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**Cognitive Pretesting of the 2015 CPS
Computer and Internet Use Supplement**

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Abstract

In an interagency project between the National Telecommunications and Information Administration (NTIA), under the Department of Commerce, and the U.S. Census Bureau, the bureau's Center for Survey Measurement conducted cognitive interview research on the Computer and Internet Use Supplement (CIUS). The CIUS, which has been administered periodically since 1994, is a supplement of the Current Population Survey (CPS). The primary purpose of the cognitive testing research was to test new and revised questions in the CIUS. The secondary purpose was to gain qualitative insight into why the Hispanic population showed a particularly large decrease in computer use from 2012 to 2013 in CIUS data. Two iterative rounds of testing were conducted, with 15 respondents interviewed each round.

Overall, results from both rounds showed that respondents were able to answer most questions with little to no difficulty. In Round 1, the questions that were problematic did not clearly account for some common situations, or had computing or Internet technology terms that were too technical for the respondent to understand. Furthermore, most respondents used recall periods for computer and Internet use that were longer than the intended recall period. In Round 2, revisions of the CIUS resulted in questions that better accounted for common situations, and the revised instructions better prompted respondents to use the intended recall period. In addition, while the Hispanic respondents in this study understood the questions and response categories as well as the non-Hispanic respondents, they identified technology terms during debriefing that would be difficult to translate for Spanish speakers who know little to no English. The results of these cognitive interviews helped inform development of the 2015 CIUS, which was implemented in the field in July 2015.

Keywords: Questionnaire Design, Mobile Devices, Computer Technology, Internet Service

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1. INTRODUCTION

Since 1994, the Computer and Internet Use Supplement (CIUS) has been a periodic supplement of the Current Population Survey (CPS). This supplement is conducted by the U.S. Census Bureau at the discretion of the National Telecommunications and Information Administration (NTIA), which is under the Department of Commerce. Conducted 12 times leading up to when the present study was conducted, the most recent CIUS administrations were in November 2007, October 2009, October 2010, July 2011, October 2012, and July 2013. The goal of the CIUS is to measure the United States population's access to and use of the Internet, computers, and similar computing devices. Because technology is a rapidly changing industry around the world, it is essential for surveys about technology use to stay current. Thus, questions about computers, similar computing devices, and the Internet have changed over time. For example, the 1994 CIUS did not even use the term "Internet," and instead asked whether computer-using households had modems (Goldberg, 2016).

Most recently, several changes were made to the CIUS questionnaire (prior to cognitive testing) to improve the quality of data collection in 2015. One major change in the 2015 CIUS was to ask about the use of specific computing devices in separate and successive questions, instead of asking about the use of many devices (e.g., desktop, laptop, netbook, notebook computer, or a tablet computer) in one question. In addition, in previous versions of the CIUS, computer and Internet use was asked of the entire household only. For example, an interviewer would ask the respondent if anyone in the household uses a tablet computer, without asking who in particular uses the tablet computer. However, with the growth of smartphone and tablet use, for example, computer and Internet use is becoming an increasingly individual activity. Persons in a single household may have computing device and Internet use habits that vary greatly. Based on this trend, a second major change in the 2015 CIUS was a shift from household-level data towards individual-level data. Additional changes to the CIUS include questions on several new topics: (a) the use of Internet-ready devices, such as wearable devices and Internet-connected thermostats or security systems; and (b) issues of privacy and security, including being affected by data breaches, whether privacy or security concerns have hampered online activity, and opinions about what online privacy and security risks are most important (Goldberg, 2016). Furthermore, in 2013, overall computer use as measured by the CIUS fell for the first time since 1994, and the Hispanic population had the greatest decrease among demographic groups. A review of the supplement found that question wording about the type of devices used might have had an impact on the measurement of computer use.

To test these CIUS revisions, gain insight into why data from the Hispanic population showed a particularly large decrease in computer use, and ensure that the supplement remain stable enough for time-series comparisons, staff from the Center for Survey Measurement (CSM) conducted

cognitive pretesting of the CIUS¹. This report presents findings and recommendations from two iterative rounds of cognitive testing.

2. METHODS

From September to December 2014, 30 face-to-face cognitive interviews were conducted in the Washington D.C. metropolitan area across two rounds of iterative cognitive testing. Fifteen interviews were conducted each round. The cognitive interviewing team for these interviews consisted of two CSM staff members. Results from Round 1 informed changes made to questions before Round 2 of testing.

2.1 Respondent Selection

The respondent screening and recruitment effort included targeting respondents who:

- had varying levels of Internet experience
- were Hispanic with varying levels of English language fluency
- lived in multiple-person households
- Owned smartphones
- Did not own smartphones

In addition to the above characteristics, respondents were recruited to represent diversity in terms of gender and race. Respondents were recruited through contacts with organizations that serve Spanish-speaking populations, advertisements in local newspapers and on Craigslist.com, and via personal networks. Twenty-two of the interviews were conducted in-person at the Census Bureau Headquarters in Suitland, MD. The remaining eight interviews were conducted off-site at locations convenient to the respondents. Each of the 30 respondents received \$40 in cash as compensation for his or her time and travel to complete the interview.

2.2 Respondent Characteristics

The group of respondents in this study represents a wide range of ages, Internet experience levels, and language abilities. In terms of race and ethnicity, about half of the respondents were of Hispanic origin and reported their “race” to be their Hispanic country of origin. Of the Hispanic respondents, eight were Spanish/English bilingual with low English proficiency². In addition, most of the respondents owned a smartphone and were about even in number between those with “little to none” and “moderate to high” levels of Internet experience. See Table 1 for the remaining respondent characteristics.

¹ New computer and Internet use questions for the American Community Survey (ACS) underwent cognitive testing in 2009 and a field test in 2010. For further details, see Hindsdale, et al., (2009) and Shin (2012), respectively.

² Hispanic respondents with low English proficiency were interviewed in English.

Table 1: Overall Sample Respondent Characteristics

	Round 1	Round 2	Total
Gender			
Female	9	9	18
Male	6	6	12
Race			
White	1	5	6
Black	6	8	14
Other	7	2	9
Don't Know	1	0	1
Hispanic Origin			
Hispanic	9	7	16
Not Hispanic	6	8	14
Language Ability³			
English Only	8	8	16 ⁴
Bilingual-English/Spanish - Low English Fluency	4	4	8
Bilingual-English/Spanish - High English Fluency	3	3	6
Age			
23-30	3	1	4
31-50	5	5	10
51-60	6	7	13
61 and over	1	2	3
Household Size			
Multiple-person households	11	11	22
Single-person households	4	4	8
Internet Experience			
Moderate to high	8	8	16
Little ⁵ to none	7	7	14
Smartphone Ownership			
Own Smartphone	13	12	25
Does not own Smartphone	2	3	5

³ Respondents self-identified their language ability during recruitment screening.

⁴ Two were Hispanic respondents who were also monolingual English speakers.

⁵ Little Internet experience was defined as using the Internet twice a week or less.

2.3 CIUS Questionnaire and Cognitive Interview Protocol

The content of Computer and Internet Use Supplement tested in this study was comprised of several sections (See Appendix A for Round 1 and Appendix B for Round 2). First, it began with demographic questions on roster, age, relationship, Hispanic origin, and race to provide context to the interview and create a household roster. Later in the interview, the interviewer used this roster to randomly select one person on the roster to then ask the respondent questions about this selected person's use of computing applications and services. After these demographic questions, the CIUS then has sections of questions about the following computer and Internet use topics:

1. Types of computing devices used
2. Location of Internet use
3. Type of Internet service used
4. Computing applications and services used
5. Challenges and concerns with Internet use
6. Internet non-use

The protocols used in this study focused on respondents' reactions to new and revised questions in the 2015 CIUS, and used the following cognitive interview methods: concurrent think-aloud, concurrent probing, and debriefing questions (Willis, 20005).

At the start of the interview, cognitive interviewers informed respondents that the purpose of the study was to see how well the CPS CIUS worked. Respondents were also told that information they provided would be confidential and their anonymity would be preserved. Interviewers instructed respondents to read and sign a consent form before the interview began. Respondents were also asked for permission to tape record the interview. Interviewers then asked respondents to participate in the interview as if an interviewer had come to their home. The cognitive interviewer played the role of an interviewer who would come to the respondent's home.

The cognitive interviewers instructed respondents to describe aloud their thoughts, feelings, and interpretations while answering a question. In addition to asking the survey questions, interviewers also employed concurrent probing by asking respondents probing questions to address specific testing issues for questions thought to be at risk of response difficulty. All the question sections shown above included some questions that were followed by scripted probes. Several questions - including a question on the use of wearable, Internet-connected devices - had probes to elaborate on the respondent's answer, in order to collect data on activity that is new and less-understood. Other probes asked respondents about the meaning of terms that could be unfamiliar, like "data caps" and "social networking." Other probes are hypothetical, and ask respondents how they would respond to a question if they experienced a particular issue, such as an online security breach. The interviewers then probed and made notes of any indication of response difficulty, including

question incomprehension and response indecisiveness. This method was also used spontaneously for questions with no scripted probes.

Finally, interviewers asked respondents a set of debriefing questions at the end of the interview that gave them the opportunity to express their overall impressions of the interview, and make any other final comments. As part of the debriefing, interviewers asked respondents to review questions on (a) how persons in the household connect to the Internet, (b) the most important characteristic of home Internet service, and (c) the types of services that people use to access the Internet from home. All respondents were asked to name any terms that would be difficult to understand for respondents with little to no Internet access. The Hispanic respondents with Spanish fluency were asked to name any terms that may be difficult to translate into Spanish for Hispanic respondents. These questions were selected for further questioning because they contain technical terms that may be difficult to translate into Spanish, and may be unfamiliar to people with limited Internet access. Interview times ranged from 16 minutes to 77 minutes, with an average time of 46 minutes.

3. FINDINGS AND RECOMMENDATIONS

We present findings and recommendations by each question section on computer and Internet use. As previously mentioned, the CIUS Supplement tested in this study had question sections about the following computer and Internet use topics:

1. Types of computing devices used
2. Location of Internet use
3. Type of Internet service used
4. Computing applications and services used
5. Challenges and concerns with Internet use
6. Internet non-use

Within each question section, all questions with scripted probes will be discussed, as well as questions that were problematic, regardless of whether they had scripted probes. Finally, issues that span multiple questions are discussed. For each problematic question or issue, Round 1 findings and recommendations are discussed, followed by Round 2 findings and recommendations.

In sum, for Round 1, respondents in general understood most of the questions and were able to give a response without difficulty. However, most respondents unknowingly used a longer recall period than the intended reference period of “current use,” because the questionnaire did not specify or define “current use” in the questionnaire’s instructions. When asked what time period they had in mind when answering questions about computer and Internet use, some respondents said “past year” or “past month,” in part because question did not specify a particular time

period. In addition, some technology terms were difficult for respondents to understand, including “data caps” and “DSL.” Further, a small number of respondents were in a situation that made responding to the question difficult given the question’s wording (e.g., answering telecommuting questions for a household member who is not employed).

In Round 2, like in Round 1, most respondents understood most questions and were able to give a response without difficulty. In addition, revisions made to the CIUS, based on findings from Round 1, resulted in questions that better accounted for relevant situations, and instructions that had respondents use the intended recall period. However, respondents still were not able to understand some of the technology terms despite adding definitions for some of the terms as part of the response category. To resolve this issue, NTIA organized some of the specific technology terms under broader category names and added optional language that provided further definition.

3.1 Type of Computer Device Used

11. [Do you/Does anyone in this household, including you,] use a desktop computer?

INTERVIEWER NOTE: Read if needed: A desktop is a personal computer that is too large or heavy to be frequently moved from place to place.

12. What about a laptop or notebook? [Do you/Does anyone in this household] use a laptop or notebook computer?

13. What about a tablet or e-book reader? (*If needed*) [Do you/Does anyone in this household] use a tablet or e-book reader?

14. What about a cellular phone or smartphone? (*If needed*) [Do you/Does anyone in this household] use a cellular phone or smartphone?

15. [Do you/Does anyone in this household] use a wearable, Internet-connected device such as a smart watch or glasses? Examples include Google Glass or Pebble.

16. [Do you/Does anyone in this household] use a smart TV, or a TV-connected device such as a game system or Internet-based video system? Examples include an Xbox, Apple TV, Playstation, Roku, or a Blu-Ray player that can access the Internet.

After the demographic questions, the first question series had questions about the types of computer devices respondents used. In Round 1 and Round 2, no issues were found for questions in this section. Respondents were familiar with the computer devices discussed in this section most of the time, and none of the questions resulted in false positives.

However, several questions had scripted probes because they had terms that were anticipated as potentially unfamiliar to respondents, or because the NTIA wanted more information about the use of some devices. A question about tablets and e-book readers found that most respondents knew the differences between a laptop, desktop computer, and tablet. For a question about using wearable, Internet-connected devices, respondents did not use them, and thus no additional data was collected on aspects of their use, but the examples of “smart watch” and “Google Glass” were familiar enough to respondents to help them answer the question. Regarding a question about the use of a TV-connected device to connect to the Internet, only a few respondents used one or knew someone who did use one, and those devices were videogame systems that connected to the Internet.

3.2 Location of Internet Use

- 18. [Do you/Does anyone in this household, including you,] use the Internet at home?**
- 19. What about at school? [Do you/Does anyone in this household] use the Internet at school? (*If yes & is multi-person household*) Who is that?**
- 20. What about at work? (*If needed*) [Do you/Does anyone in this household] use the Internet at work?**
- 21. What about at a coffee shop or other business that offers Internet access? (*If needed*) [Do you/Does anyone in this household] use the Internet while at a coffee shop or other business that offers Internet access?**
- 22. What about while traveling between places? (*If needed*) [Do you/Does anyone in this household] use the Internet while traveling between places?**
- 23. What about at a library, community center, park, or other public place? (*If needed*) [Do you/Does anyone in this household] use the Internet at a library, community center, park, or other public place?**
- 24. What about at someone else’s home? (*If needed*) [Do you/Does anyone in this household] use the Internet at someone else’s house?**
- 25. [Do you/Does anyone in this household] use the Internet at some other location we haven’t covered?**

This series asked questions about where respondents access the Internet, such as at home, at work, and at public places like libraries. In this section, questions about Internet use at school and Internet use while travelling were found to have issues. In addition, two questions did not have issues for Round 1 or Round 2, but had scripted probes meant to gain further understanding about the locations where respondents use the Internet. The first question about Internet use in a library or other public place had a probe about the frequency of use, and respondents tended to report seldom

use of the Internet in libraries or other public places, as these respondents seldom went to these public places in general. The second question about using the Internet in a location not yet mentioned had a probe to name those “other” places. Respondents could not think of other places besides the places mentioned in other questions.

3.2.1 Internet Use at School

What about at school? [Do you/Does anyone in this household] use the Internet at school? (If yes & is multi-person household) Who is that?

In Round 1, 15 respondents answered this question. While most respondents understood the question, responding that they did not use the Internet at school, two issues were raised during testing. For the first issue, one respondent had children who worked at a school. They used the Internet there for work, but do not attend the school’s classes. Thus, the respondent was unsure of what answer to give. CSM recommended that NTIA consider and decide whether Internet use at school by non-students is in scope for this question, and then clarify based on this decision.

Regarding the second issue, another respondent reported “yes” to this question, but the respondent was referring to online classes. The respondent and interviewer were unsure if online classes apply to this question. CSM recommended that NTIA consider and decide whether online classes should apply to this question, and if online classes apply to this question, add a sentence stating that online classes apply. To avoid conflation with a question that asks respondents about using the Internet for online classes, CSM recommends that online classes not apply.

Because neither school employees nor online classes are in scope for this question, NTIA approved the following instruction that instructs respondents to only consider students, and to not include online classes:

What about at school? [Do you/Does anyone in this household] use the Internet at school? Please count students only, and do not include online classes. (If yes & is multi-person household) Who is that?

For the second issue, NTIA approved switching the order of a question which asks about whether a person uses the Internet at work, and a question of Internet use at school, so that teachers and other school employees are not confused about their exclusion.

In Round 2, 15 respondents answered this question and were able to give a response with no difficulty, as respondents tended to report “no” or that their children used the Internet at school as students. When probed, respondents reported counting only students, and they did not include online classes. CSM had no further recommendations.

3.2.2 Internet Use While Traveling

What about while traveling between places? (If needed) [Do you/Does anyone in this household] use the Internet while traveling between places?

In Round 1, 15 respondents answered this question. Most respondents reported that while traveling between places, they use the Internet to find directions to their travel destinations. However, one respondent reported “yes,” and stated he used a stand-alone GPS system that operates using a satellite instead of the Internet. NTIA approved the CSM recommendation to add a lesson on this topic as part of field representative training. The lesson would teach field representatives how to determine whether the respondent is referencing satellite-based GPS devices when giving a response.

In Round 2, 15 respondents answered this question with no difficulty. Respondents reported using mobile devices, including phones, to connect to the Internet while traveling between places, and did not report using GPS-only devices. CSM had no further recommendations.

3.3 Type of Internet Service Used

28. You mentioned that [you/someone in this household/some members of this household] use[s] the Internet at home. When going online at home, do [you/members of this household] connect to the Internet using:

Read and select all that apply

- 1. A plan bought from a company that provides Internet service?**
- 2. A plan bought from a public agency, nonprofit, or cooperative that provides Internet service?**
- 3. Internet service provided for an entire apartment building, condominium, campus, or other community and included in housing costs?**
- 4. Publicly-available Internet service provided at no charge?**
- 5. Some other method of Internet access?**

29. Which of the following is the most important factor to your household regarding your home Internet service?

Read and select best match

- 1. Connection speed**
- 2. Reliability of Internet service**
- 3. Affordability**
- 4. Customer service or technical support**
- 5. Mobility or ability to use service outside the home**

6. Data caps
7. Some other factor

30. I am going to read a list of ways that people access the Internet from their homes. Keep in mind that some people connect from home in more than one way. At home, [do you/does anyone in this household] access the Internet using:

Read and select all that apply

If respondent indicates “Wi-Fi,” add: Do you know what kind of Internet service is connected to the Wi-Fi in your household?

1. Dial-up service?
2. DSL service?
3. Cable modem service?
4. Fiber-optic service?
5. Mobile broadband or a data plan for a mobile personal computer?
6. Satellite service?
7. Some other service?

32. Do you have Internet as part of a “bundle” through your Internet service provider?

33. Which services besides Internet are included in the bundle?

Read and select all that apply

1. TV channels
2. Home telephone service
3. Mobile phone service
4. Home security or monitoring
5. Some other service

This question series asked respondents about the types of Internet services they use. In this series, a question on home Internet service factors was found to have an issue. In addition, one question did not have an issue for Round 1 or Round 2, but had a scripted probe to gain further understanding. This question regarded how the respondent connected to the Internet, and had a probe asking respondents to tell more about their answers, which mostly consisted of plans bought from companies that provide Internet service. Respondents tended to share the brand name of their Internet service provider (e.g., Comcast).

3.3.1 Home Internet Service Factors

This question was revised slightly over the course of the two rounds of interviewing. The first version was:

Which of the following is the most important factor to your household regarding your home Internet service?

Read and select best match

1. **Connection speed**
2. **Reliability of Internet service**
3. **Affordability**
4. **Customer service or technical support**
5. **Mobility or ability to use service outside the home**
6. **Data caps**
7. **Some other factor**

In Round 1, 11 respondents answered this question. Five respondents did not know the definition of “data caps.” A data cap is the amount of data allowed for use each month in a particular cell phone plan. Data used in addition to the data cap amount is typically subject to additional charges by the wireless carrier company. When probed, these five respondents understood what “data” was, but did not know what “caps” were in relation to data. NTIA approved a CSM recommendation to replace the term “data caps” with “data limits,” which is a term that may be more commonly understood. The second version of the question was

Which of the following is the most important factor to your household regarding your home Internet service?

Read and select best match

1. **Connection speed**
2. **Reliability of Internet service**
3. **Affordability**
4. **Customer service or technical support**
5. **Mobility or ability to use service outside the home**
6. **Data limits**
7. **Some other factor**

In Round 2, 11 respondents answered this question. “Data limits” appeared to be a more familiar term, with only one respondent with Internet and smartphone experience not knowing what the

term meant. However, when probed later in the cognitive interview, many respondents thought this term would be difficult for respondents with low Internet experience, or difficult for translation into Spanish. NTIA accepted two CSM recommendations: (1) replace “data limits” with “monthly data limits” to indicate that the limits refer to the allotments of data each month, and (2) rephrase the question stem to emphasize that the question refers to Internet service used at home, which includes traditional home Internet service (e.g., cable), as well as mobile broadband Internet service used at home. This final recommended version was

Which of the following is the most important factor to your household regarding your Internet service used at home?

Read and select best match

- 1. Connection speed**
- 2. Reliability of Internet service**
- 3. Affordability**
- 4. Customer service or technical support**
- 5. Mobility or ability to use service outside the home**
- 6. Monthly Data limits**
- 7. Some other factor**

3.4 Computing Applications and Services Used

36. [Do you/Does NAME] use email?

37. What about texting or instant messaging? [Do you/Does NAME] use a texting or instant messaging service?

38. What about social networking? *(If needed)* [Do you/Does NAME] use social networks such as Facebook or Twitter?

39. What about participating in video or voice calls, or video conferencing, over the Internet? *(If needed)* [Do you/Does NAME] participate in video or voice calls, or video conferencing?

40. What about browsing the Web? *(If needed)* [Do you/Does NAME] browse the Web?

41. What about watching videos? [Do you/Does NAME] watch videos over the Internet? Examples include YouTube and Netflix.

42. What about streaming or downloading music, radio programs, or podcasts? *(If needed)* [Do you/Does NAME] stream or download music, radio programs, or podcasts online?
43. What about on-the-go services such as maps, GPS, or reviews of nearby businesses? *(If needed)* [Do you/Does NAME] use on-the-go services? Examples include Google Maps, Yelp, and Fandango.
44. What about telecommuting or working remotely? *(If needed)* [Do you/Does NAME] use the Internet to telecommute or work remotely?
45. What about searching for a job? *(If needed)* [Do you/Does NAME] use the Internet to search for a job?
46. What about online classes or job training? *(If needed)* [Do you/Does NAME] use the Internet for educational classes or job training?
47. What about financial services such as banking, investing, or paying bills online? *(If needed)* [Do you/Does NAME] use the Internet for financial services such as banking, investing, or paying bills?
48. What about online shopping, travel reservations, or other consumer services? *(If needed)* [Do you/Does NAME] use online shopping, travel reservations, or other consumer services?
49. What about interacting with household appliances such as a connected thermostat or refrigerator? *(If needed)* [Do you/Does NAME] use the Internet to interact with household appliances?
51. [Do you/Does NAME] research health information online, such as with WebMD or similar services?
52. What about communicating with a doctor or accessing health records or health insurance records online? *(If needed)* [Do you/Does NAME] communicate with a doctor or access health records or health insurance records online?
53. [Do you/Does NAME] use a health monitoring service that connects to the Internet?

This series asked respondents questions about their use of various computing applications and services, including social media sites and text messaging services. In this section, respondents in multiple-person households were asked to report for another person in the household, and respondents in single-person households continued to report for themselves. Several questions were found to have issues and are discussed in the following subsections.

In addition, six questions did not have issues for Round 1 or Round 2, but had scripted probes to gain further understanding about the use of the computing application or service in question. A question about using the Internet for social networking had several probes; a probe about whether respondents used LinkedIn found that only a few respondents reported the use of LinkedIn, while many respondents reported the use of Instagram and Twitter. A probe asking respondents about their definition of the term “social networking” found that respondents generally defined it as interacting with others through a website. Finally, a probe about whether respondents thought the use of LinkedIn, Facebook, and Twitter were considered forms of social networking found respondents stating that using those websites were forms of social networking.

Another question about video watching had a probe about which sites someone used to watch videos the most, and respondents reported the use of YouTube, Netflix, and news sites the most. A question about on-the-go services had a probe about knowing the term “Fandango,” and only a few respondents understood it as a movie ticket site, but correctly assumed it was another kind of on-the-go service. A question about telecommuting had a probe to tell more about the answer; only a few respondents reported telecommuting, and they did so from home. For a question about using the Internet to connect with household devices, no respondents reported such use, and thus they did not have additional information to share about it. For a question about using a health monitoring service that connects to the Internet, no respondents reported use of those devices, but some had heard of them before. In addition, all respondents reported feeling comfortable answering this medical question about another person in the household.

3.4.1 Use of Texting or Instant Messaging Services

What about texting or instant messaging? [Do you/Does NAME] use a texting or instant messaging service?

In Round 1, 13 respondents answered this question, and most respondents reported that they or the person they reported for used smartphones to send text messages. However, instead of a smartphone, one respondent used a cellphone for texting. This cellphone does not use the Internet. CSM recommended that the question be clarified to clearly state that cellphone texting does not apply. However, NTIA did not adopt this recommendation, because the focus of this question is texting and instant messaging activity, and respondents tend to be unaware of whether their text messaging service uses the Internet. Thus, NTIA is willing to collect data on text and instant message activity that is not on the network NTIA is more concerned about (i.e., the Internet). In Round 2, respondents answered this question with no difficulty and appeared to understand the terms in the question, as most respondents reported they or the persons they reported for send text messages. CSM had no further recommendation.

3.4.2 Use of On-The-Go Internet Services

What about on-the-go services such as maps, GPS, or reviews of nearby businesses? (*If needed*) [Do you/Does NAME] use on-the-go services? Examples include Google Maps, Yelp, and Fandango.

In Round 1, 13 respondents answered this question. Their responses were a mixture of not using any on-the-go services, and specifically using map apps. An issue was found, however, when one respondent reported using a stand-alone GPS that uses a satellite instead of the Internet. NTIA adopted a CSM recommendation to add a lesson on this topic as part of future field representative training. The lesson would teach field representatives how to probe and listen for cues to determine whether the respondent is referencing satellite-based GPS devices when giving a response. In Round 2, 13 respondents answered this question with no difficulty, with responses again being a mixture using or not using map apps. CSM had no further recommendation.

3.4.3 Internet Use While Working Remotely

What about telecommuting or working remotely? (*If needed*) [Do you/Does NAME] use the Internet to telecommute or work remotely?

In Round 1, 13 respondents answered this question. Most respondents reported that they did not work from home. In addition, three respondents did not understand the phrase “telecommuting or working remotely.” NTIA adopted a CSM recommendation to revise the question with plain language terms to help define “telecommuting or working remotely,” for example: “telecommuting, or working while away from your usual work place.”

What about telecommuting, or working while away from your usual workplace? (*If needed*) [Do you/Does NAME] use the Internet to telecommute or work while away from your usual workplace?

In Round 2, 12 respondents answered the revised question and understood it, showing no confusion about the new terms used. As in Round 1, most respondents reported not working from home. CSM had no further recommendations on this specific issue. However for Round 2, findings revealed another issue for this question. One respondent answered this question for a person in the household who did not have a job. Thus, this question was not applicable in this situation. NTIA adopted a CSM recommendation to add a skip pattern in the questionnaire that skips the respondent out of this question if the person referenced does not have a job.

3.5 Challenges and Concerns with Internet Use

55. During the past year, have privacy or security concerns prevented [you/anyone in this household] from engaging in the following online activities:

Read and select all that apply

1. Conducting financial transactions such as banking, investing, or paying bills online?
2. Buying goods or services online?
3. Posting photos, status updates, or other information on social networks?
4. Expressing an opinion on a controversial or political issue on a blog or social network, or in a forum, email or any other venue?

56. Overall, what concerns [you/members of your household] the most when it comes to online privacy and security risks?

Do not read; select best match or enter verbatim response if other

1. Identity theft
2. Credit card or banking fraud
3. Data collection or tracking by online services
4. Data collection or tracking by government
5. Loss of control over personal data such as email or social network profiles
6. Threats to personal safety, such as online harassment, stalking, or cyber-bullying
7. Other: _____

57. During the past year, [have you/has any member of your household] been affected by an online security breach, identity theft, or a similar crime?

58. During the past year, [have you/has any member of your household] experienced online harassment, stalking, or cyber-bullying?

59. You previously mentioned that [you/members of your household] use the Internet in some places, but not at home.

This question series asked respondents about the challenges and concerns respondents have with internet use. In this section, several questions were found to have issues, and are discussed in the following subsections. In addition, two questions did not have issues for Round 1 or Round 2, but had scripted probes to facilitate better understanding about the challenges and concerns in question. The first question asked whether anyone in the household was affected by an online security crime. A few respondents reported being victims of credit card identity theft. When probed on the Target store data breach, some respondents were familiar with the Target store data breach, and hypothetically would have reported “yes” if they were affected by it.

The second question asked about whether anyone in the household experienced online harassment, stalking, and cyber bullying within the past year. Respondents reported not having such experiences, but probes on the question’s meaning found that they were familiar with the terms. For example, one respondent described online harassment as “leaving messages saying foul things or nasty things on the Internet.”

3.5.1 Internet Uses Prevented Because of Privacy Concerns

During the past year, have privacy or security concerns prevented [you/anyone in this household] from engaging in the following online activities:

Read and select all that apply

- 1. Conducting financial transactions such as banking, investing, or paying bills online?**
- 2. Buying goods or services online?**
- 3. Posting photos, status updates, or other information on social networks?**
- 4. Expressing an opinion on a controversial or political issue on a blog or social network, or in a forum, email or any other venue?**

In Round 1, 13 respondents answered this question. Respondents most often reported not conducting online shopping and financial transactions, because they were concerned about having their financial information stolen. In addition, two respondents had difficulty understanding the phrase “engaging in online activity.” NTIA adopted a CSM recommendation to revise the question stem to use plain language:

During the past year, have concerns about privacy or security stopped [you/anyone in this household] from doing any of these activities online:

In Round 2, 12 respondents answered this question, and appeared to understand the new terms with no difficulty. Like for Round 1, most respondents reported not doing at least one of the activities due to privacy or security concerns, and not doing online shopping and financial transactions were the most prevalent reports. CSM had no further recommendations.

3.5.2 Most Important Online Privacy Concern

Overall, what concerns [you/members of your household] the most when it comes to online privacy and security risks?

Do not read; select all that apply

- 1. Identity theft**
- 2. Credit card or banking fraud**
- 3. Data collection or tracking by online services**
- 4. Data collection or tracking by government**
- 5. Loss of control over personal data such as email or social network profiles**
- 6. Threats to personal safety, such as online harassment, stalking, or cyber-bullying**
- 7. Other: _____**

In Round 1, 13 respondents answered this question. Almost all responses matched the response categories, and identity theft and credit card/banking fraud were the most prevalent reasons for concern. Respondents recounted stories of themselves or people they knew being victims of having accounts opened in their names, or having money stolen from their accounts by a thief. The exception to responses matching response options was when one respondent had no privacy or security concerns, but the question assumes that the respondent has one or more. NTIA adopted a CSM recommendation to add a response option for “no concerns.” NTIA also allowed the interviewer to record multiple responses instead of only recording the respondent’s best answer.

Like in Round 1, responses in Round 2 mostly consisted of identity theft and credit card/banking fraud being the most prevalent reasons for concern. A few respondents reported having no concerns, and the newly added “no concerns” category was able to reflect their response. CSM had no further recommendations.

3.6 Internet Non-use

61. [Have you/Has anyone in this household] ever used the Internet from home?

62. What are the reasons why [you/members of your household] do not use the Internet at

home?

Do not read; select all that apply and/or enter verbatim response if other

1. Don't need it
2. Not interested
3. Can't afford it
4. Not worth the cost
5. Can use it elsewhere
6. Not available in area
7. No computer, or computer inadequate or broken
8. Online privacy or cybersecurity concerns
9. Personal safety concerns
10. Household moved or is in the process of moving
11. Other: _____

63. Of the reasons you just listed for not going online at home, which do you consider to be the most important?

64. Would your household buy home Internet service if it were offered at a lower price?

65. [Have you/Has anyone in this household] ever used the Internet from a location other than home?

66. What are the reasons why [you/members of your household] do not use the Internet outside the home?

67. Of the reasons you just listed for not going online outside the home, which do you consider to be the most important?

The questions in this section were about the reasons why respondents and their households did not use the Internet. No issues were found in this section during testing in Round 1 and Round 2. However, five questions had probes that asked respondents to say more about the answers they gave, to help further understand the topics covered in each question.

The first question regarded reasons for interest non-use at home. Respondents reported various answers, including not having an interest, needing training to use the Internet, not being able to afford it, and privacy concerns. Respondents who were not interested or needed training tended to be older respondents, and those who could not afford it were lower-income respondents. The second question was about the most important reason why the Internet is not used at home, if

multiple reasons were reported. Only four respondents answered this question, and a lack of interest, an inability to afford it, and privacy concerns were the reported reasons.

The third question asked respondents who could not afford the Internet if they would buy home Internet if it were offered at a lower price. Across both rounds, four respondents reported “yes,” and five respondents reported “no” because they were generally not interested in the Internet. Regarding the fourth question about using the Internet outside of home if they do not use the Internet at home, three of six respondents reported use outside of the home. Finally, for a question about reasons why the Internet is not used outside of the home, the stated reasons were privacy concerns and a need to learn how to use the Internet.

3.7 Issues Affecting Multiple Questions

3.7.1 Question Recall Period

In terms of recall period, the intent of the CIUS is to only collect data about current computer and Internet use. Because there is no language in the supplement’s three sets of instructions that specifically explains this intent, whether respondents understand these questions to be about current use remains in question. For example, the following passage is the first of three sets of instructions, and it does not explicitly define current use:

This month we are asking some additional questions about the Internet, computers, mobile phones, tablets, and other connected devices. First, we will ask what types of computers and other devices [you/members of your household] use. We are interested in devices used at any location, whether at home, work, school, a library, or anywhere else.

To address this recall period issue, respondents were probed about how far back in time respondents were thinking about when responding to a question which asks whether a person uses email, and a question which asks whether a person uses a health monitoring device that connects to the Internet. Twelve respondents answered this probe⁶.

In Round 1, respondents’ answers to these probes showed that all but two respondents did not report current use only. Two respondents reported thinking of use within the past six months while the remaining respondents reported thinking back a year or more, with the furthest back in time being 15 years. NTIA adopted a CSM recommendation to give a specific time period that defines current use, and added a definition of “current” use as within the past six months, and use the following wording:

This month we are asking some additional questions about the Internet, computers, mobile phones, tablets, and other connected devices. First, we will ask what types of computers and other devices [you/members of your household] currently use. Please focus on devices

⁶ Two respondents reported not using the Internet, and another respondent was not asked due to interviewer error.

[you/members of your household] currently have access to, and have used at least occasionally *during the past six months*. We are interested in devices used at any location, whether at home, work, school, a library, or anywhere else.

In Round 2, all 12 respondents who answered this probe reported using recall periods within the intended six-month frame. Adding a clear definition appeared to have helped respondents only report use that is considered “current” by NTIA. CSM had no further recommendations.

3.7.2 Difficult Questions and Terms for Special Populations

NTIA was concerned with whether two different populations would have difficulty with the technical terms used in the CIUS: Hispanic respondents, and respondents with little to no Internet access. Some terms may be difficult to translate into Spanish for Hispanic respondents who know little to no English. Respondents with limited Internet access may not know the subtle differences between similar technologies enough to definitively describe their Internet service (e.g., distinguishing DSL from cable modem).

To determine which of the technical terms would be most difficult for these two populations, respondents were shown three questions during debriefing that included many technical terms that described technology. The questions were about the following topics: (a) the Internet plan type used at home, (b) the most important factor regarding home Internet service, and (c) the ways people access Internet at home. Interviewers then asked all respondents whether the terms in these questions would be difficult for respondents with little to no Internet access. In addition, the English-Spanish bilingual respondents (n = 7) were also asked to identify which terms would be difficult to translate into Spanish.

Table 2 shows the frequencies in which terms in the three questions were identified in Round 1 as difficult for translation into Spanish and low-access respondents, respectively. The terms most frequently identified as difficult were “DSL,” “Fiber Optics,” and “Plan bought from a public agency, non-profit, or cooperative that provides Internet service.” Although the respondents in the present study were generally familiar with these terms, previous cognitive interview research has found that some respondents are not familiar with the specific type of technology their households use to access the Internet (Hindsdale, 2009).

Table 2: Terms Identified in Round 1 as Difficult for Spanish Translation and Low-Access Respondents

Term	Spanish Translation (n = 7)	Low-Access Respondents (n = 15)
DSL	5	3
Fiber optics	3	4
Plan bought from a public agency, non-profit, or cooperative that provides Internet service	2	4
Dial-up	3	2
Cable modem	2	3
Satellite	1	4
Data caps	2	2
Broadband	3	2
Internet service provided for an entire apartment building, condominium, campus, or other community and included in housing costs?	0	4
Affordability	1	2
Plan bought from company that provides Internet service	2	1
Mobility	1	1
Publicly-available Internet service provided at no charge?	1	1
Ability to use outside of home	0	1
Reliability of Internet service	0	1
Some other factor	0	1
A plan bought from a company that provides Internet service?	0	1
Some other method of Internet access?	0	1

CSM had two recommendations: (a) Have Spanish language experts suggest alternative English wording that Spanish-English bilingual respondents may better understand terms identified as difficult to translate into Spanish, and (b) consider adding optional definitions for terms identified as difficult for low-access respondents. Written in plain language, these definitions would be read aloud if respondents think they may have that type of service, but are not sure. Instead, to make the different Internet services more understandable, NTIA revised the response categories for the “access Internet at home” question by consolidating the problematic terms “cable,” “DSL,” and “fiber optic service” into one category, and providing optional further explanations:

- (1) Mobile Internet service or a data plan for a cellular phone, smartphone, tablet, laptop, or other device? *(If needed)* This type of Internet service is provided by a wireless carrier, and may be part of a package that also includes voice calls from a cellular phone or smartphone.**
- (2) High-speed Internet service installed at home, such as cable, DSL, or fiber-optic service? *(If needed)* This type of Internet service is often provided by a cable company or phone company.**
- (3) Satellite Internet service?**
- (4) Dial-up service?**
- (5) Some other service?**

In Round 2, respondents were again probed on the same three questions. Table 3 shows the frequencies in which terms were identified in Round 2 as difficult for low-access respondents and for translation into Spanish, respectively. The terms most frequently identified as difficult were “satellite Internet service,” “data limits,” and “connection speed.” Regarding terms that were difficult for Spanish translation, far fewer terms were identified in Round 2 than in Round 1. NTIA adopted a CSM recommendation to replace “connection speed” with the plainer language phrase “Internet service speed,” as well as a CSM recommendation to replace “data limits” with “monthly data limits.”

Table 3: Terms Identified in Round 2 as Difficult for Spanish Translation and Low-Access Respondents

Term	Spanish Translation (n = 7)	Low-Access Respondents (n = 15)
Satellite Internet service	0	6
Data limits	1	5
Connection Speed	0	5
Dial-up service	0	5
High-speed Internet service such as cable, DSL or fiber-optic service	1	4
A plan bought from a public agency, nonprofit, or cooperative that provides Internet service	0	3
Mobile Internet service or data plan for a cellular phone, smartphone, laptop, or other device	0	3
Internet service provided for an entire apartment building, condominium, campus, or other community and included in housing costs	0	2
Publically-available Internet service at no extra charge	0	2
Some other method of Internet access	0	1
A plan bought from a company that provides Internet service	0	1
A plan bought from a agency, nonprofit, or cooperative that provides Internet service	0	1

5. REFERENCES

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APPENDIX A: 2015 CPS Computer and Internet Use Supplement Protocol Round 1

Cognitive Testing of the 2015 CPS Computer and Internet Use Supplement

Round 1 Cognitive Interview Protocol Guide

PARTICIPANT ID #: _____

DATE: ____ / ____ / 2014

COGNITIVE INTERVIEWER NAME:

START TIME: _____ : _____ AM / PM

SECTION I. INTERVIEW CONSENT

(COGNITIVE INTERVIEWER: READ)

PLACE THE CONSENT FORM IN FRONT OF PARTICIPANT

A. Hello, I'm [NAME OF COGNITIVE INTERVIEWER]. I work for the Census Bureau. Thanks for agreeing to help me today.

Before we start, I would like you to read over the document in front of you. This document explains a little bit about this interview and provides information about your rights as a participant. It also asks for your permission to have this session audio recorded. Please ask me any questions you have about this document. Once you have finished reading the document, please sign it.

- PARTICIPANT READS AND SIGNS FORM

B. IF PARTICIPANT PROVIDES CONSENT TO HAVE THE SESSION AUDIO-TAPED: I will now turn on the audio recorder.

TEST AUDIO RECORDER AND TURN IT ON AGAIN AFTER TEST

SECTION II. COGNITIVE INTERVIEW

A. Introduction

(COGNITIVE INTERVIEWER: READ/PARAPHRASE)

“Let me begin by telling you a little more about what we’ll be doing today. The United States Census Bureau counts the population in the U.S and also conducts various kinds of surveys. Today, with your help, we will be testing some new questions that were developed for a national survey called the Current Population Survey. I will first ask you some survey questions and you’ll answer the questions just like you would if you were doing it with an interviewer in a regular survey. We are interested in how you understand these questions and how these questions work for you. I am interested in your answers, but I am also interested in the process you go through in your mind when you answer the questions. So I’d like you to think aloud as you answer the questions, just tell me everything you are thinking about as you go about answering each question. From time to time, I’ll ask you some questions about your answers, or about the questions themselves.

Our goal here is to get a better idea how well the new questions work with people such as yourself before we actually use them in the survey. So the purpose of our session today is to collect your thoughts and opinions on these new questions and materials. I just want to remind you that I’m only asking for your thoughts and opinions on these materials. There is no right or wrong answer. We are simply trying to make sure the question wording is clear and easy for most people to understand. Your feedback will be very useful for helping make sure these questions will make sense to other people.

Your participation in this interview and the review of the materials is very important because it will help the Census Bureau with improving these questions.

Do you have any questions before we begin?”

A. THINK-ALOUD PRACTICE

Let’s begin with a practice question. Remember to try to think aloud as you answer.

Practice Question 1. How many windows are there in the house or apartment where you live? WINDOWS _____

[IF NEEDED:] Try to visualize the place where you live, and think about how many windows there are in that place. As you count up the windows, tell me what you are seeing and thinking about.

PROBES:

- How did you come up with that answer?
- Tell me more about that. Why did you say [ANSWER]?
- I noticed that you hesitated. Tell me what you were thinking.

Okay, let's get started. Please answer the questions as you would if an interviewer had come to your home.

1. NAME **Now I will ask you some questions about the people who live here. What are the names of all persons living or staying here? Start with the name of the person, or one of the persons, who owns or rents this home.**

2. AGE **What is [your/NAME's] age?**

3. REL ***IF NOT RESPONDENT:* How [are/is] [you/NAME] related to [fill name of person on line 1 of the Household Roster]?**

- | | |
|--|---|
| 1. <input type="checkbox"/> Spouse | 7. <input type="checkbox"/> Foster Child |
| 2. <input type="checkbox"/> Unmarried Partner | 8. <input type="checkbox"/> Housemate/Roommate |
| 3. <input type="checkbox"/> Child | 9. <input type="checkbox"/> Roomer/Boarder |
| 4. <input type="checkbox"/> Grandchild | 10. <input type="checkbox"/> Other Non-relative |
| 5. <input type="checkbox"/> Parent | 11. <input type="checkbox"/> Dk |
| 6. <input type="checkbox"/> Other relative (Aunt, Cousin, Nephew, Mother-in-law, etc.) | 12. <input type="checkbox"/> Ref |

4. HISPONA (Are/Is)(Name/You) Spanish, Hispanic or Latino?

- | | |
|---------------|-----------------|
| 1. Yes | } Go to 7. RACE |
| 2. No | |
| 3. Don't Know | |
| 4. Refuse | |

5. HISPONB (Are/Is)(Name/you) Mexican, Mexican American, Chicano, Puerto Rican, Cuban American, or some other Spanish, Hispanic, or Latino Group?

- | | |
|---------------------|-----------------|
| 1. Mexican | } Go to 7. Race |
| 2. Mexican American | |
| 3. Chicano | |
| 4. Puerto Rican | |
| 5. Cuban American | |

6. Some Other > Go to 6. S_OROTSP

6. S_OROTSP What is the name of (your/his/her) other Spanish, Hispanic, or Latino group?

7. RACEA I am going to read you a list of five race categories. Please choose one or more races that (NAME/you) (considers yourself/consider NAME/considers himself/considers herself) to be: White; Black or African American; American Indian or Alaska Native; Asian; OR Native Hawaiian or Other Pacific Islander.

- 1. White
 - 2. Black or African American
 - 3. American Indian or Alaska Native
 - 4. Asian
 - 5. Native Hawaiian or Other Pacific Islander
 - 6. Other – DO NOT READ
- } Go to Q9. Work
> Go to Q8. RACEB

8. RACEB What is your race?

9. WORK (THE WEEK BEFORE LAST/LAST WEEK), did (name/you) do ANY work for (pay/either pay or profit)?

- 1. Yes
- 2. No
- 3. Retired
- 4. Disabled
- 5. Unable to work

Ask Q1 – Q9 for 1st HH member. Record information on Household Roster. Then ask for next HH member. Repeat for every member of HH.

10. CMPINT This month we are asking some additional questions about the Internet, computers, mobile phones, tablets, and other connected devices. First, we will ask what types of computers and other devices [you/members of your household] use. We are interested in devices used at any location, whether at home, work, school, a library, or anywhere else.

11. DESKTP [Do you/Does anyone in this household, including you,] use a desktop computer?

INTERVIEWER NOTE: Read If needed: A desktop is a personal computer that is too large or heavy to be frequently moved from place to place.

(If yes & is multi-person household) Who is that?

1. Yes - If yes, *Enter persons by line number (1-16)*
2. No
3. Don't know
4. Refuse

12. LAPTOP What about a laptop or notebook? [Do you/Does anyone in this household] use a laptop or notebook computer?

(If yes & is multi-person household) Who is that?

1. Yes - If yes, *Enter persons by line number (1-16)*
2. No
3. Don't know
4. Refuse

13. TABLET What about a tablet or e-book reader? *(If needed)* [Do you/Does anyone in this household] use a tablet or e-book reader?

(If yes & is multi-person household) Who is that?

1. Yes - If yes, *Enter persons by line number (1-16)*
2. No
3. Don't know
4. Refuse

Probe – What are the differences between a desktop and a laptop? A desktop and a tablet? A laptop and a tablet?

Do you use any smaller devices with a touch screen that are not smart phones, like an iPod Touch? If yes: Did you think of that device when answering this question? When response is given: Tell me more about that.

14. MPHONE What about a cellular phone or smartphone? (*If needed*) [Do you/Does anyone in this household] use a cellular phone or smartphone?

(*If yes & is multi-person household*) Who is that?

1. Yes - If yes, *Enter persons by line number (1-16)*
2. No
3. Don't know
4. Refuse

15. WEARAB [Do you/Does anyone in this household] use a wearable, Internet-connected device such as a smart watch or glasses? Examples include Google Glass or Pebble.

(*If yes & is multi-person household*) Who is that?

1. Yes - If yes, *Enter persons by line number (1-16)*
2. No
3. Don't know
4. Refuse

Probe: If yes, tell me more about that.

16. TVBOX [Do you/Does anyone in this household] use a smart TV, or a TV-connected device such as a game system or Internet-based video system? Examples include an Xbox, Apple TV, Playstation, Roku, or a Blu-Ray player that can access the Internet.

(*If yes & is multi-person household*) Who is that?

1. Yes - If yes, *Enter persons by line number (1-16)*
2. No
3. Don't know
4. Refuse

Probes: If yes, tell me more about that.

Are you familiar with the Google Chromecast device? If yes: How do you think a person with a Chromecast or similar device should answer this question?

If yes and has a game system: Do you use your [game system] to

connect to the Internet? What do you do on the Internet through your game system?

Interviewer note: Find out if their PlayStation is updated enough to be able to connect to the Internet.

17. INTINT Next, we will ask where members of your household typically use the Internet. People can use the Internet in many places, such as at work, school, or a library. Internet use includes a wide variety of activities, from checking email or browsing the Web to watching videos or using mobile apps. We are interested in all forms of Internet use on all types of devices, including the ones we just discussed.

18. INHOME [Do you/Does anyone in this household, including you,] use the Internet at home?

(If yes & is multi-person household) Who is that?

1. Yes - If yes, *Enter persons by line number (1-16)*
2. No
3. Don't know
4. Refuse

19. INSCHL What about at school? [Do you/Does anyone in this household] use the Internet at school? *(If yes & is multi-person household) Who is that?*

1. Yes - If yes, *Enter persons by line number (1-16)*
2. No
3. Don't know
4. Refuse

If any Q9. WORK [1-16] == 1 (anyone in the household is employed), go to 20. INWORK

Else go to 21. INCAFE

20. INWORK What about at work? (*If needed*) [Do you/Does anyone in this household] use the Internet at work?

(If yes & is multi-person household) Who is that?

1. Yes - If yes, *Enter persons by line number (1-16)*
2. No
3. Don't know
4. Refuse

21. INCAFE What about at a coffee shop or other business that offers Internet access? (*If needed*) [Do you/Does anyone in this household] use the Internet while at a coffee shop or other business that offers Internet access?

(If yes & is multi-person household) Who is that?

1. Yes - If yes, *Enter persons by line number (1-16)*
2. No
3. Don't know
4. Refuse

22. INTRAV What about while traveling between places? (*If needed*) [Do you/Does anyone in this household] use the Internet while traveling between places?

(If yes & is multi-person household) Who is that?

1. Yes - If yes, *Enter persons by line number (1-16)*
2. No
3. Don't know
4. Refuse

Probe: If yes, tell me more about that.

23. INLICO What about at a library, community center, park, or other public place? (*If needed*) [Do you/Does anyone in this household] use the Internet at a library, community center, park, or other public place?

(If yes & is multi-person household) Who is that?

1. Yes - If yes, *Enter persons by line number (1-16)*

2. No
3. Don't know
4. Refuse

Interviewer note: Probe to understand frequency of use at the library, community center, park, etc... (e.g., how often do you access the Internet at each of these places?) Are we getting "typical/frequent" use or just one time use answers?

24. INELHS What about at someone else's home? (*If needed*) [Do you/Does anyone in this household] use the Internet at someone else's house?

(If yes & is multi-person household) Who is that?

1. Yes - If yes, *Enter persons by line number (1-16)*
2. No
3. Don't know
4. Refuse

25. INOTHR [Do you/Does anyone in this household] use the Internet at some other location we haven't covered?

(If yes & is multi-person household) Who is that?

1. Yes - If yes, *Enter persons by line number (1-16)*
2. No
3. Don't know
4. Refuse

Probe: If yes: what location(s)?

Probe – When answering for all those locations, what kind of device were you thinking off? Did you include using your or a HH member's smartphone (if have one)?

If HRNUMHOU > 1 & (total persons where any IN* == 1) < HRNUMHOU (this is a multi-person household and not everyone was reported as using the Internet), go to 26. NETCHKss

Else if any 18. INHOME[1-16] == 1 (anyone goes online at home), go to 28.

HOMSU

Else if any IN*[1-16] == 1 (anyone goes online anywhere), go to 35. USEINT

Else go to 60. NONINT

26. NETCHK Based on your responses, it sounds like (*list names where all IN* != 1, or say “this household” if appropriate*) [does not/do not use the Internet]. Did we miss anyone in your household who uses the Internet for any purpose? (*If additional users*) Where does NAME use the Internet?

Fill appropriate lines if necessary, using INOTHR for responses that do not fit other categories

If any ({11. DESKTP, 12. LAPTOP, 13. TABLET, 14. MPHONE, 15. WEARAB, 16. TVBOX} == 1 & all IN* == 2) (anyone uses some device but not the Internet anywhere), go to 27. CMPCHK

Else If any 18. INHOME[1-16] == 1 (anyone goes online at home), go to 28. HOMSU

Else if any IN*[1-16] == 1 (anyone goes online anywhere), go to 35. USEINT

Else go to 60. NONINT

27. CMPCHK Earlier you mentioned that (*list names where any {DESKTP, LAPTOP, TABLET, MPHONE, WEARAB, TVBOX} == 1 but all IN* == 2*) [uses/use] some type of computing device. Is it correct that NAMES [does/do] not use the Internet?

Correct IN responses if necessary*

If any INHOME[1-16] == 1 (anyone goes online at home), go to 28. HOMSU

Else if any IN*[1-16] == 1 (anyone goes online anywhere), go to 35. USEINT

Else go to 60. NONINT

28. HOMSU You mentioned that [you/someone in this household/some members of this household] use[s] the Internet at home. When going online at home, do [you/members of this household] connect to the Internet using:

Read and select all that apply

- 6. A plan bought from a company that provides Internet service?**
- 7. A plan bought from a public agency, nonprofit, or cooperative that provides Internet service?**
- 8. Internet service provided for an entire apartment building, condominium, campus, or other community and included in housing costs?**
- 9. Publicly-available Internet service provided at no charge?**
- 10. Some other method of Internet access?**

Probe: tell me more about your answer.

29. HOMFAC Which of the following is the most important factor to your household regarding your home Internet service?

Read and select best match

- 8. Connection speed**
- 9. Reliability of Internet service**
- 10. Affordability**
- 11. Customer service or technical support**
- 12. Mobility or ability to use service outside the home**
- 13. Data caps**
- 14. Some other factor**

Probe: What does “data cap” mean to you in this question?

If needed: Tell me more about your answer.

30. HOMTE I am going to read a list of ways that people access the Internet from their homes. Keep in mind that some people connect from home in more than one way. At home, [do you/does anyone in this household] access the Internet using:

Read and select all that apply

If respondent indicates “Wi-Fi,” add: Do you know what kind of Internet service is connected to the Wi-Fi in your household?

1. **Dial-up service?** (Go to 35. USEINT)
2. **DSL service?** (Go to 32. BUNDLE)
3. **Cable modem service?** (Go to 32. BUNDLE)
4. **Fiber-optic service?** (Go to 32. BUNDLE)
5. **Mobile broadband or a data plan for a mobile personal computer?** (Go to 32. BUNDLE)
6. **Satellite service?** (Go to 32. BUNDLE)
7. **Some other service?** (Go to 31. TEOTHR)

Probe – Do you know what each of these answers are? Do you understand the difference? If respondent appears unsure: How sure of your answer are you? Are you guessing?

31. TEOTHR What other service?

Enter verbatim response

32. BUNDLE Do you have Internet as part of a “bundle” through your Internet service provider?

1. Yes (Go to 33. BUNSV)
2. No (Go to 35. USEINT)

33. BUNSV Which services besides Internet are included in the bundle?

Read and select all that apply

- 6. TV channels**
- 7. Home telephone service**
- 8. Mobile phone service**
- 9. Home security or monitoring**
- 10. Some other service**

If BUNSV5 == 1, go to 34. BUOTHR

Else go to 35. USEINT

34. BUOTHR What other service?

Enter verbatim response

35. USEINT *Random age 15+ Internet user in household NAME selected for this series of questions*

We are interested in learning about the applications and services people commonly use with the Internet. *[(If is multi-person household & NAME != primary respondent) We have randomly selected one member of your household for this section.]* Consider how [you personally/NAME] typically use[s] the technologies we've been discussing, whether at home or any other location, and using any connected device.

36. EMAIL [Do you/Does NAME] use email?

1. Yes
2. No
3. Don't know
4. Refuse

37. TEXTIM What about texting or instant messaging? [Do you/Does NAME] use a texting or instant messaging service?

1. Yes
2. No
3. Don't know
4. Refuse

38. SOCIAL What about social networking? (*If needed*) [Do you/Does NAME] use social networks such as Facebook or Twitter?

1. Yes
2. No
3. Don't know
4. Refuse

Probe: If no: Do you use LinkedIn, Instagram, or Twitter? What does "social networking" mean to you in this question? Do you consider LinkedIn, Facebook, Twitter to be social networking?

39. CONFER What about participating in video or voice calls, or video conferencing, over the Internet? (*If needed*) [Do you/Does NAME] participate in video or voice calls, or video conferencing?

1. Yes
2. No
3. Don't know
4. Refuse

40. WEBBRO What about browsing the Web? (*If needed*) [Do you/Does NAME] browse the Web?

1. Yes
2. No
3. Don't know
4. Refuse

41. VIDEOS What about watching videos? [Do you/Does NAME] watch videos over the Internet? Examples include YouTube and Netflix.

1. Yes
2. No
3. Don't know
4. Refuse

Probe: What Internet sites do you use to watch videos? How long are the videos you usually watch on each site?

42. AUDIO What about streaming or downloading music, radio programs, or podcasts? *(If needed)* [Do you/Does NAME] stream or download music, radio programs, or podcasts online?

1. Yes
2. No
3. Don't know
4. Refuse

43. ONTHEG What about on-the-go services such as maps, GPS, or reviews of nearby businesses? *(If needed)* [Do you/Does NAME] use on-the-go services? Examples include Google Maps, Yelp, and Fandango.

1. Yes
2. No
3. Don't know
4. Refuse

Probe: What is Fandango? How do (or would) you use it?

44. TELEWK What about telecommuting or working remotely? *(If needed)* [Do you/Does NAME] use the Internet to telecommute or work remotely?

1. Yes
2. No
3. Don't know
4. Refuse

Probe: tell me more about your answer.

45. JOBSCH What about searching for a job? *(If needed)* [Do you/Does NAME] use the Internet to search for a job?

1. Yes
2. No
3. Don't know
4. Refuse

46. EDTRAI What about online classes or job training? *(If needed)* [Do you/Does NAME] use the Internet for educational classes or job training?

1. Yes
2. No
3. Don't know
4. Refuse

47. FINANC What about financial services such as banking, investing, or paying bills online? *(If needed)* [Do you/Does NAME] use the Internet for financial services such as banking, investing, or paying bills?

1. Yes
2. No
3. Don't know
4. Refuse

48. ECOMME What about online shopping, travel reservations, or other consumer services? *(If needed)* [Do you/Does NAME] use online shopping, travel reservations, or other consumer services?

1. Yes
2. No
3. Don't know
4. Refuse

49. HOMIOT What about interacting with household appliances such as a connected thermostat or refrigerator? *(If needed)* [Do you/Does NAME] use the Internet to interact with household appliances?

1. Yes
2. No
3. Don't know
4. Refuse

Probe: If yes. Tell me more about your answer. Which appliances do you use the Internet to interact with?

Do you have an alarm system? If yes, Is it connected to the Internet? What can it do using its connection to the Internet?

50. MEDINT I'm going to ask a couple of questions about how [you use/NAME uses] the Internet for health-related activities.

51. MEDINF [Do you/Does NAME] research health information online, such as with WebMD or similar services?

1. Yes
2. No
3. Don't know
4. Refuse

52. MEDCOM What about communicating with a doctor or accessing health records or health insurance records online? *(If needed)* [Do you/Does NAME] communicate with a doctor or access health records or health insurance records online?

1. Yes
2. No
3. Don't know
4. Refuse

53. MEDMON [Do you/Does NAME] use a health monitoring service that connects to the Internet?

1. Yes
2. No
3. Don't know
4. Refuse

Probe: If yes, tell me more about your answer.

What is a BodyBugg or FitBit? If you used one, would you say yes to this question?

For the questions I just asked you about use, starting from using email and ending with using health monitoring services, how far back in time did you think about when answering them?

How comfortable were you answering medical questions for a person other than yourself in your household? Is it something you would usually not do? How sure of your answers are you?

For all the questions about the other person – overall, did you have any difficulty answering those questions?

54. UHHINT *(If multi-person household)* Our remaining questions are about your household as a whole. We are interested in learning generally, without identifying specific people, what challenges your household has had while using the Internet. *(If single-person household)* For our remaining questions, we are interested in learning what challenges you have had while using the Internet.

55. PSPRE During the past year, have privacy or security concerns prevented [you/anyone in this household] from engaging in the following online activities:

Read and select all that apply

- a. Conducting financial transactions such as banking, investing, or paying bills online?**
- b. Buying goods or services online?**
- c. Posting photos, status updates, or other information on social networks?**
- d. Expressing an opinion on a controversial or political issue on a blog or social network, or in a forum, email or any other venue?**

Probe: tell me more about your answer.

56. PSCONC Overall, what concerns [you/members of your household] the most when it comes to online privacy and security risks?

Do not read; select best match or enter verbatim response if other

- 8. Identity theft
- 9. Credit card or banking fraud
- 10. Data collection or tracking by online services
- 11. Data collection or tracking by government
- 12. Loss of control over personal data such as email or social network profiles
- 13. Threats to personal safety, such as online harassment, stalking, or cyber-bullying
- 14. Other: _____

Probe: tell me more about your answer.

57. PSCYBA During the past year, [have you/has any member of your household] been affected by an online security breach, identity theft, or a similar crime?

1. Yes
2. No
3. Don't know
4. Refuse

Probe: If yes, tell me more about your answer.

If no: Are you familiar with the Target or University of Maryland data incidents? If yes: How would you answer if you were affected?

58. CBULLY During the past year, [have you/has any member of your household] experienced online harassment, stalking, or cyber-bullying?

1. Yes
2. No
3. Don't know
4. Refuse

Probe: tell me more about your answer.

If any INHOME[1-16] == 1 (anyone goes online at home), end interview

Else go to 59. NHMINT

59. NHMINT You previously mentioned that [you/members of your household] use the Internet in some places, but not at home.

Go to 61. EVRHOM

60. NONINT *(If multi-person household)* Our remaining questions are about your household as a whole. We are interested in learning why households such as yours do not use the Internet.

(If single-person household) For our remaining questions, we are interested in learning why households such as yours do not use the Internet.

61. EVRHOM [Have you/Has anyone in this household] ever used the Internet from home?

1. Yes
2. No
3. Don't know
4. Refuse

62. NOHM What are the reasons why [you/members of your household] do not use the Internet at home?

Do not read; select all that apply and/or enter verbatim response if other

12. Don't need it
13. Not interested
14. Can't afford it
15. Not worth the cost
16. Can use it elsewhere
17. Not available in area
18. No computer, or computer inadequate or broken
19. Online privacy or cybersecurity concerns
20. Personal safety concerns
21. Household moved or is in the process of moving
22. Other: _____

Probe: tell me more about your answer.

**If more than one NOHM response given, go to 63. PRINOH
Else go to 64. PSENSI**

63. PRINOH Of the reasons you just listed for not going online at home, which do you consider to be the most important?

Read previous responses if needed; select best match and/or enter verbatim response if other

1. Don't need it
2. Not interested
3. Can't afford it
4. Not worth the cost
5. Can use it elsewhere
6. Not available in area
7. No computer, or computer inadequate or broken
8. Online privacy or cybersecurity concerns
9. Personal safety concerns
10. Household moved or is in the process of moving
11. Other: _____

Probe: tell me more about your answer.

64. PSENSI Would your household buy home Internet service if it were offered at a lower price?

1. Yes
2. No

Probe: tell me more about your answer.

If any IN*[1-16] == 1 (anyone goes online anywhere), end Interview

Else go to 65. EVROUT

65. EVROUT [Have you/Has anyone in this household] ever used the Internet from a location other than home?

1. Yes
2. No

Probe: tell me more about your answer.

66. NOOUT What are the reasons why [you/members of your household] do not use the Internet outside the home?

Do not read; select all that apply and/or enter verbatim response if other

1. Don't need it
2. Not interested
3. Can't afford it
4. Not worth the cost
5. Nowhere to go that has it
6. No computer, or computer inadequate or broken
7. No mobile device, or mobile device inadequate or broken
8. Online privacy or cybersecurity concerns
9. Personal safety concerns
10. Other: _____

Probe: tell me more about your answer.

If more than one NOOUT response given, go to 62. PRINOO
Else end interview

67. PRINOO Of the reasons you just listed for not going online outside the home, which do you consider to be the most important?

Read previous responses if needed; select best match and/or enter verbatim response if other

1. Don't need it
2. Not interested
3. Can't afford it
4. Not worth the cost
5. Nowhere to go that has it
6. No computer, or computer inadequate or broken
7. No mobile device, or mobile device inadequate or broken
8. Online privacy or cybersecurity concerns
9. Personal safety concerns
10. Other: _____

Probe: tell me more about your answer.

SECTION III. DEBRIEFING QUESTIONS

AFTER THE INTERVIEW:

Now, I am going to ask you some questions about your answers and about the questions themselves. I am really interested in how these questions work for you, so there are no right or wrong answers.

- Overall, what did you think of this interview? Was it easy or difficult?
- Have you ever answered survey questions about your computer and Internet use in the past? If yes, what was the survey? What was the experience like for you?
- *Show respondents questions 28. HOMSU, 29. HOMFAC, 30. HOMTE and 31. TEOTHR*
 - Imagine that you are someone in your family or household who does not use the Internet frequently, such as an older parent or grandparent or someone who lacks access because of low-income or unemployment. Do you think there are terms or phrases in these questions that might be difficult for someone with less Internet experience to understand?
 - For bilingual respondents: Are there terms or phrases that would be particularly difficult to translate into Spanish for someone who does not use the Internet often?

Just a few final questions to wrap up –

- Overall, do you think some people might find these questions sensitive?
- Do you have anything else you would like to tell us that you haven't had a chance to mention yet?

I want to thank you very much for your participation. I will now give you \$40 and I will ask you to sign a receipt form verifying that you received the money.

TURN OFF THE RECORDER. HAND THE CASH INCENTIVE TO THE PARTICIPANT.

APPENDIX B: 2015 CPS Computer and Internet Use Supplement Protocol Round 2

**Cognitive Testing of the 2015 CPS Computer and Internet Use Supplement
Round 2
Cognitive Interview Protocol Guide**

PARTICIPANT ID #: _____

DATE: ____ / ____ / 2014

COGNITIVE INTERVIEWER NAME:

START TIME: _____: _____ AM / PM

SECTION I. INTERVIEW CONSENT

(COGNITIVE INTERVIEWER: READ)

PLACE THE CONSENT FORM IN FRONT OF PARTICIPANT

A. Hello, I'm [NAME OF COGNITIVE INTERVIEWER]. I work for the Census Bureau. Thanks for agreeing to help me today.

Before we start, I would like you to read over the document in front of you. This document explains a little bit about this interview and provides information about your rights as a participant. It also asks for your permission to have this session audio recorded. Please ask me any questions you have about this document. Once you have finished reading the document, please sign it.

- PARTICIPANT READS AND SIGNS FORM

B. IF PARTICIPANT PROVIDES CONSENT TO HAVE THE SESSION AUDIO-TAPED: I will now turn on the audio recorder.

TEST AUDIO RECORDER AND TURN IT ON AGAIN AFTER TEST

SECTION II. COGNITIVE INTERVIEW

A. Introduction

(COGNITIVE INTERVIEWER: READ/PARAPHRASE)

“Let me begin by telling you a little more about what we’ll be doing today. The United States Census Bureau counts the population in the U.S and also conducts various kinds of surveys.

Today, with your help, we will be testing some new questions that were developed for a national survey called the Current Population Survey. I will first ask you some survey questions and you’ll answer the questions just like you would if you were doing it with an interviewer in a regular survey. We are interested in how you understand these questions and how these questions work for you. I am interested in your answers, but I am also interested in the process you go through in your mind when you answer the questions. So I’d like you to think aloud as you answer the questions, just tell me everything you are thinking about as you go about answering each question. From time to time, I’ll ask you some questions about your answers, or about the questions themselves.

Our goal here is to get a better idea about how well the new questions work with people such as yourself before we actually use them in the survey. So the purpose of our session today is to collect your thoughts and opinions on these new questions and materials. I just want to remind you that I’m only asking for your thoughts and opinions on these materials. There is no right or wrong answer. We are simply trying to make sure the question wording is clear and easy for most people to understand. Your feedback will be very useful for helping make sure these questions make sense to other people.

Your participation in this interview and the review of the materials is very important because it will help the Census Bureau improve these questions.

Do you have any questions before we begin?”

B. THINK-ALoud PRACTICE

Let’s begin with a practice question. Remember to try to think aloud as you answer.

Practice Question 1. How many windows are there in the house or apartment where you live? WINDOWS _____

[IF NEEDED:] Try to visualize the place where you live, and think about how many windows there are in that place. As you count up the windows, tell me what you are seeing and thinking about.

PROBES:

- How did you come up with that answer?
- Tell me more about that. Why did you say [ANSWER]?
- I noticed that you hesitated. Tell me what you were thinking.

Okay, let's get started. Please answer the questions as you would if an interviewer had come to your home.

1. NAME Now I will ask you some questions about the people who live here. What are the names of all persons living or staying here? Start with the name of the person, or one of the persons, who owns or rents this home.

2. AGE What is [your/NAME's] age?

3. REL *IF NOT RESPONDENT:* How [are/is] [you/NAME] related to [fill name of person on line 1 of the Household Roster]?

- | | |
|---|---|
| 7. <input type="checkbox"/> Spouse | 7. <input type="checkbox"/> Foster Child |
| 8. <input type="checkbox"/> Unmarried Partner | 8. <input type="checkbox"/> Housemate/Roommate |
| 9. <input type="checkbox"/> Child | 9. <input type="checkbox"/> Roomer/Boarder |
| 10. <input type="checkbox"/> Grandchild | 10. <input type="checkbox"/> Other Non-relative |
| 11. <input type="checkbox"/> Parent | 11. <input type="checkbox"/> Dk |
| 12. <input type="checkbox"/> Other relative (Aunt, Cousin, Nephew, Mother-in-law, etc.) | 12. <input type="checkbox"/> Ref |

4. HISPONA (Are/Is)(Name/You) Spanish, Hispanic or Latino?

- 5. Yes
 - 6. No
 - 7. Don't Know
 - 8. Refuse
- } Go to 7. RACE

5. HISPONB (Are/Is)(Name/you) Mexican, Mexican American, Chicano, Puerto Rican, Cuban American, or some other Spanish, Hispanic, or Latino Group?

- 1. Mexican
 - 2. Mexican American
 - 3. Chicano
 - 4. Puerto Rican
 - 5. Cuban American
 - 6. Some Other
- } Go to 7. Race
- > Go to 6. S_OROTSP

6. S_OROTSP What is the name of (your/his/her) other Spanish, Hispanic, or Latino

group?

7. RACEA I am going to read you a list of five race categories. Please choose one or more races that (NAME/you) (considers yourself/consider NAME/considers himself/considers herself) to be: White; Black or African American; American Indian or Alaska Native; Asian; OR Native Hawaiian or Other Pacific Islander.

- 1. White
 - 2. Black or African American
 - 3. American Indian or Alaska Native
 - 4. Asian
 - 5. Native Hawaiian or Other Pacific Islander
 - 6. Other – DO NOT READ
- } Go to Q9. Work
> Go to Q8. RACEB

8. RACEB What is your race?

9. WORK (THE WEEK BEFORE LAST/LAST WEEK), did (name/you) do ANY work for (pay/either pay or profit)?

- 1. Yes
- 2. No
- 3. Retired
- 4. Disabled
- 5. Unable to work

Ask Q1 – Q9 for 1st HH member. Record information on Household Roster. Then ask for next HH member. Repeat for every member of HH.

10. CMPINT This month we are asking some additional questions about the Internet, computers, mobile phones, tablets, and other connected devices. First, we will ask what types of computers and other devices [you/members of your household] currently use. Please focus on devices [you/members of your household] currently have access to, and have used at least occasionally during the past six months. We are interested in devices used at any location, whether at home, work, school, a library, or anywhere else.

11. DESKTP [Do you/Does anyone in this household, including you,] use a desktop computer? *(If needed)* A desktop is a personal computer that is too large or heavy to be frequently moved from place to place. *(If yes & is multi-person household)* Who is that?

(If yes & is multi-person household) Who is that?

1. Yes - If yes, *Enter persons by line number (1-16)*
2. No
3. Don't know
4. Refuse

12. LAPTOP What about a laptop or notebook? [Do you/Does anyone in this household] use a laptop or notebook computer? *(If yes & is multi-person household)* Who is that?

(If yes & is multi-person household) Who is that?

1. Yes - If yes, *Enter persons by line number (1-16)*
2. No
3. Don't know
4. Refuse

13. TABLET What about a tablet or e-book reader? *(If needed)* [Do you/Does anyone in this household] use a tablet or e-book reader? *(If yes & is multi-person household)* Who is that?

(If yes & is multi-person household) Who is that?

1. Yes - If yes, *Enter persons by line number (1-16)*
2. No
3. Don't know
4. Refuse

Probe – Earlier we asked you about notebook computers. What did “notebook computer” mean to you in that question?

Are there any differences to you between a notebook and a laptop? A notebook and a tablet? A tablet and an e-book reader?

Do you use any smaller devices with a touch screen that are not smart phones, like an iPod Touch? If yes: Did you think of that device when answering this question? When response is given: Tell me more about that.

14. MPHONE What about a cellular phone or smartphone? *(If needed)* [Do you/Does anyone in this household] use a cellular phone or smartphone? *(If yes & is multi-person household)* Who is that?

(If yes & is multi-person household) Who is that?

1. Yes - If yes, *Enter persons by line number (1-16)*
2. No
3. Don't know
4. Refuse

15. WEARAB [Do you/Does anyone in this household] use a wearable, Internet-connected device such as a smart watch or glasses? Examples include an Apple Watch, Microsoft Band, or Google Glass. *(If yes & is multi-person household)* Who is that?

(If yes & is multi-person household) Who is that?

1. Yes - If yes, *Enter persons by line number (1-16)*
2. No
3. Don't know
4. Refuse

Probe – If yes, tell me more about that.

16. TVBOX [Do you/Does anyone in this household] use a smart TV, or a TV-connected device such as a game system or Internet-based video system? Examples include an Xbox, Apple TV, Playstation, Roku, or a Blu-Ray player that can access the Internet. *(If yes & is multi-person household)* Who is that?

(If yes & is multi-person household) Who is that?

1. Yes - If yes, *Enter persons by line number (1-16)*
2. No
3. Don't know
4. Refuse

Probes: If yes, tell me more about that.

Are you familiar with the Google Chromecast device? If yes: How do you think a person with a Chromecast or similar device should answer this question?

If yes and has a game system: Do you use your [game system] to connect to the Internet? What do you do on the Internet through your game system?

Interviewer note: Find out if their PlayStation is updated enough to be able to connect to the Internet.

17. INTINT Next, we will ask where members of your household currently use the Internet. Please focus on places where [you/members of your household] have used the Internet at least occasionally during the past six months. People can use the Internet in many places, such as at work, school, or a library. Internet use includes a wide variety of activities, from checking email or browsing the Web to watching videos or using mobile apps. We are interested in all forms of Internet use on all types of devices, including the ones we just discussed.

18. INHOME [Do you/Does anyone in this household, including you,] use the Internet at home? (*If yes & is multi-person household*) Who is that?

(If yes & is multi-person household) Who is that?

1. Yes - If yes, *Enter persons by line number (1-16)*
2. No
3. Don't know
4. Refuse

If any PEMLR[1-16] == 1 or 2 (anyone in the household is employed), go to INWORK

Else go to INSCHL

19. INWORK What about at work? [Do you/Does anyone in this household] use the Internet at work? *(If yes & is multi-person household)* Who is that?

(If yes & is multi-person household) Who is that?

1. Yes - If yes, *Enter persons by line number (1-16)*
2. No
3. Don't know
4. Refuse

20. INSCHL What about at school? [Do you/Does anyone in this household] use the Internet at school? Please count students only, and do not include online classes. *(If yes & is multi-person household)* Who is that?

(If yes & is multi-person household) Who is that?

1. Yes - If yes, *Enter persons by line number (1-16)*
2. No
3. Don't know
4. Refuse

21. INCAFE What about at a coffee shop or other business that offers Internet access? *(If needed)* [Do you/Does anyone in this household] use the Internet while at a coffee shop or other business that offers Internet access? *(If yes & is multi-person household)* Who is that?

(If yes & is multi-person household) Who is that?

1. Yes - If yes, *Enter persons by line number (1-16)*
2. No
3. Don't know
4. Refuse

22. INTRAV What about while traveling between places? (*If needed*) [Do you/Does anyone in this household] use the Internet while traveling between places? (*If yes & is multi-person household*) Who is that?

(*If yes & is multi-person household*) Who is that?

1. Yes - If yes, *Enter persons by line number (1-16)*
2. No
3. Don't know
4. Refuse

Probe: If yes, tell me more about that.

23. INLICO What about at a library, community center, park, or other public place? (*If needed*) [Do you/Does anyone in this household] use the Internet at a library, community center, park, or other public place? (*If yes & is multi-person household*) Who is that?

(*If yes & is multi-person household*) Who is that?

1. Yes - If yes, *Enter persons by line number (1-16)*
2. No
3. Don't know
4. Refuse

Interviewer note: Probe to understand frequency of use at the library, community center, park, etc... (e.g., how often do you access the Internet at each of these places?) Are we getting "typical/frequent" use or just one time use answers?

24. INELHS What about at someone else's home? (*If needed*) [Do you/Does anyone in this household] use the Internet at someone else's house? (*If yes & is multi-person household*) Who is that?

(*If yes & is multi-person household*) Who is that?

1. Yes - If yes, *Enter persons by line number (1-16)*
2. No
3. Don't know
4. Refuse

25. INOTHR [Do you/Does anyone in this household] use the Internet at some other location we haven't covered? (*If yes & is multi-person household*) Who is that?

(If yes & is multi-person household) Who is that?

1. Yes - If yes, *Enter persons by line number (1-16)*
2. No
3. Don't know
4. Refuse

Probe: If yes: what location(s)?

Probe – When answering for all those locations, what kind of device were you thinking off? Did you include using your or a HH member's smartphone (if have one)?

If HRNUMHOU > 1 & (total persons where any IN* == 1) < HRNUMHOU (this is a multi-person household and not everyone was reported as using the Internet), go to NETCHK

Else if any INHOME[1-16] == 1 (anyone goes online at home), go to HOMSU

Else if any IN*[1-16] == 1 (anyone goes online anywhere), go to OUTMOB

Else go to NONINT

26. NETCHK Based on your responses, it sounds like (*list names where all IN* != 1, or say "this household" if appropriate*) [does not/do not use the Internet]. Did we miss anyone in your household who uses the Internet for any purpose? (*If additional users*) Where does NAME use the Internet?

Fill appropriate lines if necessary, using INOTHR for responses that do not fit other categories

If any ({DESKTP, LAPTOP, TABLET, MPHONE, WEARAB, TVBOX} == 1 & all IN* == 2) (anyone uses some device but not the Internet anywhere), go to **CMPCHK**

Else If any INHOME[1-16] == 1 (anyone goes online at home), go to HOMSU

Else if any IN*[1-16] == 1 (anyone goes online anywhere), go to OUTMOB
Else go to NONINT

27. CMPCHK Earlier you mentioned that (*list names where any {DESKTP, LAPTOP, TABLET, MPHONE, WEARAB, TVBOX} == 1 but all IN* == 2*) [uses/use] some type of computing device. Is it correct that NAMES [does/do] not use the Internet?

Correct IN responses if necessary*

If any INHOME[1-16] == 1 (anyone goes online at home), go to HOMSU
Else if any IN*[1-16] == 1 (anyone goes online anywhere), go to OUTMOB
Else go to NONINT

28. HOMSU You mentioned that [you/someone in this household/some members of this household] use[s] the Internet at home. When going online at home, do [you/members of this household] connect to the Internet using:

Read and select all that apply

- 1. A plan bought from a company that provides Internet service?**
- 2. A plan bought from a public agency, nonprofit, or cooperative that provides Internet service?**
- 3. Internet service provided for an entire apartment building, condominium, campus, or other community and included in housing costs?**
- 4. Publicly-available Internet service provided at no charge?**
- 5. Some other method of Internet access?**

Probe: tell me more about your answer.

29. HOMFAC Which of the following is the most important factor to your household regarding your home Internet service?

Read and select best match

- 1. Connection speed**
- 2. Reliability of Internet service**
- 3. Affordability**
- 4. Customer service or technical support**
- 5. Mobility or ability to use service outside the home**
- 6. Data limits**

7. Some other factor

Probe: What does “data limits” mean to you in this question?

If needed: Tell me more about your answer.

30. HOMTE I am going to read a list of ways that people access the Internet from their homes. Keep in mind that some people connect from home in more than one way. At home, [do you/does anyone in this household] access the Internet using:

Read and select all that apply

If respondent indicates “Wi-Fi,” add: Do you know what kind of Internet service is connected to the Wi-Fi in your household?

1. Mobile Internet service or a data plan for a cellular phone, smartphone, tablet, laptop, or other device? *(If needed)* This type of Internet service is provided by a wireless carrier, and may be part of a package that also includes voice calls from a cellular phone or smartphone. **(Go to BUNDLE)**
2. High-speed Internet service installed at home, such as cable, DSL, or fiber-optic service? *(If needed)* This type of Internet service is often provided by a cable company or phone company. **(Go to BUNDLE)**
3. Satellite Internet service? **(Go to BUNDLE)**
4. Dial-up service? **(Go to USEINT)**
5. Some other service? **(Go to TEOTHR)**

Probe – Do you know what each of these answers are? Do you understand the difference?

If respondent appears unsure: How sure of your answer are you? Are you guessing?

31. TEOTHR What other service?

Enter verbatim response

32. BUNDLE Do you have Internet as part of a “bundle” through your Internet service provider?

1. Yes (Go to **BUNSV**)
2. No (Go to **OUTMOB**)

33. BUNSV Which services besides Internet are included in the bundle?

Read and select all that apply

1. **TV channels**
2. **Home telephone service**
3. **Mobile phone service**
4. **Home security or monitoring**
5. **Some other service**

If BUNSV == 5, go to BUOTHR

Else go to OUTMOB

34. BUOTHR What other service?

Enter verbatim response

35. OUTMOB This question is about how [you/members of this household] use the Internet outside the home. While away from home, [do you/does anyone in this household] access the Internet using a mobile Internet service or a data plan for a cellular phone, smartphone, tablet, laptop, or other device?

(If needed) This type of Internet service is provided by a wireless carrier, and may be part of a package that also includes voice calls from a cellular phone or smartphone.

1. Yes
2. No
3. Don't know
4. Refuse

36. USEINT *Random age 15+ Internet user in household (any IN*[1-16] == 1 & PRTAGE >= 15) NAME selected for this series of questions. If all Internet users are under 15 years old, skip to UHHINT.*

We are interested in learning about the applications and services people commonly use with the Internet. [(If is multi-person household & NAME != primary respondent) We have randomly selected one member of your household for this section.] Consider how [you personally/NAME] currently use[s] the technologies we've been discussing, whether at home or any other location, and using any connected device. Please focus on activities [you have/NAME has] done online at least occasionally during the past six months.

37. EMAIL [Do you/Does NAME] use email?

1. Yes
2. No
3. Don't know
4. Refuse

38. TEXTIM What about texting or instant messaging? [Do you/Does NAME] use a texting or instant messaging service?

1. Yes
2. No
3. Don't know
4. Refuse

39. SOCIAL What about social networking? (*If needed*) [Do you/Does NAME] use social networks such as Facebook or Twitter?

1. Yes
2. No
3. Don't know
4. Refuse

Probe: If no: Do you use LinkedIn, Instagram, or Twitter? What does "social networking" mean to you in this question? Do you consider LinkedIn, Facebook, Twitter to be social networking?

40. CONFER What about participating in video or voice calls, or video conferencing, over the Internet? (*If needed*) [Do you/Does NAME] participate in video or voice calls, or video conferencing?

1. Yes
2. No
3. Don't know
4. Refuse

41. WEBBRO What about browsing the Web? (*If needed*) [Do you/Does NAME] browse the Web?

1. Yes
2. No
3. Don't know
4. Refuse

42. VIDEOS What about watching videos? [Do you/Does NAME] watch videos over the Internet? Examples include YouTube and Netflix.

1. Yes
2. No
3. Don't know
4. Refuse

Probe: What Internet sites do you use to watch videos? How long are the videos you usually watch on each site?

43. AUDIO What about streaming or downloading music, radio programs, or podcasts? (*If needed*) [Do you/Does NAME] stream or download music, radio programs, or podcasts online?

1. Yes
2. No
3. Don't know
4. Refuse

44. ONTHEGO What about on-the-go services such as maps, GPS, or reviews of nearby businesses? (*If needed*) [Do you/Does NAME] use on-the-go services? Examples include Google Maps, Yelp, and Fandango.

1. Yes
2. No
3. Don't know
4. Refuse

Probe: What is Fandango? How do (or would) you use it?

45. TELEWK What about telecommuting, or working while away from your usual workplace? (*If needed*) [Do you/Does NAME] use the Internet to telecommute or work while away from your usual workplace?

1. Yes
2. No
3. Don't know
4. Refuse

Probe: tell me more about your answer.

46. JOBSCH What about searching for a job? (*If needed*) [Do you/Does NAME] use the Internet to search for a job?

1. Yes
2. No
3. Don't know
4. Refuse

47. EDTRAI What about online classes or job training? *(If needed)* [Do you/Does NAME] use the Internet for educational classes or job training?

1. Yes
2. No
3. Don't know
4. Refuse

48. FINANC What about financial services such as banking, investing, or paying bills online? *(If needed)* [Do you/Does NAME] use the Internet for financial services such as banking, investing, or paying bills?

1. Yes
2. No
3. Don't know
4. Refuse

49. ECOMME What about online shopping, travel reservations, or other consumer services? *(If needed)* [Do you/Does NAME] use online shopping, travel reservations, or other consumer services?

1. Yes
2. No
3. Don't know
4. Refuse

50. HOMIOT What about interacting with household appliances such as a connected thermostat or refrigerator? *(If needed)* [Do you/Does NAME] use the Internet to interact with household appliances?

1. Yes
2. No
3. Don't know
4. Refuse

Probe: If yes. Tell me more about your answer. Which appliances do you use the Internet to interact with?

Do you have an alarm system? If yes, Is it connected to the Internet? What can it do using its connection to the Internet?

51. MEDINT I'm going to ask a couple of questions about how [you use/NAME uses] the Internet for health-related activities.

52. MEDINF [Do you/Does NAME] research health information online, such as with WebMD or similar services?

1. Yes
2. No
3. Don't know
4. Refuse

53. MEDCOM What about communicating with a doctor or accessing health records or health insurance records online? (*If needed*) [Do you/Does NAME] communicate with a doctor or access health records or health insurance records online?

1. Yes
2. No
3. Don't know
4. Refuse

54. MEDMON [Do you/Does NAME] use a health monitoring service that connects to the Internet?

1. Yes
2. No
3. Don't know
4. Refuse

Probe: If yes, tell me more about your answer.

What is a BodyBugg or FitBit? If you used one, would you say yes to this question?

For the questions I just asked you about use, starting from using email and ending with using health monitoring services, were there any questions that where you reported "yes," but it was longer ago than the past than six months?

We also asked you to think about access and use that happened occasionally within the past six months. What did the word “occasionally” mean to you in the instructions?

How comfortable were you answering medical questions for a person other than yourself in your household? Is it something you would usually not do? How sure of your answers are you?

For all the questions about the other person – overall, did you have any difficulty answering those questions?

55. UHHINT *(If multi-person household)* Our remaining questions are about your household as a whole. We are interested in learning generally, without identifying specific people, what challenges your household has had while using the Internet. *(If single-person household)* For our remaining questions, we are interested in learning what challenges you have had while using the Internet.

56. PSPRE During the past year, have concerns about privacy or security stopped [you/anyone in this household] from doing any of these activities online:

Read and select all that apply

- 1. Conducting financial transactions such as banking, investing, or paying bills online?**
- 2. Buying goods or services online?**
- 3. Posting photos, status updates, or other information on social networks?**
- 4. Expressing an opinion on a controversial or political issue on a blog or social network, or in a forum, email or any other venue?**

Probe: tell me more about your answer.

57. PSCON Overall, what concerns [you/members of your household] the most when it comes to online privacy and security risks?

Do not read; select all that apply and/or enter verbatim response if “Other.”

1. Identity theft
2. Credit card or banking fraud
3. Data collection or tracking by online services
4. Data collection or tracking by government
5. Loss of control over personal data such as email or social network profiles
6. Threats to personal safety, such as online harassment, stalking, or cyber-bullying
7. No concerns
8. Other: _____

Probe: tell me more about your answer.

58. PSCYBA During the past year, [have you/has any member of your household] been affected by an online security breach, identity theft, or a similar crime?

1. Yes
2. No
3. Don't know
4. Refuse

Probe: If yes, tell me more about your answer.

If no: Are you familiar with the Target, Home Depot, or University of Maryland data incidents? If yes: How would you answer if you were affected?

59. CBULLY During the past year, [have you/has any member of your household] experienced online harassment, stalking, or cyber-bullying?

1. Yes
2. No
3. Don't know
4. Refuse

Probe: tell me more about your answer.

If any INHOME[1-16] == 1 (anyone goes online at home), end interview

Else go to NHMINT

60. NHMINT You previously mentioned that [you/members of your household] use the Internet in some places, but not at home.

Go to EVRHOM

61. NONINT *(If multi-person household)* Our remaining questions are about your household as a whole. We are interested in learning why households such as yours do not use the Internet.

(If single-person household) For our remaining questions, we are interested in learning why households such as yours do not use the Internet.

62. EVRHOM [Have you/Has anyone in this household] ever used the Internet from home?

1. Yes
2. No
3. Don't know
4. Refuse

63. NOHM What are the reasons why [you/members of your household] do not use the Internet at home?

Do not read; select all that apply and/or enter verbatim response if other

1. Don't need it
2. Not interested
3. Can't afford it
4. Not worth the cost
5. Can use it elsewhere
6. Not available in area
7. No computer, or computer inadequate or broken
8. Online privacy or cybersecurity concerns
9. Personal safety concerns
10. Household moved or is in the process of moving
11. Other: _____

Probe: tell me more about your answer.

If more than one NOHM response given, go to PRINOH

Else go to PSENSI

64. PRINOH Of the reasons you just listed for not going online at home, which do you consider to be the most important?

Read previous responses if needed; select best match and/or enter verbatim response if other

1. Don't need it
2. Not interested
3. Can't afford it
4. Not worth the cost
5. Can use it elsewhere
6. Not available in area
7. No computer, or computer inadequate or broken
8. Online privacy or cybersecurity concerns
9. Personal safety concerns
10. Household moved or is in the process of moving
11. Other: _____

Probe: tell me more about your answer.

65. PSENSI Would your household buy home Internet service if it were offered at a lower price?

1. Yes
2. No

Probe: tell me more about your answer.

If any IN*[1-16] == 1 (anyone goes online anywhere), end interview

Else go to EVROUT

66. EVROUT [Have you/Has anyone in this household] ever used the Internet from a location other than home?

1. Yes
2. No

Probe: tell me more about your answer

67. NOOU What are the reasons why [you/members of your household] do not use the Internet outside the home?

Do not read; select all that apply and/or enter verbatim response if other

- (1) Don't need it
- (2) Not interested
- (3) Can't afford it
- (4) Not worth the cost
- (5) Nowhere to go that has it
- (6) No computer, or computer inadequate or broken
- (7) No mobile device, or mobile device inadequate or broken
- (8) Online privacy or cybersecurity concerns
- (9) Personal safety concerns
- (10) Other: _____

Probe: tell me more about your answer.

**If more than one NOOUT response given, go to PRINOO
Else end interview**

68. PRINOO Of the reasons you just listed for not going online outside the home, which do you consider to be the most important? *Read previous responses if needed; select best match and/or enter verbatim response if other*

- (1) Don't need it
- (2) Not interested
- (3) Can't afford it
- (4) Not worth the cost
- (5) Nowhere to go that has it
- (6) No computer, or computer inadequate or broken
- (7) No mobile device, or mobile device inadequate or broken
- (8) Online privacy or cybersecurity concerns
- (9) Personal safety concerns
- (10) Other: _____

Probe: tell me more about your answer.

SECTION III. DEBRIEFING QUESTIONS

AFTER THE INTERVIEW:

Now, I am going to ask you some questions about your answers and about the questions themselves. I am really interested in how these questions work for you, so there are no right or wrong answers.

- Overall, what did you think of this interview? Was it easy or difficult?
- Have you ever answered survey questions about your computer and Internet use in the past? If yes, what was the survey? What was the experience like for you?
- *Show respondents questions 28. HOMSU, 29. HOMFAC, 30. HOMTE and 31. TEOTHR*
 - Imagine that you are someone in your family or household who does not use the Internet a lot, such as an older parent or grandparent or someone who lacks access because of low-income or unemployment. Do you think there are words or phrases in these questions that might be hard to understand for someone with less Internet experience?
 - For bilingual respondents: Are there words or phrases that would be hard to translate into Spanish for someone who does not use the Internet a lot?

Just a few final questions to wrap up –

- Overall, do you think some people might find these questions sensitive?
- Do you have anything else you would like to tell us that you haven't had a chance to mention yet?

I want to thank you very much for your participation. I will now give you \$40 and I will ask you to sign a receipt form verifying that you received the money.

TURN OFF THE RECORDER. HAND THE CASH INCENTIVE TO THE PARTICIPANT.