

# MICHIGAN STATE UNIVERSITY

September 17, 2020

RE: Docket No. 200813-0218, Comment on NTIA Internet Use Survey Questionnaire Development

To Whom it May Concern:

The National Telecommunications and Information Administration (NTIA) Internet Use Survey is among the few and most important federally produced projects that provides evidence-based data and analysis on Internet connectivity in America. This survey is an extremely important source of data to inform policy and experts on the state of digital connectivity in the United States. In response to the call for feedback on the design of future questions to be administered as part of this survey, I submit the following recommendations.



### *New Questions Related to Digital Skills*

Existing questions included in the NTIA Internet Use Survey focuses exclusively on issues of access and frequency of use. Existing questions in the NTIA Internet Use Survey about access and use outside of the home, in particular questions about diverse types of access in diverse locations (e.g., cell phones, libraries, cafes) are especially important for understanding the extent of digital connectivity. Similarly, the NTIA does a very good job at measuring differentiated use, by including questions about participation in different online activities (e.g., social media, banking, etc.). However, experts in the study of Internet use have increasingly focused, not just on types of access and differentiated use but on measures of digital skills. While it is no doubt important to understand if Americans have access to the Internet, it is equally as important to know how well they are able to use these technologies to participate in work, school, commerce, etc.

Digital skills may be as or more important in understanding how Americans learn, work and participate in the digital economy. As one example, a recent report by Michigan State University's Quello Center on *Broadband and Student Performance Gaps* found that digital skills were a stronger predictor of middle and high school students performance on the SAT Suite of standardized exams, grades, and educational aspirations, than Internet access alone

(<https://quello.msu.edu/broadbandgap/>). Policy pertaining to digital connectivity must increasingly address questions, not only about equity in access, but about equity in digital skills.

My recommendation is that the NTIA add a new series of questions to the next NTIA Internet Use Survey that measure digital skills. It is important that such a measure assess the multidimensional nature of digital skills, including Internet and social media skills. An example of a possible measure can be found in the work of Eszter Hargittai and Yuli Patrick Hsieh on "Succinct Survey Measures of Web-Use Skills" (2011) (<https://journals.sagepub.com/doi/abs/10.1177/0894439310397146>). I also

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point you to the extensive work by Alexander J.A.M. van Deursen, Ellen J. Helsper and Rebecca Eynon (2014) on “Measuring Digital Skills” (<https://www.lse.ac.uk/media-and-communications/assets/documents/research/projects/disto/Measuring-Digital-Skills.pdf>) and the work of Ester van Laar Alexander J.A.M. van Deursen Jan A.G.M. van Dijka and Josde Haan on “The relation between 21st-century skills and digital skills” (2017) (<https://www.sciencedirect.com/science/article/abs/pii/S0747563217301590>).

#### *New Questions Related to Churn in Access*

The NTIA Internet Use Survey includes a series of very good measures about different types of Internet access (e.g., satellite, cable, smartphone). However, important recent research suggests that measures that suggest persistent, static levels of access may not be adequate to understand the challenges associated with retaining connectivity. In particular, I point you to the work of Amy Gonzales on “The contemporary US digital divide: from initial access to technology maintenance” (2016) (<https://www.tandfonline.com/doi/abs/10.1080/1369118X.2015.1050438>). This and related works suggest that connectivity, in terms of ownership of devices, Internet access, and attitudes about access, cannot be understood without recognizing that a substantial portion of Internet users experience frequent instability in access characterized by periods of disconnection. Such periods of disconnection have implications for how people access work, health, and education related content online.

My recommendation is that the NTIA add a new series of questions to the next Internet Use Survey that focuses on churn in access, or periods of dysconnectivity. This may be accomplished through questions about how people pay for access (e.g., pre-paid data plans for smartphones vs a subscription), the age of the devices they are using to access the Internet, and questions to clarify if they have experienced recent periods without Internet access (for those who say they currently have access). Examples of approaches to this topic and specific questions can be found in the works of Amy Gonzales, Jessica McCrory Calarco, and Teresa Lynch (2018) on “Technology Problems and Student Achievement Gaps” (<https://journals.sagepub.com/doi/abs/10.1177/0093650218796366>) and Amy Gonzales, Lindsay Ems, and Venkata Ratnadeep Suri (2016) on “Cell phone disconnection disrupts access to healthcare and health resources” (<https://journals.sagepub.com/doi/abs/10.1177/1461444814558670>).

#### *Questions in the Context of COVID-19*

Finally, it is my recommendation that the NTIA pay particular attention to the influence that stay at home orders, online schooling, and related events resulting from COVID-19 are likely to have on data collected through the Internet Use Survey. In particular, it is reasonable to expect that rates of Internet access and use related to work and school have changed dramatically as a result of COVID-19. People have been forced to work, learn and participate in the digital economy from home. Others have experienced unexpected unemployment and financial instability that may disrupt connectivity. To avoid misinterpretation of trend data, the NTOA has a

responsibility to identify change in Internet access and activity, as a result of COVID-19, that may, or may not be permanent as a result of shifts in activity from work, schools, and public places into the home. This can be accomplished either through a separate battery of questions related to COVID-19, or through follow-up questions that attempt to clarify if there has been change in activity and access related to recent circumstances.

Thank you for the opportunity to provide the NTIA with feedback on this important activity.

Sincerely,

A handwritten signature in black ink, appearing to read "Keith N. Hampton". The signature is fluid and cursive, with a prominent initial "K" and a long, sweeping underline.

Keith N. Hampton

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