Beginning in April of 2017, the State's Broadband Mapping Team began implementing a new confidence metric to evaluate the quality of the broadband data it receives and processes. This metric (hereafter referred to as the data's confidence score) is calculated via automated script, and is entirely dependent on the data provided by the Internet Service Provider, thus resulting in an objective and measurable output. The formula that determines the data confidence score was created by the Broadband Mapping Team. This formula is considered an improvement over the previous process and is open to feedback and critique, in an effort to recursively improve the method by which confidence in the data is assessed.

The three components of the confidence score are: data type, data currentness, and data completeness. Each of these categories holds a percent weight towards the final confidence score. Additionally, multiple criteria exist within each group, which carry their own weight contributing to the overall total. The final data confidence score for each provider is based on the following equation:

[**Data Type** x 0.50] + [**Data Currentness** x 0.25] + [**Data Completeness** x 0.25] = Final Confidence Score

Data confidence scores are on a 0 - 100 point scale, with 100 being the highest possible score. The Team places a heavier weight on data type over data currentness and completeness. This is due to the fact that the type of raw data submitted by a provider has a major impact on the spatial quality and accuracy of the resulting processed coverage area. The Team's priority to produce the most spatially accurate representation of broadband coverage throughout the State thus results in this aspect playing a major role on the final score for each service provider.

The following sections go into further detail on the three components that drive the final confidence score:

Data Type

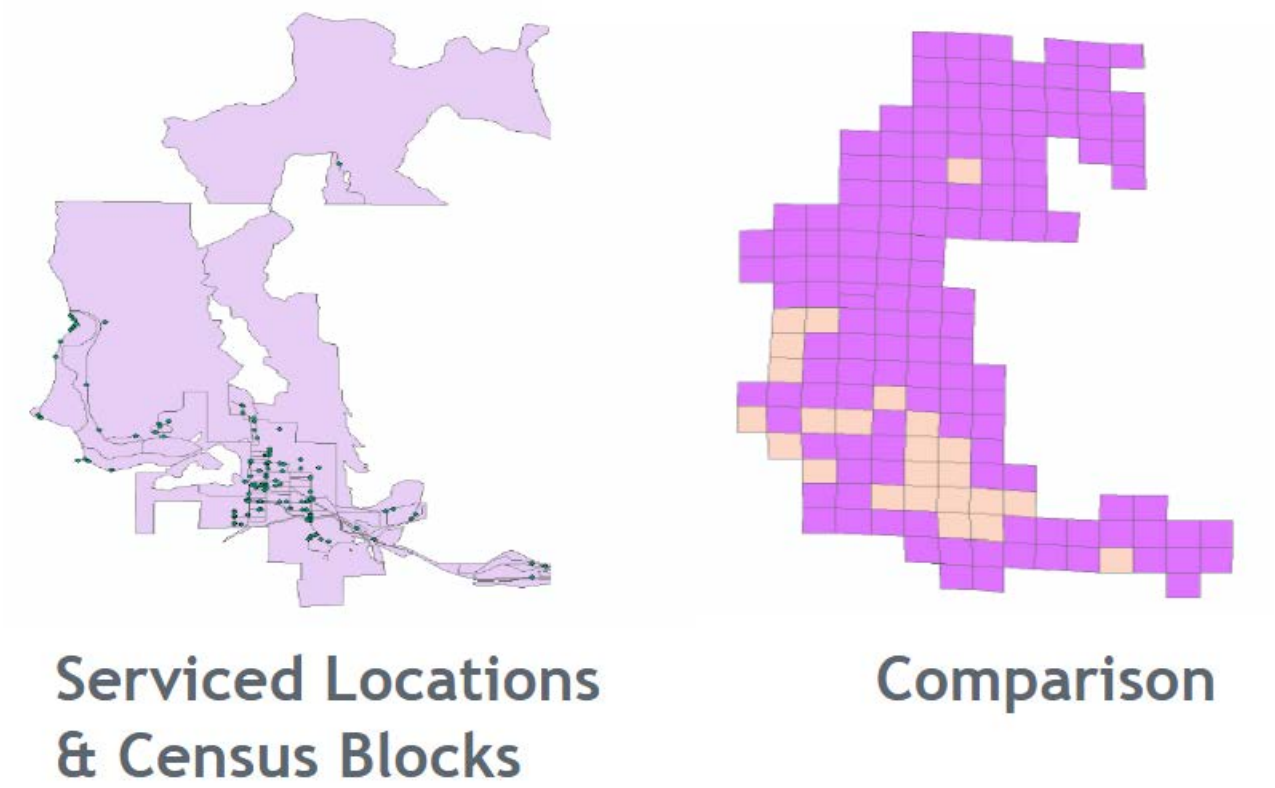
Wireline Data

The raw data type submitted by the provider accounts for 50% of the final confidence score. The data type is assigned a predetermined value based on its granularity. The following values are assigned for each wireline raw data type:

- Serviced Locations: Address points - Value of 100
- Serviced Locations: Latitude/longitude coordinates - 90
- Service Coverage Areas: GIS shapefiles, KML/KMZ Google Earth files, or low precision sketch/approximation of coverage area - 70
- FCC Form 477 Data: Census blocks - 50

Serviced locations are the preferred data type, as they provide the most spatially accurate depiction of a wireline provider's coverage area. All data types are aggregated to Public Land Survey System Quarter-Quarter sections (PLSS QQ) to both ensure anonymity of serviced locations and display coverage areas in

a universal spatial unit. The example below demonstrates the importance of receiving the more granular serviced location data vs. census block data in terms of portraying a more accurate coverage area:



The left image above depicts a sample provider that has submitted both serviced locations (green points) and census blocks (pink polygons) as data. The image on the right portrays what the coverage area would look like for each data type after aggregated to PLSS QQ's. The orange QQ's represent the coverage area for the serviced location points, while the dark pink QQ's represent the coverage area for the census block polygons. As evident, the census block based coverage area is a gross overrepresentation of actual coverage area. Conversely, the serviced location based coverage area is much more granular, while maintaining anonymity for each location.

Wireless Data

Much like wireline data, wireless raw data is submitted by providers in varying forms. The following values are assigned for each wireless raw data type:

- Tower/antennae data - 100
- Propagated Coverage Model: GIS shapefiles, KML/KMZ Google Earth files or Tower Coverage upload - 90
- Low precision sketch/approximation of coverage area - 70

Tower/antennae data is the most desirable data, as the Mapping Team uses the propagation simulation software Radio Mobile to input antennae settings, which in turn creates a propagated coverage model based on those settings. Further, a provider submitting tower settings receives a higher confidence score than submitting a propagated coverage model because of the transparency demonstrated in allowing the Broadband Team to create the model from scratch. By allowing the Team to generate the propagation model it achieves the highest level of veracity possible under our current methodology. Providing a propagated model, while useful and generally accurate, is impossible to verify and must be taken at face value.

Data Currentness

The age of the data the Team has received from each provider accounts for 25% of the final confidence score. The assigned values for data currentness follow an "all or nothing" approach and are as follows:

- Data received within two years of current data cycle - 100
- Data received more than two years from current data cycle - 0

In an effort to utilize only the most up-to-date information, the Team considers any dataset idle for longer than two years outdated. Certain exceptions, such as a provider confirming the data has not changed over a long period of time, are considered when determining the assigned value.

Data Completeness

The completeness of the data submitted by the provider accounts for the remaining 25% of the confidence score. Completeness is measured by the presence of requested attribution that accompanies each submitted dataset. Requested attribution includes the following:

- Service type: Residential, commercial or both
- Pricing: Monthly prices for each speed/service package currently deployed
- Maximum subscriber download and upload speeds for a given location
- Maximum typical download and upload speeds for a given location

The presence of the above attributes help to better understand the service(s) deployed by each provider and, in turn, the broadband landscape as a whole.