Method/Product Proposal

After analyzing our overall goal that we would like to achieve this summer, we decided that the best approach would be centered around creating a geo-spatial web application with an inventory database. This application would essentially be a map highlighting different assets within the tri-state region. When a marker is clicked on the map, the map will zoom in on the asset and provide the viewer with various information, including but not limited to the name, address, and broadband information. Examples of broadband information include whether the asset has internet access and/or internet source lending. The creation of the interactive map was successful due to shiny app and leaflet programs found in R. We believed this end product would be a good fit to highlight the problem surrounding lack of broadband access because it not only shows where people can access broadband if needed, but it also depicts areas in which there is less access to broadband. Below is a product requirements outline that emphasizes how our end product came to form:

> While building this product our main goal is to accurately portray the location of the library's assets within the 16 counties and be able to highlight the gaps in broadband access using the created geospatial map.

> The main features of this geospatial map will be a marker that represents each asset. These markers are differentiated in two colors, where the green color represents those assets that have access to specific assets while the red color shows unavailability of said asset.

To bring this product to life, we will utilize the tools found in R, such as shiny app and leaflet, which facilitate the creation of the map. The details such as the names of the library and county that appear as pop up on the marker were initially read from an excel sheet that was curated through google search, as well as reaching out to already existing contacts.

In addition to our clients, Thrive regional partnership, the expected users of our product would be anyone interested in observing and understanding the distribution of broadband in the tri-state region. This product will be open source, hence accessible to anyone who can access. Though we are hoping that this product will be of great importance to whoever accesses it, we do acknowledge it's limitations. The information displayed on the map is from outside resources we reached out to, so we do realize that certain information may not be available.