><input type="checkbox"/> 否，居住在美国本土或者波多黎各境内的另一处房子内</p> <p>[The rest of the categories are omitted for space-saving reasons.]</p> <p>Does this person live in this house or apartment 1 year ago?</p> <p><input type="checkbox"/> No, outside the United States and Puerto Rico – <i>Print name of foreign country, or U.S. Virgin Islands, Guam, etc., below; then SKIP to question 16</i></p> <p><input type="checkbox"/> No, different house in the United States or Puerto Rico</p> <p>[The rest of the categories are omitted for space-saving reasons.]</p>	<p>이 사람은 1년 전에도 이 주택 또는 아파트에서 살았습니까?</p> <p><input type="checkbox"/> 이 사람은 1살 미만입니다 → <i>아래 질문을 건너 뛰어 질문 16부터 응답해 주십시오.</i></p> <p><input type="checkbox"/> 예, 이 주택이나 아파트에서 살았습니다 → <i>질문 16으로 건너 뛰어 응답해 주십시오.</i></p> <p><input type="checkbox"/> 아니오, 미국 및 푸에르토리코 이외 – <i>다른 나라의 이름 또는 미국령 버진아일랜드, 괌 등을 적은 다음, 질문 16으로 건너 뛰어 응답해 주십시오.</i></p> <p><input type="checkbox"/> 아니오, 미국 또는 푸에르토리코에 있는 다른 집에서 살았습니다.</p> <p>Did this person live in this house or apartment 1 year ago?</p> <p><input type="checkbox"/> This person is under 1 year old → <i>Please SKIP to question 16 and answer it.</i></p> <p><input type="checkbox"/> Yes, lived in this house or apartment → <i>Please SKIP to question 16 and answer it.</i></p> <p><input type="checkbox"/> No, other than the United States or Puerto Rico – <i>Please write the name of a different country or U.S. Virgin Islands, Guam, etc and then SKIP to question 16 and answer it.</i></p> <p><input type="checkbox"/> No, lived in a different house in the U.S. or Puerto Rico</p>

	Chinese	Korean
Recommended Wording	<p>这个人1年前是否居住在这所房子或者公寓内？</p> <p><input type="checkbox"/> 否，在美国以外和在波多黎各岛以外 – 请在下面用正楷写出国家名称或者美属维尔京群岛、关岛等；然后跳到第16题</p> <p><input type="checkbox"/> 否，居住在美国或者波多黎各岛境内的另一处房子内</p> <p>[The rest of the categories are omitted for space-saving reasons.]</p> <p>Does this person live in this house or apartment 1 year ago?</p> <p><input type="checkbox"/> No, outside the United States and Puerto Rico island – <i>Print name of country, or U.S Virgin Islands, Guam island, etc., below; then SKIP to question 16</i></p> <p><input type="checkbox"/> No, different house in the United States or Puerto Rico Island</p> <p>[The rest of the categories are omitted for space-saving reasons.]</p>	<p>이 사람은 1년 전에도 이 주택 또는 아파트에서 살았습니까?</p> <p><input type="checkbox"/> 이 사람의 나이는 1 살 미만임 → <u>질문 16으로 건너 뛰어</u> 응답해 주십시오.</p> <p><input type="checkbox"/> 예, 이 주택이나 아파트에서 살았음 → 질문 16으로 <u>건너 뛰어</u> 응답해 주십시오</p> <p><input type="checkbox"/> 아니오, 미국이나 푸에르토리코가 아닌 <u>다른 나라</u>에서 살았음 – <u>그 나라의 이름이나 미국령 버진아일랜드, 괌 등을 적은 후, 질문 16으로 건너 뛰어</u> 응답해 주십시오.</p> <p><input type="checkbox"/> 아니오, 1년 전에는 미국이나 푸에르토리코의 다른 집에서 살았음.</p> <p>Did this person live in this house or apartment 1 year ago?</p> <p><input type="checkbox"/> This person’s age is under 1 year old (Shortened ending form) → <i>Please SKIP to question 16 and answer it.</i></p> <p><input type="checkbox"/> Yes, lived in this house or apartment (shortened ending form) → <i>Please SKIP to question 16 and answer it.</i></p> <p><input type="checkbox"/> No, lived in a <u>different country</u>, not the United States or Puerto Rico (shortened ending form) – <i>Please write the name of the country or U.S. Virgin Islands, Guam, etc and then SKIP to question 16 and answer it.</i></p> <p><input type="checkbox"/> No, lived in a <u>different house</u> in the U.S. or Puerto Rico (short ending form).</p>

Chinese Language Interviews

Other than the global change to “Puerto Rico” and “name of foreign country” (see discussion in Detailed Person Question 7), no further changes were recommended.

Korean Language Interviews

In both rounds, a few respondents were confused by the first answer category “Person is under 1 year old.” It is because the current question is about the place where the respondents lived previously but the first answer category focused on age. Therefore, they thought it must be a typo, and those who lived in the current place less than 1 year chose this answer category based on their belief that it must mean 이 집에서 산 지 1년 미만입니다 (has lived in this home for less than 1 year). In addition, we found that the italic skip

instructions next to the arrows were lengthy, and the translations were not consistent in original translation tested in round 1. We revised this translation to follow the same wording used in the second and the third answer category of this question, hoping that it would possibly help respondents' reading. However, round 2 testing showed that this less-crowded text did not seem to be a remedy. Therefore, we recommended adding *나이는* (age) here to prevent respondents who lived in a current place less than 1 year from choosing this answer category based on their interpretation that this wording was wrong. We also recommended shortening the ending form to make it less crowded.

In addition, seven respondents did not follow the skip instructions to go to Question 16 and proceeded to answer Question 15b anyway. When probed directly about the reasons, respondents indicated that they understood the meaning of the instructions, but simply ignored them because (1) the question seemed simple and therefore there was no need to scrutinize everything, (2) they did not notice the skip instruction, or (3) there was no space other than here to write an address, and they thought an address needed to be written somewhere on the LAG. These respondent difficulties seem to have different sources of confusion in that difficulty (1) comes from respondents' lack of experience with self-administered surveys, (2) is caused by text that is too crowded, and (3) may be an artifact introduced by our cognitive testing design in that the respondents fill out only a certain portion of the LAG. While the type-one and type-three difficulty cannot be addressed at this time, the type-two difficulty can possibly be addressed by shortening the ending sentence form of each answer category.

In round 2, a few respondents interpreted that the last two answer categories, both of which contain the same word *다른* (different), meant the same. This confusion could possibly be due to the densely written text. We recommended underlining *다른 나라* (a different country) and *다른 집* (different house) to emphasize the difference and shortening the ending form of the sentence to make it less crowded. All of these recommendations were accepted by the Census Bureau.

Detailed Person Question 15b

b. Where did this person live 1 year ago?

Address (number and street name)
Name of city, town, or post office
Name of U.S. county or municipio in Puerto Rico
Name of U.S. state or Puerto Rico
ZIP Code

	Chinese	Korean
Original Wording	<p>这个人1年前居住在哪里？ 地址（注明门牌号与街道名称） 市镇或者邮局名称 美国的县名 美国的州名或者波多黎各 邮政编码</p> <p>Where did this person live 1 year ago? Address (indicate number and street name) City/town or post office U.S. county name Name of U.S. county or municipio in Puerto Rico Postal administration number</p>	<p>이 사람은 1년 전에 어디에 살았습니까? 주소(번지 및 거리 이름) 도시, 타운 또는 우체국 이름 [The rest of the categories are omitted for space-saving reasons.]</p> <p>Where did this person live 1 year ago? Address (number and street name) City, Town or post office name [The rest of the categories are omitted for space-saving reasons.]</p>
Recommended Wording	<p>这个人1年前居住在哪里？请把地址写下来。 注明门牌号与街道名称 市名 (city)，镇名 (town) 或者邮局名称 美国的县名 (county) 美国的州名或者波多黎各岛 邮政编码 (ZIP code)</p> <p>Where did this person live 1 year ago? <i>Please write down the address.</i> Indicate number and street name Name of city (city), name of town (town), or name of postal office U.S. county name (county) Name of U.S. county or municipio in Puerto Rico Island Postal administration number (ZIP code)</p>	<p>이 사람은 1년 전에 어디에 살았습니까? 그 주소를 적어 주십시오. 번지 및 거리 이름 도시(city) (또는 타운/우체국 이름). [The rest of the categories are omitted for space-saving reasons.]</p> <p>Where did this person live 1 year ago? <i>Please write the address.</i> Number and street name City (<i>city</i>-in Roman Alphabet) (or town/post office name) [The rest of the categories are omitted for space-saving reasons.]</p>

Chinese Language Interviews

Following the first round, we recommended deleting the word “address” in the label for the first write-in box that is intended for the number and street name. Three respondents wrote in their complete address in this first box, because the label says “address” in it. The Korean language team made the same recommendation of deleting the word “address” and incorporating the concept as part of the question text, like this: Where did this person live 1 year ago? *Please write the address.* This recommendation was approved for the Korean language team, and to maintain comparability across languages, we tested it in the Chinese LAG. There were still some problems in round 2, but these seemed rooted in respondents’ lack of experience to “break up” the address and write each part in the designated fields.

It is worthwhile to note that during the protocol design phase, we were concerned that monolingual respondents may not be able to write their own address, as it requires English language skills. However, with few exceptions, all respondents were able to write their address in English, possibly because this is a basic life skill that they know from living in the United States.

For “name of city, town, or post office,” we recommended inserting the corresponding English words in parentheses: “city” and “town.” As noted by a respondent in the second round, she learned to write her U.S. address in English, so seeing the exact English words make this task more obvious to her (i.e., she knew exactly what needed to be done here, which is to write down the city in which she lived).

For “name of U.S. county,” the issue is “social practice” is nature. County is specific to the United States, and not an administrative geographic unit in China. Therefore, there is no equivalent term in Chinese. However, past translations have used the word 郡 (“jun”) or, in Cantonese, 府 (“fu”). We asked respondents whether they had heard of these terms before and only some had. The original translation used 县 (“xian”) to mean county. This is a familiar term to Chinese speakers. However, in modern China, 县 is a smaller administrative geographic unit than a city. In Taiwan, on the other hand, 县 is bigger than a city (but cities are not necessarily under the jurisdiction of a 县). We recommended to continue using 县 since it denotes a geographic unit to respondents, but add the English term “county” in parentheses. In addition, the translation for county starts with “U.S.,” which tells the reader that this is a geographic unit specific to the United States. Round 2 revealed similar findings to the previous round. The majority of respondents did not even fill out the county information, but the inclusion of the English word “county” makes the box more noticeable. For “ZIP code,” we recommended adopting a similar strategy by providing the English word in the parentheses after the translation, like this: 邮政编码 (ZIP code).

Korean Language Interviews

More than two thirds of the round 1 respondents wrote their complete address in the first box where they were supposed to write the number and street name only. Many respondents immediately thought of a full address when they encountered the word 주소, translation for “address” in the label of the first write-in box. At that time, we recommended deleting the word “address” and inserting the phrase currently in parentheses as the label for the answer box, so it says “Number and street name” only. However, the “address” labeling is important so we suggested writing it in a complete sentence to be a part of the actual question text.

In round 2, fewer but still half of the respondents wrote their complete address in the first write-in box. This showed partial improvement. As discussed in the Chinese language findings, the problem seems rooted in respondents’ lack of experience to “break up” the address and write each part in the designated fields. The Korean team agreed with the Chinese team’s notion that it is more helpful to show English words after the translated terms of city for monolingual respondents who learned what to write when seeing the word “city.” Therefore, we recommended implementing a similar revision by inserting the corresponding English words after 도시 (city). For aesthetic reasons, we also recommended using “/” meaning “or” in Korean, and the phrase will appear as 도시 (city) (또는 타운/우체국 이름). This recommendation was approved.

Detailed Person Question 16

Is this person CURRENTLY covered by any of the following types of health insurance or health coverage plans? Mark “Yes” or “No” for EACH type of coverage in items a–h.

- a. Insurance through a current or former employer or union (of this person or another family member)
- b. Insurance purchased directly from an insurance company (by this person or another family member)
- c. Medicare, for people 65 and older, or people with certain disabilities
- d. Medicaid, Medical Assistance, or any kind of government-assistance plan for those with low incomes or a disability
- e. TRICARE or other military health care
- f. VA (including those who have ever used or enrolled for VA health care)
- g. Indian Health Service
- h. Any other type of health insurance or health coverage plan – *Specify*

Original Wording	Chinese	Korean
	<p>请针对列出的每项保险计划，分别标选“有”或者“没有”。</p>	<p>이 사람은 <u>현재</u> 의료 보험에 가입되어 있습니까? 항목 a-h 를 보시고 아래에 제시된 각각의 의료 보험에 대해 “예” 또는 “아니오”를 표시해 주십시오.</p>
a.	<p>通过 (这个人或者其他家庭成员) 目前或之前的雇主或者工会享受保险</p>	<p>a. 직장의료보험(이 사람 또는 가족이 현재나 이전 고용주 혹은 노조를 통해 가입한 보험)</p>
b.	<p>(这个人或者其他家庭成员) 直接从保险公司购买的保险</p>	<p>b. 이 사람 또는 가족이 보험회사로부터 직접가입한 보험</p>
e.	<p>TRICARE 或其它军队医疗计划</p>	<p>c. 65세 이상의 연장자를 위한 메디케어</p>
	<p><i>Please mark "yes" or "no" based on every listed insurance plan.</i></p>	<p>혹은 장애인을 위한 연방 정부 의료보험</p>
a.	<p>Insurance through (this person's or other family members'), current or previous employer or union</p>	<p>d. 메디케이드나 의료보조 등 저소득층이나 장애인을 위한 각종 정부 지원</p>
b.	<p>Insurance (this person or other family members directly purchase from insurance company</p>	<p>e. 트라이케어 (TRICARE) 또는 기타 군 의료보험</p>
e.	<p>TRICARE or other military medical plans</p>	<p>[The rest of the categories are omitted for space-saving reasons.]</p>
	<p>[The rest of the categories are omitted for space-saving reasons.]</p>	<p>Is this person <u>currently</u> enrolled in health insurance? After reading items a-h, <i>please mark "yes" or "no" regarding each health insurance provided below.</i></p>
a.		<p>a. Work health insurance (this person or another family member's enrolled insurance through a current or former employer or union)</p>
b.		<p>b. This person or another family member's directly enrolled health insurance</p>
c.		<p>c. 65 years of age and older people Medicare – phonetic translation or federal government's health insurance for the disabled</p>
d.		<p>d. Medicaid – phonetic translation, medical assistance, or various government assistance for the low income or the disabled)</p>
e.		<p>e. TRICARE – phonetic translation (TRICARE) or other military health insurance</p>
		<p>[The rest of the categories are omitted for space-saving reasons.]</p>

	Chinese	Korean
Recommended Wording	<p>请看以下列出的各项保险计划，并在每一项中标选“有”或者“没有”。</p> <p>a. 通过目前或者以前的雇主或者工会享受的保险(这个人或者其他家庭成员的雇主或者工会)</p> <p>b. 直接从保险公司购买的保险(这个人或者其他家庭成员购买的)</p> <p>e. TRICARE (军人及其家属的医疗计划) 或其它军队医疗计划</p> <p>[The rest of the categories are omitted for space-saving reasons.]</p> <p><i>Please see the insurance plans listed below, and mark "yes" or "no" in each type.</i></p> <p>a. Insurance through current or previous employer or union (this person or other family members' employer or union)</p> <p>b. Insurance directly purchased from insurance company (purchased by this person or other family members)</p> <p>e. TRICARE (medical plan for military persons and family members) or other military medical plans</p> <p>[The rest of the categories are omitted for space-saving reasons.]</p>	<p>항목 a-h 를 보시고, 이 사람이 아래에 제시된 각각의 의료 보험에 가입했는 지를 각 항목마다 “예” 또는 “아니오”로 표시(x)해 주십시오.</p> <p>a. 이 사람이나 가족이 현재나 이전 고용주 혹은 노조를 통해 가입한 직장 의료보험</p> <p>b. 이 사람이나 가족이 보험회사로부터 직접 가입한 보험</p> <p>c. 메디케어 (65 세 이상의 연장자 및 장애인을 위한 연방 정부 의료보험)</p> <p>d. 메디케이드나 의료보조 등 저소득층이나 장애인을 위한 각종 정부 지원</p> <p>e. TRICARE (군인 및 그 가족을 위한 의료보험) 혹은 기타 군 의료보험</p> <p>[The rest of the categories omitted for space-saving reasons.]</p> <p><i>After reading the items a-h, please mark (x) "yes" or "no" at each item to indicate whether or not this person is enrolled at each presented health insurance.</i></p> <p>a. This person or another family member's enrolled health insurance through a current or former employer or union</p> <p>b. This person or another family member's directly enrolled health insurance</p> <p>c. Medicare – phonetic translation (federal government health insurance for people 65 and older or people with certain disabilities)</p> <p>d. Medicaid – phonetic translation, medical assistance, or various government assistance for the low income or the disabled</p> <p>e. TRICARE (medical plan for military persons and family members) or other military medical plans</p> <p>[The rest of the categories are omitted for space-saving reasons.]</p>

Chinese Language Interviews

Respondents in the first round tended to mark an answer for only the coverage that applied to them, and left rest of the checkboxes blank. But it was also possible that they simply did not read the other choices. We recommended adding 每一项 (each type) to the translation to emphasize that each coverage should be marked yes or no, and we also restructured the

translation because of the added words. There was a major improvement in the second round, but there were still some respondents who did not mark the “no” box. This is an issue that is that is more related to familiarity with questionnaire conventions.

Between subitems “a” and “b,” respondents were able to distinguish that these were two different types of coverage. However, the parenthetical portion of the text in the original wording made the translation look hard to digest. We recommended moving the parenthetical phrase to the end and writing it in a complete sentence.

The acronym TRICARE by itself meant nothing to most respondents because they had not heard of it before. We recommended adding a note in parentheses to provide a general definition of this term. Because TRICARE serves many types of military personnel and veterans, we used a generic term 軍人 (military person) to be inclusive.

Korean Language Interviews

About half of the respondents were confused with the layout of the subitems in both rounds. Similar to the Chinese interview findings, respondents in round 1 only marked “yes” to the answer categories that applied to them, but left the answer categories blank when they were not applicable. In round 2, we implemented the recommended translation to combine a main question and instruction into one sentence in typical Korean wording style. Although about the same number of respondents made a mistake in round 2, the content of mistakes showed some improvement. For example, three respondents marked “x” appropriately to the answer categories a through g. They left the answer category h unmarked, but wrote in their specific types of health insurance in a box for “h. Other – specify.” This behavior seems to result mainly from respondents’ lack of experience with self-administered surveys. We recommended adding an underline 각 항목마다 (at each item) and adding “(x)” as a visual aid for additional emphasis. These changes were approved by the Census Bureau.

For subitems a and b, most respondents were able to distinguish the difference between them. However, a few round 1 respondents focused on the beginning part of subitem b and interpreted that it included the insurance by another family member, while subitem a meant the insurance by this person only. To eliminate this confusion, we modified the translation of subitem a to be in a similar word order where subitem b is presented and tested it in round 2. No problems related to this phrase were observed, confirming that the proposed translation clarifies meanings.

For subitems c and d, most respondents were able to distinguish clearly the difference between the two types of health insurance. However, the round 1 Korean translation of subitem c started with a phrase 65 세 이상의 연장자 (65 years of age and older people), and this made a few respondents interpret that subitem c is for people 65+ only, while answer category d is for people under 65. To reduce this confusion, we moved the 65+ part in the parentheses, and tested it in round 2. This problem was no longer observed in round 2.

For subitem e, none of the respondents had heard of TRICARE but most respondents could guess this meant some type of military insurance. However, a few respondents pointed out that the one syllable translation 軍 (military) could be easily missed, and commented that the round 1 translation starting with 트라이케어 (TRICARE – phonetic translation) was confusing. We proposed two options. Option 1 changed the order of the round 1 translation and used 軍인 (military persons) rather than 軍 (military). Option 2 used the acronym “TRICARE” and included a short explanation in parentheses.

In round 2, we implemented Option 1 in LAG and showed Option 2 on a Show Card. All respondents (10) preferred Option 2, saying that it explains the meaning clearly and shows that both family members and military persons are covered. Therefore, we recommended Option 2, and it was approved by the Census Bureau.

Detailed Person Question 17a

a. Is this person deaf or does he/she have serious difficulty hearing?

	Chinese	Korean
Original Wording	这个人是否失聪，或者有严重的听力障碍？ Does this person have loss of [hearing] intelligence or does he/she have serious difficulty hearing?	이 사람은 청각 장애인이거나 듣는 데 심각한 어려움을 겪고 있습니까? Is this person deaf or (does this person) have serious difficulty hearing?
Recommended Wording	这个人是否耳聋，或者有严重的听力障碍？ Is this person ear deaf or does he/she have serious difficulty hearing?	No changes recommended.

Chinese Language Interviews

Some respondents in the first round did not know the original translation 失聪 meant deaf; instead, they only knew its literal meaning, which was loss of intelligence. This might be a high-level vocabulary word, and we recommended using a vernacular term instead: 耳聋 (ear deaf). The recommended term was also used in the 2000 census form language guide. This change worked well in the second round.

Korean Language Interviews

No changes were recommended.

Routing Instruction G

Answer question 18a–c if this person is 5 years old or over. Otherwise, SKIP to the questions for Person 2 on page 12.

	Chinese	Korean
Original Wording	<p>填表说明: 如果这个人满5岁, 请回答第18a题到第18c题。否则跳到第12页上针对第2位人士的问题。</p> <p>Form-taking instruction: Answer question 18a–c if this person reaches 5 years old. Otherwise, SKIP to the questions for Person 2 on page 12.</p>	<p>이 사람이 5세 이상인 경우 질문 18a–c에 응답해 주십시오. 그렇지 않으면 아래 질문들을 건너 뛰어 12쪽의 가구원 2에 대한 질문에 응답해 주십시오.</p> <p>If this person is 5 years old or older, please answer question 18a–c. Otherwise, SKIP the questions below and answer the questions about household member 2 on page 12.</p>
Recommended Wording	<p>填表说明: 如果这个人满5岁或者超过5岁, 请回答第18题a项到第18题c项。否则跳到第12页上针对第2位人士的问题。</p> <p>Form-taking instruction: Answer number 18 question a item to number 18 question c item if this person reaches 5 years or over 5 years old. Otherwise, SKIP to the questions for Person 2 on page 12.</p>	<p>이 사람이 5세 이상 (5세 포함) 인 경우, 질문 18a부터 18c까지 응답해 주십시오. 이 사람이 5세 미만인 경우, 아래 질문들을 건너 뛰어 12페이지의 가구원 2에 대한 질문에 응답해 주십시오.</p> <p>If this person is 5 years old or older (including 5 years old), please answer question from 18a to 18c. If this person is under 5 years old, SKIP the questions below and answer the questions about household member 2 on page 12</p>

Chinese Language Interviews

When seeing the word 满 (reached, literally meaning “full”), a few round 1 respondents only thought of a person who has reached a certain age. To clarify, we recommended expanding the phrase to say “reached 5 years old or over 5 years old.” Round 2 testing did not reveal problems.

Korean Language Interviews

Several round 1 respondents had difficulty interpreting 5 세 이상 (5 years old or older), and they were particularly confused about whether 5 years old should be included. For clarification, we added 5 세 포함 (including 5 years old) in the parentheses after 5 세 이상 (5 years old or older), and tested this change in round 2. No problems related to this phrase were observed in round 2, confirming the proposed translation clarifies the meaning.

However, we found a new issue in round 2. Some respondents did not interpret that 그렇지 않으면 (otherwise) referred to persons under 5 years old. Therefore, we recommended

specifying the meaning of “otherwise” for clarification, like this: If this person is under 5 years old. 그렇지 않으면 (otherwise) has been used often in other routing instructions of the Korean LAG, but this was the first time we observed this issue. It is possible that the lengthy instructions after adding the clarifying phrase in the parentheses introduced this error, so we suggested implementing this recommendation only here and in a similarly structured translation in Routing Instruction H. The Census Bureau approved this recommendation.

Routing Instruction H

Answer question 19 if this person is 15 years old or over. Otherwise, SKIP to the questions for Person 2 on page 12.

	Chinese	Korean
Original Wording	<p>填表说明: 如果这个人满15岁, 请回答第19题。否则跳到第12页上针对第2位人士的问题。</p> <p>Form-taking instruction: Answer question 19 if this person reaches 15 years old. Otherwise, SKIP to the questions for Person 2 on page 12.</p>	<p>이 사람이 15세 이상인 경우 질문 19에 응답해 주십시오. 그렇지 않으면 아래 질문들을 건너 뛰어서 12쪽의 가구원 2에 대한 질문들에 응답해 주십시오.</p> <p>If this person is 15 years old or over, please answer question 19. Otherwise, <u>SKIP</u> the questions below and answer the questions about household member 2 on page 12.</p>
Recommended Wording	<p>填表说明: 如果这个人满15岁或者超过15岁, 请回答第19题。否则跳到第12页上针对第2位人士的问题。</p> <p>Form-taking instruction: Answer question 19 if this person reaches 15 years or over 15 years old. Otherwise, SKIP to the questions for Person 2 on page 12.</p>	<p>이 사람이 15세 이상(15세 포함)인 경우, 질문 19에 응답해 주십시오. 이 사람이 15세 미만인 경우, 아래 질문들을 건너 뛰어서 12페이지의 가구원 2에 대한 질문들에 응답해 주십시오.</p> <p>If this person is 15 years old or over (including 15 years), please answer question 19. If this person is under 15 years old, <u>SKIP</u> the questions below and answer the questions about household member 2 on page 12.</p>

Chinese Language Interviews

Because Routing Instruction H is very similar to Routing Instruction G, we implemented the same recommendation. We recommended expanding the phrase to say “reached 5 years old or over 5 years old.” Round 2 testing did not reveal problems.

Korean Language Interviews

Routing Instruction H is very similar to Routing Instruction G; therefore, we recommended implementing the same suggestion given in Routing Instruction G here, and it was approved by the Census Bureau.

During the round 2 testing, about half of respondents did not notice the routing instructions, and this seems to be primarily because respondents are not familiar with survey conventions. We believe that making the routing instructions more prominent could be a possible solution, for example, bolding the text in the routing instructions (like the LAG questions) and/or showing the text in different colors. However, this recommendation was not approved.

Detailed Person Question 20

What is this person’s marital status?

- Now married
- Widowed
- Divorced
- Separated
- Never married

	Chinese	Korean
Original Wording	<p>这个人的婚姻状况如何？</p> <p><input type="checkbox"/> 从未结过婚 → <u>跳到标示 I 的地方</u></p> <p>[The rest of the categories are omitted for space-saving reasons.]</p> <p>What is this person’s marital status?</p> <p><input type="checkbox"/> Never married → <i>SKIP to the place where I is marked</i></p> <p>[The rest of the categories are omitted for space-saving reasons.]</p>	<p>이 사람의 혼인 상태는 어떻게 됩니까?</p> <p><input type="checkbox"/> 결혼한 적 없음 → <u>아래 질문들을 건너 뛰어 I의 질문들에 응답해 주십시오.</u></p> <p>[The rest of the categories are omitted for space-saving reasons.]</p> <p>What is this person’s marital status?</p> <p><input type="checkbox"/> Never married → <i>Please SKIP questions below and answer questions under I.</i></p> <p>[The rest of the categories are omitted for space-saving reasons.]</p>
Recommended Wording	<p>这个人目前的婚姻状况如何？</p> <p><input type="checkbox"/> 从未结过婚 → <u>跳到标示 I 的地方</u></p> <p>[The rest of the categories are omitted for space-saving reasons.]</p> <p>What is this person’s current marital status?</p> <p><input type="checkbox"/> Never married → <i>SKIP to the place where I is marked</i></p> <p>[The rest of the categories are omitted for space-saving reasons.]</p>	<p>이 사람의 현재 혼인 상태는 어떻게 됩니까?</p> <p><input type="checkbox"/> 결혼한 적 없음 → <u>아래 질문들을 건너 뛰어 I라고 쓰여진 곳을 읽어 주십시오.</u></p> <p>[The rest of the categories are omitted for space-saving reasons.]</p> <p>What is this person’s current marital status?</p> <p><input type="checkbox"/> Never married → <i>Please SKIP questions below and read the place where I is written.</i></p> <p>[The rest of the categories are omitted for space-saving reasons.]</p>

Chinese Language Interviews

We recommended adding an adjective 目前的 (current) to indicate the present tense as intended in the English wording. The original Chinese wording had no such adjective, and it could be unclear because the Chinese language does not conjugate verbs for tenses. Round 2 testing showed that the revision worked well and no additional changes are recommended for the answer categories.

Korean Language Interviews

In round 1, most respondents were able to understand the question, except one respondent with a complicated marriage history—she was widowed a long time ago, remarried, and then divorced recently. Since the question does not explicitly specify the time frame for marriage, she marked “widowed” and ignored the “divorced” status, of which she felt ashamed. As with the Chinese recommendation, we recommended adding an adjective 현재 (current) to clearly indicate the present state, as intended in the English wording. We tested this revision in round 2, and no respondent made a comment on this question.

Before round 1 testing began, our translation review found that the translation directs respondents to answer Question 24 (“under I”) even before they read about Routing Instruction I. Therefore, we corrected this issue, and tested the revised wording in rounds 1 and 2. The majority of respondents did not have issues with this, but a couple of respondents had difficulty locating the routing instruction and complained that the letter “I” looked like the number “1.” Therefore, we recommended adding 질문 23 뒤의 (after Question 23) to help respondents find the location of Routing Instruction I and considering making “I” more discernable by bolding and underlining. These formatting changes were not approved. Instead, the Census Bureau suggested more clearly denoting that the letter I refers to a routing instruction, similar to what was used in the Chinese translation for this question. The Chinese translation used “place where I is marked.” We applied the same approach and revised the Korean translation to say I 라고 쓰여진 곳을 읽어 주십시오 (read the place where I is written). Our original recommendation of adding 질문 23 뒤의 (after Question 23) was dropped because of space constraints. The decision to drop the “after Question 23” wording was also based on our evaluation that the new revised sentence serves our purpose to denote the placement of I on the LAG, and the Census Bureau approved it. This recommendation was applied to the rest of the LAG with similar phrases as in Housing Section Question 14 and Routing Instruction C.

Note for Consideration. In round 2, one respondent commented that the order of the answer categories seemed unnatural to the Korean’s typical way of thinking, and stated it should be in the order of “never married,” “married,” “divorced,” “separated,” and “widowed.” Although the language experts agree on this point, we understand this suggestion is not applicable to the LAG at this time.

Detailed Person Question 21

In the PAST 12 MONTHS did this person get –

- | | Yes | No |
|--------------|--------------------------|--------------------------|
| a. Married? | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Widowed? | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Divorced? | <input type="checkbox"/> | <input type="checkbox"/> |

	Chinese	Korean
Original Wording	<p>在最近12个月，这个人是否 –</p> <p>是 否</p> <p>a. 结婚 <input type="checkbox"/> <input type="checkbox"/></p> <p>b. 丧偶 <input type="checkbox"/> <input type="checkbox"/></p> <p>c. 离婚 <input type="checkbox"/> <input type="checkbox"/></p> <p>In the last 12 months, has this person –</p> <p>Yes No</p> <p>a. Married? <input type="checkbox"/> <input type="checkbox"/></p> <p>b. Widowed? <input type="checkbox"/> <input type="checkbox"/></p> <p>c. Divorced? <input type="checkbox"/> <input type="checkbox"/></p>	<p>지난 12개월 사이에 이 사람은 –</p> <p>a. 결혼하셨습니다? b. 사별하셨습니다? c. 이혼하셨습니다?</p> <p><u>In the PAST 12 MONTHS</u>, did this person get –</p> <p>a. Married? b. Widowed? c. Divorced?</p>
Recommended Wording	<p>在最近12个月中，这个人是否有过下列情况？</p> <p>有 没有</p> <p>a. 结婚 <input type="checkbox"/> <input type="checkbox"/></p> <p>b. 丧偶 <input type="checkbox"/> <input type="checkbox"/></p> <p>c. 离婚 <input type="checkbox"/> <input type="checkbox"/></p> <p>In the last 12 months, has this person had any of the following situations?</p> <p>Have Have not</p> <p>a. Married? <input type="checkbox"/> <input type="checkbox"/></p> <p>b. Widowed? <input type="checkbox"/> <input type="checkbox"/></p> <p>c. Divorced? <input type="checkbox"/> <input type="checkbox"/></p>	<p><u>지난 12 개월 동안</u> 이 사람은 다음 각 항목에 해당하는 일을 겪은 적이 있습니까?</p> <p>a. 결혼한 적이 있다 b. 사별한 적이 있다 c. 이혼한 적이 있다</p> <p><u>During the past 12 months</u>, has this person experienced the situation corresponding to each following item?</p> <p>a. (this person) has got married b. (this person) has got widowed c. (this person) person has got divorced</p>

Chinese Language Interviews

The question text in the English wording is incomplete and ends with a dash because the phrase is designed to be continued in the answer categories. This does not read naturally in Chinese, and the layout of horizontal subitems and checkboxes were also problematic. Many respondents thought the question was asking them to choose *one* marital status, which they had already answered in the previous question. We recommended using a complete interrogative question instead (a similar approach was taken with the tenure question in Housing Section Question 14). This may also prompt respondents to provide an answer for

each subitem, rather than thinking they should “mark one.” Changing this item to an interrogative question format requires modifications in the answer category labels. For example, the yes/no answer category changed to “(I) have” (有) or “(I) have not” (没有) according to Chinese way of responding (the response follows the verb used in the question). This revision worked well in the second round.

Korean Language Interviews

As with the Chinese findings, about half of the respondents were confused with this question in both rounds. They either did not mark any answers or left some subitems unmarked. Even those who marked all subitems of the question commented that this question was confusing, and they were unsure if they should mark all of the subitems.

Several round 1 respondents reported that they did not mark any answer because Person 1 got married a long time ago, so this question did not seem applicable to Person 1. In round 2, we modified the translation and put the emphasis on Person 1’s experience.¹⁰ No respondents reported this as a source of confusion in round 2, but said they were still unsure whether they should mark all of the subitems. Considering that most of round 2 respondents were able to mark multiple answers in Question 16, which is a similar type of question, it seems the question layout is the main source of this error.

We recommended two options. Option 1 is the approach that the Chinese language team took, which changed the incomplete phrase to make a complete question. It reads like this: 지난 12 개월 동안 이 사람은 다음 각 항목에 해당하는 일을 겪은 적이 있습니까? (During the past 12 months, has this person experienced the situation corresponding to each following item?). Option 2 not only revised the wording to make it a complete question, but also added words to clearly indicate all subitems should be marked, similar to Question 16: 항목 a-c 를 보시고, 지난 12 개월 동안 이 사람의 혼인상태에 변화가 있었는 지를 각 항목마다 “예 ” 또는 “아니오” 로 표시(x)해 주십시오. (After reading the item a-c, please mark (x) “yes” or “no” at each item to indicate whether this person’s marital status has been changed during the past 12 months.) The response choices in both options are the same, which was revised to fit the changes for the declarative sentence form from the round 1 translation. The Census Bureau approved Option 1.

¹⁰ The back translation for the revision is “has experienced,” which may seem too similar to the original translation, but in Korean, it is a more focused way of asking this question.

Detailed Person Question 23

In what year did this person last get married?

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Year

	Chinese	Korean
Original Wording	<p>这个人最近一次结婚是在哪一年？ 年</p> <p>In which year did this person recently get married? Year</p>	<p>이 사람이 가장 최근에 결혼한 것은 언제입니까? <i>최근 결혼 년도를 적어주십시오.</i> 최근 결혼 년도</p> <p>When did this person recently get married? <i>Please write the recent marriage year.</i> Recent marriage year</p>
Recommended Wording	<p>这个人是在哪一年结婚的？ <i>注：请填写最近一次结婚的年份。</i> 年份</p> <p>In which year did this person get married? <i>Note: Please fill in the year when recently got married.</i> Year</p>	<p>이 사람이 결혼한 것은 언제입니까? <i>마지막으로 결혼한 년도를 적어주십시오.</i> 마지막 결혼년도</p> <p>When did this person get married? <i>Please write the last marriage year.</i> Year of the last marriage</p>

Chinese Language Interviews

Many respondents interpreted “last get married” as having married recently, and did not think the question applied to them because they had not recently gotten married. This interpretation is most likely because the translation literally means “recently” (this is one way to convey “last” in Chinese). However, alternative translations, such as 上一次 (latest) or 最后一次 (last time), all sounded rather unnatural. The team of Chinese language experts believes that cultural norms heavily influence how this question should be asked. In the Chinese culture, divorce is undesirable and very rarely does one asks such a question about “last get married.”

We recommended not asking about “last married” in the main question but communicate it in a note, like this: 注：如果有一次以上的婚姻，请填写最近一次结婚的年份。(Note: If there is more than 1 marriage, please fill in the year when recently got married.). But the portion of the phrase indicating “if there is more than 1 marriage” was not accepted by the Census Bureau. There was improvement in the second round because respondents were not distracted by the note about “recently got married” in the main question text. However, when they did read the note, similar observations from round 1 like “I did not recently get

married” still surfaced. We recommended continuing to use the round 2 version because (1) the main question seemed to work well, and (2) there is really no other good way to address the cultural frame of reference. In this case, divorce has an undesirable connotation.

In addition, there is a label “Year” for the box that allows respondents to write in the year they were married. The Chinese translation for year has only one character 年. We suggested using 年份 so it stands out more; the meaning is unchanged.

Korean Language Interviews

In round 1, more than half of the respondents were confused because they tended to regard “marriage” as 평생에 한 번 있는 일 (once in a lifetime event), but the phrase 가장 최근에 (most recently) sounded like multiple marriages are assumed, which did not make sense to them. In addition, respondents tended to interpret 가장 최근에 (most recently) in the context of a short time period, such as in a month or a year. For those who got married a long time ago, this question seemed not applicable. Therefore, we dropped 가장 최근에 (most recently) from the first sentence and added 마지막으로 (last) in the second sentence to ask respondents to write their marriage year. In round 2, only one respondent was confused, and misinterpreted that this question was only for people who married multiple times, confirming that our recommendation eliminates the source of confusion. To maintain translation consistency, we also recommended changing 최근 (the most recent) to 마지막 (last) in the phrase directly above the answer box where respondents are supposed to write their marriage year. All of these recommendations were approved.

Detailed Person Question 25a

a. Does this person have any of his/her own grandchildren under the age of 18 living in this house or apartment?

	Chinese	Korean
Original Wording	这个人是否有18岁以下的 (外) 孙子或者孙女居住在这所房子或者公寓内?	이 사람은 이 주택 또는 아파트에서 18세 미만의 손주와 같이 살고 있습니까?
	Does this person have any of his/her own (outside) grandson or granddaughter under the age of 18 living in this house or apartment?	Is this person living with a grandchild under the age of 18 in this house or apartment?
Recommended Wording	这个人是否有18岁以下的孙子女或外孙子女居住在这所房子或者公寓内?	No changes recommended.
	Does this person have any of his/her own grandson/daughter or outside grandson/daughter under the age of 18 living in this house or apartment?	

Detailed Person Question 25b

b. Is this grandparent currently responsible for most of the basic needs of any grandchild(ren) under the age of 18 who live(s) in this house or apartment?

Yes

No → *SKIP to question 26*

	Chinese	Korean
Original Wording	<p>对于居住在这所房子和公寓内的未满18岁的(外)孙子或者孙女, 这位(外)祖父或者祖母是否负责照料其大部分基本需求?</p> <p><input type="checkbox"/> 有负责照料</p> <p><input type="checkbox"/> 没有负责照料 → <i>跳到第26题</i></p> <p>Is this (outside) grandfather or grandmother currently responsible for most of the basic needs of any under 18 years of age (outside) grandson or granddaughter who live(s) in this house or apartment?</p> <p><input type="checkbox"/> Responsible to take care of</p> <p><input type="checkbox"/> Not responsible to take care of → <i>SKIP to question 26</i></p>	<p>이 사람은 현재 이 주택 또는 아파트에서 같이 살고 있는 18세 미만의 손주의 기본적인 필요를 책임지고 있습니까?</p> <p>Is this person currently responsible for the basic needs of a grandchild under the age of 18 who lives together in this house or apartment?</p>
Recommended Wording	<p>对于居住在这所房子或者公寓内任何一位的未满18岁的孙子女或外孙子女, 这位祖父母是否负担其大部分基本需求?</p> <p><input type="checkbox"/> 有负担</p> <p><input type="checkbox"/> 没有负担 → <i>跳到第26题</i></p> <p>Is this grandfather/mother currently taking the burden of the responsibility for most of the basic needs of any grandson/daughter or outside grandson/daughter under 18 years of age who live(s) in this house or apartment?</p> <p><input type="checkbox"/> Take the burden of the responsibility for</p> <p><input type="checkbox"/> Not take the burden of the responsibility for → <i>SKIP to question 26</i></p>	<p>이 사람은 현재 이 주택 또는 아파트에서 같이 살고 있는 18세 미만의 손주에 대해 경제적인 면을 포함한 기본적인 필요를 대부분 책임지고 있습니까?</p> <p>Is this person responsible for most of the basic needs, including financial aspect, of a grandchild under the age of 18 who lives together in this house or apartment?</p>

Detailed Person Question 25c

c. How long has this grandparent been responsible for the(se) grandchild(ren)?

If the grandparent is financially responsible for more than one grandchild, answer the question for the grandchild for whom the grandparent has been responsible for the longest period of time.

	Chinese	Korean
Original Wording	<p>这位 (外) 祖父或者祖母负责照料这个 (外) 孙子或者孙女已有多少时间? 注: 如果他在经济上负担一个以上的 (外) 孙子或者孙女, 请根据负担时间最长的那个 (外) 孙子或者孙女的情况来回答这个问题。</p> <p>How long has this (outside) grandfather or grandmother been responsible for the (outside) grandson or granddaughter? <i>Note: If s/he is financially responsible for more than one (outside) grandson or granddaughter, please answer the question according to the (outside) grandson or granddaughter for whom the grandparent has been responsible for the longest period of time.</i></p>	<p>이 사람은 이 손주를 얼마나 오랫동안 책임져 왔습니까? 이 사람이 여러명의 손주를 경제적으로 책임져 온 경우 가장 오랫동안 길러온 손주에 대해 응답해 주십시오.</p> <p>c. How long has this person been responsible for this grand child? <i>If this person has been financially responsible for multiple grandchildren, answer (the question) for the grandchild that this person has raised for the longest period of time.</i></p>
Recommended Wording	<p>这位祖父母负担这个孙子女或外孙子女已有多少时间? 注: 如果他在经济上负担一个以上的孙子女或外孙子女, 请根据负担时间最长的那个孙子女或外孙子女的情况来回答这个问题。</p> <p>How long has this grandfather/mother been taking the burden of the responsibility for the grandson/daughter or outside grandson/daughter <i>Note: If s/he has financially taken the burden of responsibility for more than one grandchild or outside grandchild, please answer the question according to the grandchild or outside grandchild for whom the grandparent has taken the burden of responsibility for the longest period of time.</i></p>	No changes recommended.

Chinese Language Interviews

In Chinese, there is no generic term for “grandchild” or “grandparent” as in English. Instead, there are different terms for a male grandchild and a female grandchild, as well as maternal and paternal grandchildren. For example, the Chinese character 外 (outside) is used to described maternal grandchildren. In the original Chinese wording, the character 外 was put

in parentheses, possibly because it would be too verbose to list all the individual terms. The majority of the respondents knew that this term functions as a reminder that the grandchildren or grandparents discussed here includes maternal relationships. However, others thought that they must consider the maternal relationship only.

In reviewing the original English wording, we noted that Question 25a says “grandchildren,” which is plural. On the other hand, Question 25b and Question 25c says “grandchild(ren),” which could be singular or plural. The word “grandparent” is used in Questions 25b–c. For Question 25a, we recommended using a compound term 孙子女 (grandson/daughter) to indicate that we mean grandchildren. We also recommended writing out paternal and maternal grandchildren on its own, as shown in the proposed translation column.

Since Question 25b and Question 25c builds upon information from Question 25a, we can rely on contextual clues from Question 25a and simplify the translation for the rest of the question series. For example, in Questions 25b–c, we can omit 外 (outside) when describing grandparents, since respondents will have already identified themselves in Question 25a. As for grandchild(ren), Questions 25b–c continues to use the term in Question 25b, but adds “any one” and “this” to indicate the possibility of singularity.

These assumptions were tested in the second round, and we did not observe major respondent difficulties. Thus, we recommended adopting these translation changes.

In addition, the original translation incorporates the word 照料 (take care of) to mean “responsible,” which is quite culturally appropriate in describing grandparent/grandchild relationships in the Chinese culture. However, for a number of respondents, it did not seem to imply financial responsibility. We tested two alternative translation versions in round 2. Version 1 (负责; responsible for) is a common way to describe responsibility. Version 2 clearly means financial responsibility because it emphasizes taking burden, but it can sound like there is no loving relationship between the grandchildren and grandparents. It says: 负担, meaning to take burden of the responsibility for. We compared these two versions in round 2, and it was clear that Version 2 is the most appropriate term for this concept of financial responsibility. We implemented this change throughout the Question 25 series.

In the italic instruction of Question 25c, the phrase 孙子女或外孙子女 (grandson/daughter or outside grandson/daughter) looks like it is repeated—once in the second line of the italic text and then again in the next line of the text. The layout in the LAG was such that they are shown on top of each other in these two separate lines, as shown in Figure 3-1.

In the original English text, grandchild is also repeated twice but does not read as redundant. However, as discussed earlier, Chinese wording for grandchild must specify gender and maternal/paternal relationships, thus making the wording rather lengthy. As discussed with the Census Bureau, we moved a few words from the end of the second line

of the italic text to the beginning of the next line. This way, it does not look like these phrases are repetitive. This is shown in Figure 3-2.

Figure 3-1. Original Layout of Grandparent/Grandchild Phrasing in the LAG

c. 这位祖父母负责这个孙子女或外孙子女已有多少时间？注：如果他在经济上负担一个以上的孙子女或外孙子女，请根据负担时间最长的那个孙子女或外孙子女的情况来回答这个问题。

不到6个月

6到11个月

1或者2年

3或者4年

5年以上

Figure 3-2. Revised Layout of Grandparent/Grandchild Phrasing in the LAG

c. 这位祖父母负责这个孙子女或外孙子女已有多少时间？注：如果他在经济上负担一个以上的孙子女或外孙子女，请根据负担时间最长的那个孙子女或外孙子女的情况来回答这个问题。

不到6个月

6到11个月

1或者2年

3或者4年

5年以上

Korean Language Interviews

About half of the round 1 respondents did not interpret “basic needs” in Question 25b to include the “financial aspect.” Instead, they interpreted basic needs as “love/care” only. This can be explained by Korean culture that highly values emotional/psychological support and tends to devalue financial aspects. To clearly indicate that the question is asking for basic needs, including financial needs, we added 경제적인 면을 포함한 (including financial aspect) and tested it in round 2. No problems related to this phrase were observed in round 2, confirming that the proposed translation clarifies meanings. This revision was recommended and approved by the Census Bureau.

Detailed Person Question 26

Has this person ever served on active duty in the U.S. Armed Forces, military Reserves, or National Guard? Active duty does not include training for the Reserves or National Guard, but DOES include activation, for example, for the Persian Gulf War.

	Chinese	Korean
Original Wording	<p>这个人是否曾在美国海陆空三军、预备队或者国民警卫队中服役？注：服役不包括在预备队或者国民警卫队接受的训练，但包括因为海湾战争等情况的应征入伍。</p> <p>Has this person ever served on active duty in U.S. Navy, Army and Air Force, “yu be” Reserves team, or national citizen policing guard team? <i>Note: Active duty does not include at “yu be” Reserves team or national citizen policing guard team’s training, but INCLUDES activation due to situations like the Gulf War.</i></p>	<p>이 사람은 미국 군대, 예비군 또는 방위군에서 현역으로 복무한 적이 있습니까? 현역 복무에는 예비군이나 방위군 훈련은 포함되지 않지만, 걸프전 등 전쟁을 위한 동원은 포함됩니다.</p> <p>아니오, 예비군 또는 방위군을 위한 훈련만 받음 → 아래 질문을 건너 뛰어 질문 28a부터 응답해 주십시오.</p> <p>[The rest of the categories are omitted for space-saving reasons.]</p> <p>Has this person served on active duty in the U.S. armed forces, reserves military, or guard military? Active duty does not include training for the reserves military or guard military, but includes activation for a war such as Gulf War.</p> <p>No, received training for reserves military or guard military → <u>SKIP</u> the below questions and answer from question 28a.</p> <p>[The rest of the categories are omitted for space-saving reasons.]</p>
Recommended Wording	<p>这个人是否曾在美国军队、预备役部队或者国民警卫军中服役？注：服役不包括平时在预备役部队或者国民警卫军(National Guard)中接受的训练，但包括因为海湾战争等情况的应征入伍。</p> <p>Has this person ever served on active duty in U.S. military, “yu bei” Reserves military service force, or national citizen policing guard military? <i>Note: Active duty does not include at yu-bei Reserves military force or national citizen policing guard military’s (National Guard) regular time training, but INCLUDES activation due to situations like the Gulf War.</i></p>	<p>이 사람은 미국 군대, 예비군 또는 주방위군에서 현역으로 복무한 적이 있습니까? 현역 복무에는 예비군이나 주방위군 훈련은 포함되지 않지만, 걸프전 등 전쟁을 위한 동원은 포함됩니다.</p> <p>아니오, 예비군 또는 주방위군을 위한 훈련만 받음 → 아래 질문을 건너 뛰어 질문 28a부터 응답해 주십시오.</p> <p>[The rest of the categories are omitted for space-saving reasons.]</p> <p>Has this person served on active duty in the U.S. armed forces, reserves military, or state guard military? Active duty does not include training for the reserves military or state guard military, but includes activation for a war such as Gulf War.</p> <p>No, received training for reserves military or state guard military → <u>SKIP</u> the below questions and answer question 28a and on.</p> <p>[The rest of the categories are omitted for space-saving reasons.]</p>

Chinese Language Interviews

The original Chinese wording specified “Navy, Army, and the Air Force” to describe the Armed Forces, which is how the Chinese army is classified. Respondents did not demonstrate any difficulties. However, our research showed that the U.S. Armed Forces include more military segments, such as the Marines, so this translation is incomplete. According to the Chinese translation used at the United Nations Security Council, Armed Forces is translated as 武装部队. Our team of language experts discussed this translation and felt that it is too technical and seems to put the emphasis on “armed,” while the purpose of Question 26 is on military force. We recommended 美国军队 (U.S. military) because it uses the word 军 (military), which everyone recognizes and is generic enough.

For “Reserves,” the original Chinese wording uses “team” to describe the unit of Reserves. In the first round, we interviewed two respondents who have family that serve in the U.S. military, and two additional respondents who were knowledgeable about the military in general, one through service in the Chinese army and the other as a family member to a Taiwanese military service person. The Taiwanese and Cantonese-speaking respondents both use 后备 (“hou bei”) to describe Reserves. The respondent from China who has family in the U.S. military uses 预备役 (yu bei military service), like in the original Chinese wording, but with the word “military service” instead of “team.” The second respondent who served in the Chinese army suggested 替补队员 (Reserves for substitution [during combat]), but this is only a portion of the Reserves’ possible duties. The team of Chinese language experts discussed and recommended 预备役部队 (Reserved military service force). It clearly indicates that the Reserves is a military service and a force, while using “yu bei,” as suggested by the knowledgeable family member of U.S. military personnel. Round 2 testing supported these observations.

Among the four knowledgeable respondents we interviewed (as described in the military Reserves section), only one correctly identified the original translation for National Guard. The rest of the respondents interviewed using Protocol D thought it meant 民兵 (civilian soldiers) or some kind of armed police. Our research showed that the United Nations General Assembly uses the original Chinese wording to mean National Guard in their Chinese language memorandum. In the context of this question, we felt that using the word “military” instead of “team” would describe its function better, and it was reflected in the round 2 translation. Our final recommendation was to append the English term “national guard” to the translation because this type of unit is very specific to the needs of the United States. Whereas, in Taiwan and China, military service is mandatory for several years.

The Chinese language expert panel also recommended adding the word 平时 “at regular time” to describe the nature of training for the Reserves and National Guard. This makes the entire sentence read more logically and smoother. We also recommended repeating the term 服役 “active duty” in the text after the comma for similar reasons. The original English

text says “DOES include,” but the Chinese language has no auxiliary verbs like “does,” so the emphasis is on “include” and adding the term “active duty” before it seems to provide similar emphasis as was intended by the original English text. Repeating the term 服役 “active duty” in the text after the comma was not accepted by the Census Bureau.

Korean Language Interviews

About half of the respondents in both rounds interpreted 예비군 (reserve military) based on the Korean military system, and described it as a type of military in which males who once served as armed forces are obliged to participate after completing their military service. They are civilians, but have regular trainings and can be summoned in emergency situations. With this limitation in mind, we recommended keeping the original translation because it has the same gist (i.e., these people are civilians, but they can be called to full-time military service during war times, and they maintain military skills through training). This is also the word consistently used in the Korean newspapers in the United States to translate military reserve. Four respondents who clearly articulated the difference of military reserves in Korea and the United States confirmed that the original translation would be amenable in delivering the intended message.

About half of the round 1 respondents interpreted 방위군 (guard military, translation for “national guard”) in two ways based on the Korean military system. First, the respondents thought this term referred to 방위, people who replace the military service with public service designated by the Korean government, after completing a short military training. Second, some respondents interpreted this term from 민방위 (civilian guard). In principle, males aged 20–40 belong to 민방위 (civilian guard), but most of them are 30+ years old since those in the military/military reserve are excluded.

Currently, there is no consistent term used in the Korean newspapers in the United States to translate “national guard,” and the term used most often is 주방위군 (state guard military). Since what the national guard does is to protect their states, we replaced 방위군 (guard military) with 주방위군 (state guard military) and tested it in round 2. In round 2, the respondents exhibited a similar confusion, and additionally two respondents interpreted 주방위군 (state guard military) as armed forces on active duty to protect the states, which is a critical error.

Thus, we recommended going back to the original translation of 방위군 (guard military), which contains the basic information (i.e., these people are civilians, but they can be called to full-time military service during war times, and they maintain military skills through training). However, the Census Bureau approved the round 2 translation (주방위군 [state guard military]).

Detailed Person Question 27

When did this person serve on active duty in the U.S. Armed Forces? Mark (X) a box for EACH period in which this person served, even if just for part of the period.

	Chinese	Korean
Original Wording	<p>这个人何时在美国海陆空三军中服役? 请在此人各次服役期段标记(X), 即使服役时间仅占期间一部分。</p> <p>When did this person serve on active duty in the U.S. Navy, Army, and Air Force? Please mark (X) at each of this person's service period, even if the service only occupied part of that period.</p>	<p>이 사람이 미국 군대에서 현역으로 복무했던 기간은 언제입니까? 그 기간의 일부만 포함되더라도, 이 사람이 복무했던 각 기간에 해당되는 란이 있다면 표시(x)해 주십시오.</p> <p>When did this person serve on active duty in the U.S. Armed Forces? Mark (x) a space for <u>each</u> period that this person served, even if just for a part of period is included.</p>
Recommended Wording	<p>这个人何时在美国军队中服役? 请在此人各次服役期段标记(X), 即使服役时间仅占期间一部分。</p> <p>When did this person serve on active duty in the U.S. military? Please mark (X) at each of this person's service period, even if the service only occupied part of that period.</p>	<p>이 사람이 미국 군대에서 현역으로 복무했던 기간은 언제입니까? 그 기간의 일부만 포함되더라도, 이 사람이 복무했던 각각의 기간에 해당되는 란이 있다면 모두 표시(x)해 주십시오.</p> <p>When did this person serve on active duty in the U.S. Armed Forces? Mark (x) all space for <u>each</u> period that this person served, even if just for a part of period is included.</p>

Chinese Language Interviews

Besides the change on "U.S. Armed Forces" (see previous discussion in Question 26), no further changes were recommended.

Korean Language Interviews

Most of the respondents understood this question; however, many respondents pointed out that one syllable translation 각 (each) could be easily missed and people can mark only one period. To eliminate this error, we replaced 각 with 각각의, which still means "each," and added 모두 (all). These revisions were implemented in round 2. There were no problems related to this phrase was observed in round 2, confirming that the proposed translation addresses the confusion well.

3.4 Question-by-Question Assessments and Recommendations: Phase 3

Phase 3 covered Questions 29 to 48 of the Detailed Person pages. Per Census Bureau’s request, we also tested instructions at the end of the LAG as well as the mailing instructions on the back page.

Detailed Person Question 29a

LAST WEEK, did this person work for pay at a job (or business)?

	Chinese	Korean
Original Wording	<p>上一星期，这个人是否从事有薪工作（或者生意）？</p> <p><u>Last week</u>, did this person engage in a you-xin [has salary] job (or business)?</p>	<p>지난 주에 이 사람은 직장이나 사업체에서 수입을 얻기 위해 일하였습니까?</p> <p><u>Last week</u>, did this person, at a workplace or business, work for the purpose of getting income?</p>
Recommended Wording	<p>上个星期，这个人从事过有薪水或有酬劳的工作（或者生意）吗？</p> <p><u>Last week</u>, did this person engage in a you-xin-shui [has salary] or with reward’s job (or business)?</p>	<p>지난 주에 이 사람은 수입을 얻기 위해 직장이나 사업체에서 일했습니까?</p> <p><u>Last week</u>, did this person for the purpose of getting income, at a workplace or business, work?</p>

Detailed Person Question 29b

LAST WEEK, did this person do ANY work for pay, even for as little as one hour?

	Chinese	Korean
Original Wording	<p>上一周，这个人是否从事过任何有薪工作，哪怕只是一个小时？</p> <p><u>Last week</u>, did this person engage in any you-xin [has salary] job, even only for an hour?</p>	<p>지난 주에 이 사람은 수입을 얻기 위해 어떤 일이든 1시간이라도 일을 하였습니까?</p> <p><u>Last week</u>, did this person for the purpose of getting income do any work even as little as 1 hour?</p>
Recommended Wording	<p>上一星期，这个人是否从事过任何有薪水或有酬劳的工作，即便是只有一个小时的工作也算？</p> <p><u>Last week</u>, did this person engage in a you-xin-shui [has salary] or with reward’s job, include work even only for an hour?</p>	No changes recommended.

Chinese Language Interviews

In round 1, almost all respondents understood the original translation well, that 有薪工作 (round 1 translation for “work for pay”) meant working and receiving 薪水 (salary), 工资

(work wage), or 钱 (money) for the work. The only respondents who had trouble with the question had lower education and did not recognize the word 薪 (xin, meaning pay). When the Chinese language expert panel met and discussed this issue, we realized that the round 1 translation almost always implied cash payment, and would not cover in-kind payment or unpaid work at a family business that the ACS computer-assisted telephone interviewing (CATI) interviewer manual said to include.

In round 2, we tested three versions to gauge which sounded more natural for this question and also gave the impression of both monetary and nonmonetary payment for work. Version 1, 有薪水 (meaning has salary) is similar to the original wording, but modified to be more idiomatic. To respondents, it read most natural but would imply monetary payment. Version 2 (有报酬, meaning with compensation) and Version 3 (有酬劳, meaning with reward) could include nonmonetary aspects, but Version 3 sounded slightly better in terms of naturalness in the context of this question. Based on round 2 findings, we recommended combining Versions 1 and 3, like this: 有薪水或有酬劳 (has salary or has reward). We also reminded the Census Bureau that Version 1 can be used by itself if the most natural wording is desired, yet the nonmonetary aspect would likely be ignored. Census Bureau decided to adopt the composite version.

Korean Language Interviews

All respondents in round 1 understood the translation of Question 29a well. However, a few respondents from round 1 commented that the question did not sound natural because Koreans tend to use 일 (work) to refer to paid activities and 봉사 활동 (service activity) when unpaid. Thus, the phrase 수입을 얻기 위해 (for the purpose of getting income), which was used with 일 (work) seemed redundant and unnatural. We recommended separating the former phrase 수입을 얻기 위해 (for the purpose of getting income) from 수입을 얻기 위해 일하셨습니까? (work for the purpose of getting income) and putting this phrase 수입을 얻기 위해 (for the purpose of getting income) in front of the question for natural reading. When this change was implemented in round 2, no negative comments were made, confirming that the proposed translation clarifies the meanings. The recommended sentence structure for Question 29a was already in use for Question 29b, and therefore no adaptation was needed for the latter question.

Detailed Person Question 30 Instructions

If this person worked at more than one location, print where he or she worked most last week.

	Chinese	Korean
Original Wording	<p>注: 如果这个人在一个以上地点工作, 请用正楷写出上星期工作时间最长的地点。</p> <p>Note: If this person worked at more than one location, please print during last week longest working time's location.</p>	<p>이 사람이 두 군데 이상에서 일한 경우 가장 많이 일한 장소를 적어 주십시오.</p> <p>If this person worked at two locations or more, please write the place worked most.</p>
Recommended Wording	<p>如果这个人的工作地点不止一个, 请工整地写出上个星期这个人总共工作时间最长的那个地点。</p> <p>Note: If this person's work locations are not limited to one, please neatly write down during last week this person's total longest working times that location.</p>	<p>지난 주에 이 사람이 두 군데 이상에서 일한 경우, 가장 많이 일한 장소를 적어 주십시오.</p> <p>Last week, if this person worked at two locations or more, please write the place worked most.</p>

Chinese Language Interviews

Round 1 interviews suggested that there was some confusion about whether the instruction referred to more than one location or more than one job, and that it was about how long (time) a person works. The Chinese language expert panel examined the round 1 translation and found that the sentence structure could be improved to provide more cues on these issues. For round 2 testing, we restructured the sentence to mention 工作地点 (work location) earlier. We also noted that in the latter part of this instruction, the English text uses “where” to refer to the location and mentions “worked most” last in the sentence. However, this structure does not work for the Chinese translation as we need to say “longest working time location,” where time is mentioned before location. This was probably why many round 1 respondents got the impression that this instruction was asking about how long (time) a person works. To provide more clarification, we added the relative pronoun “that” so it says “that location,” thus deepening the impression that this instruction refers to a location, not length of time. We tested: 注: 如果这个人的工作地点不止一个, 请工整地写出上个星期工作时间最长的那个地点。(Note: If this person's work locations are not limited to one, please neatly write down during last week longest working times that location.).

Round 2 interviews showed improvement, except among respondents with lower educational attainment. The problem was related to the “worked most” concept, specifically deciding over what period the work occurred. The Chinese language expert panel discussed about further refining the wording. The recommended wording is shown in the recommended wording column.

Korean Language Interviews

In round 1, three respondents were confused by the translation. Two of them understood the instruction as asking where this person had worked in the past (not last week), so they wrote the place where this person had worked the longest. These respondents did not notice that this instruction followed the main question asking where this person worked last week. The phrase “last week” was not included in the round 1 translation to avoid unnecessary repeats for natural reading, although the English ACS questionnaire contains the time reference. However, our findings suggested that this omission could lead to confusion. In round 2, when *지난 주에* (last week) was clearly indicated, one respondent still showed confusion, but only at the first reading. Upon the second reading, she was able to understand the intended meaning, confirming that the revision offers clarification.

Detailed Person Question 30a

Address (number and street name)

	Chinese	Korean
Original Wording	地址 (门牌号与街道名称) Address (number and street name)	번지 및 거리 이름 Number and street name
Recommended Wording	注明门牌号与街道名称 Indicate number and street name	No changes recommended.

Chinese Language Interviews

There was some confusion in round 1 about what to write in the address box marked “address (number and street name).” The same observation was made among respondents when Detailed Person Question 15b (home address 1 year ago) was tested in Phase 2. We found that those who knew the address tended to write the entire address in this box, possibly because the box was labeled “address” and respondents are not used to breaking up components of an address in separate, designated fields.

For round 2 testing, we adopted the recommendation in Phase 2 (see discussion in Detailed Person Question 15b), which was to revise the box’s label to say *注明门牌号与街道名称* (indicate number and street name). However, there is a pragmatic issue that cannot be addressed in translation. In previous testing about home address, we reported that despite limited English language skills, most respondents were able to provide their home address in English, most likely because knowing where one lives is a basic life skill they have acquired living in the United States. This did not hold true for the work address.

In round 1, three of 12 respondents were unable to write the complete address because they did not know how to write it in English or because they did not know what the address was. An additional respondent knew the street name, but not the number. Yet another

respondent reported a work-at-home situation, and he did not write down the home address, but the name of the company; he later marked “yes” for Detailed Person Question 30c (city limits) and wrote the address of the company in NY in the space next to the answer categories. As an additional example, there were two respondents who both worked close to the Chicago O’Hare airport. One intuitively wrote 机场 (airport) in the address box and the other left the address box blank and wrote 机场 (airport) at Question 30c (city limits), after marking “yes.” However, there are two airports in Chicago, and they did not specify which one.

In round 2, about half of the respondents had trouble writing down the street address on their own, but some managed to look up the address or consult the LAG instructions. For example, a respondent was interviewed at his work location, and he was able to copy the address from the lanyard that he was wearing. Two respondents did not remember the address, but the LAG instruction about writing the name of the building guided them to write down the building name of the workplace. Two respondents did not remember the work address and left Question 30a blank, but they were able to fill out the city and state. A respondent ignored the label to write down the street address; instead, she wrote down the name of the place she worked because that’s how she is used to writing the first line of the complete work address.

These issues cannot be readily resolved in translations alone. We have documented these response patterns as examples for the type of data that might be collected when the LAG is used in the field. As for the translation, we recommended adopting the wording recommended for Detailed Person Question 15b for consistency.

Korean Language Interviews

Recommendations from Phase 2’s address question (Detailed Person Question 15b) were implemented for testing in both rounds of Phase 3 interviews and fewer problems compared to Phase 2 testing were observed. Although several respondents were not able to write the address because they did not know the workplace address, they easily followed the instruction to specify a description of the location such as the building name or the nearest street or intersection. Therefore, we do not have further recommendations other than implementing recommendations from the Phase 2 address question.

Detailed Person Question 30a Instructions

If the exact address is not known, give a description of the location such as the building name or the nearest street or intersection.

	Chinese	Korean
Original Wording	<p>注: 如果不知道确切地址, 请描述该地点所在位置, 例如给出建筑物名称或者最邻近的街道或者路口名称。</p> <p>Note: If the exact address is not known, please describe the location where this place is situated, for example, provide building name, or zui-lin-jin [the closest] street or intersection name.</p>	<p>정확한 주소를 모르는 경우 건물 이름, 가장 가까운 거리 또는 교차로 같은 장소를 자세하게 적어 주십시오.</p> <p>In case (you) don't know the exact address, please write the location such as the building name, nearest street, or intersection in details.</p>
Recommended Wording	<p>注: 如果不知道确切地址, 请说明该地点所在位置, 例如写下建筑物的名称, 最近的街名或者路口名称。</p> <p>Note: If the exact address is not known, please describe the location where this place is situated, for example, write down the name of the building or the name of the zui-jin [the closest] street or the intersection name.</p>	No changes recommended.

Chinese Language Interviews

No major comprehension difficulty was observed about this instruction in round 1; however, operationalizing the instruction was a problem for a few respondents. That is, although the literal meaning of what this instruction says was understood, these respondents would do what they interpret as making the most sense to them. Not writing anything, writing the name of the neighborhood, or writing something like “downtown” were among the responses about what they would actually write.

For round 2 testing, we recommended making some minor modifications to the translation to prompt for more detailed answers, such as preceding the examples in the text with a suggestion to “write down” and mention street name and intersection name on their own (the round 1 translation says “street or intersection name”). In round 2, we did not observe major comprehension problems and recommended adopting this version.

We would like to document a problem we observed in round 2 about respondents’ unfamiliarity with the survey layout (a “social practice” issue). This is not an issue that can be readily fixed in the translation. Possibly because this italic instruction is placed after the write-in box for Question 30a and appears in closer proximity to Question 30b, three

respondents thought it explained how to fill out Question 30b (city, town, or PO). For example, a respondent wrote the name of the city followed by the street. Two more respondents who could not remember their work address had the same interpretation about the layout.

Korean Language Interviews

No changes were recommended.

Detailed Person Question 30c

Is the work location inside the limits of that city or town?

- Yes
- No, outside the city/town limits

	Chinese	Korean
Original Wording	工作地点是否在本市或者本镇内？ [Is] work location at this city or this town?) 不在，在市/镇外 No, it is outside the city/town	이 곳은 그 도시나 타운의 경계 내에 있습니까? Is this place inside of that city or town boundary?
Recommended Wording	工作地点位于以上所填市镇的范围之内吗？ [Is] work location situated within above filled city town’s boundaries? 不在，不位于所填市/镇的范围之内 No, it is not within above filled city town’s boundaries	No changes recommended.

Chinese Language Interviews

Most round 1 respondents answered “yes” to the Question 30c, even for those who did not know their work address. However, when the Chinese language expert panel debriefed respondents, it became clear that the round 1 translation did not deliver the concept of “limits” that appears in the English version. The original translation literally meant “is the work location at this city or this town?” It is possible that when respondents answered “yes,” they were thinking of “this city” in the translation to mean the city in which they live—most of them live and work in the same city. Two respondents who worked in a different city from their home both answered “no,” suggesting that they, too, thought “this city” refers to the city in which they live. A clear piece of evidence occurred with a respondent who had lower educational attainment. She left the address box blank because she didn’t know how to write the address in English, but because she worked close to the

airport, she wrote 机场 (airport) for Question 30c because she believed this question asked if the workplace was inside the city where she was located.

The revised translation was used for round 2 testing. This version appeared to appropriately ask about city limits—it no longer asks about “this city” but “the above filled city” to clarify that here we are interested in knowing about the city of the workplace that has been filled in in the box above, not anywhere else. In addition, Census Bureau confirmed that the city limits question is used for situations when a city is unincorporated, but has a conventional city name. The Census Bureau sociolinguist suggested using 范围 (boundaries) to mean “limits.” Round 2 testing showed that the translation was understood, and we recommended adopting it.

However, some potential problems can be expected in the actual LAG data collection. Although this question looks simple and straightforward and the translation was understood, several respondents were unable to think of it as is, and their response pattern showed that they were convinced there must be more to this question.

1. Two respondents complained about the repetitiveness of Question 30c because they felt that they had just indicated the city of the work address in Question 30b and, of course, the work location is within the city limits. One of them decided he must leave Question 30c blank.
2. Two respondents who had trouble remembering the street address of the workplace decided to mark “no,” although based on their situations, the responses should be “yes.” The first respondent was able to write down the city of the workplace in Question 30b but marked “no” in Question 30c because the place he wrote down previously is “in the suburbs,” which is not a “city/town.” The second respondent felt that the question must be asking whether the workplace is in the same city of his home, and because they are not the same, he marked “no.” This respondent was a college graduate, and was even able to say the English word “boundary” when he saw 范围 in the translation. He was unable to describe in his own words the concept of city limits and explained: “Here in U.S., you have clear city boundaries, but in China, you do not have clear boundaries between the cities. I cannot come up with a term.” Cultural interpretation is at play here.

A respondent marked “yes,” but remarked that if he worked in the suburbs then he would have marked “no” because the suburbs are not cities. Yet another respondent marked “yes” and explained that he was indeed working there—as though this question was testing whether he really worked where he indicated in the previous question. Both of these respondents marked the intended answer, but their elaborations showed that they did not interpret the question as intended.

Korean Language Interviews

All respondents from round 1 answered “yes” about the city limit questions. However, five out of 11 respondents asked if the question was asking whether the workplace was located within a city limit, and two respondents commented that Question 30c seemed to be the same as Question 30b (city, town, or post office name). Despite this confusion, Census Bureau’s decision was not to make changes to the translation because this question is only applied to those who live in certain geographic areas.

Detailed Person Question 30e

Name of U.S. state or foreign country

	Chinese	Korean
Original Wording	美国的州名或者外国名称 Name of US state or name of the foreign country	미국 주 혹은 다른 나라의 이름 U.S. State or different country name
Recommended Wording	美国的州名；但如果工作地址在美国以外，写下所在国家的名称 Name of US state; but if work address is outside of US, write down the name of the country where it is	미국 주 이름 (미국이 아닌 나라에서 일한 경우 그 나라 이름) U.S. State name (if worked in a country, which is not the U.S., the country name)

Chinese Language Interviews

In round 1, although most respondents wrote the intended state name, when probed, many did not know what the term “foreign country” referred to. It does not seem to be a translation issue, but rather the presence of foreign country along with U.S. state did not make sense to them. An alternative version was shown on a Show Card: 美国的州名(如果地址不在美国，写下其他国家的名称 (Name of US state [if address is not in the US, write the name of other country])). It explained why a country name is requested. However, some respondents felt that neither version was clear enough because it simply did not make sense to them that a country name would be listed here if they are filling out an address in the United States.

We also observed a response pattern that we had not anticipated. Two respondents thought that the round 1 translation meant “write the state name in English and in Chinese” because they interpreted the phrase “foreign country” in this context to mean what the state name is called in a foreign country (to them, that means writing the name in another language different from the one they are writing in now). One issue we did anticipate observing, however, was respondents’ reaction to the term “foreign country.” As discussed in Detailed Person Question 7 (place of birth), whether a country is “foreign” can be a matter of perspective. For example, China, Taiwan, or Hong Kong is a “foreign country” from the U.S. perspective, but they are not “foreign” to the respondents because these are their home

countries. In Question 30, the term foreign country is used in a different context as compared with Question 7. Here, it is contrasted with U.S. state, and it is seemingly easier to grasp that we mean a non-U.S. country. However, a respondent believed “foreign country” prompts her to write United States because it is “foreign” to her, and this interpretation made more sense since foreign country is placed next to U.S. state in the label. A few other respondents discussed thinking the same way in the interview, but they did not actually write United States on the form.

Both of these issues might not be problematic for data quality. When both English and Chinese text for the state names are provided (e.g., Illinois and 伊利诺), they convey the same information. And when “US” is provided along with the state, that is just extra information because the state is already located in the United States. However, it will conceivably delay the data capture process to confirm what the Chinese entry means. It is also possible that if a respondent did work in a foreign country, then they wouldn’t have written down the intended address if they didn’t interpret “foreign country” to mean a non-U.S. country.

For round 2 testing, we recommended a seemingly verbose version. However, it leaves no room for ambiguity and does not refer to “foreign,” which has caused confusion. It lengthens the label of the box, but the phrasing is intuitive, and we feel it would not create a burden on the respondents. Round 2 confirmed these assumptions. (Note that two respondents discussed their understanding of Question 30e as if this was about writing down the name of a non-U.S. country only, but this was likely because they were reacting to the translation in isolation. Their original written responses appropriately reflected the state where they worked.)

Korean Language Interviews

In round 1, four respondents did not understand why 다른 나라 (translation for “foreign country”) was written here. Because of this confusion, respondents interpreted that this question only applied to those who worked in a foreign country, or they thought they should write United States, rather than the state name. When alternative wording 미국 주의 이름 (주소가 미국 외에 있을 경우, 그 나라의 이름을 적어 주십시오) (Name of U.S. state [if address is not in the U.S., write the name of that country]) was provided, respondents could more easily make sense of it, and eight of 11 respondents liked the alternative wording. However, respondents commented that the alternative wording could be clearer if it was revised to 미국 주 이름 (미국이 아닌 나라에서 일한 경우 그 나라 이름) (U.S. State name [if worked in a country, which is not the U.S., the country name]), so we recommended testing these two wordings in round 2.

In round 2, where the first alternative wording 미국 주의 이름 (주소가 미국 외에 있을 경우, 그 나라의 이름을 적어 주십시오) (Name of U.S. state [if address is not in the U.S., write the name of that country]) was implemented in the LAG, two out of 10 respondents were still

confused and did not understand how the address could be outside of the United States when the survey is for those who live in the United States. This confusion disappeared when the second alternative wording 미국 주 이름 (미국이 아닌 나라에서 일한 경우 그 나라 이름) (U.S. State name [if worked in a country, which is not the U.S., the country name]) was presented as a Show Card. Therefore, we recommended the second alternative translation as the final wording.

Detailed Person Question 31

How did this person usually get to work LAST WEEK? *If this person usually used more than one method of transportation during the trip, mark (X) the box of the one used for most of the distance.*

	Chinese	Korean
Original Wording	<p>[Question text is omitted for space-saving reasons.]</p> <p>注: 如果这个人通常使用一种以上的交通方式, 请选择累计起来, 用于最长距离的交通方式, 并标上(X)记号。</p> <p>Note: If this person usually used more than one transportation method, please select when accumulated, the longest distance's transportation method, and mark (X).</p>	<p>지난 주에 이 사람은 보통 어떻게 직장으로 출근했습니까? 이 사람이 두 가지 이상의 교통수단을 이용하여 출근한다면 주로 이용한 교통수단에 표시(X)해 주십시오.</p> <p>How did this person usually commute to work last week? If this person commutes by using two or more transportation methods, mark (x) the transportation method used mainly.</p>
Recommended Wording	<p>[Question text is omitted for space-saving reasons.]</p> <p>注: 如果这个人通常使用多种交通方式去上班, 请用(X)记号 标选用于最长路程的那一种交通方式。</p> <p>Note: If this person usually used multiple transportation methods, please mark X at the longest travel distance's transportation method.</p>	<p>지난 주에 이 사람은 보통 어떻게 직장으로 출근했습니까? 이 사람이 두 가지 이상의 교통수단을 이용해 출근한다면, 가장 긴 거리를 이동할 때 이용한 교통 수단 하나에만 표시(X)해 주십시오.</p> <p>How did this person usually commute to work last week? If this person commutes by using two or more transportation methods, mark(x) only one transportation method used most of the distance.</p>

Chinese Language Interviews

For round 2 testing, instead of 一种以上 (more than one [method of transportation]), we recommended saying 多种 (multiple). It seemed clearer. We also tightened the sentence so it read smoother (there was some objection about the phrase 累计起来 [when accumulated] in the round 1 translation).

Half of the respondents in round 2 still struggled with the concept of “the one used for most of the distance.” The translation expressed it as 用于最长距离的那一种交通方式 (the longest

distance's transportation). But the confusion only manifested itself during probing; all respondents had been able to mark one transportation method on the LAG because transportation was an intuitive concept. The Chinese language expert panel met and recommended replacing 距离 (distance) with 路程 (travel distance). The latter is a common term used to describe the distance to a destination, which may sound less technical than the original term 距离 (distance) and might help respondents think about traveling to work. The recommendation was accepted by the Census Bureau.

Korean Language Interviews

In round 1, all respondents understood the intent of the question. However, four respondents misunderstood this question by thinking that multiple choices were allowed. In addition, five respondents were not sure whether it meant the transportation method used for most of the distance or most of the time. Therefore, we suggested revising the sentence to clarify that only one choice was allowed and the question was asking about the method used for most of the distance. We also suggested underlining 하나에만 (only one) for emphasis but the recommendation to underline was not accepted by the Census Bureau.

When the new wording was tested in round 2, no single problem related to the multiple choice confusion was observed, confirming the proposed translation clarifies the meaning. Two respondents were still not clear about the meaning of 가장 긴 거리 (most of the distance), and they associated the phrase with a long trip that requires several days for travel, such as a travel from east coast to west coast. However, this is an improvement from round 1 and most respondents, including those who actually use multiple transportation methods for commuting, were able to understand the phrase and mark an appropriate answer. Therefore, we recommended keeping the round 2 translation as the final wording and it was approved by the Census Bureau.

Detailed Person Question 31 Response Options

- Bus or trolley bus
- Streetcar or trolley car
- Subway or elevated
- Taxicab

[The rest of the categories are omitted for space-saving reasons.]

	Chinese	Korean
Original Wording	<input type="checkbox"/> 公共汽车或者电车 Public bus or electric car	<input type="checkbox"/> 버스/마을버스나 트롤리 버스 Bus/Town bus or trolley bus (<i>phonetic translation</i>)
	<input type="checkbox"/> 街车或者电车 Street car or electric car	<input type="checkbox"/> (노면)전차(스트리트카, 트롤리카 등) (Street) car (street car, trolley car [<i>phonetic translation</i>], etc.)
	[Subway or elevated]	<input type="checkbox"/> 지하철/경전철 Subway/Light electric rail
	<input type="checkbox"/> 出租车 Taxi [The rest of the categories are omitted for space-saving reasons.]	[Taxicab] [The rest of the categories are omitted for space-saving reasons.]
Recommended Wording	<input type="checkbox"/> 公共汽车或者无轨电车 Public bus or electric car without rail	<input type="checkbox"/> 버스/마을 버스/트롤리 버스 Bus/Town bus/trolley bus (<i>phonetic translation</i>)
	<input type="checkbox"/> 有轨电车 Electric car on rail	<input type="checkbox"/> (노면)전차/스트리트카/트롤리카 (Street) car/street car/trolley car (<i>phonetic translation</i>)
	[Subway or elevated]	<input type="checkbox"/> 전철 Electric rail
	<input type="checkbox"/> 计程车 Car with meters [The rest of the categories are omitted for space-saving reasons.]	[Taxicab] [The rest of the categories are omitted for space-saving reasons.]

Chinese Language Interviews

The round 1 translation did not distinguish between “trolley car” and “trolley bus” because their Chinese translation was identical: 电车 (electric car). In addition, the translation for “street car” was literal, meaning “street” and “car” and was not indicative of its purpose when read in Chinese; these translations caused some confusion. For round 2, we recommended describing the main difference between trolley car and trolley bus—the rail—in the translation to make a distinction. Furthermore, it seemed that 有轨电车 (electric car on rail) was a sufficient description for the category “street car and trolley car,” because trying to create separate Chinese terms for each item did not seem to add more value. Furthermore, in round 1, several respondents pointed out that “elevated” referred to 轻轨

(light rail). Two members of the Chinese language expert panel confirmed that in China and Hong Kong, riders often use 轻轨 to refer to part of the subway system. However, our research showed that light rail had evolved from streetcars. Census Bureau confirmed this understanding that “light rail” should be coded in the “street car or trolley car” category and not the “subway or elevated” category. We, therefore, recommended 有轨电车 (包括轻轨) (electric car on rail [includes light rail]) for the revised translation for the streetcar/trolley car category, but it was not accepted because the same concept was not included in the English language question.

In round 2, the revised translations worked reasonably well, and we recommended adopting them. We also recommended changing the translation for taxi from 出租车 (literally means “car for rent”) to 计程车 (car with meters). Taiwanese and Hong Kong born respondents referred to taxis as 计程车 (car with meters), and only one respondent did not know that the original translation 出租车 also meant taxi. He thought it referred to a rental car, which is what this term literally means. One of the Taiwanese respondents knew 出租车 could mean taxi, but he also thought it meant a rental car. All China born respondents knew 计程车, and noted that they learned this term from the mass media. We recommend using 计程车 because Taiwanese and Hong Kong respondents might believe 出租车 refers to a rental car.

Korean Language Interviews

In both rounds, about a third to a half of respondents were unfamiliar with 트롤리버스 (*trolley bus*—phonetic translation), 트롤리카 (*trolley car*—phonetic translation), or 스트리트카 (*street car*—phonetic translation). Despite the unfamiliarity, all respondents reported these words did not affect their answer choice at all. Since nonphonetic Korean translations for trolley bus, trolley car, and streetcar are provided along with the phonetic translations in the same answer category, and these words are only provided to help such transportation system users to locate their method of transportation more easily, we recommended keeping the translations but connecting the words with “/” to save space.

In Korea, there is no corresponding transportation system term for “elevated” so 경전철 (輕電鐵, light electric rail) was used to mean “elevated” in round 1. Because Census Bureau confirmed that light electric rails should be considered as a form of streetcar, this translation was not appropriate. In round 2, we showed respondents three versions intended to mean “elevated”: 지상철 (地上鐵, on the ground rail, Version 1), 도시 철도 (city rail, Version 2), and 전철 (electric rail, Version 3). Without seeing all the alternative wordings, several respondents voluntarily mentioned 전철 (electric rail), the wording in Version 3, as the most proper term to represent the concept described during the cognitive interviews. Nine out of 10 respondents preferred Version 3 over the other two wordings. Since 전철 (electric rail) refers to a commuter rail that runs both underground and on the ground, we recommended using Version 3 전철 (electric rail) for the “subway or elevated” category, not just for “elevated.”

We would like to point out that those who use light rails for commuting are likely to choose the fourth answer category (“subway or elevated”), rather than the third category (“street car or trolley car”). If it is critical for light rail commuters to choose the appropriate answer, we recommend adding specific instructions about it in future redesign.

Detailed Person Question 32

How many people, including this person, usually rode to work in the car, truck, or van LAST WEEK?

	Chinese	Korean
Original Wording	<p>包括这个人在内，<u>上一星期</u>通常有多少人乘坐这辆汽车、卡车或者面包车前去上班？</p> <p>Including this person, in last week, usually how many people rode this car, truck or van to work?</p>	<p><u>지난 주에</u> 이 사람을 포함하여 보통 몇 명의 사람이 같은 승용차, 트럭 또는 승합차를 타고 출근하였습니까?</p> <p><u>Last week</u>, including this person, usually how many person rode to commute using the same car, truck or van?</p>
Recommended Wording	<p>通常来说，<u>上个星期</u>包括这个人在内，有几个人共乘这辆汽车、卡车或者面包车去上班？</p> <p>In general, <u>last week</u> including this person, how many people together rode this car, truck or van to go to work?</p>	<p><u>지난 주에</u> 이 사람을 포함하여 보통 몇 명이 같은 승용차, 트럭 또는 승합차로 함께 출근했습니까?</p> <p><u>Last week</u>, including this person, usually how many people commuted to work using the same car, truck or van?</p>

Chinese Language Interviews

In round 1, eight respondents in our sample reported going to work by car. The majority of respondents drove alone, so it was easy for them to answer this question. Two respondents went to work on foot and by bike and legitimately skipped this question following Routing Instruction J; when asked, they interpreted the question as intended.

Two additional round 1 respondents refused to write down the number of the commuters, explaining that the number varied and proceeded to provide a range of 1-几个人 (1 to several people) and 2-4. For round 2 testing, we placed “usually” at the beginning of the question as the way to emphasize that the question asks about the number of commuters in general, allowing us to set the tone. This version read: 通常来说，上个星期包括这个人在内，有多少人乘坐这辆汽车、卡车或者面包车去上班？ (Usually, last week including this person, how many people rode this car, truck or van to work?).

The phrase “including this person” can make the rest of the sentences look crowded, and we tested two versions to see which placement sounded more natural to respondents and also guided them to provide a more accurate answer. They were (Version 2) 通常来说，包括这个人在内，在上个星期有多少人乘坐这辆汽车、卡车或者面包车去上班？ (Usually, including this person,

in last week how many people rode this car, truck or van to work?) and (Version 3) 通常来说，上个星期包括这个人在内，有多少人共乘这辆汽车、卡车或者面包车去上班？(In general, last week including this person, how many people together rode this car, truck or van to go to work?). In round 2, we compared those two versions and they were liked by an equal number of respondents. Furthermore, all respondents were administered the vignettes (Mr. Wang goes to work alone 4 days a week and 1 day with co-workers, and Ms. Kim drops off her children at school and then goes to work), but few managed to provide the intended answer. Most provided an answer based on what makes most sense to them; for example, one must count the children because they are in the car. This revealed that problems with this question remained on both translation and conceptual levels.

In terms of the responses to Question 32, the majority of respondents (seven of 10) did not use a car, truck, or van to go to work. Two took a bus, one took the subway, three walked, and one worked at home as a nanny (she skipped as intended to Question 39a).

Three respondents in our sample reported going to work by car and answered Question 32 naturally as part of the skip pattern. The first respondent left this question blank because she did not know how to answer it. In her situation, there is one car in the household, and it is shared by her [respondent] and her husband. They both drive the car to work, but separately (they don't work the same days nor at the same location). The interviewer reported that the respondent interpreted Question 32 to mean how many people in the household in total used that car during the last week. In her case the answer would be "2" because both she and her husband used the car although they never used the car on a same day. However, the intended answer is "1." In response, the respondent suggested 共乘 (together rode) to clarify the concept. The Chinese language expert panel debriefed and identified that the original translation of "rode" might not be the best choice—that term in Chinese 乘坐 seems to suggest being driven only because it literally means "rode sitting." The respondent's suggestion, "together rode" (共乘), gets rid of the word 坐 (sitting), while keeping 乘 (rode). We created a Show Card with this new term, but the testing was not very successful because it is a highly cognitively demanding task for respondents to compare similar terms in a long sentence and consider the nuances. Most of the time, respondents reported the number of people who they felt made the most sense to them, without carefully consider the question nuances.

Among the two other respondents who drove to work, one drove alone and did not exhibit problems with this question (answering "1" person). The other (and third) respondent reported three people because he sometimes gives his co-workers a ride to work. But his responses to the vignettes that examine whether the concept of "usually" is clear showed that he would report the highest number of riders, rather than the usual number of riders. The intrinsic problem seems to be conceptual. Nevertheless, our recommendation was to keep "together rode" (共乘) because it suggests that people riding on different days should not be counted. We also recommended using 有几个人 (ji-ge-ren) to mean how many people

because it implies counting and is usually used for counting fewer people, such as the case in counting how many people ride in a car, truck, or van. The original translation 有多少人 (duo shao ren) can be used to indicate hundreds of people. The recommended wording is shown in the table above.

Korean Language Interviews

In round 1, all respondents understood the gist of this question. However, there was a comment that if a person rode to work and dropped off his or her children on the way, then the children should be counted. Although this comment was made only by one respondent, it pointed to a possible source of measurement errors. We recommended revising sentences to clarify the purpose of car use by dropping 타고 (rode) so it only said “commuted.” However, when this new wording was tested in round 2, it turned out that this revision did not solve the problem and half of the respondents still thought the number of children should be included. Since this problem seems to be beyond a translation issue, and the same error is likely to exist in the English ACS question, we do not have further recommendations to address this issue in the translation.

In round 2, the Chinese language team observed a problem when the same car is used by different family members on different days. For this, we tested an alternative wording by adding 함께 (together) to clarify that we are asking for the number of passengers who use the same car, truck, or van at the same time. This new alternative wording was tested with six respondents, and we found that five of them gave the same answers regardless of wording. However, three respondents commented that the alternative wording seemed clearer. Therefore, we recommended using the alternative wording that adds 함께 (together).

Routing Instruction K

Answer questions 35–38 if this person did NOT work last week. Otherwise, SKIP to question 39a.

	Chinese	Korean
Original Wording	<p>填表说明：如果这个人上个星期没有工作，请回答第35题到第38题。否则请跳到第39题a项。</p> <p>Form taking instruction: If this person did not have a job last week, please answer question 35 to question 38. Otherwise, please skip to question 39a.</p>	<p>이 사람이 지난 주에 일을 하지 않았다면, 질문 35에서부터 질문 38까지 응답해 주십시오. 그렇지 않으면 아래 질문들을 건너 뛰어 질문 39a부터 응답해 주십시오.</p> <p>If this person did <u>not</u> work last week, please answer from question 35 to question 38. Otherwise, please <u>skip</u> the following questions and answer Q39a and on.</p>

	Chinese	Korean
Recommended Wording	No changes recommended.	<p>이 사람이 지난 주에 일을 하지 <u>않았다면</u>, 질문 35에서부터 질문 38까지 응답해 주십시오. 지난 주에 일을 했다면, 아래 질문들을 <u>건너 뛰어</u> 질문 39a부터 응답해 주십시오.</p> <p><i>If this person did <u>not</u> work last week, please answer from question 35 to question 38. If (this person) worked last week, please <u>skip</u> the following questions and answer Q39a and on.</i></p>

Chinese Language Interviews

No changes were recommended.

Korean Language Interviews

In both rounds, at least one respondent commented that the Routing Instruction K seemed unnecessarily complicated. They complained that they had to think twice to figure out what would be a situation for 그렇지 않으면 (otherwise). That is, it would be simpler to change the order of the sentence: first, by saying what to do for those who worked last week, and then saying what to do for those who did not. The original translation includes two negative conditions 이 사람이 지난 주에 일을 하지 않았다면,…. 그렇지 않으면 (If this person did not work last week,…. Otherwise), which makes the reading inefficient. The Korean team agreed on this issue but understood that the sentence order cannot be changed at this time so that it remains consistent with the English ACS questionnaire. To reduce the readers' burden of processing the information that is written in double negation while keeping the same order of the English ACS, we recommended writing out the condition of 그렇지 않으면 (Otherwise) to clearly mean that it is for those who did work last week.

Detailed Person Question 35a

LAST WEEK, was this person on layoff from a job?

	Chinese	Korean
Original Wording	<p>上一星期, 这个人是否处于解雇状态?</p> <p><u>Last week</u>, was this person in a state of layoff?</p>	<p>지난 주에 이 사람은 직장에서 정리하고 (레이오프)되었습니까?</p> <p><u>Last week</u>, was this person laid off (<i>lay off</i> - phonetic translation) from a workplace?</p>

	Chinese	Korean
Recommended Wording	<p>上个星期，这个人是否处于被裁员后的失业状态？</p> <p><i>Last week, has this person been in an unemployed state after being laid off?</i></p>	<p>지난 주에 이 사람은 회사 사정으로 인해 직장에서 정리해고(레이오프)된 상태였습니까?</p> <p><i>Last week, was this person in a status of lay off (layoff – phonetic translation) from a workplace because of company’s reasons?</i></p>

Chinese Language Interviews

In round 1, all respondents immediately understood the term 解雇 (original translation for layoff); however, it simply meant a loss of job to them. No one thought of layoff. When the term “layoff” was defined, respondents could not think of a better way to describe this concept in Chinese. They thought the original translation worked fine or suggested alternatives that were not appropriate for this question, such as 炒鱿鱼 (fired, literally meaning “stir-fry squids”), 失业 (unemployed), or 下岗 (involuntary furlough without pay—this term could possibly be used to mean layoff, but it is only popular in China). When the Chinese language expert panel debriefed, we identified 裁员 (downsized) to be the appropriate Chinese translation. However, 裁员 is a verb, not a noun as in “layoff.” When coupled with the reference period of “last week,” it could sound like the action of layoff occurred only during last week, and this is not what the question intended.

For round 2 testing, we added the word “situation” to communicate that this has been a status, not an action: 上个星期，这个人是否处于被裁员的状况？ (Last week, has this person been in a situation of being laid off?). A Show Card version was added; it mentions unemployment after being downsized, like this: 上个星期，这个人是否处于被裁员后的失业状态？ (Last week, has this person been in an unemployed state after being laid off?). When the two versions were compared, more round 2 respondents indicated that Version 2 (Show Card) was closer to the intent of the question and that it showed a continuous state after being downsized. Therefore, we recommended adopting Version 2.

Korean Language Interviews

In round 1, four respondents had a somewhat inaccurate understanding about the original translation of “lay-off.” They understood that it meant termination of employment, but they thought the reasons for termination could also include personal performance problems or voluntary resignation. One respondent interpreted that this only referred to temporary employment termination. For clarification, we recommended adding 회사 사정으로 (because of company’s reasons). We also clarified in the translation that the question asked about the lay-off status, not that the layoff occurred just last week. All respondents from round 2 understood the intended meaning correctly. Despite the understanding of the question, three respondents from round 2 interviews intentionally chose “yes” claiming that their

employer was partially responsible for their unemployment status. This reaction likely reflected these respondents' involuntary retirement experience, which was common in the mid-1990s when the Korean economy was undergoing financial crisis.

Detailed Person Question 37

LAST WEEK, could this person have started a job if offered one, or returned to work if recalled?

	Chinese	Korean
Original Wording	<p>上一星期，如果得到录用，这个人是否能够开始工作；或者如果得到召回，是否能够回去工作？</p> <p><u>Last week</u>, if got hired, could this person start the job; or if he got summoned back, could return to work?</p>	<p>지난 주에 이 사람이 직장을 구했거나, 이전 직장에서 재호출되었다면 바로 일을 시작할 수 있었습니까?</p> <p><u>Last week</u>, if this person found a workplace or was recalled from the previous workplace, was (this person) able to start the work?</p>
Recommended Wording	<p>上一星期，如果被录用，这个人是否能够开始工作；或者如果被重新雇用，是否能够回去工作？</p> <p><u>Last week</u>, if was hired, could this person start the job; or became hired again, could return to work?</p>	<p>지난 주에 이 사람이 직장을 구했거나, 이전 직장에서 다시 나오라는 연락을 받았다면 바로 일을 시작할 수 있었습니까?</p> <p><u>Last week</u>, if this person found a workplace or received a notice to come again from the previous workplace, was (this person) able to start the work?</p>

Chinese Language Interviews

In round 1, most respondents were able to figure out what 得到召回 (translation for “recall”) meant in the translation. When the Chinese language expert panel debriefed, we found that this term was not entirely appropriate. It simply did not sound natural since it means “got summoned back.” We recommended using a descriptive phrase, 被重新雇用 (became hired again) instead to add naturalness. Furthermore, the round 1 translation for “if offered one” said 得到录用 (got hired). Since the phrase is an action from a third person, we added the word 被 (by [someone]) to indicate this relationship more clearly, like this: 被录用 (was hired [by someone]). Round 2 testing confirmed that these modifications were acceptable.

Korean Language Interviews

In round 1, most respondents understood the meaning of the translation; however, two respondents pointed out that the term 재호출 (recall, Hancha-rooted word) was unfamiliar to them. It was too difficult and unnatural. Therefore, we recommended replacing it with 다시 나오라는 연락을 받았다면 (if received a notice to come again). With this recommended translation implemented in round 2, no respondents indicated difficulty when reading this question, which confirms the improved translation.

Detailed Person Question 38

When did this person last work, even for a few days?

- Within the past 12 months
- 1 to 5 years ago
- Over 5 years ago or never worked

	Chinese	Korean
Original Wording	<p>这个人最近一次工作是在什么时候 (即使是只维持了几天的工作也算) ?</p> <p>When did this person recently work? (Include work which only maintained for several days)</p> <p>最近12个月内 In recent 12 months</p> <p>1到5年前 1 to 5 years ago</p> <p>5年之前, 或者从未工作过 5 years before, or never worked</p>	<p>[Question text is omitted for space-saving reasons.]</p> <p><input type="checkbox"/> 지난 12개월 이내 In the past 12 months</p> <p><input type="checkbox"/> 1-5년전 → 아래 질문들을 건너 뛰어 L을 읽어 주십시오. 1-5 years ago → <u>Skip</u> the questions below and read L.</p> <p><input type="checkbox"/> 5년 전 혹은 그 이상 또는 일한 적 없음 5 years ago or more or never worked</p>
Recommended Wording	<p>这个人上一次工作是在什么时候 (即使是只做了几天的工作也算) ?</p> <p>When did this person last work? (Even if only a few days of work are also considered)?</p> <p>过去12个月内 In the past 12 months</p> <p>1年前到5年内 (1 year ago to within 5 years)</p> <p>早于5年之前, 或者从未工作过 Earlier than 5 years, or never worked</p>	<p>[Question text is omitted for space-saving reasons.]</p> <p><input type="checkbox"/> 지난 12개월 이내 In the past 12 months</p> <p><input type="checkbox"/> 지난 1년 에서 5년 사이 → 아래 질문들을 건너 뛰어 L이라고 쓰여진 곳을 읽어 주십시오. Between the past 1 year and 5 years → <u>Skip</u> the questions below and read where L is written.</p> <p><input type="checkbox"/> 일을 안 한 지 5년이 넘었거나 전혀 일한 적 없음 (It has been) over 5 years (since this person worked last) or never worked</p>

Chinese Language Interviews

In Phase 2, we reported that the translation for “last married” in Question 23 was problematic because the most appropriate Chinese translation uses “most recent” to mean “last.” When describing a marriage, it was not culturally desirable to have multiple marriages. In Question 38 about when a respondent last worked, the Chinese translation in round 1 also used “most recent,” and it created some confusion again. Several respondents assumed that it meant the job before the current job. This might be an acceptable assumption given that this question is only asked of those who did not work last week.

However, if someone did not work last week because of vacation but still has the same job, then the responses about the previous job would not be accurate. To ameliorate this problem, we used 上一次 (last time) to mean “last” here because it sounds more immediate. We also made a minor change in the verb used to construct the sentence “even for a few days” so it sounds more idiomatic.

In addition, the round 1 translation for “1 to 5 years ago” was problematic. The phrase “5 years ago” was correctly translated on its own: 5 年前. However, when it is used to express a range, as in “1 to 5 years ago” in this question, the translation is misleading. It suggests beyond 5 years (i.e., 6, 7, 8 years ago and so forth), which overlaps with the third answer category. We modified the translation to say “between 1 year and 5 years,” like this: 1 年到 5 年内. Because the third category for over 5 years ago started with “5 years” in the Chinese translation, we added 早于 (earlier) in the beginning of the phrase to contrast with the 5 years ago used in the previous response category.

In round 2, we tested these descriptions of time periods in a series of short hypothetical vignettes. They worked well, in general, but at least two respondents could not distinguish between the second and third categories of the round 2 translation when the event occurred exactly 5 years ago. They would choose the third category “over 5 years ago.” We provided some minor edits to the translation for clearer reading and they were accepted by the Census Bureau.

Korean Language Interviews

In round 1, one respondent commented that both the second and the third answer categories included “5 years ago,” which is a glitch of the round 1 translation. Another respondent was not able to locate Routing Instruction L. To correct the overlapping time period, we recommended changing the third answer category to 지난 5 년간 일한 적 없거나 전혀 일한 적 없음 ([It has been] over 5 years [since this person worked last] or never worked) and also recommended adding “where L is written” for those who had difficulty locating Routing Instruction L. This was the decision made in Phase 2 to address a similar problem, and both recommendations were tested and approved in Phase 2 interviews.

In round 2 where all of these recommended changes were implemented, we found that the new wording for respondents who quit the job exactly 5 years ago did not work like the Chinese findings. Only half of round 2 respondents chose the intended answer. Therefore, we recommended changing the wording of both the second and the third answer category for clearer distinction as shown in the final wording, and it was approved by the Census Bureau.

Regarding Routing Instruction L, three respondents from round 2 interviews were still unable to locate it. However, two of them only tried to locate it on the same page, which is likely an artifact caused by a cognitive interview design, which asks respondents to

complete only a portion of the LAG not the entire guide; therefore, we do not have further recommendations.

Detailed Person Question 39a

During the PAST 12 MONTHS (52 weeks), did this person work 50 or more weeks? *Count paid time off as work.*

	Chinese	Korean
Original Wording	在最近12个月 (52个星期) 内, 这个人是否工作超过50个星期? 带薪假期也计算为工作日。 <i>In the recently 12 months (52 weeks), did this person work over 50 weeks? Paid vacations are counted as work days.</i>	지난 12개월(52주) 동안에 이 사람은 50주 이상(50주 포함) 일했습니까? 유급 휴가는 일한 기간에 포함해 주십시오. <i>In the past 12 months (52weeks), did this person work 50 or more weeks (including 50 weeks)? Please include paid-vacations in the work period.</i>
Recommended Wording	在最近12个月内 (总共52个星期) , 这个人是否工作了超过50个星期? 请把能拿薪水的假期也计算为工作时间。 <i>In the recently 12 months (in total 52 weeks), did this person work over 50 weeks? Please count vacations with salaries as work time.</i>	지난 12개월(52주) 동안에 이 사람은 50주 이상(50주 포함) 일했습니까? 유급 휴가가 있다면, 그 기간도 일한 기간에 포함해 주십시오. <i>In the past 12 months (52weeks), did this person work 50 or more weeks (including 50 weeks)? If (there is) a paid vacation, please include that period in the work period.</i>

Chinese Language Interviews

In general, there were no major problems with understanding this question in round 1. Some respondents did not know that 12 months equal 52 weeks, or they were not familiar with calculating weeks. Instead of simply indicating “52 weeks,” we suggested saying “totaling 52 weeks” to clearly indicate that there is an equivalency. As in Question 29a (work for pay), we recommended using a more idiomatic way to say “paid” when describing paid time off. We did not observe major problems in round 2 and recommended adopting the recommended wording.

Korean Language Interviews

In round 1, one respondent interpreted that this question was asking two things: whether this person worked more than 50 weeks and whether this person had a paid vacation. Considering that many Korean monolingual respondents run small businesses and do not necessarily have “paid vacations,” the mention of paid vacations could be beyond their cognitive framework. To alleviate this burden, we recommended revising the second sentence by clarifying that the instruction is for those who have company paid vacations.

In round 2, no such confusion was observed except for one respondent. However, this respondent thought that this question asked whether a person had a paid vacation (the same confusion observed in round 1). However, this person seemed to focus too much on the instruction and had very poor reading comprehension throughout the cognitive interview (i.e., ignoring all skip instructions). Sometimes, he showed unique views in addition to the given text (i.e., “it is not right to count paid vacation as work week for those who work only for a year.”). Therefore, we believed this issue was ignorable and therefore recommended keeping the round 2 translation.

Detailed Person Question 39b

How many weeks DID this person work, even for a few hours, including paid vacation, paid sick leave, and military service?

	Chinese	Korean
Original Wording	<p>这个人共工作了<u>多少星期</u>? (即使一星期中只工作了几个小时, <u>包括</u>有薪假期、有薪病假和服兵役)</p> <p><u>How many weeks</u> in total did this person work? (Even if only worked for a couple of hours in a week, <u>includes</u> salaried vacation, salaried sick leave and military service)</p>	<p>유급 휴가나 병가, 군 복무 기간도 일한 주로 포함하여 이 사람은 몇 주 동안 일했습니까?</p> <p>Including paid vacation, sick leave, and military service, how many weeks did this person work?</p>
Recommended Wording	<p>这个人总共工作了<u>多少个星期</u>? (包括只工作了几个小时的星期, 也<u>包括</u>能拿薪水的休假日或病假, 以及服兵役的时间)</p> <p><u>How many weeks</u> in total did this person work? (Include weeks when only worked for a couple of hours, also <u>include</u> salaried-enabled time-off vacation or sick leaves, and military service time.)</p>	<p>이 사람은 총 몇 주를 일했습니까? 단 몇 시간 동안 일한 주가 있다면 그 주도 <u>포함해</u> 주십시오. 유급휴가, 병가, 군 복무 기간도 <u>포함해</u> 주십시오.</p> <p>How many total weeks <u>did</u> this person work? If there is a week where (you) worked only a few hours, please <u>include</u> that week. Please <u>include</u> paid vacation, sick leave, and military service period, too.</p>

Chinese Language Interviews

The modifications following round 1 appeared in the translation for the phrase “even for a few hours.” We made it into a complete sentence, and also restructured the sentence for naturalness. As in round 1, there were, in general, no major problems with understanding the translation in the second round. The concept was problematic for a few respondents who simply never experienced a paid vacation in their line of work. We recommended adopting the round 2 version, with minor edits in the phrase about paid vacation and paid sick leave to tighten the sentence.

Korean Language Interviews

For natural reading, the round 1 Korean translation did not include the words “even for a few hours.” Because of this, five respondents were unsure whether they needed to include a few hours as a work week (the uncertainty was likely intensified by the fact that many Korean immigrants are involved in small businesses and do not necessarily have “paid vacations”). Therefore, we recommended separating the questions into two parts, with the main question asking about the number of work weeks and a separate sentence providing instruction for including paid vacations.

Another issue was that a few respondents were confused with 군 복무 기간 (military service period). This is because military service is obligatory for all Korean men, and the term of service is well over a year. To eliminate a source of confusion, we recommended replacing 군 복무 기간 (military service period) with 미국 군 복무 기간기간 (U.S. military service period).

However, this recommendation was not accepted by the Census Bureau because “military service” is not limited to the United States in the ACS. Lastly, the Korean translation did not underline “including” and did not capitalize “DID”¹¹ like the English ACS questionnaire, and we recommended correcting these issues.

When all of these changes were implemented in round 2, no single problem related to these issues was observed, confirming that the revisions clarified the meanings, except for one respondent who strongly urged that such time should not be counted as a work week from Question 39a because of his personal belief despite correct understanding of the given text.

In addition, one respondent each in rounds 1 and 2 was confused because there was no reference period, such as “during the past 12 months.” They did not realize that this question was a continuation of the previous question. However, we understand that we cannot add the reference period at this time to remain parallel with the English ACS questionnaire.

¹¹ Earlier, it was decided to use an underline for uppercase English letters to provide similar effect on the Korean LAG where uppercase does not exist. (See details in Chapter 2, Section 2.3. Translation review of LAG.)

Detailed Person Questions 41 to 46 Instructions

41–46 CURRENT OR MOST RECENT JOB ACTIVITY

Describe clearly this person’s chief job activity or business last week. If this person had more than one job, describe the one at which this person worked the most hours. If this person had no job or business last week, give information for his/her last job or business.

	Chinese	Korean
Original Wording	<p>注：第41题到第46题 - 目前或者最近的就业活动。</p> <p>Note: Question 41 to question 46 – current or most recent employment activity.</p> <p>请明确描述这个人在上星期中的主要工作活动或者生意。如果这个人有一份以上的工作，请描述这个人工作时间最长的那份工作。如果这个人上一星期没有工作或者生意，请提供最近工作或者生意的信息。</p> <p>Please clearly describe this person’s main job activities or business in the last week. If this person has more than one job, please describe the job where this person worked the longest time. If this person didn’t have a job or business in the last week, please provide information for the most recent job or business.</p>	<p>현재 또는 최근까지의 직업활동. 지난 주 이 사람의 주요 직업활동 또는 사업활동을 자세히 써주십시오. 이 사람이 두 가지 이상의 일자리를 가졌다면, 이 사람이 가장 많은 시간을 할애한 직업에 대해 써주십시오. 이 사람이 지난 주에 일하지 않았다면, 마지막 직업 또는 사업에 대한 정보를 적어주십시오.</p> <p>Current or recent job activity. Please write this person’s main job activity or business activity last week. If this person had two or more jobs, please write about the job which this person spent the most time. If this person did not work last week, write the information about the last job or business.</p>

	Chinese	Korean
Recommended Wording	<p>注：第41题到第46题有关目前或者最后一次就业情况。</p> <p><u>Note: Question 41 to question 46 are about the current or the ultimate employment situation.</u></p> <p>请根据下列的问题，明确说明这个人在上个星期中的主要就业情况或者生意。如果这个人有好几份工作，请根据他工作小时数最多的那份工作来回答以下问题。如果这个人上个星期没有工作或者生意，请根据他最后一次工作或者生意的情况来填写。</p> <p><i>According to the following questions, please clearly explain this person's main employment situation or business in the last week. If this person has several jobs, please answer the following questions based on that job where this person worked for the most hours. If this person didn't have a job or business in the last week, please fill in the answer based on his last job or business.</i></p>	No changes recommended.

Chinese Language Interviews

In the discussion for Question 38 (last work), we recommended using 上一次 (last time) to communicate the time frame, and not using 最近 (most recent), which is another common way in Chinese to mean “last.” In the notes before the Detailed Person Question 41, the English text says “most recent,” and the translation also says “most recent.” However, most respondents interpreted it too literally, thinking it meant recently. This would make it the current job in many situations. Because people who have worked in the last 5 years are directed to these instructions, we recommended modifying the translation to say 最后一次 (the ultimate time) so that it can refer to the final job in the progression of past jobs in these respondents’ situations. Round 2 testing did not suggest problems with this approach.

In round 1, several respondents complained that the italic text is lengthy and contains too much information. Using a list format might help respondents manage the information, but this is something that cannot change in the LAG until the English version does. Modifications were made to make the text easier to digest (see list below), and all respondents in round 2 were able to interpret these instructions as intended. The only challenge was whether respondents read it on their own at all. For example, one respondent said the instructions were about the last job only—possibly because that is the last sentence in the instructions.

Upon being probed, he examined the entire instructions, and he was able to point out additional information that he did not have before.

The following modifications were made following round 1 for round 2 testing to make the translation easier to digest, and we recommended adopting them:

1. Make the heading “41–46 current or most recent job activity” a complete sentence in the translation.
2. Use “employment situation” to mean “job activity.” A few respondents found the reference to “activity” in this and other questions strange because it refers to events.
3. Start the italic instruction by directing respondents to refer to the following questions, thus connecting these instructions with what is ahead.
4. Instead of “describe,” use “explain” since it sounds more like a survey process.
5. Instead of “more than one job,” use “several jobs” since it reads more smoothly.
6. For “worked the most hours,” emphasize the number of hours rather than length of time.
7. Specify that respondents need to fill out the form with their situation rather than just saying “give information.”

Korean Language Interviews

No changes were recommended.

Detailed Person Question 41

Was this person —

	Chinese	Korean
Original Wording	这个人的工作身份为： This person’s job identity is:	이 사람은 - <u>하나에만</u> 표시(x)해 주십시오 . This person — Please mark(x) <u>only one</u> .
Recommended Wording	这个人目前或者最后一次的就业情况属于下列哪一种？ This person’s current or last employment situation belongs to which of the following?	이 사람의 가장 마지막 또는 지난 주 직업이나 사업에 대하여, 아래 보기 중 해당하는 응답 <u>하나에만</u> 표시(x)해 주십시오. Regarding this person’s last or last week’s job or business, mark (x) <u>only one</u> corresponding answer among the below answer categories.

Chinese Language Interviews

Although most round 1 respondents did not object to the translation, others pointed out that the use of “job identity” (工作身份) in the original translation sounded like asking for a person’s legal status or some type of status. The Census Bureau sociolinguist suggested that the revisions should also include making the lead-in phrase a complete question because posing a complete question usually sounds more natural in Chinese. This is compared to the common approach used in the English language source question, where the question is kept simple by asking “was this person” followed by a dash, with the expectation that the rest of the sentence is continued by the answer categories. The complete sentence approach was implemented in the round 2 translation for testing.

Additional modifications were made in the translation. Census Bureau commented in their written feedback about the round 1 Korean language interview results that Questions 41 to 46 need to be in past tense, and we took it into consideration in the revised translation. In general, there is no “past tense” in the Chinese language. In previous phases of LAG testing, we added an adverbial phrase “at that time” to indicate that the action occurred in the past. We did not recommend adding this adverbial phrase to each of the Questions 41 to 46 because it would read redundant. We modified Question 41 to include a reference to “current or last employment situation” because it provided the past tense context, but made no changes in the rest of the question series because the hypothesis is that respondents can rely on contextual cues for the rest of the questions in the series. In round 2, we did not observe major difficulties with managing the time period in this question series and recommended adopting the revisions.

Furthermore, in round 1, except for one respondent, 11 respondents were able to locate a response category that they believed fit their situation best. When we examined their LAG responses in Questions 42 to 46 (employer, work activity, etc.), the one respondent who left all questions blank believed he should not answer the question because it is only for those who are currently working, and he is not (see details in the Question 42 discussion). Five of those 11 respondents who marked an answer category did not choose the intended answer for their situation. Based on their own descriptions, they misinterpreted the translation or only recognized part of the descriptions in the answer category and decided that it fit their situation. In round 2, all but one respondent were able to eventually locate an appropriate response category for their situation, even when they were not sure at first. This was an improvement since round 1. (In the discussion to come on each of the Question 41 answer categories in this report, we will provide examples for the reader.)

Korean Language Interviews

In round 1, all respondents understood the general intention of this question; however, one respondent complained that the layout was unfamiliar and suggested changing it to a full sentence format. He explained that it would read easier and sound more natural. Therefore,

we recommended converting the original question into a full sentence 이 사람의 가장 최근 또는 현재 고용 상태에 대하여, 아래의 보기 중에 해당하는 응답 하나에만 표시(x)해 주십시오 (Regarding this person’s the most recent or current employment status, please mark (x) only one corresponding answer among the below answer categories).

During its review, Census Bureau asked to clarify the tense of the answer categories. Since the answer categories are in a phrasal format without clear indication of tense in Korean grammar, we revised the Question 41 text further to reflect this comment by clarifying the past reference period.

In round 2, all respondents understood the intended meaning of the question, but one self-employed respondent left this question blank because he focused too much on 고용 상태 (employment status), saying this question was not applicable because he was not employed by someone else. In the Korean language, self-employed business is called 자영업 (自營業, self-running business), and people are unlikely to think that they are employed by themselves because the Korean language does not have a passive voice. Since 고용 (employment) was only chosen by the Korean team in the process of converting the incomplete question into a full question format, we recommended replacing 고용 상태 (employment status) with 직업이나 사업 (job or business), which are the words used in Routing Instruction L to refer to the content of the following questions.

Despite the correct understanding of the words, a couple of respondents from the round 2 interviews marked the wrong answers or left the question blank mainly because they did not read all the answer categories or hastily read the instructions written before Question 41, despite the correct understanding of each of the answer categories.

Detailed Person Question 41 – Continued

- an employee of a PRIVATE FOR-PROFIT company or business, or of an individual, for wages, salary, or commissions?
- an employee of a PRIVATE NOT-FOR-PROFIT, tax-exempt, or charitable organization?

	Chinese	Korean
Original Wording	<p>领取工资、薪水或者佣金的私人盈利性公司、商行或者个人企业的雇员</p> <p>Receive wages, salary or commission, <u>private person profit</u> company, commercial firm or individual enterprise’s employee</p> <p>私人非盈利、免税或者慈善机构的雇员</p> <p><u>Private person non-profit</u>, tax-free or charitable organizations’ employee</p>	<p><input type="checkbox"/> 임금, 봉급, 또는 수수료를 받고 일하는 영리 목적의 사기업 혹은 개인업체 직원이었습니까?</p> <p>Employee of a <u>profit purpose private company</u> or business of an individual, receiving wage, salary, or commission?</p> <p><input type="checkbox"/> 비영리 목적의 사기업, 면세 혜택을 받는 단체, 혹은 자선 기관의 직원이었습니까?</p> <p>Employee of a <u>non-profit purpose private company</u>, tax-exempt or charitable organization?</p>

	Chinese	Korean
Recommended Wording	<p>雇员，从盈利性的私营公司、商业机构或者私人雇主那里领取工资、薪水或者佣金</p> <p>Employee, from <u>for-profit private operated</u> company, commercial firm or private employer receiving wages, salary or commission.</p> <p>雇员，在非盈利性的私营机构、免税或者慈善机构工作</p> <p>Employee, at <u>non-profit private operated</u> organizations, tax-free or charitable organizations working</p>	<p><input type="checkbox"/> 임금, 봉급 또는 수수료(커미션) 를 받고 일하는 <u>영리 목적의 사기업</u> 혹은 개인 업체 직원</p> <p>Employee of a <u>profit purpose private company</u> or business of an individual, receiving wage, salary, commission (commission-phonetic translation) (shortened ending form)</p> <p><input type="checkbox"/> 비영리 목적의 사기업, 면세 혜택을 받는 단체, 혹은 자선 기관의 직원</p> <p>Employee of a <u>non-profit purpose private company</u>, tax-exempt or charitable organization (shortened ending form)</p>

Chinese Language Interviews

In round 1, half of the respondents chose one of these response categories, but two respondents' reasoning was problematic. Both of these respondents worked in a nonprofit organization offering various programs to benefit the community, so the intended response category should be private not-for-profit. When asked to compare these for-profit versus not-for-profit categories, both respondents demonstrated clear understanding. They contrasted the for-profit and not-for-profit aspect and pointed out that their employer is not-for-profit. However, the first respondent marked both response categories, saying that he received a salary so the first response category also applied to him. The second respondent marked the for-profit response category for the same reason. When the not-for-profit response category was discussed, this second respondent gave a complete explanation about what not-for-profit entailed, giving details such as any money raised must be used for the purpose stated and not to generate additional income. However, she did NOT mark that category because it says 私人 (private person, original translation to mean "private"), and she didn't believe that the organization belonged to a private person. Since the first category mentions receiving a salary, she thought that applied to her, even though it clearly referred to "for-profit."

The confusion led us to examine the sentence structure of the original translation of these answer categories. The English text mentions "employee" first, but the Chinese sentence structure mentions "employee" last because descriptions about the employees are presented first. Therefore, the original translation started with "receive wages, salary," and this phrase seemed to have caught the attention of both of these respondents, even though they knew for a fact that the company where they work is not a for-profit company.

The second respondent's issue with the translation for "private," 私人 (meaning private person) was echoed by other respondents when probed about this term. Although 私人

indeed means “private,” it does not seem to be the appropriate term here to describe companies/organizations, as it conjures the image that they belong to an individual person (it could belong to a person in some circumstances, but it just did not sound right to the respondents here).

Thus, we recommended modifying the translation so it no longer says “private person” (私人) but “private-operated” (私营). The latter seemed to fit better for a business and worked reasonably well in round 2, although one round 2 respondent hesitated when seeing the term. She was not sure if her employer is “private-operated” (私营) after all, but because the category starts with nonprofit and this is the most prominent aspect of her workplace, she decided to mark the not-for-profit answer category. Furthermore, the original translation used 个人企业 (individual enterprise) to indicate “an individual.” We modified it to say 私人雇主 (private person employer) because it appropriately describes that it is an individual for whom they work, and also an employer that has employees.

For round 2 testing, we also recommended restructuring the translation to mention “employee” first. Because descriptions need to go first in Chinese sentences, the restructuring was done this way. We start the translation with “employee” as if it was a response category on its own, a comma, and followed by the descriptions. We moved “for-profit” and “not-for-profit” before “private” to provide the contrast for these two answer categories earlier in the sentence, especially when they both start with the same word “employee.” This strategy seemed to work reasonably well in round 2.

Four round 2 respondents who worked at a nonprofit social service agency marked the “not-for-profit” category as intended. They explained that seeing not-for-profit guided them to choose that answer category. One of these respondents commented that she is only working part-time (兼职) and wondered if she would be considered an 雇员 (employee). She decided to mark the category anyway. This could be an issue for the English language, too, because the term “employee” is used.

Four round 2 respondents who worked in a restaurant, a security company, a doctor’s office, and a bank found it easy to identify with the for-profit category. One respondent did not choose the for-profit category. He worked for a factory making garments, but instead of marking the for-profit category, he marked the self-employed incorporated category because his company had shares (the Chinese translation used “shares” to denote incorporated). This suggests a problem with the self-employed translation and will be discussed in later sections. Given that round 2 translations worked reasonably well, we recommended adopting them as final.

Korean Language Interviews

In round 1, respondents complained about the busy text of the answer categories, so we recommended shortening the grammatical ending form to facilitate reading. When the short ending forms were used in round 2, none of the respondents made such complaints.

In round 1, two respondents thought “not-for-profit” and “private company” conflict with each other. It is because “not-for-profit companies” are most likely to be publicly owned in Korea, not owned by an individual person, so respondents were not familiar with a private nonprofit company. Since this issue was noted by only two respondents (out of 12) and was observed by only one interviewer (among four), we planned to test the alternative wording 민간 기업 (nongovernmental, civil company) and 비영리 단체 (not-profit organization) in round 2 whenever respondents made similar comments. However, no such comments were made in round 2, and therefore, we recommended keeping the round 2 translation.

Note for Consideration. We observed that one respondent in round 2 who worked for the nonprofit organization chose the first answer category (for-profit organization) because the second category did not mention compensations, despite his clear understanding of the terms “not-for-profit” and “for-profit.” This may be a consideration for future redesign. Issues of individual response categories will be discussed in later sections.

Detailed Person Question 41 – Continued

- SELF-EMPLOYED in own NOT INCORPORATED business, professional practice, or farm?
- SELF-EMPLOYED in own INCORPORATED business, professional practice, or farm?

	Chinese	Korean
Original Wording	<p>自雇, 从事非公司的业务、专业性服务或者农场主</p> <p><u>Self-employed</u>, engaged in <u>nonincorporated</u> business, professional services or farm owner</p> <p>自雇, 从事公司性质的业务、专业性服务或者农场主</p> <p><u>Self-employed</u>, engaged in <u>incorporated nature</u> business, professional services or farm owner</p>	<p><input type="checkbox"/> 비법인 업체인 개인 사업장, 농장, 전문직 사무실을 운영하는 자영업자였습니까?</p> <p><u>Not incorporated</u> (enterprise) private business, farm, professional office running self-employed person?</p> <p><input type="checkbox"/> 법인 업체인 개인 사업장, 농장, 전문직 사무실을 운영하는 자영업자였습니까?</p> <p><u>Incorporated</u> (enterprise) private business, farm, professional office running self-employed person?</p>

	Chinese	Korean
Recommended Wording	<p>经营自己的独资或者合资的公司，专业性业务或者农场</p> <p>Operate <u>own proprietorship or partnership</u> company, professional business or farm</p> <p>经营自己的股份有限公司，专业性业务或者农场</p> <p>Operate <u>own share limited</u> company, professional business or farm</p>	<p><input type="checkbox"/> 개인 소유의 업체(비법인)를 운영하는 자영업자 (예: 개인 사업장, 농장, 전문직 사무실)</p> <p>Self-employed person who runs a business (Not-incorporated) owned by a(n) individual(s) (Example: private business, farm, professional office)</p> <p><input type="checkbox"/> 회사(법인)로 등록된 업체를 운영하는 자영업자 (예: 개인 사업장, 농장, 전문직 사무실)</p> <p>Self-employed person who runs a business registered as company (Incorporated) (Example: private business, farm, professional office)</p>

Chinese Language Interviews

In round 1, three respondents marked one of the self-employed response categories. However, that response category was not appropriate for the work situation they described. For example, a respondent who worked in a restaurant that he owned interpreted the original translation for self-employed as intended, but he decided that the restaurant is 公司性质 (original translation for “incorporated”). He explained that the restaurant is a private company, so it is 公司性质 (original translation for “incorporated”). He also said that it is impossible that any company is 非公司 (original translation for “not incorporated”). This led the Chinese language expert panel to realize that the original translation could be problematic: “incorporated” is translated correctly to 公司, but this same word is most commonly used to mean “company” in Chinese. In fact, the Chinese LAG uses 公司 to mean a company in general. It is no wonder that this respondent was shocked to see 非公司 (original translation for “not incorporated”) because he read it to mean “non-company.” But the not incorporated response category was actually the correct answer category that fit his situation.

The second respondent also marked the incorporated response category. She was a salesperson at a large department store, so it is unlikely that she actually owned it. She distinguished the two self-employment categories by the word 公司, and said 非公司 meant that you do not work at a company and gave doctors as an example. These responses suggest that, like the first respondent, she also thought 公司 here referred to a company in general. It probably did not help that “department store” in Chinese literally means “hundred commodity company” (百货公司).

The third respondent was a doctor, and she saw the term 专业性服务 (original translation for “professional practice”) and decided it was for her, ignoring the self-employment aspect all together. She worked for a government hospital.

Examining the remainder of the round 1 interviews, this interpretation about 公司 seems prevalent or that respondents admitted that they did not know what we meant. The term 自雇 (original translation for “self-employment”) was interpreted as self-employed by some, while others associated it with being an employee because 公司 is also mentioned later. What is clear is that few associated self-employment with any of the other descriptions in the same category, as if self-employment was a standalone. Furthermore, respondents associated “professional practice” with different things: some only considered professionals, while others felt it could include any work as long as they provide a service.

For round 2 testing, we turned “self-employed” into a verb so it connects with the rest of the descriptions: 个体经营 (individually operate). The phrase 个体户 (individual unit) is commonly used in China to refer to self-employed individuals. We also avoided the word [self-] “employed” (雇) and used “operated” (营) instead to avoid the perception of being an employee, but we moved the phrase into parentheses. Furthermore, because “self-employed” has been made a verb, there is no longer a need to say 农场主 (farm owner), which was used in the original translation to mean a self-employed farm owner. We kept “professional practice” as is. Moreover, our research showed that an incorporated business may involve shares and recommended incorporating 股份制 (shareholding) in the translation. Census Bureau indicated that this was not the ideal approach and could be acceptable for round 2 testing. We refer to this version as Version B and it says:

个体经营 (自营) 非股份制公司性质的业务、专业性业务或者农场 (Individually operate [self-operated] non-shareholding company nature business, professional business or farm)

个体经营 (自营) 股份制公司性质的业务、专业性业务或者农场 (Individually operate [self-operated] Shareholding company nature business, professional business or farm)

Almost immediately into round 2, we identified problems with the revised translations. First, 个体经营 (自营) (individually-operate [self-operate]) sounded like the business belonged to one person and one person only. Second, respondents could distinguish between the two answer categories by pointing out that they differ by whether 股份制 (shareholding) was mentioned, but what they actually entailed was not as clear. This is not a language issue per se, because even in English what “incorporated” entails is not something that the general public can readily explain. One round 2 respondent chose the self-employed incorporated response choice, but she was not self-employed. She marked that option because her company had shares, but based on her responses in other Industry/Occupation (I/O) questions, the first response choice (employee of for-profit) is the appropriate choice. This showed that the self-employed portion of the translation needed improvement.

In response to these early round 2 findings, the Chinese language expert panel met and proposed a Version C for testing to the Census Bureau, as follows.

经营自己的独资或者合资的公司，专业性业务或者农场 (not incorporated) (operate own proprietorship or partnership company, professional business or farm [not incorporated])

经营自己的股份有限公司，专业性业务或者农场 (incorporated) (operate own share limited company, professional business or farm [incorporated])

To avoid the one owner perception, but still emphasize the self-employed aspect, Version C used 经营自己的 (operate own). We were also able to work the following into Version C: (1) Census Bureau had suggested during their review of the round 1 findings that “proprietorship and partnership” could be considered for expressing the not incorporated concept; and (2) our research showed that in a Chinese-speaking country “股份有限公司” (share limited company) is often used to indicate the incorporation of a company. We also appended the English words “not incorporated” and “incorporated” in parentheses at the end of the Chinese translation to demonstrate that these concepts can be anchored in English. All of these modifications were accepted by the Census Bureau for testing. We were able to test Version C with at least half of the respondents who received Protocol Guide “F.” Compared to Version B (shares vs. no shares), respondents were able to recognize the difference more readily and at least one respondent pointed out that having the English words in parentheses was helpful (although we did not test him whether he really knew what they meant). As expected, most respondents did not quite know what these categories entailed, but there was improvement in terms of recognition and the self-employed aspect. We recommended adopting Version C from round 2. Census Bureau accepted this recommendation but asked to have the English wording “(not incorporated)” and “(incorporated)” deleted.

Korean Language Interviews

In round 1, most respondents were unable to give accurate definitions about “not-incorporated business” or “incorporated business,” but they seemed to distinguish them by size: an “incorporated business” is bigger in size than a “not incorporated business.” It is notable that several respondents first interpreted 법인 (incorporated) as a legally registered business, implying that not incorporated might not be. In addition, a few round 1 respondents complained about the long and complicated sentence structure. It is because the Korean translations for these two answer categories start with the term (not) incorporated business, which most respondents do not exactly understand, and the term “self-employed” does not appear until the end. Therefore, we recommended testing two alternative wordings, Version B and Version C, which placed “self-employed” as early as possible in the sentence and included additional explanatory text. We also suggested changing the order of these answer categories by turning the phrase of “business,

professional practice, or farm” into examples in parentheses and moving them to the end to facilitate reading. Below are the actual wordings used in Version B and Version C.

	Version B	Version C
SELF-EMPLOYED in own NOT INCORPORATED business, professional practice, or farm?	<p>회사(법인)로 등록되지 않은 업체를 운영하는 자영업자 (예: 개인 사업장, 농장, 전문직 사무실)</p> <p>Self-employed person who runs a business, not registered as company (Incorporated) (Example: private business, farm, professional office)</p>	<p>개인 이름으로 등록된 업체(비법인)을 운영하는 자영업자 (예: 개인 사업장, 농장, 전문직 사무실)</p> <p>Self-employed person who runs a business (Not-incorporated) registered under an individual person’s name (Example: private business, farm, professional office)</p>
SELF-EMPLOYED in own INCORPORATED business, professional practice, or farm?	<p>회사(법인)로 등록된 업체를 운영하는 자영업자 (예: 개인 사업장, 농장, 전문직 사무실)</p> <p>Self-employed person who runs a business, registered as company (Incorporated) (Example: private business, farm, professional office)</p>	<p>회사(법인)로 등록된 업체를 운영하는 자영업자 (예: 개인 사업장, 농장, 전문직 사무실)</p> <p>Self-employed person who runs a business (Incorporated) registered as company (Example: private business, farm, professional office)</p>

In addition, to assess whether and how often the response category “not incorporated business” is interpreted as “illegal,” we added a particular probe in round 2. However, only one out of 11 respondents interpreted “not incorporated business” as “illegal business,” and this respondent seemed to be obsessed with “illegal” matters overall. She often demonstrated her concerns about the disclosure of personally identifiable information (PII) and government actions regarding illegal workers. Besides, her answers to her working status were inconsistent between the time of the screening and the interview. Therefore, this respondent may be an undocumented worker and such background might have led to her interpretation.

When the preference to the different wordings about “incorporated” and “not incorporated” was asked after the definitions of “incorporated business” and “not incorporated business” were given, a dominant number of respondents (eight out of 11 respondents) chose Version C because the wording was more explanatory. However, one respondent preferred Version B to Version C because Version C is technically incorrect in that there was no business registered under an individual person’s name and all businesses should be registered as the business name. This respondent pointed out that “ownership” could be a discriminating factor because only a nonincorporated business can be owned by a person or multiple persons. Based on this comment and round 2 testing results, we recommended changing the wording of the “not incorporated” answer category from Version C only.

To eliminate problems related to some respondents not realizing that the examples provided were simply examples, we recommended adding “, etc.” to the list of examples in the parentheses. (See more discussions about the “etc.” recommendation in Detailed Person Question 43.) However, this recommendation was not approved by the Census Bureau, and therefore the final recommended wording shown in the table does not include “etc.” at the end of the list.

Detailed Person Question 41 – Continued

- Working WITHOUT PAY in family business or farm?

	Chinese	Korean
Original Wording	无薪为家庭生意或者农场工作 <u>No salary</u> , work for family business or farm	가족이 운영하는 사업체나 농장에서 무급으로 일함 Working a business or farm which family runs without pay
Recommended Wording	不领薪水为自家生意或者自家农场工作 <u>Don't receive salary</u> , work for own family business or own family farm	No changes recommended.

Chinese Language Interviews

In round 1, one respondent marked this response category. She explained that it meant “working for own family’s business, don’t get paid, but has joint family income” (自己为家里做生意, 没有工资, 但是有家庭的共同收入). She owns a Chinese restaurant, so this seemed to be the intended understanding. We also asked all respondents to read the original translation and tell us what they think it meant. Although the literal meaning is understood—working for the family, no payment—the examples several respondents cited suggested that their interpretation was not as intended. For example, they thought since homemakers and students do not get paid, this is the category that they should mark. We do not believe this is accurate because homemakers and students would have skipped this question at Routing Instruction L, OR be directed to this question and respond based on their last job if any. A few respondents rejected the notion that there is 无薪 (no salary, original translation for “without pay”). They reasoned that one must benefit from the family income.

For round 2 testing, we recommended softening the translation for “without pay” to say 不领薪水 (don’t receive salary) so it suggests that without pay could be an option, not that there is not any kind of remuneration. The Census Bureau sociolinguist questioned whether “family business” in this question refers to the respondent’s own family business, someone else’s family business, or a relative’s family business. Our interpretation that the question is about “one’s own or relative’s family business” was later confirmed. Thus, we recommended emphasizing that the business and farm belong to the family by adding the word 自家 (own

family), which is how the respondent who marked this category explained her situation. Round 2 testing did not reveal major problems, and we recommended adopting the translation.

Korean Language Interviews

No changes were recommended.

Detailed Person Question 42

For whom did this person work?

If now on active duty in the Armed Forces, mark (X) this box → and print the branch of the Armed Forces

	Chinese	Korean
Original Wording	<p>这个人受谁雇用？ By whom is this person employed?</p> <p><i>注：如果目前正在军队服役，请在这个框中标记 (X) → 并用正楷写下具体的军部名称。</i> <i>Note: If now serving in the military, please indicate X in the box → and print specific name of military unit.</i></p>	<p><i>이 사람의 직장 이름이 나 고용주의 이름을 써 주십시오. 현역으로 군 복무중일 경우, 옆란에 표시(X) 하고 군대의 종류를 적어 주십시오.</i> <i>Please write this person's workplace name or the name of employer. If on active duty, mark (x) the next space and please write the kind of Armed Forces.</i></p>
Recommended Wording	<p>这个人为哪个雇主工作？ For which employer does this person work?</p> <p><i>注：如果目前正在美国军队服役，请在这个框中标记 (X) → 并工整地写下哪个军种。</i> For which employer does this person work? <i>Note: If now serving in the U.S. military, please indicate X in the box → and neatly write which military branch.</i></p>	<p>이 사람의 직장 혹은 사업체 이름은 무엇이었습니까? 현역으로 군 복무중일 경우, 옆란에 표시(X) 하고 군대의 종류를 아래에 적어 주십시오. What was this person's workplace or business name? <i>If on active duty, mark (x) the next space and please write the kind of Armed Forces below.</i></p>

Chinese Language Interviews

Half of the round 1 respondents interpreted the question as intended and wrote down the name of the company or the organization they worked for. Six respondents left the question blank saying it did not apply to them. Four of them did so because they said they did not work for the military. They were distracted by the italic note instructing respondents who are in the military to write down the branch of military to which they belong. They thought military service is what this question was about. The other two respondents did not write an answer because they were not currently working, and because Chinese language does not use tenses, the translation sounds like it is asking for whom they are working now. When

probed, one of these two respondents interpreted the question as intended, while the other respondent wrote down "hospital," but not the name of that hospital.

We made several recommendations that were accepted for round 2 testing. First, in the LAG, we created a larger visual divide between the question text and the italic instructions so respondents do not automatically think they must go together. Respondents not knowing that the italics serve a different purpose has been something we have observed in previous phases and have suggested preceding the italic instructions with "Note" as a way to indicate that it is a separate note, and not part of the question text. Although this technique worked reasonably well in other questions, it did not work very well in the round 1 translation. Possibly this is because the question text itself is very short and one is naturally drawn to the long italic note and think it is the main purpose of the question. We also suggested moving the label "name of company, business, or other employer" closer to the write-in box, and adding "please write" in the translation of the label as an additional aid to respondents on what they are supposed to do.

Second, we specified in the translation that we are asking about the employer instead of a general "for whom." Both revisions seemed to work reasonably well in round 2 because seven of 10 respondents wrote down the name of their employer (although one respondent wrote an incomplete name, she knew Question 42 was intended for employer's name). Four of these seven who did write the name of the employer wrote in Chinese. One respondent could not remember how to write in English the name of the company for which she worked and left it blank. Two respondents, however, still left the question blank because of the active military duty note. Upon closer examination, they both realized that the active duty note was not a prerequisite for this question. These types of nontranslation problems will likely be seen when the LAG is used in the field.

Furthermore, in the italic instructions, the round 1 translation contained an error. 军部 refers to a specific military unit and its name, which is exactly what most respondents interpreted. We corrected the translation to say 军种 to accurately mean "branch." Census Bureau had confirmed that the Armed Forces here meant the U.S. Armed Forces, so we understand that the expected answer is one of the five military branches of the Armed Forces. The revisions are shown in the recommended wording column and were accepted by the Census Bureau.

Korean Language Interviews

The original translation used 이 사람의 직장이름이나 고용주의 이름을 써 주십시오 (Please write this person's workplace name or the name of employer) to represent "For whom did this person work?," and three respondents were confused. Two of them were not sure whether to write a restaurant name or the owner of the restaurant, if a person was working at a small restaurant, for example. Four additional respondents reported that it was not clear where to write the name of Armed Forces branches. To address these issues, we recommended revising the question to 이 사람의 직장 이름은 무엇이었습니까? (What was the

name of this person’s workplace?) and revising the instructions by adding 아래에 (below) to specify where to write the branches of Armed Forces.

In round 2, one self-employed person left the question blank intentionally because the word 직장 (workplace) used in the question is the term that employees who work for companies usually use to refer to their workplace, and so he believed that this question was not applicable to him. To be more comprehensive, we recommended adding 사업체 (business) in the question.

Interestingly, in round 2 where the past tense was used in the italic instruction about military service to reflect the Census Bureau’s communications for ensuring the past tense in Questions 41 to 46, three out of 11 respondents thought the italic instruction asked about the past military experience. Because military service is obligatory for all men in Korea, essentially all male respondents would potentially respond about their past military experience. This could result in data errors, and therefore we recommended using the round 1 translation for the italic instruction where past tense was not implemented. Since the round 1 translation (same as the final recommendation) is in a phrasal format that complies with the contextual tense from the main question, it still presents technically accurate information but in less direct way.

Detailed Person Question 43

What kind of business or industry was this?

Describe the activity at the location where employed. (For example: hospital, newspaper publishing, mail order house, auto engine manufacturing, bank.)

	Chinese	Korean
Original Wording	<p>属于何种行业？</p> <p>Belongs to which industry?</p> <p>注：描述雇佣地点的经营活动。（例如：医院、报纸出版、邮购公司、汽车引擎制造、银行</p> <p>Note: describe employment location’s business activities.(for example, hospital, newspaper publishing, mail order company, auto engine manufacturing, bank)</p>	<p>이 일은 어떤 분야의 산업 또는 사업이었습니까?</p> <p>근무지 혹은 사업장의 주요 업무를 자세히 적어 주십시오. (예: 병원, 신문 발행, 통신 판매회사, 자동차 엔진 제조, 은행)</p> <p>What area of industry or business was this work? Please write the work of the workplace or business place in detail (Example: Hospital, newspaper publishing, mail order company, car engine manufacturing, bank)</p>

	Chinese	Korean
Recommended Wording	<p>雇主从事哪种业务或者属于什么行业？</p> <p>What kind of business or industry did the employer engage in or belong to?</p> <p>注：请说明在雇佣地点的经营活动。</p> <p>(例如：医院、报纸出版、邮购公司、汽车引擎制造、银行等行业类别)</p> <p>Note: Please explain employment location's business activities.</p> <p>(For examples: hospital, newspaper publishing, mail order company, auto engine manufacturing, bank, etcetera other industry types).</p>	<p>이 직장이나 사업체에서 하는 일은 어떤 분야의 산업이나 사업에 속하는 것이었습니까? 근무지 혹은 사업장의 주요 업무를 자세히 적어 주십시오. (예: 병원, 신문 발행, 통신 판매회사, 자동차 엔진 제조, 은행)</p> <p>To which areas of business or industry did the work done at this workplace or business place belong? Please write the work activity of the workplace or business place in detail (example: hospital, newspaper publishing, mail order company, car engine manufacturing, bank).</p>

Chinese Language Interviews

In round 1, half of the 12 respondents left Question 42 (name of employer) blank because the mention of military in the italics made them think that the question did not apply to them. At Question 43 (industry), three of them continued to leave the write-in box blank. The remaining three respondents wrote in an answer (as intended) because they felt that Question 43 made sense. Among the other half of the 12 round 1 respondents who did provide an answer in Question 42 (name of employer), three wrote in an industry that made sense in combination with the employer (restaurant; community service; sundries). However, the other three respondents did not. For example, one wrote the name of the place she worked for in Question 42, but wrote “non-profit organization” in Question 43. Based on these two answers, we cannot figure out what this employer does exactly, although the name of the employer is suggestive. Similar problems existed for two others. Although they wrote the name of the employer in Question 42, both wrote 服务 (services) as the industry. “Services” may be too general of a categorization for this question and does not tell us what the employer does. Based on these observations, we recommended being more specific in the question text and use “explain” rather than “describe” in the italic instructions to prompt respondents for more details. The translation of the question also was expanded.

As reported earlier, there was an improvement in round 2 in terms of providing the name of the employer in Question 42 and there seemed to be an improvement in Question 43 (industry) as well. All respondents wrote something in Question 43 (industry), even the three round 2 respondents who left Question 42 (name of employer) blank.

Furthermore, in Phase 2 (see *Note for Consideration* in Detailed Person Question 12), we observed that some respondents did not realize that the examples provided were simply examples, even though “for example” is indicated upfront. They thought that they must

choose one of the listed examples. Because the majority of the respondents did not exhibit difficulties, we did not make specific recommendations about this. We continued to see this response pattern in Phase 3 and feel that it should be addressed because those respondents tended to leave a question blank, thinking the examples did not apply to them or they became lost. We recommended adding etcetera at the end of the list of examples AND repeating what the examples are for. In the case of Question 43 (industry), it would be: EXAMPLES 等行业类别 (EXAMPLES etcetera industry types). We believe both additions (etcetera and type) are important because some of the Phase 2 list of examples did say etcetera, but it was still not very noticeable to respondents, possibly because the Chinese wording for etcetera is only one character: 等. It also sounded quite natural in Chinese. However, following round 1, the Census Bureau preferred that we expand the “for example” into a longer phrase: “The following are some examples.”

Although the majority of respondents quickly recognized that the list items are examples, one respondent was clueless. This was consistent with our observations from prior testing in that some respondents simply struggle with this survey convention. We also offered a Show Card that used the short “for example” phrase in round 1 and appending “etcetera industry type” at the end. Several respondents preferred this version. Census Bureau accepted this recommendation for Question 43 in particular (shown in the table for recommended wording), but not for the other questions.

Korean Language Interviews

In round 1, two respondents had issues in understanding the purpose of the examples and thought they should choose their answers from the included examples only. Because respondents were not able to find an appropriate answer among the examples, they left the answer blank or chose the most similar answer from their point of view, which, in fact, made no sense to others. These respondents showed persistent problems whenever examples were included such as in Questions 44, 45, and 46. We had similar observations from the earlier rounds/phases of interviews, and these respondents seemed to have general problems in providing meaningful answers throughout the cognitive interviews because of their low levels of reading comprehension.

Based on the Census Bureau suggestions, we added 참고용 (reference purpose) at the beginning of the list of examples as a way to clarify their intention. We also tested adding 등 (etc.) at the end of the examples. In round 2, no respondents exhibited such difficulties. However, it is difficult to say no errors are because of our revision efforts since in each round, respondents who demonstrated difficulty with managing the list of examples are few. However, they persistently appear across rounds and therefore we recommended looking for a solution. When respondents were asked about their preference between the two wordings in round 2, nine out of 11 respondents preferred seeing 등 (etc.) at the end of the list of examples because it is simpler and more commonly used. Therefore, we

recommended using this wording whenever a similar phrase appears such as in Questions 45 and 46. However, this recommendation was not approved the Census Bureau, and therefore “etc.” was not added to the final wordings throughout the LAG.

In round 2, a few respondents demonstrated confusion about the question mainly because the use of 이 일 (this work) and its grammatical subject was not clear. Korean grammar uses only people and animals as the grammatical subject and rarely uses objects as the agent of the verb, like in this question. To address these issues, we recommended specifying 이 일 (this work) in more detail and revising the entire question to flow more naturally in Korean, to the extent that it does not distort the meaning of the English ACS question, as follows: 이 직장이나 사업체에서 하는 일은 어떤 분야의 산업이나 사업에 속하는 것이었습니까? (To which areas of business or industry did the work done at this workplace or business belong?).

Detailed Person Question 44

Is this mainly —

- manufacturing?
- wholesale trade?
- retail trade?
- other (agriculture, construction, service, government, etc.)?

	Chinese	Korean
Original Wording	这种行业主要是 — (This industry is mainly —) [The answer categories are omitted for space-saving reasons.]	이것은 주로 — <u>하나에만 표시(X)해 주십시오.</u> <input type="checkbox"/> 제조업입니까? <input type="checkbox"/> 도매업입니까? <input type="checkbox"/> 소매업입니까? <input type="checkbox"/> 기타(농업, 건축업, 서비스업, 정부 관련업 등)입니까? This is mainly — Please mark (x) only one. <input type="checkbox"/> Is (this) manufacturing? <input type="checkbox"/> Is (this) wholesale business? <input type="checkbox"/> Is (this) retail business? <input type="checkbox"/> Is (this) other (agriculture, construction, service, government related works, etc.)?

	Chinese	Korean
Recommended Wording	<p>雇主从事的业务主要属于 :</p> <p>The business work the employer engages in mainly belongs to:</p> <p>[The answer categories are omitted for space-saving reasons.]</p>	<p>아래의 보기 중 이 사람의 직장이나 사업체에 해당되는 산업 <u>하나에만</u> 표시(x)해 주십시오.</p> <p><input type="checkbox"/> 제조업</p> <p><input type="checkbox"/> 도매업</p> <p><input type="checkbox"/> 소매업</p> <p><input type="checkbox"/> 기타(농업, 건축업, 서비스업, 정부 관련업 등)</p> <p>Among the below answer categories, mark (x) only one industry which corresponds to this person's workplace or business.</p> <p><input type="checkbox"/> Manufacturing</p> <p><input type="checkbox"/> Wholesale business</p> <p><input type="checkbox"/> Retail business</p> <p><input type="checkbox"/> Other (agriculture, construction, service, government related works, etc.)</p>

Chinese Language Interviews

With the exception of two respondents, all round 1 respondents chose an appropriate response category right away. Those two respondents included the one that left all questions blank because he felt that he could not provide answers as someone who is not currently working (also see earlier discussion about Question 42). When given a hypothetical situation about working in a factory, however, this respondent was able to determine that the “manufacturing” response category would be a fit. The other person worked at a restaurant and felt that it is “retail” rather than “service” because service meant providing free service to her. So, she is the only respondent who did not interpret the answer categories as intended.

Previously in the discussion for Question 43 (industry) for round 1, we mentioned that three respondents wrote in an industry that is too broad: nonprofit organization and services. But they all chose the intended answer in Question 44, including the respondent who wrote “service” as the industry for a grocery store—for Question 44, she chose “retail” in the list of answer categories.

These findings showed that this question worked reasonably well in round 1. It worked well in round 2, also, since all respondents answered Question 44 as intended.

Following round 1, we recommended a modification in the translation for round 2 testing. A few respondents pointed out that Questions 43 and 44 ask the same thing, and we noticed that the round 1 translation for the two questions are indeed almost identical, both asking about 行业 (industry) in the translation. In round 2, we tested two versions.

The first version was generic without any prompts, like the English version, except it was phrased in a complete question: 雇主以从事下列哪一项为主? (Which of the following category was the employer mainly engaged in?).

The second version used “business work” instead of “industry” like in the round 1 translation, but ended with a colon, rather than a dash (because the shape of the dash looks like a Chinese character). It says: 雇主从事的业务主要属于 : (The business work the employer engages in mainly belongs to:).

More round 2 respondents preferred Version 2 to Version 1. We recommended adopting Version 2 (ends with a colon), but have offered an alternative to the Census Bureau that phrases Version 2 in a complete question, like this: 雇主从事的业务主要属于下列哪一项? (The business work the employer engages in mainly belongs to which of the following category?). Census Bureau chose the unmodified Version 2 that was tested in round 2.

Korean Language Interviews

In round 1, most respondents were able to understand the question and answer it correctly, except for two respondents who continued to demonstrate difficulty understanding the list of examples such as in Questions 43, 45, and 46.

To be consistent with recommended changes in the other questions of a similar format, such as Question 41 (type of employer), we recommended converting this question to a full sentence and making the answer categories in a phrasal format to be appropriate for this change.

In round 2, we did not observe any issues related to the example list interpretation, and we have no further recommendations regarding this matter. The wording shown in the final recommendation column added 사업체 (business) for the self-employed who might not be able to associate 직장 (workplace) with their business place, as shown in Questions 41 and 42.

Detailed Person Question 45

What kind of work was this person doing? (For example: registered nurse, personnel manager, supervisor of order department, secretary, accountant.)

	Chinese	Korean
Original Wording	<p>这个人正在从事何种工作？</p> <p>(Which type of job is this person currently doing?)</p> <p>(例如：注册护士、人事经理、订单部门主管、秘书、会计师)</p> <p>(For example: registered nurse, personnel manager, supervisor of order department, secretary, accountant)</p>	<p>이 사람의 직업은 무엇입니까? 가능한 한 구체적으로 자세히 적어주십시오 (예: 간호사(RN), 인사 관리자, 조달 책임자, 비서, 회계사)</p> <p>What is this person's job? Please write in detail as specifically as possible. (Example: Nurse (RN), human resources manager, order department manager, secretary, accountant)</p>
Recommended Wording	<p>这个人从事什么工作？</p> <p>What job was this person doing?</p> <p>(以下是一些例子：注册护士、人事经理、订单部门主管、秘书、会计师)</p> <p>(The following are some examples: registered nurse, personnel manager, supervisor of order department, secretary, accountant)</p>	<p>이 사람의 직업은 무엇이었습니까? 가능한 한 구체적으로 자세히 적어 주십시오. (예: 간호사, 인사 관리자, 조달 책임자, 비서, 회계사)</p> <p>What was this person's job? Please write in detail as specifically as possible. (Example: Nurse, human resources manager, order department manager, secretary, accountant)</p>

Chinese Language Interviews

In round 1, the majority of the respondents answered this question as intended. Two respondents did not provide specific answers, writing down “education” (respondent was a teacher) and “restaurant” (respondent owns a restaurant). The one respondent who left everything blank (also see earlier discussion) continued the same practice here, but he was able to articulate what the question meant. Although this question posed little problems (most had straightforward positions like teacher, accountant, sales, cashier), several respondents felt that the examples suggested that it is a job title or the rank of the position that should be given.

We noted that it is misleading to include 正在 (currently) in the original translation. The English used a past progressive tense (was doing), but because Chinese grammar does not specify past tense, indicating 正在 (currently) implies that the job must be current. (This is a good example of why survey translation must involve methodologists who understand the context, not just the language.) Because respondents who have worked within 5 years, but are not currently working, could still get this question, we modified the translation so it does not say currently. We also used 什么 to mean “what” because it is more idiomatic than 何种 in the original translation.

In round 2, all respondents provided a response about what they do, but some still lacked details. For example, a respondent wrote 工人 (laborer) in Question 45, but did not specify what type of labor she did. When looking at her responses in the industry questions, she left Question 42 blank because she did not remember how to write the company's name in English, and in Question 43, she wrote "garment-making industry." We assume she was a garment maker, but more details would be needed. Her entries in Question 46 did not clarify what she did exactly because she simply repeated 工人 (laborer). She explained that it is who she was and what she did. It seemed that she felt her work was straightforward and no details were needed. But without the details, we could only conjecture that she made garments. Another respondent wrote 打表 (typing forms) in Question 45, and wrote 打字 (typing) in Question 46. Perhaps this was sufficient information for I/O coders.

Korean Language Interviews

In round 1, except for two respondents with persistent problems in understanding the intention of example lists described in Question 43, all respondents understood that this question was asking them to write the name of their job, and they mostly wrote their job title such as teacher, salesman, etc. A couple of respondents added their position name, such as manager, along with their job titles.

In round 2, we changed the translation to past tense since round 1 translation used present tense while the past tense was used in the English ACS questionnaire. We also added 참고용 (reference purpose) at the beginning of the list of examples to be consistent with the changes made at Question 43 and to clarify the intention of examples. No significant issues after these revisions were observed in round 2. However, the change to add 참고용 (reference purpose) was not implemented in the final recommendations. (See details in Detailed Person Question 43.)

Commonly in both rounds, respondents' answers seem satisfactory based on the given translation of the question and examples. However, we understand that details are desired in I/O questions because the ACS CATI interviewer manual instructs interviewers to collect at least a two-word answer. It is not clear if these respondents' answers would be sufficient for I/O coders to code the job accurately. Another notable finding is that respondents tended to refer to the given examples as opposed to coming up with their own answers. We understand that to be parallel with the English ACS questionnaire, the examples cannot be changed at this time. When revisions are possible, we recommend providing fewer examples, but offering greater details. Upon review of the final wording, the Census Bureau decided to drop the English word "RN" written next to the Korean translation of nurse 간호사, and the wording in the above table shows this final decision.

Detailed Person Question 46

What were this person’s most important activities or duties? (*For example: patient care, directing hiring policies, supervising order clerks, typing and filing, reconciling financial records.*)

	Chinese	Korean
Original Wording	<p>这个人最重要的工作或者职责是什么？</p> <p>What is the most important work or duty for this person?</p> <p>(例如：病人护理、指导招聘政策、监督订购人员、打字与归档、调整财务记录等)</p> <p>(For example: patient care, directing hiring policies, supervising order clerks, typing and filing, reconciling financial records, etc.)</p>	<p>이 사람의 주된 업무 및 임무는 무엇입니까?</p> <p>(예: 환자 간호, 인사 정책 지휘, 주문 직원 관리, 타자 및 문서 관리, 재무 기록 정산)</p> <p>What are this person’s main work and responsibility? (Example: Patient care, directing human resources department policy, supervising order staff, typing and document management, reconciling financial records)</p>
Recommended Wording	<p>这个人最主要的具体工作任务或者职责是什么？</p> <p>What is the main detailed work tasks or duties for this person?</p> <p>(以下是一些例子：病人护理、指导招聘政策、监督订购人员、打字与文件归档、调整财务记录)</p> <p>(The following are some examples: patient care, directing hiring policies, supervising order clerks, typing and document filing, reconciling financial records)</p>	<p>이 사람의 주된 업무 및 임무는 무엇이었습니다?</p> <p>(예: 환자 간호, 인사 정책 지휘, 주문 직원 관리, 타자 및 문서 관리, 재무 기록 정산)</p> <p>What were this person’s main work and responsibility? (Example: Patient care, directing human resources department policy, supervising order staff, typing and document management, reconciling financial records)</p>

Chinese Language Interviews

In round 1, this question was somewhat successful since about half of respondents described what they did in more than one word. However, four respondents simply repeated what they wrote in Question 45 (kind of work): cashier, sales, restaurant, and doctor. They felt that there was no more to write for this question. Two additional respondents showed appropriate understanding of this question when probed, but did not provide sufficient details while filling out the LAG. One person wrote “accountant” in Question 45 and “manager” in Question 46, while the other respondent wrote 服务 (service) in Question 45 and 服务老人 (serve the elderly) in Question 47. The only respondent that left this question blank was the same person we reported on earlier about leaving all boxes blank, but his understanding of this question seemed accurate given his responses to probes.

Seeing these findings, we were not sure whether these issues can be addressed in the translation, but did suggest one modification. After discussing with the Census Bureau

sociolinguist, we recommended using 最主要的具體工作任務 (main detailed work tasks) to elicit more details. The original translation asked about work only (the word “work” was used to mean “activities” in the English). The modification “main detailed work tasks” seems to be more specific than just “work.”

We tested the revised translation in round 2 to see if this change prompted respondents to enter more details. There was some improvement. With the exception of two respondents who repeated their entries in Questions 45 and 46 (also see discussion in Question 45), the remainder of the respondents provided more than a one word description. We found it most encouraging in a respondent who worked in a restaurant. He had left the name of the employer blank because the active duty instruction made him think that he must be in the military to answer the question. In Question 43, he wrote that the employer was in the food industry. For Questions 46 and 47, he was able to write that his work involved takeouts and that his main work task/duty was delivering food to customers. Thus, we recommended adopting the revised translation. The only change that we see could be helpful is in the list of examples. Our Cantonese language interviewer reported that 归档 (original translation for filing) when read aloud in Cantonese sounded awkward, and her observation was supported by a Cantonese-speaking respondent who found this term amusing. We recommended softening the phrase by saying 文件归档 (document filing).

Korean Language Interviews

In round 1, along with Question 45 (kind of work respondents did), two respondents had persistent problems in trying to choose their answers from the examples only. However, most respondents understood that they had to write their main job duties. Again, respondents tended to write very short descriptions of their job duties, such as “student education” or “sales,” and it is not clear to us whether the information is enough for I/O coders to code the occupation accurately. If greater details are desired, a future redesign may consider providing fewer examples but offering greater details, such as 高等학생에게 물리를 가르침 (Teaching physics to high school students).

In round 2, we changed the translation to past tense since round 1 translation used present tense while the past tense was used in the English ACS questionnaire. We also added 참고용 (reference purpose) at the beginning of the list of examples to be consistent with the changes made in Questions 43 and 45 to clarify the intention of examples. No significant issues after these revisions were observed in round 2. However, the change to add 참고용 (reference purpose) was not implemented in final recommendations. (See details in Detailed Person Question 43.)

Detailed Person Question 47

INCOME IN THE PAST 12 MONTHS

Mark (X) the "Yes" box for each type of income this person received, and give your best estimate of the TOTAL AMOUNT during the PAST 12 MONTHS. (NOTE: The "past 12 months" is the period from today's date one year ago up through today.)

Mark (X) the "No" box to show types of income NOT received.

If net income was a loss, mark the "Loss" box to the right of the dollar amount.

For income received jointly, report the appropriate share for each person—or, if that's not possible, report the whole amount for only one person and mark the "No" box for the other person.

	Chinese	Korean
Original Wording	<p>最近12个月中的收入 (Most recent 12 months income)</p> <p>填表说明: 请在这个人的各类收入来源下方的标示“有”的框中标记(X), 并尽可能准确地估计最近12个月中的总金额。(注:“最近12个月”是指从去年的今天一直到今天。)</p> <p>Form-taking instruction: Please go to this person’s various types of income source and mark (X) in “yes” box, and estimate as accurately as possible in the most recent 12 months the total amount. (Note: “recent 12 months” refers to from today of last year to today.)</p> <p>请在标示“没有”的框中标记(X), 来表示没有这种收入。 Please mark (X) in “no” box to indicate there is <u>no</u> this type of income.</p> <p>如果净收入为负数, 请在美元数额右边的“亏损”框中标记(X)。 If the net income is negative, please mark (X) in “loss” box at the right of US dollar.</p> <p>对于共同获得的收入, 请报告每个人的收入额度 - 如果这种方式不可行, 请把两个人的总金额报告在一个人的名下, 然后在填写其他人的数据时在“没有”的框中标记。 For income received jointly, please report everyone’s income share—if this method is not doable, please report the total amount of these two persons under one person’s name, and mark “no” box when filling out information for others.</p>	<p>이 사람이 받은 각 유형의 소득에 대해 “예”란에 표시(X)하고 <u>지난 12개월 동안의 총액을 가능한 한 정확하게 적어 주십시오.</u></p> <p>About this person’s receiving each type of income, mark (x) “yes” and please write <u>the total amount of the past 12 months as accurately as possible.</u></p> <p>해당 항목의 소득이 <u>없는</u> 경우에는 “아니오”란에 표시(X)해 주십시오. In the case of <u>no</u> corresponding income, please mark (x) “No.”</p> <p>순소득이 적자인 경우 달러 액수 오른쪽에 있는 “적자”란에 표시(X)해 주십시오. In case that the net income is a loss, mark (X) at the space for “Loss” presented at the right side of the dollar amount.</p> <p>공동 소득의 경우 이 사람에게 해당하는 소득만 써 주십시오. 그것이 불가능하다면, 한 사람에게만 총액을 적으시고, 다른 사람에게 대해서는 “아니오”란 에 표시(X)해 주십시오. In the case of joint income, please write the income which corresponds to this person only. If (that is) impossible, please write the total amount for one person only and mark (x) “no” for the other person.</p>

Recommended Wording	Chinese	Korean
	<p>来自最近12个月的收入</p> <p>Comes from the most recent 12 months income</p> <p>填表说明:</p> <p>请看以下各类收入。如果这个人有某类收入,请在“有”的框中标记(X),并尽可能准确地估计在最近12个月内从这类收入来源所得的总金额。(注:“最近12个月”是指从去年的今天一直到今天。)</p> <p>Form-taking instruction: Please look at the following types of income. If this person has a certain type of income, please mark (X) in “yes” box, and estimate as accurately as possible within <u>the recent 12 months</u> this type of income source and its <u>total amount</u>. (Note: “recent 12 months” refers to from today of last year to today.)</p> <p>如果这个人没有某类收入,请在“没有”的框中标记(X)。</p> <p>If this person <u>doesn't have</u> a certain type of income, please mark (X) in “no” box.</p> <p>如果净收入为负数,填写亏损数额并在美元金额旁的“亏损”标项上标记(X)。</p> <p>Note: If the net income is negative, fill in the amount of loss and mark (X) under “loss” next to US dollar.</p> <p>在有共同获得的收入的情况下,请分别填写每个住户成员分到的金额。要是无法分开共同收入,请把总金额填写在其中一个人的名下。然后在填写其他人的收入时,在“没有”的框中标记(X)。</p> <p>In the situation where there is a joint income, please fill in the distribution amount for each household member respectively. If the joint income can't be separated, please write down the total amount under the name of one of them. Then when writing down other people's income, mark (X) in “no” box.</p>	<p>다음에 제시되는 다양한 형태의 소득 중, 이 사람에게 해당하는 소득이 있으면 “있음”에 표시(X)하고, 그 소득의 지난 12개월간 총액을 가능한 한 정확하게 적어 주십시오.</p> <p>Among the various types of incomes presented in the following, if there is a corresponding income which applies to this person, mark (x) “there is” and please <u>write the total amount of that (corresponding) income in the past 12 months</u> as accurately as possible.</p> <p>해당 항목의 소득이 없다면, “없음”란에 표시(X)해 주십시오.</p> <p>If (there is) <u>no</u> corresponding income, mark(x) “there is no (corresponding income).”</p> <p>해당 항목의 순소득이 적자라면, 손해가 난 금액을 적은 후 오른쪽의 “적자”란에 표시(X)해 주십시오.</p> <p>If the corresponding net income is a loss, write in the loss amount and then mark (x) at the space for “Loss” at the right side.</p> <p>공동 소득의 경우 이 사람에게 해당하는 소득만 써 주십시오. 그것이 불가능하다면, 한 사람에게만 총액을 적으시고, 다른 사람에 대해서는 “아니오”란에 표시(X)해 주십시오.</p> <p>In the case of joint income, please write the income which corresponds to this person only. If (that is) impossible, please write the total amount for one person only and mark (x) “no” for the other person.</p>

Chinese Language Interviews

This heading introduces the instructions for the Question 47 income series. Following round 1, we recommended adding the phrase “comes from” to start the heading. It makes the heading sound more complete: 来自最近 12 个月的收入 (Comes from the most recent 12 months income).

In round 2, we encountered one respondent who was completely confused about the time period. The Chinese translation used 最近 12 个月 (most recent 12 months) to indicate in the past 12 months. He thought it referred to any recent 12 months. The Chinese language expert panel met and realized that although only one respondent expressed the confusion, this is a valid observation.

The same phrasing “during the past 12 months” also appears in the same income series instructions before Question 47a and Question 48, in Detailed Person pages Question 40, Question 39a, Question 36, Question 38, Question 24, Question 10a, Question 12, and the Housing Section’s Question 11c and Question 11d. Although the Chinese language does not use past tense, the context and other grammatical descriptors clearly indicated that “the most recent 12 months” referred to the past. However, in this heading, there is no context or grammatical descriptors. It is not surprising that this respondent was so confused. We were tempted to recommend using 過去 (past) instead of 最近 (most recent) to denote the past 12 months. However, considering that the actual ACS respondent would be able to see the LAG in its entirety and theoretically be “trained” to think in this time frame (because it is used throughout), we recommend leaving the wording as is. It probably would have been ideal if we had used 過去 (past) instead of 最近 (most recent) in the translation, but we have not had respondents who demonstrated difficulties in any of the questions that had sufficient contextual clues. In the final wording, there is only a small grammatical edit that we recommended, deleting the word 中 to make the heading sound smoother.

In terms of the instructions, respondents across both rounds, in general, demonstrated reasonably good understanding, but they usually did not read these instructions thoroughly while filling out the form. We intentionally designed the protocol guide so that the instructions are probed after the first three income subquestions have been asked. When these instructions were probed and reviewed, some respondents realized that they had more to report or that they did not follow the instructions while filling out the form.

Following round 1, after probing 12 respondents about their understanding of these instructions, the Chinese language expert panel felt that the translation could be improved so it reads smoother and clearer. Round 2 testing did not reveal major problems. During the Phase 3 final meeting, we were reminded that the “loss” instruction here intends for respondents to write in the amount. Thus, we recommended for the final wording to use the translation that is already in place in Question 48 directing respondents to write in the loss amount.

Furthermore, in round 1, there were some problems with respondents' operationalizing this instruction about joint income. For example, one respondent received "joint income" with her husband, a monthly cash allowance from their children. She decided that she should write the total amount in subquestion a (work income). That is her only income source and she marked "no" for all other subquestions. In Question 48 (total income), however, she wrote only half of the amount because that is the portion she herself received. She said because Question 48 asked about "this person" specifically, and "this person" is her, so she must write only half of that amount.

In terms of comprehension, more respondents than expected were able to rephrase this instruction in their own words. Some were confused since this was the first time other people were mentioned in the interview, and all the while they were filling out the form about just one person, "this person," which was himself or herself. There were also some difficulties about the concept of "joint income."

Based on these observations, we tested two versions in round 2. Version 1 is the "long" version that provides more context and reads more idiomatically compared to the original translation. Version 1 reads: 在有共同获得的收入的情况下，请分别填写每个住户成员分到的金额。要是无法分开共同收入，请把总金额填写在其中一个人的名下。然后在填写其他人的收入时，在“没有”的框中标记(X)。(In the situation where there is a joint income, please fill in the distribution amount for each household member, respectively. If the joint income can't be separated, please write down the total amount under the name of one of them. Then when writing down other people's income, mark (X) in "no" box.).

Version 2 is the "simple" version that is short like the original translation, but describes joint income in a different way and also sounds more idiomatic compared to the original translation. Version 2 reads: 对于共享的收入，请分别填写每个人分到的金额。如果分不清，请把总金额填写在一个人的名下。之后在填写其他人的收入时，在“没有”的框中标记(X)。(For shared income, please fill in each person's distribution amount respectively. If it can't be separated clearly, please write down the total amount under one person's name. Later when writing other people's income, mark (X) in "no" box.).

More round 2 respondents found Version 2 easier to understand and simpler, mainly because it is shorter in length. Several respondents pointed out that essentially the two versions say the same thing. We recommended adopting Version 1.

Whether respondents can operationalize this instruction seems to be a better fit for a usability study because they can be asked to write down income for all of the household members.

Korean Language Interviews

In round 1, respondents had basic and literal understanding of this set of instructions. However, about a third of respondents had difficulty in processing and applying this

instruction when they answered the subquestions. It is because the round 1 instruction assumes people are familiar with these itemized income types, but it may not be intuitive enough for respondents with limited social/cultural exposure in the United States.

To help respondents better process the first instruction, we recommended converting the sentence to an “if” clause so that they can actively look for what they have to do, and we recommended adding 그 소득의 (that [corresponding] income) in the middle of the sentence to clearly state it does not ask for the total income but the total amount of the corresponding income during the past 12 months. We recommended shortening other phrases in the instruction to compensate for lengthening this sentence because of this change. We also recommended changing 예 (yes) to 있음 (there is) to be more appropriate for the revised sentence and applying this to the Questions 47a–h of the income series.

Regarding the second instruction, respondents from round 1 interviews reported that responses used in the original translation do not look appropriate. It is because 아니오 (no) was an answer more appropriate for a “yes/no” question. Since subquestions only present each type of income, respondents thought 있음 (there is) and 없음 (there is no [such income]) would be more appropriate. Although most of them chose “no” when they did not have the corresponding income, we agreed on this point and recommended applying this change to all Questions 47a–h for natural reading and easier understanding. For wording consistency in the Question 47 instructions, we recommended changing 없는 경우 (in the case of no) to 없다면 (if not).

In round 2, when all of these changes were implemented, two respondents still left the question blank rather than marking “no” when they did not have the corresponding incomes. However, this mistake was because of their hasty reading of the given text, and they were able to self-correct their previous answers by marking “no” at the specific probes. It does not seem that the translation effort would resolve this issue completely, and therefore, we recommended keeping the round 2 translation.

For the instruction about how to report loss, three respondents from round 1 interviews were confused. One respondent was confused because of 달러 액수 (the dollar amount) appeared abruptly in the instruction, and this respondent was not sure where to mark “loss.” In addition, two respondents interpreted 적자 (loss) as the negative balance between total household income and total household spending. To address the answer location-related confusion, we recommended specifying where to mark “loss.” We also revised the sentence by adding 손해가 난 금액을 적은 후 (write in the loss amount and then) to reflect the Census Bureau request to clarify that the amount of loss should be written. After these revisions were implemented in round 2, two respondents still interpreted 적자 (loss) in the context of family budget and thought that it referred to the negative balance after deducting living expenses from income. We do not have further recommendations since most

respondents understood the term correctly, and it does not seem that further translation efforts would resolve this issue.

Another noteworthy finding is massive confusion about the joint income instruction. In both rounds, about half of the respondents were unclear about this instruction, and they particularly did not understand what 다른 사람 (other person) referred to here. The problem in understanding this instruction seems to be an artifact caused by a cognitive interview design, which asks respondents to complete only a portion of the LAG, not the entire guide. Since “other person” did not appear until this instruction, it could be surprising and confusing to respondents. It might be possible to test this instruction with a vignette that could provide more background information; however, given the priority of translated text testing under the time constraint, a usability study would be a more effective method to identify the source of the problem. Therefore, we recommend testing this instruction in a separate usability study.

After the interim meeting, the Census Bureau clarified that only “joint income” occurring within the household needs to be reported here. However, when it was probed in round 2, five out of 11 respondents said it was not clear if 공동 소득 (joint income) was limited to the household members. Since the English ACS questionnaire does not have such information either, we do not have further recommendations. However, when revisions to the ACS questionnaire are possible, consider including this detailed information.

Detailed Person Question 47a

Wages, salary, commissions, bonuses, or tips from all jobs. *Report amount before deductions for taxes, bonds, dues, or other items.*

	Chinese	Korean
Original Wording	<p>注: 填入在扣除各项税金、债券、应付款项或者其它款项之前的金额。</p> <p>Note: Fill in deducting taxes, bonds, dues or other items' before amount.</p>	<p>모든 직장에서 받은 임금, 봉급, 수수료, 보너스 또는 팁. 세금, 부과금 등의 모든 납부금을 공제하기 전의 액수를 적어주십시오</p> <p>All workplace received wage, salary, commission, bonus, or tip. Please write the amount before deductions for all payments such as taxes and dues.</p>
Recommended Wording	<p>注: 请填写没有扣除各项税金、债券、或者应付款项的金额。</p> <p>Note: Please write down free of the deduction of taxes, bonds, dues or other payments' amount.</p>	<p>직장에서 일해서 받은 임금, 봉급, 수수료(커미션), 보너스 또는 팁.</p> <p>Wage, salary, commission (commission-phonetic translation), bonus (bonus – phonetic translation), or tip received through work at workplace. Please write the amount before deductions for all payments such as taxes and dues.</p>

Chinese Language Interviews

Following round 1, we recommended restructuring the translation. In the English, “amount” and “before deductions” was mentioned first, but the Chinese grammar structure places it last in the sentence. This construction led respondents to have to read the long note before realizing that the main focus is the amount BEFORE all of these deductions.

The round 2 translation puts the focus on “before deductions” back in the translation by restructuring the sentence so the concept of before deductions is introduced earlier. The way the sentence is structured does not allow for the amount to be placed earlier in the round 2 version, but the previous restructuring makes the reading smoother. Round 2 testing did not reveal respondent difficulties, and we recommended adopting the revised translation.

Korean Language Interviews

In round 1, four respondents had problems with this question. Three respondents wrote the amount of total income regardless of their income type, including Social Security Administration (SSA), income from self-employed business, and spouse income.

This mistake seems to stem from respondents’ unfamiliarity with the itemized income type, but also from the original translation. The round 1 translation started with 모든 (all), so it led respondents to write total income, not the corresponding income. We recommended revising the original translation by emphasizing that the question is only about the money received through working at a job.

In round 1, most respondents had a basic understanding of 수수료 (original translation of commission), and they thought it meant 일한 대가로 받는 돈 (Money in exchange for work) or money charged for a service performed. Several respondents even used 커미션 (commission-phonetic translation) to explain the meaning and 10 out of 11 respondents preferred 커미션 (commission-phonetic translation) to the original translation. Therefore, we recommended adding this phonetic translation in parentheses for better reading comprehension.

When these revisions were made in round 2, all respondents provided adequate answers to Question 47a except two respondents. These two respondents left the question blank because they missed the previous instruction about marking “no.” However, they understood the instruction well and were able to provide a correct answer during the cognitive interviews, confirming that the round 2 translation eliminates the source of confusion.

Detailed Person Question 47b

Self-employment income from own nonfarm businesses or farm businesses, including proprietorships and partnerships. *Report NET income after business expenses.*

	Chinese	Korean
Original Wording	<p>来自非农业企业或者农业企业的自雇收入，包括独资和合伙公司。</p> <p>From nonfarm or farm enterprises' self-employment income, including proprietorships and partnerships.</p> <p>注: 报告扣除业务开支后的净收入。</p> <p>Note: Report <i>net</i> income after deduction of business expense.</p>	<p>이 사람의 직접 운영하는 농장 기업이나 비농장 기업(사기업 및 합자회사 포함)에서 나오는 사업 소득.</p> <p>From this person's directly running farm or non-farm business (private company or partnership company included) business income.</p>
Recommended Wording	<p>来自经营自己的业务的收入，包括非农业或者农业，独资或者合资。</p> <p>From operating own business's income, including non-farm or farm, proprietorships or partnerships.</p> <p>注: 请填写在扣除业务支出后得到的净收入。</p> <p>Note: Write <i>net</i> income after deduction of business expense.</p>	<p>자영업자의 사업 소득(개인이 운영하는 사기업이나 합자 회사 혹은 농장 기업을 통한 소득)</p> <p>Self-employed person's business income (income through individual's running private company, partnerships, or farm)</p>

Chinese Language Interviews

Following round 1, we restructured the sentence so the main focus of the question, self-employment income, is mentioned first rather than last, like how Chinese sentences are usually structured. The restructuring also allowed us to simplify the sentence. For "report," rather than using the literal translation, we suggested using "write" to prompt respondents to write their answers.

As discussed in Question 41, we recommended referring to self-employed as 经营自己的 (operate own...) after reviewing round 2 respondent reactions. To be consistent, we recommended adapting this phrase in the translation for self-employment income in this question, as shown in the final recommendation column.

Korean Language Interviews

In round 1, respondents were not able to readily realize that it meant "self-employment income from own business" because 사업소득 (business employment income) was located at the end of the long phrase. The unnecessarily long original translation of "own" also contributed to this error. Therefore, we recommended changing the order by putting 자영업자의 사업 소득 (self-employed person's business income) at the front as much as

possible and using alternative short wording for the translation of “own.” When this revision was used in round 2, no respondents demonstrated such difficulty, confirming the translation was improved.

In round 1, we provided a vignette about a small business owner with a loss over the past year to gauge respondents’ answers in this particular situation. Most respondents correctly marked “loss,” but they were unsure what to mark between “yes” and “no,” and respondents frequently added a minus sign in front of the loss amount. This observation continued in round 2 after adding a clarifying sentence instructing respondents to write the loss amount. With the clarification, all respondents wrote the loss amount without confusion. However, the confusion about what to choose between “yes” and “no” remained. That is, four respondents chose “yes,” three respondents chose “no,” and four respondents did not choose any. Seven respondents said that they did not choose “yes,” because this person did not have any real income, but loss. Two respondents also added a minus sign in front of the loss amount. If marking “yes” is crucial, then explicit instructions are needed.

Detailed Person Question 47c

Interest, dividends, net rental income, royalty income, or income from estates and trusts.
Report even small amounts credited to an account.

	Chinese	Korean
Original Wording	<p>利息、股息、净租金收入、所有权使用费收入或者来自遗产或者信托基金的收入。</p> <p>Interest, dividends, net rental income, fee for the rights to use, or income from inherited estates or trusts.</p> <p>注: 即使贷记账户的金额再小, 也应该进行报告。</p> <p><i>Note: Even if the amount in the credit account is small, still should report.</i></p>	<p>이자, 배당금, 순임대소득, 로열티 소득, 부동산 및 신탁 소득. <i>계좌에 들어온 금액은 아무리 적은 액수라도 적어 주십시오.</i></p> <p>Interest, dividend, net rental income, royalty income, or income from real estates and trust. <i>Please write the amount credited to the account even if (it is) very small.</i></p>
Recommended Wording	<p>利息、股息、净租金收入、版权或专利收入或者来自遗产和信托财产的收入。</p> <p>Interest, dividends, net rental income, ban-quan or patent income, or income from inherited estates and trust possession.</p> <p>注: 即使账户存入的金额再小, 也请填写。</p> <p><i>Note: Even if the amount deposited into the account is small, please still fill it in.</i></p>	<p>이자, 주식 배당금, 순 임대 소득, 저작권(로열티) 소득, 유산이나 신탁(펀드)으로 발생하는 소득. <i>이런 항목의 돈이 계좌에 들어왔다면, 아무리 적은 액수라도 적어 주십시오.</i></p> <p>Interest, stock dividend, net rental income, royalty (royalty-phonetic translation) income, income generated from legacy or trust (fund-phonetic translation). <i>If this type of money is credited to the account, please write the amount even if (it is) very small.</i></p>

Chinese Language Interviews

Following round 1, the only change we recommended was the translation for “royalty.” The round 1 translation for royalty was 所有权使用费 (fee for the rights to use) and read accurately, but it was too general. We understood that royalty meant fee to use a patented product, books, or music, so we suggested saying it like this: 版税或专利收入 (ban-shui or patent income). Several round 2 respondents, however, were troubled by the term 版税 (ban-shui) because it literally means “publication tax.” We recommended changing it to say 版权 (ban-quan, or publication right). Combined with the reference to income in the same phrase, this alternative can deliver the same meaning while avoiding using the word tax. The translation for “trusts,” 信托基金, was interpreted by a few respondents as mutual fund. The Census Bureau sociolinguist suggest modifying the translation to say 信托财产 (trust possessions), and we support this approach.

We also noted in round 1 that the original translation for the italic instructions was problematic. It described “credited to an account” in the technical sense, which was not understood by most round 1 respondents. We recommended two options for the Census Bureau to consider. Option 1 simply says to write income even though it is a small amount, like this: 注: 即使收入的金额再小, 也请填写上。 (Note: Even if the income amount is small, please still fill it in.). We also proposed Option 2 that provides the level of detail about the account and credit: 注: 即使账户存入的金额再小, 也请填写。 (Note: Even if the amount credited to the account is small, please still fill it in.). The Census Bureau chose Option 2 for testing, and we recommended adopting it in the final translation.

Korean Language Interviews

In round 1, although most respondents were not able to articulate the meaning of each type of income included here, they had a basic understanding of all the terms except 신탁소득 (trust income). A couple of respondents interpreted the italic instruction as a separate question and thought of any money deposited to the bank account, including gifted money transferred from family. To address this issue, we recommended clarifying that the instruction is an extension of the preceding text. To address the issue with 신탁 소득 (trust income), we recommended adding 펀드 (*fund* – phonetic translation, meaning trust fund investment products in Korean) to 신탁 (trust) in parentheses. When these revisions were implemented in round 2, no respondents showed such confusion, confirming that the translation was improved.

Also in round 1, there were a few respondents who wanted to confirm that “interest” meant “interest from bank account” and “dividend” meant “dividend from stock.” One respondent also thought a translation using Korean words, rather than the current phonetic translation would be better for “royalty income.” Since most respondents from round 1 interviews understood these terms quite well, we decided not change the terms and continued gathering the data to see if round 2 respondents reported similar issues.

In round 2, no respondents were confused about 이자 (interest); however, six respondents and four out of 11 respondents, respectively, were unclear about the meaning of 배당금 (dividend) and 로열티 (royalty – phonetic translation). Among those who were confused, all but one respondent liked the alternative wording, 주식 배당금 (stock dividend) and 저작권(로열티) 소득 (著作権, royalty [royalty – phonetic translation] income).

During the round 2 interviews, the Korean team realized that the original translation was somewhat misleading in that 부동산 혹은 신탁(펀드) 소득 (real estate or trust [fund – phonetic translation] income) was used to represent “income from estates and trusts.” Therefore, we recommended using 유산이나 신탁(펀드)으로 발생하는 소득 (income generated from legacy or trust [fund – phonetic translation]) to clarify that this refers to the income generated from estates and trusts.

Detailed Person Question 47d

Social Security

	Chinese	Korean
Original Wording	社会安全福利金 Social security benefit money	국민연금(소셜 시큐리티) 또는 철도은퇴연금으로 받은 소득. income received as Citizen Pension (Social Security - phonetic translation) or railroad retirement pension.
Recommended Wording	社会安全福利金 (Social Security) Social security benefit money (Social Security)	No changes recommended.

Detailed Person Question 47e

Supplemental Security Income (SSI)

	Chinese	Korean
Original Wording	社会安全生活补助金 (SSI) Social security living subsidy (SSI)	65세 이상 저소득층 연장자 및 장애인을 위한 생활 보조금 (SSI) Living expense subsidy (SSI) for 65+ low income elderly people and the disabled
Recommended Wording	名为SSI의社会安全生活补助金 Named SSI social security living subsidy	No changes recommended.

Chinese Language Interviews

Following round 1, we recommended adding the English words “Social Security” in parentheses after the translation. For Supplemental Security Income (SSI), our

recommendation was to indicate the English acronym SSI in the beginning of the phrase because this is the way that people who know it usually refer to it (rather than in Chinese). We felt that this sentence structure change was necessary because the Chinese translation (using the recommended wording from the SSA Chinese glossary¹²) for Social Security and Supplemental Security Income sounded about the same—they both start with the identical four Chinese characters 社会安全. Seeing the English acronym “SSI” did help three round 2 respondents identify that the translation refers to the SSI. We recommended adopting these changes.

Korean Language Interviews

In both rounds, most respondents had heard of the original translation for Social Security and had the correct understanding. In contrast, most respondents had not heard of railroad retirement pension, but they guessed it meant the retirement pension given to railroad workers after retirement. Since the original translation seems to deliver the basic information without any misinterpretation, we recommended keeping the original translation.

Regarding SSI in Question 47e, most respondents had not heard of the Korean term, but in both rounds they guessed it meant government money given to the elderly or those with low income to subsidize living expenses. Since the original translation seems to deliver the basic information without any misinterpretation, we recommended keeping the original translation.

During the review, the Census Bureau recommended using 생활 보조금 (SSI) 프로그램 (living expense subsidy [SSI] program), the official text used by the Social Security Administration in their Korean-language publications.¹³ This wording drops the phrase to specify the beneficiaries of the SSI from our recommended translation, and it is because this phrase contains more information than the English phrase.

We pointed out the limitation of the official translation to deliver the meaning of SSI, because it simply says “living expense subsidy.” It is difficult to distinguish it from other government subsidies that are translated in Korean, such as Temporary Assistance for Needy Families (TANF) or Low Income Home Energy Assistance Program (LIHEAP), while this could be less of a problem in English because the SSI is an established program and well known in the English language. Because of inconsistent Korean translations¹⁴ for SSI

¹² <http://www.socialsecurity.gov/multilanguage/Chinese/Glossary-CH.pdf>

¹³ <http://www.socialsecurity.gov/multilanguage/Korean/11000-KOR.pdf>

¹⁴ According to the research conducted by the Korean language expert panel, the following are the examples of Korean translations for SSI used in the United States: 보충보장소득 (supplemental security income), 사회생활 보조비 (social life assistance money), 생계보조금 (livelihood assistance money), 생활보조금 (life assistance money), 정부보조 생계비 (government-assisted livelihood money), 저소득층 보조 프로그램 (*low-income assistance program* – phonetic translation), 웰페어 SSI (*welfare* – phonetic translation SSI), 생활보조 연금 (life assistance pension), and SSI 장애연금 (SSI disability pension).

that are used by Korean social welfare agencies and in ethnic newspapers in the United States, respondents are likely to remain confused.

Based on our belief that the reference to age and income would contribute to decreasing the level of false positive reporting in Question 47e caused by non-SSI recipients who mistake other government subsidies for SSI, we provided additional justifications to keep the proposed translation. First, in the cognitive interviews, actual SSI recipients recognized the English acronym “SSI,” but those who did not receive SSI were able to guess the intent of the translation correctly, even when they did not know to what SSI referred. Second, our wording is consistent with previously proposed approach for government programs in Questions 12 and 16 of the Phase 1 questions. For example, the approved Korean translation for “WIC” in Question 12 says “WIC(5 세 미만의 아동 및 임산부를 위한 영양 보조 프로그램)” (WIC [Nutrition assistance program for children under 5 or pregnant women]). In Question 16, the approved Korean translation for “Medicare” says “메디케어 (65 세 이상의 연장자 및 장애인을 위한 연방 정부 의료보험)” (*Medicare* – phonetic translation [Federal government health insurance for people 65 + or people with disabilities]). Finally, Census Bureau accepted our proposed wording, which contains extra wording for SSI Korean translation.

Detailed Person Question 47f

Any public assistance or welfare payments from the state or local welfare office.

	Chinese	Korean
Original Wording	来自州或者地方福利署的公共协助或者福利款项。 From state or local welfare bureau’s assisting public or welfare payments.	주 또는 지역 복지국 으로부터 받는 공적 보조금 또는 복지 수혜금. Public assistance or welfare payments received from state or local welfare office.
Recommended Wording	来自州立或者地方社会福利部门的公共援助金或者福利款项。 From state-level or local social welfare department’s public aid or welfare payments.	주나 지역 정부에서 지급되는 현금 형태의 보조금 State or local government providing assistance money in cash form

Chinese Language Interviews

In addition to cognitive testing in round 1, we conducted additional research on the current Chinese translations in use for welfare office and public assistance. There was a variety. The Chinese language expert panel met and decided that the recommended wording seems most appropriate for the intent of the English words in this question. We recommended adopting these changes.

Korean Language Interviews

In round 1, most respondents said they never heard of 공적 부조금 혹은 복지 수혜금 (Public assistance or welfare payment), but were able to get the gist of the terms, which is money from governments to low-income people. However, three respondents interpreted that this was money from government to help people in trouble because of a natural disaster.

Several respondents did not understand what 주 또는 지역 복지국 (State or local welfare office) meant, although they thought this referred to government offices that provide welfare services. They thought of Korean community centers as well, since respondents usually received public services (which are sometimes directly related to their welfare) through these centers.

To clarify that the purpose of this money is to subsidize living expenses and that it is from the government, we recommended revising the whole phrase to 주나 지역 정부에서 지급되는 현금형태의 생활 보조금 (State or local government providing assistance money in cash form).

When these revisions were implemented in round 2, respondents demonstrated a clearer understanding of the question, and no one interpreted this to refer to money from the government to help people in trouble due to natural disaster, confirming this change improved translation.

Two respondents commented that this could not be a form of cash since nothing is given in cash, but in the form of a check or electronic transfer these days. However, we recommended keeping round 2 translations since these respondents knew what it meant exactly, and the revised translation delivered the intended meaning accurately. For example, one respondent who was a Food Stamp recipient said that he did not include Food Stamps here because the word 현금 형태 (in cash form).

Although we understand it cannot be implemented in the LAG at this time, consider adding a sentence SSI 는 제외해 주십시오 (Please exclude SSI), since we observed that respondents report SSI income here.

Detailed Person Question 47g

Retirement, survivor, or disability pensions. *Do NOT include Social Security.*

	Chinese	Korean
Original Wording	<p>注: 不要将社会保障金计算在内。</p> <p>Note: Do not include social insurance money.</p>	<p>은퇴연금, 유족연금 또는 장애 연금. 국민연금 (소셜 시큐리티)은 포함하지 마십시오.</p> <p>Retirement pension, survivor pension, disability pension. Do not include citizen pension (Social Security – phonetic translation)</p>

	Chinese	Korean
Recommended Wording	<p>注：不要将社会安全福利金 (Social Security) 计算在内。</p> <p>Note: Do not include social security benefit money (Social Security).</p>	<p>국민연금(소셜 시큐리티)을 제외한 모든 공적 사적 형태의 은퇴 연금, 유족 연금, 장애 연금을 적어 주십시오.</p> <p>Please write all forms of public and private retirement pension, survivor pension, disability pension <u>except citizen pension (social security – phonetic translation)</u></p>

Chinese Language Interviews

No changes were recommended, except to adopt the recommended translation for Social Security, as discussed for Question 47c.

Korean Language Interviews

In round 1, most respondents reported they had heard of these terms, and their responses indicated basic understanding. However, their reporting was frequently not comprehensive enough. For example, four respondents interpreted “survivor pension” as the pension given to the family members who died for the nation. Similarly, two respondents interpreted “disability pension” as the pension given to a person who becomes disabled when working for the nation. Respondents also tended not to think of any private retirement pensions.

To be comprehensive, we recommended revising the original translation to 국민연금(소셜 시큐리티)을 제외한 모든 종류의 은퇴 연금, 유족 연금, 장애 연금을 적어 주십시오 (Please write all types of retirement pension, survivor pension, disability pension except national pension [social security—phonetic translation]) by providing more details and combining the italic instruction.

This problem continued in round 2 after the revisions were made. That is, five out of 11 respondents thought 유족 연금 (survivor pension) as the pension given to the family members who died for the nation or public, and one respondent thought 장애 연금 (disability pension) as the pension given to a person who becomes disabled in the army. To better emphasize the comprehensiveness of the pensions, regardless of its origin, we recommended replacing 모든 종류의 (all kinds) with 모든 공적 사적 형태의 (all forms of public and private).

We did not have further recommendations for the issues related to the narrow interpretation of “survivor pension” and “disability pension” because the recipients of these pensions are highly likely to know the correct definitions and not likely to exclude the amount. In addition, the original translations are very commonly used terms to describe these types of pensions.

Detailed Person Question 47h

Any other sources of income received regularly such as Veterans' (VA) payments, unemployment compensation, child support or alimony. *Do NOT include lump sum payments such as money from an inheritance or the sale of a home.*

	Chinese	Korean
Original Wording	<p>定期获得的其它收入来源，例如退伍军人(VA)津贴、失业补偿金、儿童抚养费或者离婚赡养费等。</p> <p>Other income sources received regularly, such as veteran's allowance, unemployment compensation, child support or divorce alimony, etcetera.</p> <p>注: <u>不</u>计算来自遗产或者出售房屋的一次性付款金额。</p> <p>Note: Do <u>not</u> count inheritance or home sale's one time payment.</p>	<p>기타 은퇴군인 (재향군인원호청) 연금, 실업수당, 자녀 양육비 또는 위자료 같이 정기적으로 받는 소득.</p> <p>Other retired soldier (returned soldier support office) pension, unemployment compensation, child support, or alimony like regularly received income.</p>
Recommended Wording	<p>定期获得的其它收入，例如:退伍军人津贴(由美国政府VA提供)、失业补助金、孩子抚养费或者离婚赡养费。</p> <p>Other income received regularly, such as veteran's allowance (provided by US government's VA), unemployment compensation, child support or divorce alimony.</p> <p>注: <u>不</u>包括一次付清的款项，例如继承了一笔钱或者出售房屋后一次得到的金额。</p> <p>Note: Do <u>not</u> include one time payment, such as inherited a sum of money or received amount from a house sale at one time.</p>	<p>기타 정기적으로 받는 소득(예: 실업수당, 전 배우자로부터 받는 자녀 양육비나 위자료, 재향군인 원호청(VA)에서 받는 생활 보조금)</p> <p>Other regularly received income (example: unemployment compensation, child support or alimony from a previous spouse, living expense subsidy received from returned soldier supporting office (VA))</p>

Chinese Language Interviews

During round 1 testing, Census Bureau clarified that the veteran's payments here refer to the U.S. Department of Veterans Affairs (VA), and the Census Bureau sociolinguist suggested indicating "U.S. government provided" to describe the VA payments, and like in the original translation, to keep the English acronym VA in the parentheses. Our suggestion was that phrasing about U.S. government be kept in the parentheses with the acronym VA. For the italic instructions, we recommended restructuring the translation so the main focus of "lump sum payments" is mentioned first in the sentence. This is consistent with the approach taken throughout Phase 3 since the original translation put it at the end of the sentence (that is how Chinese sentences are structured). We also noticed that inheritance

was translated as 遗产, which is the same word used for estates in Question 47c. To avoid confusion, we recommended saying 继承了一笔钱 (inherit a sum of money), which was closer to the lump sum concept. Furthermore, the Census Bureau sociolinguist suggested referring to “child” in the phrase “child support” from 儿童 (er tong) to 孩子 (hai zi) to avoid potential misunderstanding. All of these revisions are presented in the recommended wording column.

Korean Language Interviews

In round 1, most respondents were confused by this question and did not know where to mark if a person receives a VA payment. It is because the round 1 translation used 은퇴군인 (재향 군인 원호청) 연금 (retired soldier [returned soldier support office] pension) to translate veterans’ (VA) payments. This translation contained two words: 은퇴 (retirement) and 연금 (pension), which appeared the same in Question 47g. Therefore, respondents were confused about where to report this amount of income between Question 47g and Question 47h. To address this issue, recommended using 재향 군인 원호청 (VA) 에서 받는 생활 보조금 (Living expense subsidy from returned soldier supporting office [VA]) for VA payments to be easily distinguished from items in Question 47g and to mean it is a living expense subsidy from the VA, not a disability pension or retirement pension.

For easier processing of the given text, we also recommended restructuring the order so that it starts with “Other sources of income received regularly,” which is closer to the English ACS and presents the examples in parentheses at the end.

Although most of round 1 respondents understood the meaning of “unemployment compensation,” “child support,” and “alimony,” three out of 12 respondents were confused by “child support” and thought it meant general expense needed to raise children or government subsidy for single moms. Therefore, we recommended using 전 배우자로부터 받는 자녀 양육비나 위자료 (child support or alimony from a previous spouse) to exclude the interpretation of government support for general child rearing expenses for child support and alimony.

When these revisions were implemented in LAG in round 2, respondents showed clearer understanding of this question. First, respondents’ confusion about where to report the VA payments was reduced significantly, although they had not completely disappeared. For example, one respondent believed “VA payments” was a kind of VA retirement plan, so this respondent thought that it should still be reported under Question 47g, which asks about different kinds of pensions. Another respondent was a recipient of VA disability pension and thought that he should report the amount in Question 47h since it specifically mentioned VA, although VA payments do not actually include disability pension.

After the revised translation about child support and alimony was used in round 2, no single issue related to this was observed, confirming the revised translation resolved the issue.

Interestingly, one respondent complained that the current wording overemphasized VA payments and this overemphasis made “VA payments” look like something special, not the example of an income received regularly. The Korean team agreed with this comment since “VA payments” appeared first in the examples, and it was translated into a long phrase to deliver the intended meaning. To mitigate the impact, we recommended changing the order of examples and showing the translation of “VA payments” at the end. We also recommended adding 등(等, etc.) to remind respondents that these are the given examples of other incomes received regularly. The recommendation to add 등(等, etc.) was made in Questions 43, 45, and 46, when a similar phrase with a list of examples appeared in the LAG, and this particular recommendation was not approved by the Census Bureau.

Detailed Person Question 48

What was this person’s total income during the PAST 12 MONTHS? *Add entries in questions 47a to 47h; subtract any losses. If net income was a loss, enter the amount and mark (X) the “Loss” box next to the dollar amount.*

	Chinese	Korean
Original Wording	<p>注: 计算第47a 至47h 各项的总金额, 并从中扣除亏损。如果净收入为负数, 填写亏损数额并在美元金额旁的“亏损”标项上标记(X)。</p> <p>Note: count total income from item 47a to 47h, and subtract loss. If the net income is negative, fill in the amount of loss and mark (X) under “loss” next to US dollar.</p>	<p>지난 12개월 동안 이 사람의 총소득은 얼마입니까? 질문 47a에서부터 47h까지 답한 각 항목의 소득을 모두 더하고 적자가 있으면 그 금액을 총액에서 빼 주십시오. 순소득이 적자라면, 그 액수를 적으신 후 달러 액수 옆에 있는 “적자” 란에 표시(X)해 주십시오.</p> <p><u>In the past 12 months</u>, what is this person’s total income? Add answered incomes from 47a through 47h, and if there is a loss, subtract the amount from the total. If net income is a loss, write the amount and then, mark (x) “loss” next to the dollar amount.</p>
Recommended Wording	<p>注: 请把填写在第47题a项 至h项的金额加起来, 并从中扣除亏损。如果净收入是负数, 请填写亏损数额并在美元金额旁的“亏损”框中标记(X)。</p> <p>Note: Please sum up the amount filled in under 47 question a item to h item, and subtract loss. If the net income is negative, please fill in the amount of loss and mark (X) in “loss” box next to US dollar.</p>	<p>지난 12개월 동안 이 사람의 총소득은 얼마입니까? 질문 47a에서 47h까지 답한 각 항목의 소득을 모두 더하고, 적자가 난 금액은 그 합에서 빼 주십시오. 그 총액이 적자라면, 그 액수를 적으신 후 오른쪽의 “적자” 란에 표시(X)해 주십시오.</p> <p><u>In the past 12 months</u>, what is this person’s total income? Add each answered income from 47a through 47h, and subtract amount of loss from the total. If that total amount is a loss, write that amount and mark (x) “loss” at the right side.</p>

Chinese Language Interviews

Following round 1, we recommended some modifications in the first part of the translation of the italic instructions to add naturalness. Again, the action of “write” was emphasized and it clarified that the entries that were written should be added, not that the amount for each subitem should be calculated again. We recommended adopting these changes in the final translation.

Korean Language Interviews

In round 1, four respondents had problems understanding this question. Two respondents understood this question, but were confused because of their earlier incorrect interpretation of Questions 47a–h. Another two respondents were confused because they thought it meant any surplus that they had after paying all living expenses from their total income. To reduce this confusion, we recommended shortening the italic instruction to help efficient reading comprehension with a hope this revision could reduce the possibility of interpreting 적자 (loss) in the context of household budget and that the amount must come from the amount reported in the Question 47 series.

When this revision was implemented in round 2, two respondents still had problems with this question. However, the level of confusion was somewhat different. For example, one respondent followed the italic instruction correctly, but was confused because the amount he wrote was not his total income in the past 12 months. This is because of the cognitive interview design, which asks respondents to think of the last time respondents worked when they did not work last week. This respondent thought of “5 years ago,” when answering Questions 47a–h, so it is no wonder that the sum totaling the answers of Questions 47a–h was not his income in the past year that was asked for in Question 48. Another respondent made a mistake by interpreting this question in the context of a household budget again and not reading the italic instruction. Since these two issues are not translation errors, but the issues caused by respondents’ not reading the given text or being influenced by the cognitive interview design, we recommended keeping the round 2 translation and testing this issue in the usability study.

Mailing Instructions

Please make sure you have...

- listed all names and answered the questions on pages 2, 3, and 4 on the English version of the American Community Survey questionnaire.
- answered all Housing questions on the English version of the American Community Survey questionnaire.
- answered all Person questions for each person on the English version of the American Community Survey questionnaire.

Then...

- put the completed English version of the American Community Survey questionnaire into the postage-paid return envelope. If the envelope has been misplaced, please mail the questionnaire to:
- Do NOT mail back this Language Assistance Guide.
- Make sure the barcode above your address shows in the window of the return envelope.

	Chinese	Korean
Original Wording	<p>请确保您.....</p> <ul style="list-style-type: none"> • 已经在英文版美国社区问卷调查表的第 2、3、4 页中列出所有姓名，回答了所有问题。 <p>Please make sure you... Have listed all names on page 2, 3 and 4 of English version American Community Survey questionnaire, and also answered all questions.</p> <ul style="list-style-type: none"> • 已经在英文版美国社区问卷调查表中回答了所有有关住处情况的问题。 <p>Have answered all questions about residential condition on English version American Community Survey questionnaire.</p> <ul style="list-style-type: none"> • 已经在英文版美国社区问卷调查表中回答了所有关于每个住户成员的问题。 <p>Have answered all questions about each household member on English version American community survey questionnaire.</p>	<p>다음의 사항을 꼭 확인해 주십시오.</p> <ul style="list-style-type: none"> • 미국 지역사회 조사 영문 설문지에 모든 이름을 쓰고, 2,3,4쪽에 있는 해당 질문에 응답하셨습니까? <p>Please confirm the following things.</p> <ul style="list-style-type: none"> • Did you write all names on the English American Community Survey questionnaire and answered all applicable questions on page 2, 3, and 4? • 미국 지역사회 조사 영문 설문지의 주거 환경과 관련된 질문에 모두 응답하셨습니까? • Did you answer all questions related housing environments on the English American Community Survey questionnaire? • 미국 지역사회 조사 영문 설문지의 개별 가족 구성원에 대한 질문에 모두 응답하셨습니까? • Did you answer all questions for individual family members on the English American Community Survey questionnaire?

	Chinese	Korean
	<p>然后..... Then...</p> <ul style="list-style-type: none"> • 将填写完整的英文版美国社区问卷调查表放入邮资已付的回邮信封中。如果信封遗失，请将问卷调查表邮寄至： <p>Put completely filled English version American Community Survey questionnaire into postage-paid return envelope. If the envelop is missing, please mail the questionnaire to:</p> <ul style="list-style-type: none"> • 请勿寄回本语言帮助指南。 <p>Please do <u>not</u> mail back this language assistance guide.</p> <ul style="list-style-type: none"> • 确保地址上方的条形码显示在回邮信封的窗口中。 <p>Make sure the barcode above the address shows in the window of the return envelope.</p>	<p>[The rest of text is omitted for space-saving reasons.]</p> <p>귀하의 주소 위에 있는 바코드가 우편 봉투의 투명 창을 통해 보이도록 넣어주십시오.</p> <p>Please insert (it) so that the bar code above your address is shown through the transparent window of the mail envelope.</p>
Recommended Wording	<p>请确保以下步骤都已完成：</p> <ul style="list-style-type: none"> • 参照此中文表格，在英文版美国社区问卷调查表的第2、3、4页中列出了所有住户成员的姓名，也回答了相关问题。 <p>Please make sure the following steps have been completed:</p> <p>Reference to this Chinese form, listed all household members' names on page 2, 3 and 4 of English version American Community Survey questionnaire, and also answered relevant questions.</p> <ul style="list-style-type: none"> • 在英文版美国社区问卷调查表中回答了所有有关住处情况的问题。 <p>Answered all questions about residential condition on English version American Community Survey questionnaire.</p> <ul style="list-style-type: none"> • 在英文版美国社区问卷调查表中回答了所有关于每位人士（列出的住户成员）的问题。 <p>Answered all questions about each person (listed household member) on English version American community survey.</p>	<p>No recommended changes for this portion of the question.</p>

Chinese	Korean
<p>下一步： The next step:</p> <ul style="list-style-type: none"> • 请将填写完整的英文版美国社区问卷调查表放入所提供的回邮信封中。这个回邮信封的邮资已经付清。如果信封遗失了，请将问卷调查表邮寄到： <p>Please put completely filled English version American Community Survey questionnaire into the provided return envelope. The postage of this return envelope is paid. If the envelope is lost, please mail the questionnaire to:</p> <ul style="list-style-type: none"> • 请勿寄回这份中文版指南。 <p>Please do <u>not</u> mail back this Chinese language guide.</p> <ul style="list-style-type: none"> • 检查确认在地址上方的条形码可以从回邮信封的窗口中看到。 <p>Check and confirm the barcode above the address can be seen in the window of the return envelope.</p>	<p>[The rest of text is omitted for space-saving reasons.]</p> <p>귀하의 주소 위에 있는 바코드가 우편 봉투 밖으로 보이도록 넣어 주십시오.</p> <p>Please insert (it) so that the bar code (<i>barcode</i> – phonetic translation) above your address shows outside of the mail envelope.</p>

Chinese Language Interviews

Census Bureau requested that the mailing instructions on the back page of the LAG be tested on a time-permitting basis. The same request was made for the instructions on page 12 and on the bottom of page 11 of the LAG, but no changes were recommended there. In round 1, we were able to test the mailing instructions with 14 of 24 respondents.

We knew from the beginning that the success of this testing would be limited because this was the first time that these Phase 3 respondents were introduced to the idea that the form they filled out was an LAG. Although a few respondents demonstrated a complete understanding, most respondents could only interpret bits and pieces of the translation and made comments on them, such as the translation for “postage-paid,” the barcode, or reference to the persons. Although the feedback was limited, we were able to use them to inform some recommended changes for the mailing instructions, as shown in the proposed translation column. An important change that we made was NOT to follow the English structure of having the text in the bulleted list continue the phrase in the heading “please make sure you have....” That grammar structure just does not work in Chinese. We have made modifications so that each bulleted text is a complete sentence and that the heading is also a complete sentence (please make sure the following steps have been completed).

Interviewers noted that respondent fatigue was a factor as well because respondents would have had to read through a lot of text to give meaningful responses. Although we did show them the English version of the ACS, they did not actually write their responses in the ACS, and we do not know if they can reliably follow these instructions. There is also no barcode or address listed on the envelope for the cognitive interviews, so the discussion was based on a hypothetical situation.

We did not recommend continuing testing these instructions in round 2, and this recommendation was supported by the Census Bureau. A usability study seems to be a better fit for testing these type of instructions.

Korean Language Interviews

In round 1, mailing instructions and instructions on the bottom of page 11 were tested with 15 out of 23 respondents on a time-permitting basis.

When these instructions were tested, more than half of respondents were confused when they first read these instructions. However, once additional context was provided to the respondents, all respondents proceeded to say that the instructions were clear. This could be true because the original wording functions well to deliver the intended messages. However, respondents' fatigue toward the end of the interview could also be the reason. In addition, the probes used for these instructions were prepared to simply confirm if the current text delivers the intended meaning and may not produce truthful answers because of acquiescence bias, which is known to be more prominent for low-educated older respondents in cultures emphasizing politeness, such as the Korean culture. Therefore, we recommended no further testing in round 2, and there was no observation in round 2. To examine whether respondents can follow the instructions, we recommend conducting a usability study.

However, we do have one noteworthy finding from round 1. That is, three out of 10 respondents thought the last sentence about the bar code in the mailing instructions did not sound natural or respondents were not able to understand the meaning. To make it sound more natural, we recommended revising the sentence to 귀하의 주소 위에 있는 바코드가 우편 봉투 밖으로 보이도록 넣어 주십시오 (please put (the materials) so that the bar-code (*barcode* – phonetic translation) above your address shows outside of the mail envelope).

3.5 Special Topics in the Chinese Translation

Translation of the Word "Print"

The original translation 正楷 (print) can be interpreted as "write in good penmanship, not cursive writing," "write in traditional Chinese character set," "write in formal Chinese," or "write in Chinese, not English." But these responses only surfaced when respondents were probed or when they actually noticed the term. We did not actively probe about this term.

Usually, respondents just wrote down the information the way they usually write things or write what they believe should be written on a form like this.

In Phase 1, we recommended 工整地写 (neatly write) whenever the instruction refers to printing numbers. This was because 正楷 simply made no sense for numbers, and therefore our recommendation of using 工整地 (write neatly) was approved and implemented when referring to numbers. We did not make a recommendation to change it for the questions that involve write-in answers because the wording 正楷 was used on the 2010 decennial census to mean print. This was mainly because of a desire to maintain the translation consistent for the Basic Person Questions, where 正楷 was used. However, as we neared the conclusion of the LAG testing, we felt obligated to point out that 工整地写 (neatly write) would be a better way to say print. Compared to the decennial census form, the ACS asks numerous questions that require respondents to print a variety of responses (e.g. person's name, employer's name, ethnicity/ancestry, home address, work address, country name, insurance name, and bachelor's major). Although some questions may be skipped, several are asked of everyone. Thus the instruction to "print" becomes a more prominent term; although, as mentioned previously, the term 正楷 usually did not confuse or concern the respondents until they noticed it or were probed about it. However, the design of the LAG study did not allow us to test the entire LAG from beginning to the end so it is hard to say what respondents would or would not notice. We also did not actively engage respondents in discussing this term because we knew the preference is to be consistent with the decennial census form. Yet, whenever the issue surfaced, the interpretation for 正楷 was usually not simply "to print" as intended in the English. Rather, it made respondents wonder if they wrote the right thing. Because the occurrence of "print" is more frequent in the ACS and because 工整地 (write neatly) seems to be a more pragmatic way to convey the intent of the questionnaire designer, we recommend adopting this term throughout the LAG. We adopted the recommended wording 工整地 (write neatly) for Phase 3 round 2 testing and did not observe a negative impact.

Census Bureau accepted this recommendation to use 工整地 consistently throughout the ACS for both the write-in boxes and numbers that had been previously approved.

Translation for "Chinese" in the Race Question

One of the race categories listed in Question 6 of the Person pages is "Chinese." It can be translated as 中国人 (zhong guo ren) or 华人 (hua ren). The term 中国人 literally means "people from China" but is, in general, used to describe people with Chinese origin. The term 华人 means "ethnic Chinese." We asked Phase 1, round 2 respondents whether these two terms are different to them and what their answer choice would be on the form. Respondents pointed out that 华人 focuses on Chinese origin, and is used to describe Chinese Americans or those who come from southeast or south Asia but are ethnically Chinese, such as the Philippines, Malaysia, or Singapore. When asked about how the two

terms differ to respondents, the difference is actually quite small to them. However, 华人 is seen as more inclusive, while 中国人 can refer to people from mainland China only. Our sample of respondents included men and women born in China, Hong Kong, and Taiwan. In general, respondents from China and Hong Kong indicated that they would choose either translation to indicate their race; that is, their response will not change when one or the other translation is listed in Question 6. However, one of the two interviewed Taiwanese respondents decided that she did not identify with 华人 or 中国人 and would rather write “Taiwanese” in the Other Asian category. The second Taiwanese respondent chose both “Chinese” and also wrote in “Taiwanese.”

Although our data is limited to 21 respondents from Phase 1, round 2, it seems that 华人 may be a more culturally appropriate and sensitive translation for the race category on the ACS. Since race is based on self-identification, using an inclusive term like 华人 will likely be more well received by respondents. For example, as respondents pointed out, Chinese Americans are described as 华人. The term 中国人, on the other hand, can be interpreted as only those who came from mainland China. We also learned from respondents that using 中国人 could be synonymous to 华人, but only to non-Taiwanese (at least those sampled in Phase 1, round 2). Census Bureau decided to use 华人 in the ACS.

4. LESSONS LEARNED

This large-scale translation pretesting effort generated numerous lessons that will benefit future studies. This chapter documents the lessons learned about respondent recruitment, study design, and pretesting that span the three phases of cognitive interviews and analysis.

4.1 Respondent Recruitment

- The recruitment activities were conducted by multiple recruiters in three phases over 2 years of recruitment. Systematic recruitment data management with a unique respondent ID scheme was crucial from the beginning of the project to manage a large-scale respondent recruitment effort of this kind.
- Advertisement in local ethnic, in-language newspapers demonstrated a prominent advantage in reaching potential respondents in a short time.
- Word-of-mouth was a helpful strategy for recruiting hard-to-reach respondents meeting specific study requirements, such as monolinguals respondents with work experience or those with family members in military service.
- Different recruiting strategies reach people with different characteristics. For example, electronic dissemination reached a greater number of younger, highly educated, recent immigrants compared to the other methods.
- Newspaper advertisement and physical flyers reached somewhat overlapping population groups. Therefore, researchers may consider including only one of these methods.
- Recruiters' strong ties with the local ethnic community and cooperation with community leaders were helpful for increasing credibility of the study and participation of any individuals who are dubious of the study, especially among elderly monolingual speakers (Park, Liu, & Sha, 2011; Park, Sha, & Lu, forthcoming).

4.2 Devising Recommendations According to Interview Findings

- Revise phrases and sentences to reflect Chinese and Korean linguistic practice and restructure complex sentences.
- Add appropriate details to help Respondents understand the questions in survey contexts better.
- Develop with descriptive phrases for concepts that do not exist in Chinese or Korean.
- Provide additional information or resources for concepts that require prior knowledge and practice.
- Consider using two words to describe a single concept (do not limit translation possibilities by trying to "fit" a concept into one word just because the English source wording used only one word).
- Consider conducting cognitive interviews with English-speaking respondents to see whether parallel issues exist in the source language.
- To overcome limitations of the cognitive interviews because of the small sample size, crossreference the findings across languages to confirm if the issues are language specific or common to each target language.

4.3 Study Design

- We devised a modified, concurrent, probing approach by splitting the LAG into sections with similar themes and implemented them in round 1 of the Phase 2 interviews. This approach was effective for detecting issues since respondents could better explain what originally caused confusion while they were answering the questions compared with their comments during retrospective probing. We think that the level of interruption to the respondent's question-answer process during this new approach was amenable and thus we recommend this approach for future use.
- We used vignettes to accommodate rare or tricky interview situations that respondents could have in reality, such as having a negative business income. It worked well for most cases, and we recommend this technique. However, the description and the vignette characters should be kept simple to avoid introducing any sources of additional confusion.
- Respondents in the older age group, particularly those 65 years or older, exhibited more difficulty with cognitive interview probes. They also struggled with the LAG. Similar observations might be made about respondents with lower educational attainment. The study design should take these challenges into consideration.
- When the translation and pretesting teams are different, the translation review process prior to the cognitive interview was very helpful and effective in complementing the cognitive interviews in multiple ways:
 - It gives an opportunity to detect obvious translation errors, which are unlikely to be corrected through cognitive interviews with the monolingual respondents because they knew little or no English and have no access to the English source text.
 - Researchers can design cognitive interview protocols more effectively based on preidentified potential problems from the translation review.
 - Researchers can devote more time to discussing complicated translation issues during the cognitive interview by using revised translated material with fewer basic translation errors. For example, hard-to-translate terms that are rooted in diverse sociolinguistic practices and cultures can only be found through cognitive interviews with monolingual speakers of the target language because they have a unique perspective on the latest language practices that are often missed by language experts. Advance translation review will help detect and resolve such issues more efficiently.
- Researchers may want to evaluate utility of practice sessions prior to the interviews and design them to be specific to the project, the pretested materials, and types of probes in the interview protocols.
- Questionnaire layout and formatting, such as bolding and underlining, can be important factors that affect respondents' comprehension and need further investigation.
- Consider incorporating usability testing as part of the study design to observe the interaction between questionnaire design and translation. We often found that respondents did not give attention to survey instructions and some errors were caused by respondents' difficulty with managing the corresponding instructions even when they understood the translation.
- Some respondent difficulty simply cannot be "fixed" in the translation but must be addressed at the source language questionnaire level, such as examples showing the appropriate level of details to the I/O questions. Giving relevant context is important for

respondents to understand the survey questions. Therefore, interview protocols should be carefully designed to include an appropriate level of context.

- Inclusion of both the respondents' answers to the survey questions and the bullet-pointed respondent behavior observation in the interview summary report was helpful for understanding the source of issues and recommending alternative translations.
- Precoded answer categories in a tabular format summarizing respondents' behavior, such as whether respondents answered the question correctly or followed the skip instruction correctly, facilitated efficient data analysis. This precoded answering scheme can boost the objectiveness of cognitive interview data analysis and may increase the utility of the data set for future publications.

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APPENDIX A: ADDITIONAL CHANGES

The following tables document translation changes that affect multiple questions in the LAG, as well as minor changes.

Chinese Language Changes

English on the Form	Location on the Form	Original Translation (back-translation)	Round 2 Translation (back-translation)	Final Recommendation and Justification
Please print today's date.	Chinese LAG Start Here box, today's date	请用正楷写下今天的日期。 (Please use block characters to write down today's date.)	请工整的写下今天的日期。 (Please neatly write down today's date.)	FINAL RECOMMENDATION (same as R2 translation) JUSTIFICATION: The original translation suggests that respondents (Rs) must use Chinese characters (words) to indicate numbers, because the English original wording was to "print." Although most Rs used Arabic numerals as intended, we recommend saying "neatly write" to communicate the concept of "print." The Chinese characters for numbers are only used in legal documents, and are not used in daily life. The recommended version will help avoid the impression that the question answering will be a task. We did not recommend further testing in round 2 and as expected, no respondent difficulties were observed with the revision.
Area Code	Chinese LAG Start Here box, telephone number	区号 (zone number)	电话区号 (telephone zone number)	FINAL RECOMMENDATION (same as R2 translation) JUSTIFICATION: Some Rs in round 1 confused the original translation for area code with postal zip code. For round 2, we recommended adding the word "telephone" to clarify that it is for telephone numbers. We did not recommend further testing in round 2 and as expected, no respondent difficulties were observed with the revision.

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or	Chinese LAG Global change	或 (or)	或者 (or //)	<p>FINAL RECOMMENDATION (same as R2 translation)</p> <p>JUSTIFICATION:</p> <p>The original translation for “or” is correct. Because it is only one single Chinese character, it does not stand out in a questionnaire. Some round 1 Rs did not notice it at all. The recommended translation adds a second character to help establish its presence. We recommended testing this in conjunction with testing specific question items. In general, we did not observe respondent difficulties associated with the revision and recommend adopting it for future phases.</p>
number of people	Chinese LAG Start here page, number of people	人口数 (population number)	人数 (person number)	<p>FINAL RECOMMENDATION (same as R2 translation)</p> <p>JUSTIFICATION:</p> <p>The original translation literally means “population number.” It can be used to indicate number of people in a household, but it can also mean a large population. Consequently, some Rs answered about the number of people in their entire neighborhood. The recommended translation deleted a character in the current translation to avoid the confusion that the question is asking about a large population. As expected, no respondent difficulties were observed with the revision in round 2.</p>
Add wording “instruction” before each questionnaire routing instruction	Chinese LAG Global change		填表说明： (Form-taking instruction:)	<p>FINAL RECOMMENDATION (same as R2 translation)</p> <p>JUSTIFICATION:</p> <p>The vast majority of the Rs had no prior experience with self-administered questionnaires or surveys at all. Preceding the questionnaire routing instructions with a heading “form-taking instruction” will help “train” Rs on what is a question and what are instructions. In general, we did not observe respondent difficulties associated with the revision while testing specific questionnaire routing instructions and recommend adopting it for future phases.</p>

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Add wording "Note" before each italic explanation for a question	Chinese LAG Global change		注： (Note:)	FINAL RECOMMENDATION (same as R2 translation) JUSTIFICATION: The vast majority of the Rs had no prior experience with self-administered questionnaires or surveys at all. In this questionnaire, additional explanation for a question is shown in italics right after the question text itself. Many Rs did not know what to do with it, or thought it was part of the question they had to answer. Preceding the italic explanation with a "note" will help "train" them on what is a question and what is additional explanation for a question. In general, we did not observe respondent difficulties associated with the revision while testing specific questions and recommend adopting it for future phases.
House, apartment, or mobile home	Chinese LAG Global change	房屋、公寓或移动式房屋 (house, apartment, or mobile house)	房屋、公寓或者移动式房子 (house, apartment, or// mobile home)	FINAL RECOMMENDATION (same as decennial census form) 房子、公寓或者移动式房屋 (house, apartment, or// mobile home) JUSTIFICATION: In the original translation, the words used to denote "[mobile] home" ([移动式]房屋) is the same as the translation for "house" (房屋). Because this phrase appears so frequently in the ACS, we recommend altering the translation for "[mobile] home" by one character to differentiate it from the translation for "house." Some respondents were confused by the two and the confusion was compounded by not knowing what mobile home is in the first place. We consulted the Chinese translation for the 2010 decennial form and recommend adopting it in the ACS translation for these terms: the translation for "[mobile] home" (房屋) and the translation for "house" (房子) uses slightly different words to differentiate between "home" and "house".

English on the Form	Location on the Form	Original Translation (back-translation)	Round 2 Translation (back-translation)	Final Recommendation and Justification
Property	Chinese LAG Global change Q5, Q6, Q17, Q18, Q19a, Q19b, Q19c, Q19d, Q20a, Q20b, Q21.	房地产 (real estate property)	住宅以及土地 (this housing unit and soil land)	FINAL RECOMMENDATION: 住宅以及院地 (this housing unit and yuan land) JUSTIFICATION: In round 1, 房地产 (fang di chan) sounded awkward to respondents even though it was the proper translation for "property." It was also confusing because this term is usually used to describe a realtor's office, as in 房地产公司 (fang di chan company). Based on round 2 testing, we recommend implementing 住宅以及院地 (housing unit and yuan land) because respondents almost always described the land attached to the housing unit as a 院 (yuan). This change should be implemented in all questions that ask about "property."
[Answer categories] No Yes	Chinese LAG Global change	是 / 否 (positive/yes Negative/no)	Use idiomatic words for positive and negative answers.	FINAL RECOMMENDATION (same as R2 version) JUSTIFICATION: The current translation of "Yes" and "No" is too literal and not idiomatic. Responses in Chinese usually repeat part of the question (for example: do you have it? [yes] I have it; [no] I don't have it). In round 1, we tested the current version with the grammatical and idiomatic version for positive and negative answers. Nearly all respondents felt that the latter sounds more natural. In round 2, we tested the idiomatic version and as expected, no respondent difficulty was observed. We recommend reviewing answer categories for future phases and determine if idiomatic words should be applied in those answer categories.

English on the Form	Location on the Form	Original Translation (back-translation)	Round 2 Translation (back-translation)	Final Recommendation and Justification
Annual	Chinese LAG Global change	每年 (every year)	全年 (full year)	FINAL RECOMMENDATION (same as R2 version) JUSTIFICATION: While there were no major observations about respondent difficulty, after administering 22 interviews in Chinese, the team of Chinese language experts felt that the current translation for “annual” can be improved. When asked about what period of time they were thinking, although R said that the current translation meant a year, they noted that they were thinking of a point in time for their answers, rather than a period of time. The proposed translation uses “full year” to better capture the English original version “annual.” As expected, no respondent difficulty was observed in round 2.
Mortgage First mortgage Second mortgage	Chinese LAG Global change	抵押贷款 ([collateral] mortgage loan) 第一次抵押贷款 (first time [collateral] mortgage loan) 第二次抵押贷款 (second time [collateral] mortgage loan)	贷款 ([mortgage] loan) 第一个贷款 (primary [mortgage] loan) 第二个贷款 (secondary [mortgage] loan)	FINAL RECOMMENDATION (same as R2 version) JUSTIFICATION: In round 1, we observed that some Rs had very negative reaction to the original translation for mortgage. It literally means “[collateral] mortgage loan” and the first part on collateral (抵押) implies having financial trouble, which is highly undesirable. We recommend deleting 抵押 and just keep 贷款 (loan). In the context of the question, it is clear that the term is about a mortgage and seems pragmatically reasonable. The current translation for “first” and “second” mortgage gave the impression to a few Rs that there are multiple mortgages because they mean “first time” and “second time.” The recommended translation means primary and secondary. We tested these terms as part of the question comprehension in round 2 and no major respondent difficulty was observed.

English on the Form	Location on the Form	Original Translation (back-translation)	Round 2 Translation (back-translation)	Final Recommendation and Justification
How much is the regular monthly payment on all second or junior mortgages and all home equity loans on THIS property?	Housing section, Q20b	您支付这项房地产的所有第二次或次级抵押贷款以及所有房屋净值贷款的每月分期付款额是多少？ (What is monthly installment amount you pay on all second time or junior [collateral] mortgage loan and home equity loans on <u>this</u> property?)	您支付这个住处的所有第二个 (次级) 贷款以及所有房屋净值贷款的每月分期付款额是多少？ (What is monthly installment amount you pay on all secondary (junior) [mortgage] loan and home equity loans on <u>this</u> residence?)	FINAL RECOMMENDATION (same as R2 version) JUSTIFICATION: The recommended translation puts “junior mortgage” in parentheses to make the sentence sound more natural. We tested it in round 2 and did not observe major respondent difficulty.

Korean Language Changes

English on the Form	Location on the Form	Original Translation (back-translation)	Round 2 Translation (back-translation)	Final Recommendation and Justification
the people who are living or staying	Cover page Introduction (above help-line box on the bottom left side)	살고 있거나 머무는 사람들 (the people who live or stay)	*Same as round 1 translation	FINAL RECOMMENDATION: 살거나 머물고 있는 사람들 (the people who are living or staying) JUSTIFICATION: The current translation is not consistent with what was used in Start Here Box for the same phrase, "(the) people who are living or staying." The translation can be found in Start Here box four times. We recommend making the translation consistent.
Last Name	Start Here box, last name	"Last Name" above the last name blank box is not very noticeable.	N/A	The "Last Name" label above the answer box is not very noticeable because it is placed too close to the second arrow instruction (name and phone number). As a result, many respondents (Rs) wrote their full name in the blank box for "First Name." We recommend creating an additional line space between the 2nd arrow instruction and "Last Name" above blank box.
page(s)	Global changes	쪽 (page(s))	페이지 (page(s))	FINAL RECOMMENDATION: (same as R2 translation) 페이지 (page(s)) JUSTIFICATION: Round 1 translation uses a pure Hangul word, 쪽. Rs had hard time figuring out where they were instructed to move on, because this Hangul word has become strange to Koreans living in the United States. Round 1 translation, 쪽, is also a homonym for "side," and thus it caused another confusion. The translation was changed to 페이지, a phonetic expression of the English word "page," in round 2. Although it is a phonetic translation, several Rs in P1R1 suggested this word sounded more familiar. No difficulties were observed with this translation in P1R2, and all Rs were able to easily figure out what page(s) were referred to (especially in Question 3 and Routing Instruction E). Thus, we propose 페이지 as our final recommendation.

English on the Form	Location on the Form	Original Translation (back-translation)	Round 2 Translation (back-translation)	Final Recommendation and Justification
this property	Housing Question 5; Q6	이 부동산 (this property)	이 집(및 토지) (this home (including land area))	FINAL RECOMMENDATION: (same as R2 translation) 이 집(및 토지) (this home (including land area)) JUSTIFICATION: Round 1 translation 이 부동산 properly reflects the intended meaning of the original term, "this property." However, some Rs were confused because of multiple meanings of this translated term, 부동산. Depending on contexts, 부동산 could mean "asset" because "real estate" is the most popular type of assets/investments in Korea. It could also mean a realtor's office. For better understanding, we have recommend replacing 이 부동산 with 이 집(및 토지) (this home (including land area)), that refers to one's current residence including its land area. During P1R2, the proposed translation was used and probed. Most Rs understood that 이 집(및 토지) referred to his/her current residence including attached land area, confirming that the proposed translation corrected the problem observed in P1R1. Hence, we propose round 2 translation as our final recommendation.
SKIP to C	Housing Question 14	아래 질문들을 건너뛰어 C의 질문 16 부터 응답해 주십시오. <i>(Skip questions below and answer question 16 under C and on.)</i>	*Same as round 1 translation	FINAL RECOMMENDATION: <i>아래 질문들을 건너 뛰어 C를 읽어 주십시오. (Skip the next question and read C.)</i> JUSTIFICATION: The current translation directs Rs' attention directly to question 16, even before they read Routing Instruction C. Also, there should be a space between 건너 and 뛰어. The final recommendation corrects these errors.
this property	Housing Questions 17;18,19a-d;20a-b	이 부동산 (this property)	이 집 및 토지 (this home including land)	FINAL RECOMMENDATION: 이 집(및 토지) (this home (including land area)) JUSTIFICATION: In our final recommendation, we suggest put 및 토지 in parenthesis to make it consistent with what we have used for translation of the same term, this property, in questions 5-6.

English on the Form	Location on the Form	Original Translation (back-translation)	Round 2 Translation (back-translation)	Final Recommendation and Justification
None	Housing Question 17	없음 (None)	부동산 세 내지 않음 (Do not pay real estate taxes)	FINAL RECOMMENDATION: (same as R2 translation) 부동산 세 내지 않음 (Do not pay real estate taxes) JUSTIFICATION: In Korean, 없음 often means “there is nothing (to mark/ relevant to my case).” For clearly indicating that Rs should mark here only if they do not pay real estate taxes, we recommend replacing 없음 (None) with 부동산 세 내지 않음 (Do not pay real estate taxes).
None	Housing Question 18	없음 (None)	보험료 내지 않음 (Do not pay insurance premium)	FINAL RECOMMENDATION: (same as R2 translation) 보험료 내지 않음 (Do not pay insurance premium) JUSTIFICATION: In Korean, 없음 often means “there is nothing (to mark/ relevant to my case).” To clearly indicate that Rs should mark here only if they do not pay insurance premium on their properties, we recommend replacing 없음 (None) with 보험료 내지 않음 (Do not pay insurance premium).
you or any member of this household	Housing Question 20a	귀하 또는 이 가구의 구성원은 (you or any member of this household)	*Same as round 1 translation	FINAL RECOMMENDATION: 귀하 본인이나 이 가구의 구성원은 (yourself or any member of this household) JUSTIFICATION: For consistency with our recommendations on the similar term in Routing Instruction C and question 19a, we recommend replacing 귀하 또는 (you or) with 귀하 본인이나 (yourself or).

English on the Form	Location on the Form	Original Translation (back-translation)	Round 2 Translation (back-translation)	Final Recommendation and Justification
SKIP to D	Housing Question 20a	아래 질문들을 건너 뛰어 D의 질문들에 응답해 주십시오. (<u>Skip</u> questions below and answer questions belongs to D.)	*Same as round 1 translation	FINAL RECOMMENDATION: 다음 질문을 건너 뛰어 D를 읽어 주십시오. (<u>Skip</u> the next question and read D.) JUSTIFICATION: The current translation gives a false impression that there is more than one question to skip if R marked on the forth response category. It also directs Rs to answer question 21 even before they read Routing Instruction D. The final recommendation corrects these issues.
Otherwise, SKIP to E.	Routing Instruction D	그렇지 않으면 아래 질문들을 건너 뛰어 E의 질문들에 응답해 주십시오. (Otherwise, <u>skip</u> questions below and answer questions following E.)	*Same as round 1 translation	FINAL RECOMMENDATION: 그렇지 않으면 다음 질문을 건너 뛰어 E를 읽어 주십시오. (Otherwise, <u>skip</u> the next question and read E.) JUSTIFICATION: The current translation gives a false impression that there is more than one question to skip if this is not a mobile home. The final recommendation corrects this issue.

**APPENDIX B: FINDINGS AND RECOMMENDATIONS FROM
CENSUS BUREAU USABILITY TEST**