Co-ops Connect FYI

By Jonathan Chambers • Aug 12, 2022 Smart Brevity[®] count: 1.5 mins... 432 words

Updates and insights for electric cooperatives considering or operating rural broadband networks.

A Comparison Between the FCC's Location Fabric and Actual Broadband Serviceable Locations



As described <u>last week</u>, the FCC is creating a new national broadband map **intended to reflect the service availability by speed and technology type at every serviceable location in the country.**

> • As a preliminary step, the FCC has contracted with CostQuest to create a broadband serviceable location fabric (the Fabric).

- CostQuest is a first-rate organization of industry professionals. I believe the work they have undertaken on behalf of the FCC is simply impossible.
- The Fabric is a dataset that includes all locations in the United States and U.S. Territories where fixed broadband internet access service has been or could be installed.

Below is a sample of data from the Fabric compared to actual locations where we have designed and are constructing fiber optic networks.

- Each Fabric location is centered on a rooftop (orange).
- Each Network Interface Device (NID) to connect the fiber to the premises is shown at its actual location at the side of the house (blue).



In this example, **there is a very close correlation between the Fabric and the actual location of the NIDs.** The imagery of this area is shown below.



The next example shows a similar area, but one in which **the Fabric misses some of the locations built with a fiber network.**

- Again, there is a close correlation.
- **Yes, but:** In this case, the Fabric undercounts the actual broadband serviceable locations by over 20%.





In this third example, **the Fabric simply misses the entirety of a new subdivision.** Below are electric meter locations with no corresponding points on the Fabric.





Finally, we thought we would look at **an example from a farm**, which often has multiple structures and **where increasingly the demands of precision agriculture require multiple places for connectivity.**

• Again, the orange dots display the Fabric's determination of serviceable locations, centered on rooftops. The blue dots display actual electric meter locations.



The Big Picture



The point of this exercise **is not to criticize the Fabric, but to understand where there may be shortcomings** so that the shortcomings can be remedied.

- In nearly every case where we have compared the Fabric with actual fiber network design and construction, **the Fabric contains fewer locations than actual serviceable locations**.
- In addition to missing certain locations, **the Fabric** erroneously excludes certain types of businesses.

The bottom line:

In total, we believe the Fabric undercounts broadband serviceable locations in rural areas **by more than 10%**.

It will not be possible to remedy the undercount by adjudicating every one of millions of individual locations.

Next week, I'll show examples of a second problem with the new FCC maps: a new way the FCC is allowing DSL, fixed wireless and cable to overstate their internet access speeds.

Feel free to forward this **Co-ops Connect FYI** to colleagues who want to stay in the know on all things broadband! Subscribe to Conexon's weekly newsletter <u>here</u>.