Summary of Comments Received – 77 FR 20367 (June 25, 2012)

1. Cassandra Kirsch, National Conference of State Legislatures

Ms. Kirsch expresses concern that most Internet users are unable to specify the technologies they use to go online, such as cable or DSL. She speculates that most respondents will simply guess the answers to any detailed questions about the Internet services they use, and that the results will therefore be unreliable. As an alternative, Ms. Kirsch proposes "to look regionally at the availability of Internet providers and services, combined with an analysis of their rates and the local GDP." Such a study would necessarily take place outside the scope of the Current Population Survey (CPS).

NTIA and the Census Bureau have worked to produce clear questions that elicit accurate responses since producing the very first Computer and Internet Use Supplement in 1994. We take the efficacy of our survey instruments very seriously, and are fortunate to be able to rely on the Census Bureau's two centuries of experience in survey design. The first Supplement to inquire about Internet connection technologies was part of the August 2000 CPS,[1] and the connection type question proposed for October 2012 was first asked in very similar form in October 2010.[2] Over the years, the Census Bureau has routinely subjected proposed survey instruments to rigorous analysis, including review by survey design experts and cognitive testing of proposed questions. NTIA appreciates Ms. Kirsch's concern and has previously contemplated the possibility of problems with asking about specific technology types. We are pleased to report that Census Bureau testing has not identified the question as problematic.

More generally, Ms. Kirsch's alternative solution would answer a different set of questions than we intend with the proposed information collection. The Computer and Internet Use Supplement studies the use of high-speed Internet in the United States, including who goes online, where and how they do so, and the applications and purposes for which Americans use the Internet. While availability, speed, and price of an Internet connection are clearly prominent factors in determining an individual's usage habits, they are not the sole indicators of adoption. Previous NTIA reports have utilized CPS data to demonstrate the importance of income, education, age, the presence of school-aged children in the household, and other factors in predicting Internet use.[3] NTIA considers the Supplement to be one of several vital datasets in shaping public policy; another is our National Broadband Map, which comprehensively tracks availability of various Internet connection technologies in every locale across the country.[4]

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[1] U.S. Census Bureau, *Current Population Survey, August 2000: Internet and Computer Use Supplement File – Technical* Documentation. p. '9-17', http://www.census.gov/apsd/techdoc/cps/cpsaug00.pdf.
[2] U.S. Census Bureau, *Current Population Survey, October 2010: School Enrollment and Internet Use Supplement File – Technical Documentation*. p.'8-9', http://www.census.gov/apsd/techdoc/cps/cpsoct10.pdf.
[3] NTIA and ESA, *Exploring the Digital Nation: Computer and Internet Use at Home*. November 2011, http://ntia.doc.gov/report/2011/exploring-digital-nation-computer-and-internet-use-home.
[4] http://www.broadbandmap.gov

2. Helena Mitchell, Rehabilitation Engineering Research Center for Wireless Technologies (WirelessRERC), Georgia Institute of Technology

WirelessRERC's comments focus on the need to ensure the ability to accurately and comprehensively assess disabled Americans' Internet usage habits. WirelessRERC proposes the addition of several questions aimed at recording detailed disability status for each respondent, including a list of difficulties one might have (e.g., seeing, hearing, thinking, speaking, using hands, and walking, standing, or climbing stairs), as well as levels of hearing and seeing difficulties and whether deaf respondents use American Sign Language. WirelessRERC points out that such detailed data would enable analysis of "specific trends amongst the different populations," which is important because "each group… [has] different factors that influence technology adoption, and at varying degrees."

Furthermore, WirelessRERC proposes an additional question to assess whether a respondent uses assistive technologies such as screen readers and cochlear implants, and makes two additions to existing proposed questions to indicate difficulties or expenses related to assistive technologies as reasons for not using the Internet. It points out that data on the state of assistive technology could be helpful in forming policies aimed at closing the gap in Internet adoption between the disabled and non-disabled communities.

We strongly agree with WirelessRERC on the importance of collecting comprehensive data aimed at assessing Internet adoption among persons with disabilities. As it points out in its comments, recent NTIA studies point to substantial disparities in use based on disability status.[5] In fact, our analysis was possible because in June 2008, the basic CPS survey instrument was updated to include six questions identifying a range of disabilities, including difficulties hearing, seeing, thinking, walking, dressing, and performing routine activities alone.[6] WirelessRERC's proposal includes additional questions designed to identify more specific demographic categories, such as distinguishing the hard of hearing from the deaf and low vision persons from the blind, and we agree that these proposed additions may be helpful to researchers and to the policymaking process. That said, demographic questions that are not specific to computer and Internet use are more appropriate for consideration as additions to the basic monthly CPS, rather than the Supplement. Because the CPS is designed to be useful as a tracking survey, households are surveyed a number of times, so for efficiency reasons demographic questions are not asked of the same households in subsequent months after initial contact.[7] Additional demographic questions about disability status should therefore be part of the basic portion of the CPS and handled similarly.

NTIA is interested in examining WirelessRERC's proposed additions related to the use of assistive technologies for possible inclusion in future editions of the Supplement. Both the question about aids used (e.g., screen readers, hearing aids, or text-to-speech technology) and the additional options under reasons for Internet nonuse have the potential to inform policymakers on strategies for narrowing the Internet adoption gap between disabled and non-disabled

[5] NTIA and ESA 2011, p. 16.
[6] U.S. Census Bureau, "Frequently asked questions about disability data." November 17, 2011, http://www.bls.gov/cps/cpsdisability_faq.htm.
[7] Ibid.

Americans. Frequent citing of the cost of assistive technology as prohibiting Internet use, for example, or a higher rate of adoption among visually impaired persons who possess screen readers may implicate certain priorities in future efforts at stimulating connectivity. Given resource constraints and the need for the Census Bureau to analyze the language of new survey questions, we are unable to include the proposed additions in time for the October 2012 survey date, but we will consider WirelessRERC's recommendations when designing future Supplements.

3. Jonathan Banks and Patrick Brogan, United States Telecom Association (USTelecom)

USTelecom focuses its comments on identifying Internet use issues that may not be adequately covered in the Supplement, ways in which the proposed questions may be consolidated, and general suggestions for long-term consideration. The first issue it believes may warrant additional data collection is the substitution of mobile broadband for traditional fixed connections. Noting that the proposed Supplement includes a question asking what technologies households use to go online, including mobile broadband, USTelecom suggests augmenting these data with information about the relative usage of fixed and mobile technologies among multi-connection users. Second, it seeks more specific information on the substitution of over-the-top video services for their traditional counterparts (e.g., using an Internet-based voice service like Skype rather than traditional wireline and mobile phone services). In particular, USTelecom notes the importance of tracking changes in relative use for both over-the-top services and mobile broadband over time to understanding technological trends. Finally, it asks NTIA and the Census Bureau to explore ways in which we could "collect data on business adoption of broadband and usage of broadband and broadband-enabled information technology." Such an effort would have to take place in the framework of a business survey rather than the household-centric CPS, and to that end, USTelecom suggests contributing to the Current Employment Statistics (CES) survey.

USTelecom points out parts of the Supplement that it believes may be consolidated or deprecated. It focuses on the Supplement's inclusion of three similar questions about reasons for non-adoption of the Internet at home, each with slightly different language for dial-up users, former Internet users, and nonusers who have never had Internet at home. Pointing out the rapidly declining population of dial-up users, as well as the ability to break out results among these three groups based on their answers to previous questions, USTelecom suggests consolidating the three similar questions into one question asking all non-adopters of high-speed Internet about their reasons for nonuse. Additionally, it questions the accuracy with which respondents will specify specific types of broadband that are unavailable, and suggests renaming "wired" to "fixed" in questions about the types of service that are unavailable, in order to properly account for fixed wireless connections.

Finally, USTelecom offers general suggestions for potential enhancement of the data collected by the Supplement. For example, it contemplates asking respondents to characterize their mobile phones as either smartphones or "traditional" cellular phones, and possibly even providing a middle category for so-called feature phones (though it acknowledges the potential for definitional confusion). USTelecom further suggests we should direct questions about mobile

phone use to the entire household rather than the respondent, asserting that the current proposal may underestimate "mobile device adoption at the household level." It also questions whether one of the measured mobile phone usage activities should be labeled "download 'apps'" when "use 'apps'" may be a more accurate description of the behavior we seek to measure, and suggests additional phone use categories such as mobile payments. USTelecom also suggests modifying the question about how many computers are in a household to measure separately the number of desktops, laptops, and mobile devices. Furthermore, it asks whether the categories of broadband service used in assessing home adoption should be made identical to those used either by the Federal Communications Commission (FCC) in its Form 477, or in the National Broadband Map. USTelecom goes on to ask whether the "mobile broadband plan" option in the list of home Internet connection types should include some clarification that this technology is distinct from Wi-Fi networks. It also suggests modifying the questions about reasons for non-adoption to make lack of availability the first answer choice, and possibly to collect multiple reasons rather than just a main one. Finally, USTelecom points out an error in the instructions for a question about who uses the Internet at home, in which respondents are asked to include usage outside the home (which is covered in a subsequent question).

We share USTelecom's interest in comprehensive assessment of emerging technological trends, including Internet-based ("over-the-top") competitors to traditional telecommunications services like voice calls and television programming, and the shift from fixed to mobile connection technologies. These are very important issues for Internet and telecommunications policy, and given sufficient testing time and space in the Supplement, we would be inclined to add such questions. Unfortunately, resource constraints would make it difficult for us to add new and untested questions for the October 2012 edition of the Supplement. That said, we would consider these proposals when devising future survey instruments. As for data on business adoption of high-speed Internet, as USTelecom points out this is beyond the scope of the person- and household-centric CPS. While its suggestion that we work with the Bureau of Labor Statistics (BLS) on the Current Employment Statistics (CES) survey is interesting, that survey is limited to providing industry-level employment statistics and does not have CPS-style supplements as vehicles to answer other policy questions.[8]

NTIA appreciates USTelecom's extensive analysis of the proposed Supplement questions that ask non-adopters of high-speed Internet at home about their reasons for nonuse. We note that, while there are indeed three different versions of this inquiry in the Supplement, no respondent will ever be asked more than one version. We could consolidate the three versions into one and break out the results into dial-up users, former users, and general nonusers of high-speed Internet at home, but doing so would not reduce the length of time it takes for a respondent to complete the survey. The existing approach simply allows for variations in question language to suit the situation.

Furthermore, we understand USTelecom's concerns about asking respondents to specify the types of high-speed Internet access that are unavailable to their households. We agree this question is unlikely to yield perfect accuracy; however, we are also interested in perceptions of availability, which are also important to broadband adoption and more easily measured in a survey of this nature. Fine-grained data on actual broadband availability by technology is a strength of the National Broadband Map. USTelecom's suggestion that we rename the "wired"

[8] Bureau of Labor Statistics, "CES Overview." March 9, 2012, http://www.bls.gov/ces/cesprog.htm#Data_Available.

high-speed access category to "fixed" also makes sense, as "fixed" is a more accurate description given the existence of fixed (non-mobile) wireless networks. However, that term may confuse anyone unfamiliar with the telecommunications industry. Finally, while we agree that a lack of availability could be seen as a threshold question for reasons for nonuse, and that households may have multiple reasons for not adopting the Internet at home, we note that the interview instructions specify that potential reasons for nonuse not be read. In other words, CPS interviewers allow respondents to come up with a main reason for nonuse independently, and then select a response category accordingly. This approach is based on cognitive testing performed by the Census Bureau.

USTelecom offers interesting suggestions about collecting data on mobile phone use. We appreciate its desire to distinguish between smartphones and basic handsets. However, we believe such a breakdown could confuse respondents, and industry trends are blurring the distinction between basic phones, feature phones, and smartphones. The Pew Internet and American Life Project, another major source of data on Internet use, finds that as of February 2012, 53 percent of all mobile phone owning adults in the United States had smartphones. Furthermore, Pew discovers that asking about smartphones in two slightly different ways increased the odds of respondents indicating smartphone use at least once, a sign of confusion about the term.[9] With these issues in mind, the proposed Supplement asks mobile phone users to discuss how they use their devices, including browsing the web, accessing email, and a number of other common use cases, rather than attempting to precisely distinguish between smartphones and feature phones.

As for USTelecom's suggestion that mobile phone usage be measured at the household level, we believe the personal nature of a handset lends itself to person-level measurement. USTelecom is correct that only one person per household, who must be at least 15 years old, answers the question, although we note that the household respondent is not necessarily the owner or renter of the housing unit (known as the reference person). The Census Bureau seeks to "interview a responsible person living in each sample unit" (household), and the interviewee may change in subsequent months.[10] While it would be more comprehensive to ask about each household member's mobile phone use, time constraints prevent us from asking the two relevant questions about each household member, particularly the question that asks about ten different activities for which respondents may use mobile phones. In order to approximate mobile phone usage habits among the wider population, we will ask the Census Bureau to include a weighting variable in the public use file that accounts for demographic differences between household respondents and the American population of persons ages 15 and older. This methodology is consistent with what we and the Census Bureau have employed to analyze a nearly-identical pair of questions, as well as a large number of other questions asked only of household respondents, in the July 2011 Supplement.

We agree with USTelecom that actually using "apps" on a mobile phone is a more interesting behavior to measure than the mere downloading of these programs. However, our choice of "downloading" rather than "using" as one of the usage habit options is designed to assess the

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[9] Pew Internet and American Life Project. "Nearly Half of American Adults are Smartphone Owners." March 1, 2012, http://pewinternet.org/Reports/2012/Smartphone-Update-2012/Findings.aspx.

[10] U.S. Census Bureau, "Current Population Survey (CPS): Collecting Data." June 8, 2012, http://www.census.gov/cps/methodology/collecting.html.

extent to which Americans add applications not preinstalled on their phones. On a smartphone, even the basic voice call and text messaging functionalities tend to be packaged as discrete applications, but we would not consider their use to be part of the behavior we seek to measure with that answer choice.

The other enhancements to the proposed Supplement posited by USTelecom are similarly thought provoking. We share its desire to measure separately the number of desktops, laptops, tablets, and other devices in a household, particularly with the aim of tracking trends in device selection over time. NTIA would likely prefer to measure device selection at the individual level, rather than among households, in order to better gauge person-specific differences in usage habits. In fact, the longer July 2011 edition of the Supplement (release pending) asked about the types of devices each individual in a household used to access the Internet at any location. Unfortunately, resource constraints make it infeasible to add that particular set of questions to this information collection, but we may include them again the next time we can attach a longer supplement to the CPS.

We also sympathize with USTelecom's desire for a common list of broadband categories used on the CPS, the National Broadband Map, and in the FCC's Form 477. However, both of these other datasets use more technical terminology (e.g., they distinguish between symmetric and asymmetric versions of DSL technology), which may reduce clarity and respondent accuracy in a survey of the general public. We agree with USTelecom's desire that mobile broadband not be conflated with Wi-Fi when respondents are asked how they go online at home. To that end, we will investigate whether it may be appropriate to include a clarification either in the question itself or in the interviewer instructions. Finally, we thank USTelecom for highlighting the error in the instructions for the question about each household member's Internet use at home, and will correct the language accordingly.