



CONNECTED COMMUNITIES

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# Community Hotspots

Pilot Project Case Study

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**LOCATION**

Giles County, TN

**PROJECT COSTS**

**\$7,013**

Total Funding

**\$4,597**

TVA Connected Communities

**\$2,416**

Pilot Team Match

**FOCUS AREAS**



Broadband and Digital Literacy



Enhanced Community Resiliency

# Project Summary

To expand high-speed internet access to rural Giles County communities, PES Energize (Pulaski Electric System) installed public Wi-Fi hotspots across the county.

**TOPICS**

- ✓ Wi-Fi Connectivity and Accessibility

**TECHNOLOGY**

- ✓ 8 Wi-Fi hotspots

**KEY PARTNERS**

- Local Power Company
- Fiber / Internet / Wi-Fi Installer
- Economic & Community Development Organization
- Project Advisor







“ Bringing the internet to a centralized location in these communities allows people to connect closer to their home... It provides that ease of access, which can be the make or break for a lot of these community members.

GARRET LAARMAN | PES Energize

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# Challenge and Solution



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## Challenge

The small rural communities served by PES Energize (Pulaski Electric System) lacked access to high-speed internet. As of 2017, many residents living in rural Giles County only had access to notoriously unreliable satellite services. Access to public Wi-Fi technology in these communities would be transformative, allowing community members to connect their devices for online needs, like banking or telehealth, and school-aged children to connect their school-issued Chromebooks for school assignments.



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## Solution

To expand high-speed internet access to rural Giles County communities, PES Energize installed public Wi-Fi hotspots across the county in easily accessible locations.

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# Focus Areas Supported



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## Broadband and Digital Literacy

Wi-Fi provides equitable access to information, resources and opportunities, playing a crucial role in advancing energy and environmental justice, particularly for underserved communities. This connectivity helps bridge the gap in energy equity, promotes sustainable practices and empowers communities to advocate for a healthier environment.



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## Enhanced Community Resiliency

Wi-Fi access significantly enhances community resiliency by supporting emergency communication, education, economic stability, healthcare access, social connectivity and resource coordination. These factors collectively contribute to a community's ability to withstand and recover from adverse events, ultimately promoting long-term resilience and stability. By investing in Wi-Fi infrastructure, communities can better prepare for and respond to various crises, ensuring that residents remain connected and supported during challenging times.

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# Goals, Approach and Results



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## Project Goals

The installation of eight additional Wi-Fi hotspots provides a wide range of coverage within each community. For internet access, citizens could visit an area where the public Wi-Fi system is available. The ideal outcome of this pilot project is for other groups or businesses to adopt the same vision of unity as PES Energize and implement a similar system of Wi-Fi access points for connectivity to the internet in their own communities.

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# Goals, Approach and Results

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## Project Approach

In 2017, Leadership Giles—a community advocacy and leadership group in Giles County—proposed the idea for publicly accessible Wi-Fi in the downtown square of Pulaski, Tennessee, a hub of activity in the otherwise rural area. Being composed of executives and business owners in the community, Leadership Giles felt strongly that providing Wi-Fi access was critical in supporting community members who lacked home connectivity.

PES Energize became involved with the initiative, as their CEO at the time was part of Leadership Giles, so the partnership was organic. The community organization fundraised that initial project cost of approximately \$15,000 and had contractors complete the work.

After the COVID-19 pandemic, Giles County found that there was still an acute need for local hot spots in other parts of the county to support more rural residents. After identifying this continued need, the project team explored

and applied for the Tennessee Valley Authority (TVA) Connected Communities funding opportunity to allow them to expand the Wi-Fi hotspot access points to Lynnville, Elkton and Minor Hill, broadening the network of connectivity throughout the county.

Once the system upgrades were designed, eight new Wi-Fi devices were installed as an extension of the existing public Wi-Fi system in downtown Pulaski. Installations in the three rural towns as part of the pilot project include Wi-Fi hotspots that use mesh technology to connect to each other and fiber-optic point-to-point connections for cohesive remote management. Locations such as community centers and police stations were chosen to ensure resident comfort, safety and accessibility.

These methods provide a wide range of coverage within each community. For internet access, citizens could visit an area where the public Wi-Fi system is available.

“ The hotspot locations were chosen because those were areas where less fortunate [residents] live who could not afford their own private internet service. These locations give those folks an opportunity to use the internet for free while they’re already in town.

GARRET LAARMAN | PES Energize

# Goals, Approach and Results

## Project Results

Across the eight Wi-Fi hotspots installed in various locations around the three towns, the pilot team identified the number of users of the free Wi-Fi by month and location. The ideal outcome of this pilot project is for other groups or businesses to adopt the same vision of unity as PES Energize and implement a similar system of Wi-Fi access points for connectivity to the internet in their own communities.

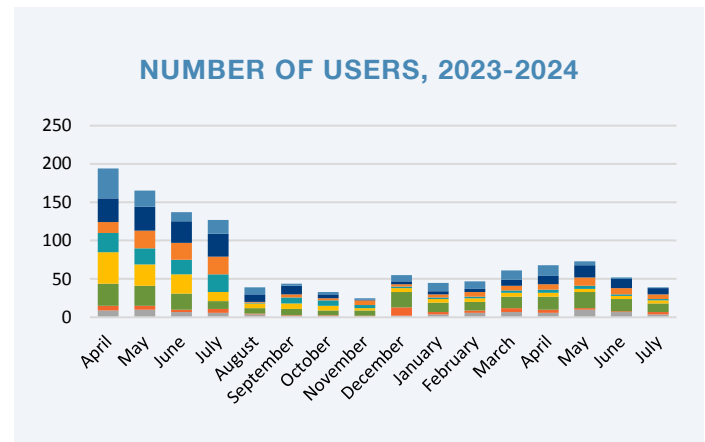


**8 Wi-Fi Hotspots were installed in communities across Giles County, TN.**

- Elkton Community Center
- Elkton School
- Lynnville Clinic
- Lynnville Police Station
- Minor Hill Community Center 1
- Minor Hill Community Center 2
- Minor Hill Library
- Minor Hill School

## Key Partners

- **PES Energize**
  - **Melinda Brown**, Wi-Fi installation location development
  - **Bobby Jones**, project budget and development
  - **Garret Laarman**, previous Wi-Fi installation project experience
  - **Daphne Long**, Wi-Fi installation location development
  - **Chelsea Ramsey**, team lead
  - **Tamieka Russell**, Wi-Fi installation location development, device distribution and digital literacy training
  - **Emily Skeets**, Wi-Fi installation location development
- **Tennessee Valley Authority**
  - **Lisa Akins**, senior program manager
  - **Georgia Caruthers**, senior project lead





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# Lessons Learned

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## Ensure Reporting Needs are Met

Wi-Fi access points and data reporting systems have varying levels of reporting metrics that allow communities to better pinpoint the needs of residents, helping project teams make future decisions about connectivity and comply with project reporting expectations. The pilot team found that their elected level of data insights was not sufficient to identify exactly how residents are using the Wi-Fi hotspots, instead providing holistic, high-level data usage.

“ The basic data reports were not granular enough for me to determine if they were actually using it for a medical appointment, schoolwork or something else. If I had to do something different, I would have either paid for additional reporting features, or I would have tried to pick a different solution that provided those metrics.

GARRET LAARMAN | PES Energize

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## Utilize Community Sounding Boards

The introduction of new technology can be intimidating for residents. Open communication about the benefits of connectivity and what community hotspots can offer residents is key to gaining buy-in from more hesitant community members. Utilizing existing platforms such as town hall meetings, community bulletin boards and influencer networks can lessen the resistance to innovative initiatives. The project team enlisted the local newspaper to talk about the project and Leadership Giles was instrumental in driving support across the county; with direct connections to the mayor, Leadership Giles was able to ensure any concerns were addressed early and maintained an open line of communication throughout the lifecycle of the project.

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# Lessons Learned

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## Remind the Community About Hotspots

Ensuring community members are aware of new amenities is a critical part of project success. Data collected by PES Energize on the utilization of the hotspots indicate that while the amount of data transfer through the hotspots remains strong, the number of unique users has gone down, indicating that it may be worth regularly reminding the community at large of the existence of the hotspots over time. Creating an ongoing communications campaign in underserved areas can help ensure more residents are aware of access points and how connecting can serve their needs.

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# Looking Ahead

The project team will continue building on the network of Wi-Fi hotspots to connect as many county residents as possible to Internet access and the benefits it affords. The project team recently received additional third-party grant funds to expand the access points further into the county and is currently starting the planning process for the next installation phase of the initiative.



**New third-party grant funding will be used to extend Internet access points deeper into the county.**

CONNECTED COMMUNITIES

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