Pilot Project Helps Expand Broadband Access in Rural Allendale County

The South Carolina Office of Regulatory Staff (ORS) has completed the launch of a pilot project to establish multiple public Wi-Fi hubs and to simultaneously deploy residential broadband service for families with K-12 students in Allendale County. As part of the Broadband Infrastructure Program (BIP), this pilot project helps to aid the expansion of broadband infrastructure with emphasized services to rural communities and communities with a high prevalence of COVID-19 or with demographic characteristics consistent with risk factors for COVID-19.

The $2.2 trillion Coronavirus Aid, Relief, and Economic Security or "CARES Act" was passed by Congress to help provide relief to the United States economy from the COVID-19 pandemic. The South Carolina General Assembly passed Act 142 authorizing the ORS to expend up to $50 million for broadband initiatives related to COVID-19. Included in this $50 million was funding to expand broadband access through the BIP. As part of this expansion of infrastructure, the ORS funded a $393,104 Allendale Broadband Pilot Project to expand broadband access in Allendale County.

The primary goal for the Allendale Broadband Pilot Project was to see how rapidly wireless internet infrastructure could be deployed, by using existing state assets, to a community that did not have internet access. Wireless technologies may not provide speeds as fast as wired technologies like fiber or cable, but they can help provide broadband access to communities until wired technologies are deployed.

AT A GLANCE

Funding: $393,104

Households Served: 300

Households Passed*: 1,000

Businesses Passed: 25

Community Anchor Points Passed: 10

Educational Institutions Passed: 4

Public Wi-Fi
Maximum Download/Upload Speeds:
50 Mbps / 10 Mbps

Residential Network
Maximum Download/Upload Speeds:
78 Mbps / 6 Mbps

**The residence or business is eligible to subscribe to services.*

Collaborative Partnership
In November 2020, the ORS partnered with SCETV, South Carolina Department of Education, University of South Carolina (USC) Salkehatchie, Allendale County School District, Allendale Hampton Jasper Regional Library, Town of Allendale, and Revolution D, Inc. to launch the Allendale Broadband Pilot Project. In addition, corporate partners Linksys, Siklu, and Ookla® made significant contributions to the initiative. Local contractors were used for all of the engineering design and construction activities.

Revolution D, Inc. worked with Palmetto Rural Telephone Cooperative to establish fiber backhaul— creating a link from the main fiber network to create a new subnetwork— to two SCETV towers located in Allendale County. In addition, Dominion Energy South Carolina helped to provide power to the sites. One tower is located at USC Salkehatchie and the other at Allendale Elementary School.

Public Wi-Fi Hubs
Public Wi-Fi hubs were established thanks to equipment donated from Siklu and Linksys. Creatively and collectively, these hubs use UptownAllendale as their Service Set Identifier (SSID) or network name.

Members of the community will have access to these free Wi-Fi hubs at three different locations— one at Allendale Elementary School, another at USC Salkehatchie, and the third at the Allendale Hampton Jasper Regional Library.

Each location is equipped with high-speed Linksys outdoor access points. Direct fiber connections drive the hubs at Allendale Elementary School and USC Salkehatchie, and the third hub at the Allendale Hampton Jasper Regional Library is connected to the USC Salkehatchie tower by using Siklu Etherhaul equipment (5G, 60Ghz mmWave radios). Funding for these free public Wi-Fi hubs was paid for by the CARES Act through December 2021.

Residential Wi-Fi Access
In addition to public Wi-Fi, Revolution D, Inc. worked with SCETV to design and deploy a private LTE fixed wireless network or citizens broadband radio service (CBRS).

CBRS is a band of radio-frequency spectrum from 3.5GHz to 3.7GHz that was made generally available for commercial deployment in January 2020 by the Federal Communications Commission. The Allendale Broadband Pilot Program is one of the first CBRS deployments in the nation.

This residential network provides internet access for homes in the Allendale community. Wireless network speeds will vary depending on each home's geography, but initial tests have logged maximum download/upload speeds of 78 Mbps/6 Mbps.

In total, approximately 1,000 homes will have access to the residential network. The CARES Act provided funding for equipment to distribute to 300 households with K-12 students to enhance distance learning during COVID-19.

Questions?

Broadband Information
Broadband@ORS.SC.GOV

More information can be found at ORS.SC.GOV/broadband