

Planning the Buildout of Rural Broadband: A Rural Appalachian County Case Study ~ Noble County, Ohio

Gwynn Stewart - CD Extension Educator IV, Ohio State University Extension, Caldwell, OH, 43724



**Ohio State University Extension
Community Development Program Mission:**
CD helps communities enhance their well-being and create social, economic and environmental conditions in which they can thrive.

Background:

- The Ohio State University Extension Community Development Program in Noble County is levy-funded and serves as the Economic Development local organization for the county. Working from a Strategic Plan that prioritized enhancement of broadband infrastructure, CD funded and coordinated an initial mobile and fixed broadband analysis study with Connected Nation – Ohio.



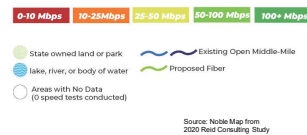
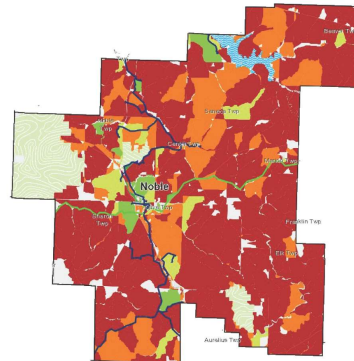
• **According to the 2020 study, Noble County was “the least-connected county in Ohio.”**

- Among those without internet in Noble, the vast majority (nearly 85%) say broadband is not available where they live.
- 43% of Noble Countians responding to the survey telework at least some.
- 96% said they were interested in more choices for internet at home.
- In a 2018 JobsOhio study, Ohio ranked 42nd in percent of population with broadband access and 44th in average speed.

- Noble County is in the Ohio Appalachian region with dense foliage and hilly terrain.
- Of the 6,469 Noble County Households, **4,006 are Unserved**
- 361.6 miles of populated Noble County area, **334 are Unserved**

References:

- Independent Performance Assessment of JobsOhio – June 2018
- Mobile & Fixed Broadband Analysis – Noble County, Ohio – April 2020

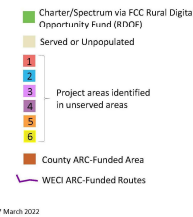


Role of Extension:

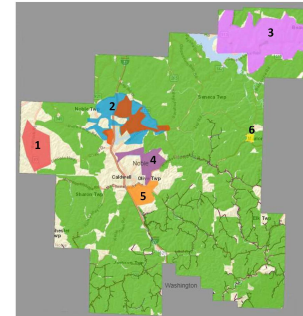
- Conveners** – Identify local needs and key stakeholders, gain support and cooperation through the data and educational process, and work to design and carry out a process and plan for improvement.
- Research & Data Support** – Identify research needed and access primary and secondary data sources and resources to compile a data analysis, and mapping of needs for use in the planning process.
- Networkers/Diplomats** – Make tactical moves between stakeholders and encourage them to work together to identify the public infrastructure need and a pathway for resolution with implementation plans.
- Grant Seeking** – Identify and link resources to increase knowledge of rural Broadband issues and encourage participation in public grant seeking with local matching funds.



Updated Project Areas



Source: Noble Map from 2022 Reid Consulting Broadband Planning



Broadband Partners:

- Ohio State University Extension – Noble, CD
- Ohio Department of Development – *Governor’s Office of Appalachia* & Appalachian Regional Commission
- Connected Nation – Ohio
- Ohio Broadband Office
- Noble County Board of Commissioners & EMA
- Noble Local & Caldwell Village Schools
- Washington Electric Power Co-operative
- Muskingum Watershed Conservancy District
- Tom Reid Consulting
- Providers: Charter Spectrum, OhioGig



The Ohio State University Extension – Noble County office hosted Ohio Lt. Governor John Husted, state legislators, County Commissioners and other key community stakeholders including Caldwell Village, Noble EMA, Noble Chamber, and schools with FFA students and Ohio State Agriculture leaders for a Broadband Roundtable and project update in 2022.

Research & Grantmaking:

- The research initiative and grantmaking for implementation involved multiple steps.
- Connected Nation – Ohio 2020 Study with a Community Survey (*funded by OSU Extension*).
- COVID-related Study addendum focused on immediate education/healthcare needs (*funded by Noble Commissioners*)
- OSU Extension applied for a **\$50,000** Appalachian Regional Commission (ARC) POWER grant for Technical Assistance. The study and mapping provided a clearer picture of current service and areas served or bid to be served through the federal Rural Development Opportunity Fund (RDOF) bidding process. *See map at far left.* The Noble Team used that data to inform local implementation grantmaking efforts for other areas not already bid by local providers. *See map at left.*
- Noble County** Received a **\$750,000 Grant** from ARC (*Focused on Areas NOT Bid in Federal Rural Development Opportunity Fund/RDOF – Areas 2 & 6*). *The 20 percent matching funds were provided by Noble Commissioners & Proposed Internet Service Provider.*
- Washington Electric Cooperative** applied for RDOF unsuccessfully, but partnered again to receive an **ARC POWER grant for \$1.5M** for Grid Modernization (“Make Poles Ready” for fiber access across 215 miles in Noble County, *with matching funds provided by Co-operative.*)
- OhioGig applied for Noble implementation with Broadband Ohio and NTIA for Area 3 (*not funded*).
- Noble County is coordinating another large ARC Broadband grant for FY2023 for Areas 4 & 5 with matching funds from OSU Extension.

