

TV white spaces beneficiary profile:

Toby Bradley, Network Administrator, Pascagoula School District, Mississippi

Gigabit Libraries Network Libraries WhiteSpace National Pilot

Toby Bradley is the Pascagoula, Mississippi School District Network Administrator. Mr. Bradley is leading a [TV white spaces pilot project](#) that the Pascagoula School District was selected to participate in by the Gigabit Libraries Network. One of six winners out of 50 applicants, the project is designed to increase Internet access for the school district and Pascagoula community at large, extending broadband connectivity beyond the school district buildings to locations such as sports fields, public parks and community centers. The district's 17 school libraries act as base stations, using the pilot's TV white spaces radio technology to wirelessly enable remote Wi-Fi hotspots.



Pascagoula School District TV white spaces pilot project base station



Pascagoula School District TV white spaces pilot project client station: remote radio, POE injectors, switch, brocade wireless (Source:

Mr. Bradley applied for the pilot because he saw it as an opportunity to fulfill one of the Pascagoula School District's strategic goals of expanding broadband to Pascagoula and Gautier community members without Internet at home to pursue adult education, career exploration and English language learning, among other things. The school district will also benefit from the technology at school sanctioned events outside the school district buildings, for instance, field trips to local parks or school events held at a community center or other locations that do not have internet access.

Improved disaster relief communications is another important benefit of TV white spaces devices. In the event of a hurricane, to which Pascagoula and Gautier are susceptible with their proximity to the Gulf of Mexico, the school district can aid relief workers in communicating outside the area, and give community members the ability to connect with family members. In the aftermath of Hurricane Katrina when the surrounding area had no Internet access for weeks, the Pascagoula School District maintained connectivity since its Network Core is located across the street from the local ISP. The TV white spaces technology could create mobile Wi-Fi hotspots throughout Pascagoula and Gautier to provide relief workers and residents multiple opportunities for critical broadband access.

About the Gigabit Libraries Network Libraries WhiteSpace National Pilot

[The Gigabit Libraries Network \(GLN\)](#), an open collaboration of innovative libraries, launched the pilot program in August and chose six participating library systems throughout the U.S., including the Pascagoula School District. The program's goal is to create remote library WiFi access points providing greater Internet coverage throughout underserved communities. Deployment is underway for the six trial participants – four individual library systems and two state consortia comprised of multiple library systems within a state. The trials are scheduled to run through the end of 2013, at which point the libraries will have an option to purchase the technical equipment to continue offering expanded library services beyond the trial period.

Approximately 80 million people in the U.S. rely on libraries to provide access via fixed workstations or as open WiFi. One fourth of these public-library Internet users name libraries as their sole source of connectivity. Over 90 percent of the nation's 16,000 library facilities currently offer free-of-charge WiFi service. The GLN trials exemplify how two wireless communications technologies – WiFi which is ubiquitous and TV white spaces equipment which has excellent range and penetration – can be used together to provide comprehensive broadband access to currently underserved communities. These two technologies combined foster public access WiFi points throughout communities beyond the immediate vicinity of a library by creating remote library WiFi hotspots in places such as parks, civic centers, bookmobiles, and more locations.

The trials have vast potential to create tens of thousands of new public library hotspots to make Internet access more convenient to tens of millions of people in all regions from rural to urban. The technology, which uses TV white spaces open spectrum to provide connectivity between libraries and remote WiFi hotspots, is simple, effective and inexpensive to deploy, and has life changing potential for the millions of people who rely on libraries for Internet access. By creating new remote library hotspots, people have multiple opportunities throughout their communities to search for jobs, communicate via email, and participate in online educational programs, among other things.

By adopting TV white spaces devices, innovative libraries have an opportunity to be a leader in establishing the next generation of digital users – giving their patrons more connectivity options and solidifying their position as a key community resource for knowledge and exploration.

GLN announced terms for participation in Phase Two of the project. One part of the next phase is to expand pilots in the U.S. by encouraging every state to launch library TV white spaces pilots and to adopt the remote public library WiFi hotspot model into state broadband policies and strategies. The other main component announced is to expand participation beyond the U.S. Accepting library pilot proposals from other countries will create the first global scale TV WhiteSpace Pilot to roll out in early 2014.

For additional information, please contact Dynamic Spectrum Alliance member, Don Means, Coordinator of the Gigabit Libraries Network, at don@digitalvillage.com.