

Re: Measuring Broadband American Program, GN Docket No. 12-264
Comments on **Measuring Broadband America Program-Privacy Review Draft-20121128.pdf**

Submitted by

Jim Warner
University of California Santa Cruz

Thank you for this opportunity to review and comment on this important work. I am focused primarily on the matrix.

The heading “policy use case” seems to be poorly chosen. These have nothing to do with Policy.

What they appear to be is network service characteristics to be inferred from measured data. I would suggest a column heading **service characteristics**.

Under the heading of Risks and Concerns, it seems to me that the concern is that the location of a device might be disclosed. It is the location rather than the path that is the concern. “Path” is, after all, a derived observation of the time series of location measurements. If path were truly the concern, it could be addressed by limiting the frequency of measurements against a single handset. I suggest in all cases, replacing “geographic path” with “location.”

Location of Towers is neither a “policy use case” [original name] nor a “service case” [proposed revision]. It is not something that can be discovered by monitoring handsets. It is unclear on what planet the GPS location of a tower would be a risk to the privacy of a handset owner. I suggest removing this item and its data elements and risks.

In the **Needed Data Elements** column the word *metric* is used as if it were synonymous with *measurement*. It seems clear to me that the data elements we are collecting are our measurements. It just seems to me that *metric* is confusing. Either that, or it is simply wrong. It further seems to me that the word performance only muddles the element descriptions. So “IP speed measurement” instead of “IP performance speed metric.” And similarly for the other data elements.

The network service characteristic that is not covered in the draft is subscriber quota use. How much data are subscribers using? How does network consumption per handset grow over time? The SamKnows system collects this data in the fixed broadband measurements. Is it possible to interrogate handsets to discover how much data they are moving? Can a distinction be made between data moved through the cellular radio and data moved through Wi-Fi? If use data is to be collected, it will be perhaps the most challenging for privacy. Gigabytes transferred could be determined by taking the difference of readings of a counter maintained in the handset. The data analysis system needs to pair up readings taken at different times to get a delta for a handset. That would, I think, require collecting a device unique identifier with each measurement.

Perhaps it has already been determined that measuring service consumption – sometimes called bandwidth use – is too much of a challenge to privacy and should not be attempted. If that is the conclusion, it should be part of the privacy policy. The policy should, of course, state what we do. It should also state what we do not do.