Goldberg, Rafi

From:	kflamm@austin.utexas.edu
Sent:	Wednesday, May 26, 2021 3:14 PM
To:	Goldberg, Rafi
Subject:	Suggestion on NTIA/Census Internet Use Survey
Follow Up Flag:	Follow up
Flag Status:	Flagged

Dear Mr. Goldberg:

I use both the NTIA and ACS Internet Survey data in my research, and I am writing to make a straightforward suggestion for improvement to one of the questions on these surveys. In particular, question HOMTE is widely used by researchers to characterize broadband availability within households. In particular, selection of response (1) is often used as a measure of whether or not terrestrial broadband service is available in a household.

However, the wording of the question seems to imply that technologies other than cable, DSL, or fiber are NOT high speed services, even though these technologies are presented as *examples* of high speed technologies in the question. In particular, suppose I have a fixed wireless service connection, which can be significantly faster than a DSL connection in many areas. Would I select option (1) because it is "high speed", or option (4) because it is not cable, DSL, or fiber? If I as a well informed researcher am scratching my head about which response to select, I can only imagine that the average household respondent is going to have the same or worse confusion about how to respond.

This is not a theoretical issue-- FCC data show that about 20% of service providers in urban census blocks are fixed wireless service providers, and an even larger share of rural census blocks are served using fixed wireless service. It has great practical importance because survey data users choosing to interpret response (1) as "broadband service availability" are going to be systematically underestimating broadband adoption, while adding (1) and (4) is likely going to overestimate "high speed" broadband availability, since little is known about what "some other service" means-- a cellular hot spot with 3G or 4G LTE service, for example (these were widely deployed by schools in some areas during the pandemic)? Or would a household be expected to classify a cellular hot spot as "mobile data plan"? Is response (4) where fixed wireless broadband is supposed to go?

The interpretation issues are going to get even more confused in the future as fixed 5G service begins to be deployed in some areas

It is also important to note that available fixed wireless speeds are comparable or faster than slower DSL service in many areas, particularly in rural and suburban areas. This can be demonstrated by analyzing the distribution of maximum speeds offered by providers, as reported in the FCC Form 477 data.

My main suggestion is that there needs to be specific guidance as to what choice to select if a household has fixed wireless service, which is a common "high speed" broadband service option in many US census blocks. (Maximum speeds of 25+ Mbps are common with fixed wireless, and this speed threshold meets any of the current definitions of "broadband" quality service.) In particular, I suggest that you either put "fixed wireless" as another example of "'high speed" in choice (1), or add an additional category for fixed wireless to the list of options that can be chosen by a household respondent.

I would be happy to discuss these issues further with you by phone or email. I can also provide you with an analysis of FCC Form 477 data that support the statements above.

Thank you for considering these issues with the HOMTE question.

Best regards,

Ken Flamm

--Prof. Kenneth Flamm Dean Rusk Chair The Lyndon B. Johnson School of Public Affairs University of Texas at Austin Box Y University Station Austin, Texas 78713