



SUBMISSION FORM

All submission forms must include the following information. Separate submission forms must be turned in for each eligible program. **Deadline: July 1, 2021.** Please include this submission form with the electronic entry. If you do not receive an email confirming receipt of your entry within 3 days of submission, please contact [Gage Harter](#).

PROGRAM INFORMATION

County: Page
Program Title: Mobile Connections
Program Category: Information Technology

CONTACT INFORMATION

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SIGNATURE OF COUNTY ADMINISTRATOR OR DEPUTY/ASSISTANT COUNTY ADMINISTRATOR

Name: Amity Moler
Title: County Administrator
Signature: Amity Moler

Overview

Page County is one of the most beautiful localities in the Commonwealth of Virginia. Situated in the Shenandoah Valley, it's rural location and rustic mountainous charm brings thousands of visitors to our community each year. The same stunning blue ridge, has created a topographical nightmare in regards to internet connectivity. Although local leaders were aware of the issue and actively working toward additional broadband measures, COVID-19 resulted in an immediate need for our school children, as well as citizens and visitors teleworking and those needing to see their physician virtually. Through ingenuity, Page County staff created a mobile hotspot solution, teaming with a local vendor and using funds awarded through the CARES Act funding to fast-track broadband with immediate results. The first two day of operation showed 180 unique clients and have continues to be utilized today.

Challenge

In mid-March of 2020, Page County Public Schools closed their doors to learning and education for the remainder of the school year. Schools in surrounding localities and across the Commonwealth were able to offer distance learning options to students which allowed them to complete the school year, without falling behind. In addition to distance learning challenges, Page County also struggled with citizen participation in telework and telemedicine options now offered by many businesses and required by medical offices. Page County's topography has made it difficult and very costly to provide adequate internet service to a large percentage of households. Recognizing the challenge, Page County Supervisors approved a broadband expansion project utilizing CARES funds, however, it would take a year to complete and would

not provide coverage to all areas of the county. Page County Public Schools planned to re-open in September but COVID-19 restrictions and the lack of universal internet coverage impacted student's ability to learn virtually. With many children struggling with Schoology and receiving/returning assignments, citizens trying to telework and the increased need to participate in telehealth appointments, we didn't have a year to wait for service. Our community needed help NOW!

COVID-19 resulted in several business closures, lay-offs, minimal school attendance and more time at home for a majority of families in Page County. County Administration and elected officials were reminded regularly of the lack of connectivity and the impact it was having on our residents. We researched what other localities were doing, hoping to find a solution. While looking through the daily mail delivery, we came across a printed flyer, advertising mobile hotspots. We contacted our local IT Contractor (Form Networks), and asked their opinion of the units and if they would work in Page County. We scheduled a Zoom meeting a few days later with the company owner and System Administrator, who told us YES and – they could build them for us and use cellular data for connectivity. As long as an area had 4G coverage, it would work. We spent the next few days, driving through remote areas of the county, checking the coverage with our cell phones and taking notes. Form Networks provided a proposal with options and pricing. Although the cost was reasonable, we had so many areas lacking internet coverage, we were going to need multiple units. We placed an initial order for two units to test how long it took to build them and how well they worked. In the meantime, we had to figure out how to pay for more.

Financing

On October 7, 2020, we received notice Governor Northam allocated \$30 million in CARES Act Funding to fast track broadband projects. We submitted an application on October 19, 2020 for \$78,800 to fund eight mobile hotspot units that would allow drive-up access to free internet from the comfort of your car. Each unit could accommodate up to 25 users at a time, reaching up to 200 households at any given moment. The eight cellular mobile hot spots would be stationed in concentrated areas where internet connections were problematic. They would provide connected and wireless opportunities for telemedicine, remote learning and telework. COVID-19 had impacted the quality of education the county could provide students because a significant percentage of the population has limited access to internet and will not be able to participate in virtual learning opportunities. The hot spots will also support a “stay in place” work environment and assist with telemedicine and access to care while minimizing visits and trips to a doctor’s office. We were awarded our request in early November and immediately notified Form Networks to add six additional units to our order, for a total of eight.

Once Form Networks was able to locate and purchase the six additional 4x6 tow behind trailers for construction of all eight units, they assembled them in steadfast pace. Each unit included a cellular modem, WiFi connectivity, GPS location updates, solar system to provide ability to self-power or plug-in local station power, camera system for monitoring area and restriction on streaming data such as movies or music, as well as inappropriate content. Primary access was concentrated on allowing school level work to be completed (Schoology and related components), email, general internet searching and zoom calls or other telemedicine

related content. A first time user would pull up to a trailer and park, open Wi-Fi on their phone or tablet, select “Page County Free Wi-Fi” and click “Accept” to agree to the terms and begin free access to the internet.

Results

Upon completion of the eight mobile units, we formed a staff committee of Administration, GIS and Economic Development team members to review coverage maps indicating areas lacking internet connectivity and chose locations we felt would help the most people while providing ample parking around the trailers. Our GIS Coordinator then created an app detailing the mapping and location summary of each mobile hotspot:

<https://pagecounty.maps.arcgis.com/apps/MapJournal/index.html?appid=283e8dfd463442c399e8c8e5c65a3817>

We advertised our new mobile fleet on social media, with our local media outlets and branded the trailers with our County logo to let the public know some help had arrived. Although we couldn’t provide fiber to every household or even line of sight connectivity to everyone, it was something. It allowed children to download assignments and upload finished work, it allowed remote workers to check and send emails or participate in zoom calls a few miles down the road rather than traveling ten miles into town, it allowed symptomatic patients to have a telehealth call with their physician in their car rather than going into a place of business to use the Wi-Fi. We know this isn’t a long-term solution and it wasn’t meant to be. It was an immediate help to the big problem our rural county faces. We will provide the mobile service until we have full connectivity across Page County. When that happens, we will use the

mobile units during search and rescue events in remote areas and for large events needing an extra boost to the bandwidth.

