Move Your Community Forward with Technology & Broadband

Closing the Rural Broadband Gap

k6305275 www.fotosearch.com

June 3rd – 4th , 2015
Millie Atkins
CenturyLink

Broadband in Rural America

- In the United States today, rural communities face unique challenges as well as different opportunities and limitations to achieving prosperity relative to their urban and suburban counterparts. Rural areas comprise nearly 75 percent of the land area of the U.S. but were home to only 51 million people (about 17 percent of the U.S. population) in 2010. Most rural towns have fewer than 2,500 residents. One of the biggest challenges to these communities is that they tend to suffer from poverty disproportionately more than urban or suburban areas.

- U.S. Secretary of Agriculture Tom Vilsack argues that the U.S. Department of Agriculture (USDA) "must help rural communities create wealth so they are self-sustaining, re-populating and thriving economically." Recreation, technology, infrastructure, education and agriculture provide these communities with opportunities to overcome challenges and sustain long-term prosperity. Natural resources from agriculture or mining and recreational activities often play a greater role in local economic development in rural areas, which tend to lack human capital due to low population density and outmigration as a result of limited employment and economic opportunities.

CenturyLink™

CenturyLink Rural Philosophy

Broadband is not a luxury. It's a necessity. CenturyLink supports policies and programs that help in the expansion of access to broadband for all Americans, especially those who are living in rural communities.

The telecom industry has spent enormous sums of money and made great progress in bringing broadband to rural America; however, a great deal more has to be done if rural communities are to survive economically and socially. Broadband access and expansion in rural communities are critical.

Why is Broadband Important in Rural Areas?

Broadband facts:

- Broadband is responsible for 20 percent of new jobs across all businesses and at least 30 percent of new jobs in businesses with fewer than 20 employees.

- Farmers within each state now need broadband to manage their crops.

- Rural doctors need it to read x-rays and scans in real-time as well as for telemedicine and telehealth efforts.

- Students/teachers need it for online and digital learning in areas where teacher recruitment is difficult.

CenturyLink™

u45910944 fotosearch.com

k4007013 www.fotosearch.com

Rural Broadband Creates Hi-tech Farms

CONNECTED!!

The global positioning system (GPS), electronic sensors and other new tools have moved farming even further into a technological wonderland. Technological inventions during this century is changing the way farmers work.

Urban/Rural Differences

Urban-rural differences in the adoption of high speed Internet were previously attributed to the demographics of rural communities, including age, education, and household income.

However, a recent broadband study from Pew Research Center found that 15% of American adults do not use the internet. Those least likely to use the internet:

- **Senior citizens**
- **Adults with less than a high school education**
- **Those living in households earning less than $30,000 per year**

CenturyLink recognizes that furthering the country's national broadband objectives is of primary importance to our customers as well as the education, entertainment, health care and economic development needs of our communities.

CenturyLink's Internet Basics

CenturyLink's goal is to work closely with our communities and public anchor institutions to encourage training, awareness and access to discounted broadband connectivity and personal computers.

Our broadband adoption program, Internet Basics , has helped to increase adoption among low-income households within its service areas. By offering the service at a monthly discount, free computer training and a discount on computer equipment, CenturyLink provides a broadband connection to qualified financially-disadvantaged families who need it.

High Speed Internet --$9.95 per month

1.5 Mbps speed

Computer equipment at $150 plus tax

Traditional Broadband Strategic Planning

Low population density, topographical barriers, and greater geographical distances have made broadband service more difficult to obtain in some rural areas. In attempting to address these challenges, some rural communities have found it helpful to develop a strategic plan for broadband deployment that includes creating a comprehensive business proposal to broadband providers.

Such a plan, for example, could demonstrate to local broadband providers that deployment is a sound business decision that would benefit both the providers and the community. This strategic planning process may include, but is not limited to, the following elements and strategies:

- Educating the community about the potential benefits of broadband service.
- Creating partnerships among community organizations and institutions that might benefit from broadband deployment.
- Systematic assessment and prioritization of the community's needs for broadband service.
- Aggregating (consolidating) demand within the community to make service profitable for broadband providers. Participants may include, but are not limited to, individual consumers, businesses, educational institutions, health care facilities, and government agencies.
- Identifying an anchor tenant with adequate demand to spur infrastructure investment in broadband.

CenturyLink™

Future Broadband Strategic Planning

Ensuring that broadband communication exists in rural areas has created a number of market challenges:

- Broadband deployment is now based on population density;
- Diverse competitive service providers that are not confined by regulatory rules;
- Traditional providers' loss of revenue in urban areas creates a decrease of funding for connectivity in rural areas.

What can rural communities do to ensure their areas have a competitive broadband infrastructure?

- Recognize that good broadband has become as important as good roads and water systems;
- At the community level, organize local boards to assess broadband infrastructure needs just as they do road and water quality projects;
- Broadband boards must become knowledgeable in financing enhanced broadband infrastructure because:
  - Local providers without a sufficient business case to supply the speeds necessary to be competitive in this new regulatory environment forces rural areas to seek other options such as:
    — state and federal funding efforts such as CAF funding, e-rate, etc. that can help communities partner with local providers to build stronger business cases.
    — Community support of private/public partnerships to build and maintain their broadband infrastructure projects

CenturyLink™

Public/Private Partnerships

Generally there are three factors that determine the viability of a public-private partnership:

- Ability to create a level of trust amongst the community and the provider;
- Number of current broadband providers in local community; and
- Level of interest or support from at least one current provider

Having a private sector provider, either an incumbent or new competitive provider, willing to step up into partnership with the community can make moving forward easier.

Public Private Partnerships may take many forms, but for a community where a pure market case cannot be made, there may be a solution in drawing on private expertise and public funding options.

CenturyLink™

Leadership is Crucial

Who should be involved in the Planning process when considering a rural broadband effort?

- **Federal Government** *(Administration & Congress)*
- **State Governments** *(Administration & Legislatures)*
- **Local Governments**
  - *Cities & towns*
  - *Counties*
  - *School districts*
  - *Fire districts*
  - *Utility districts*
  - *Hospitals*
  - *Universities*
- **Private Industry** *(Service Providers)*
- **Consumers** *(Residential, Commercial & Industrial)*

Local Partnership Roles

The partners play important roles that are often critical to success:

• **Local and state government entities may serve as leaders and catalysts to garner community support, identify needs, develop innovative solutions and attract private investment through rights of way (ROW) access, streamlined permitting processes and financial support.**

• **Private network service providers, equipment vendors, developers and technology firms bring expertise, resources and innovation in network deployment and operations, customer support and new broadband applications to support the work of local government.**

• **Community anchor institutions (CAIs), non-profit groups, research, education and government networks can drive initial demand and promote capacity building over the long-run.**

CenturyLink™

Questions…

CenturyLink

Resource Links

http://www.fcc.gov/cgb/broadband.html

www.fcc.gov/voip

www.fcc.gov/cgb/consumerfacts/tribalfactsheet.html

www.lifelinesupport.org/li/low-income/lifelinesupport/

www.naruc.org

www.fcc.gov/cgb/consumerfacts/usp_Schools.html

www.fcc.gov/cgb/consumerfacts/usp_RuralHealthcare.html

http://www.rurdev.usda.gov

http://www.usda.gov/rus/telecom/commconnect.htm

http://www.ntia.doc.gov/ptfp

http://www.tdfund.com

www.dra.gov