



The proposed project area is in southeast Johnson County, Kansas around W 214th Street in Bucyrus. The goal of the build is to bring a full range of state-of-the-art residential and business services including Spectrum Internet®, TV, Mobile and Voice service to 45 homes. The households in the project area currently lack access to terrestrial-based, minimally adequate internet connectivity (residential  $\leq$  25/3 Mbps).

Charter Communications' network utilizes a hybrid fiber-coax (HFC) architecture, which combines the use of fiber optic cable with coaxial cable. We deliver our signals via fiber optic cable from the headend to a group of nodes, and use coaxial cable to deliver the signal from individual nodes to the homes served by that node. Our hybrid network design provides high capacity, signal quality and two-way signal capabilities for the support of interactive services.

After construction, residents in the proposed project area will have access to Spectrum Internet Gig with download speeds of up to 940 Mbps. With Spectrum Internet, customers can simultaneously stream videos, download music and more without sacrificing performance. Spectrum provides free modems and the fastest, most powerful in-home WiFi to do more on more devices. Especially because Spectrum currently has no data caps or extra fees.

All of this is made capable by our scalable hybrid fiber/coax DOCSIS Network which is upgradeable to support additional bandwidth and speeds. As the market demands faster speeds, Spectrum expects to raise the minimum speed offered to its customers by continuing to upgrade our network based on the latest DOCSIS specifications.

As the coronavirus pandemic has swept the country, the need for a fast internet connection has become critical to our ability to work, learn, and receive health care. Unfortunately, the residents in the proposed project area are still without adequate service to engage in these activities. Many expect the current trend of teleworking, distance learning, and telehealth to continue after the pandemic, making access to high-speed broadband for the residents of this area a necessity. Approval of this grant application will enable the residents in this project area to meaningfully engage in these activities like their neighbors in surrounding communities.