

## Delaware Libraries White Space Pilot Update, January 2015

Carlson equipment has been installed at Laurel Public Library and Greenwood Public Library. Ed Moore, Network Technologist, with assistance from Sussex County IT and Conxx, has tested the range of the signal. They've learned that the height of the antennas at the libraries needs to be maximized to get the full distance of the signal. Quotes to raise the antennas are in progress. However, the signal strength is good and the proof of concept for the technology is successful.

Ed's current findings point to certain developments that need to occur within the TVWS industry:

**Interoperability** – currently the existing equipment is proprietary and not interoperable. All equipment must be purchased from one manufacturer.

**Cost** – Being a new technology, early adopters have to pay for R and D. This industry is no different but the entry cost is prohibitive and needs time to adjust to a marketable number.

**Installation** -The required height needed to achieve distance requires fabrication of a sturdy base and installation by a qualified electrician. The equipment needs to be registered with the base station prior to any communication being permitted. This is a good and secure method but prevents the system from being plug and play.

**Performance** - closer proximity to the antenna produced satisfactory performance for most testing. The latency is a bit high and can cause issues when attempting to stream video.

Next steps – Kathy Graybeal, Sussex County Librarian, and Wendy Roberts, Laurel Public Library Director, will enter local partnerships to showcase application of the technology. We are seeking only those partners who are interested in experimentation with the technology, as this is an initial pilot project.

An update was provided to the Sussex Broadband Working Group in January 2015. The update also highlighted the recently released final report on the social and economic impacts of the BTOP awards (<http://www2.ntia.doc.gov/BTOP-Reports#evaluation>). A case study was conducted on Delaware Libraries BTOP project, and references to Delaware's successful project are included in the final report. The BTOP project was the catalyst for creating the Job Centers @ Delaware Libraries, now expanded to Inspiration Spaces. The current White Space Pilot builds upon lessons learned from BTOP.