



Becoming a Smart City

Don't get left behind.

Without high-speed Internet, communities can't do everything possible for its residents and businesses. And in most rural areas, if you go 10 minutes outside of a community, you have nothing.

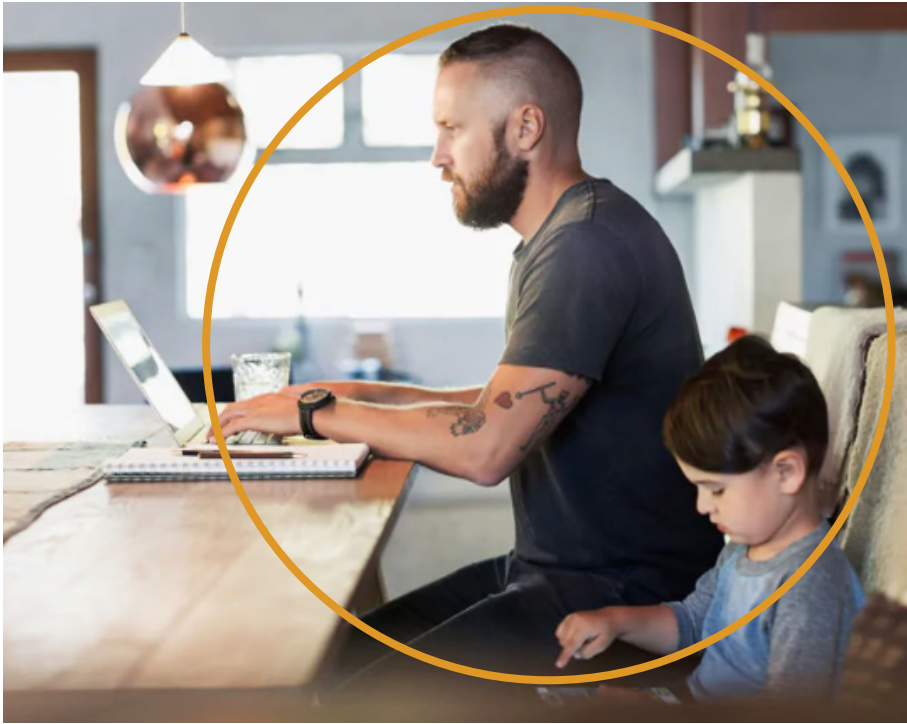




Introduction

The Internet's increasing necessity in our daily lives has made Broadband Internet as vital as public water and electric power. As a municipal faced with the need to keep your citizens from being left behind, it's important to understand the benefits of building a broadband network for your community. Three significant areas define the crucial need for high-speed connectivity for rural communities: Quality of Life, Economic Development, and Community Continuity.

Quality of Life



Publicly owned and powered networks with better connectivity have contributed to the health and wealth of local communities. When a city or town chooses to deploy its own network, it introduces Internet services into the community that are significantly faster and more reliable. These faster networks support the community's development with advanced healthcare and local security, more robust housing markets, and long-term investments in the form of better-connected schools and libraries. They also create millions of dollars in savings that are reinvested back into the community.



Improving the day to day lives of your citizens

- **Telecommuting** - Fast access to the Internet makes it possible for employees in technology, marketing, finance, design, customer care, programming, and many other computer based fields to work from home and live in rural communities without sacrifice.
- **Home Entertainment and Social Connectivity** - Staying connected socially is important to mental health. The media connections and interactive entertainment of the Internet contribute to a healthy part of daily life. Access to look up a recipe, video chat, stream a movie or music, or play interactive online games are all part of this social environment and require broadband connectivity.
- **Education K-12** – Children have access to information for study, real time access to assignments and grades, and numerous educational resources. Parents are engaged through web portals that provide communication with teachers, counselors, and administrators.
- **Distance Learning** - Citizens are educated through remote learning. Educational and advancement opportunities for every age and economic group are quickly becoming the norm as colleges, adult education programs, and even virtual elementary schools emerge.
- **Health Care** - Telemedicine can now allow the digital transfer of information that once required the telephone. An Internet connection enables health care professionals to evaluate, diagnose and treat patients in remote locations using telecommunications technology. Patients in remote areas can access medical advice quickly, efficiently and without having to travel.

- **Independent Living** - As Americans continue to live longer, aging in place is becoming common and preferred. Internet-dependent home automation products like voice- activated devices, monitoring systems and more, will have a profound impact on the quality of life for seniors, the disabled, and the people who care for them.
- **Security** - Broadband helps public safety personnel respond swiftly to emergencies when they occur. Broadband can also provide citizens with new ways of calling for help and receiving emergency information.
- **Property Values** - It has been shown that housing prices can increase whenever large companies relocate to smaller cities due to a community's technological infrastructure and high-speed municipal broadband access. Companies bring jobs and new workers, and the demands for housing increases their value.
- **Distance Learning** - Due to the advanced technologies that bring knowledge and innovations, cities will be more competitive, modernized and functional.
- **Libraries** - During economic declines, libraries provide computers and internet access, books and movies for inexpensive entertainment, and assistance with online job searching. Libraries are automated so that users can download digital content from home, reserve and renew books, and access internet-based educational tools.



Bringing Rural America Into the 21st Century

The challenge of having little to no broadband is the primary concern among rural community leaders. It will only become more difficult as today's technology evolves into the technology of tomorrow with augmented reality and artificial intelligence applications. Community broadband, when done correctly, will bring rural America into the 21st century. Governments must reconsider how access to high-speed technology can keep their communities alive or watch their populations fall behind the rest of the world.



Community Continuity

Meeting the needs of the present and future generations

● **Better Governing** - Modern technologies enable a rich new set of communications capabilities for Government agencies to coordinate and collaborate with each other and aid fast and efficient interdepartmental communications. Using digital technology and tools allows cities to deliver information more efficiently as Government agencies continuously have to provide new and updated information to its citizens. The municipality's endorsement of building networks leads to a direct contribution to the community's development and enhances community participation. The community network will be directly linked as a means to address problems related to social exclusion and other forms of community breakdown.

● **Savings** - Government processes are streamlined, which improves efficiency and cuts costs resulting in savings. Savings are then reinvested into further development of applications and services. Live streaming of Government proceedings in real-time provides a continuous stream of information for public participation. Paying taxes online, registering vehicles, procuring hunting, fishing, and pet licenses all completed with the click of a button. Many governments have employed a messaging system that allows citizens to use connected devices to alert officials about everything from dangerous potholes to emergency situations they might witness.



Part of what needs saving in small towns is families. That's going away because of the lack of broadband. Young families that build and nourish a community aren't populating the rural areas because they can't make a living without the connectivity. No town should be mostly populated by retirees. The richness of a rural community is multigenerational.

● **Transparency and Participation** - smart technology improves clarity and closes the gap between citizens and the Government, ensuring that they are connected in meaningful ways. Citizens can participate in public forums and discussions in real-time and with a less costly approach and communicate via email with elected officials and staff. Citizens can influence processes, thus improving the accountability of Government and politicians are fully and immediately aware of public opinion..

● **Entrepreneurship** - After decades of decline, many rural areas show a recovery and attract new residents due to the combination of IT and the amenities it brings. With this rural rebound, there has been an emergence of rural knowledge-based service firms and entrepreneurs, who rely on telecommunications to trade with a broad market. The ability of rural service firms to fit into the digital economy may prove crucial for building a local community's economic base.



Economic Development

Providing jobs and tax revenue that ensures the growth of a healthy community

Being stuck in an antiquated dial-up system or DSL makes it hard for businesses to hire remote workers, sell goods online, or access government services and filings necessary for business success. This is the problem for towns that have seen their economic base decline in recent decades and are trying to survive in the new economy.

Many people are interested in rural living, but without better broadband connectivity, it's not feasible and the community misses opportunities to increase their tax base. But with a reliable community network that is faster and more affordable, existing businesses can improve their productivity and new companies and jobs are attracted to the community.

- **Job Creation** - A lot of industries that were primary employers years ago, such as manufacturing, commercial agriculture, mining and other sectors, are gone now so the alternative is attracting people who are connected to jobs elsewhere. And that is why fast and reliable connectivity is so important.
- **Business Attraction** - Municipal broadband plays a significant role in attracting new businesses that want to take advantage of faster speeds offered by a city/s municipal broadband. Rural areas with a fast digital infrastructure are better able to compete to bring companies into the community because high-speed connectivity is now an essential service for day-to-day business. Software creation, online customer care, retail shipping and other industries all rely on high-speed connections. A public network gives businesses the pipeline they need to compete, and it gives your city the digital infrastructure it needs to bring new business to the area. Unfortunately, the reverse can mean that slow Internet speeds might force existing firms to leave town.

