

Public Hearing on Rural Broadband
Pennsylvania House Consumer Affairs Committee
Written Testimony

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Mr. Chairman, House Consumer Affairs Committee, representatives, state officials, ladies and gentlemen, thank you for the opportunity to address you today on this important matter.

Our names are Lance Grable and Jeremy Jurick, and we are submitting this combined public testimony on the importance of ensuring broadband access for all, specifically related to rural areas. I, Lance Grable, am the Director of the Beaver County Office of Planning and Redevelopment, representing Beaver County with a population of over 160,000 people in rural, suburban, river town and urban geographies. I, Jeremy Jurick, am a Program Manager for Michael Baker International, headquartered in western Pennsylvania, and partner with entities to provide planning, engineering and geospatial services to solve the world's most complex problems, including those related to broadband mapping, planning, and deployment.

We would like to emphasize the importance of the role county government should have in ensuring broadband connectivity to overlooked rural areas, an issue known as the "digital divide", by providing this testimony and presenting our processes, findings, and results of a broadband study we've recently completed in September 2021 in Beaver County. Our goal is to convey these ideas to best support policy-making that will aid in future rural broadband planning efforts in our Commonwealth with the goal of ensuring high-speed internet access for every citizen of the Commonwealth.

It is widely known that the Federal Communications Commission collects broadband service coverage geographically every six months at the census block level via FCC Form 477. This style of data collection allows for an overstatement of coverage due to the "one served, all served" methodology, wherein if a service provider serves at least one location within a census block the entire census block is counted as being served. Utilizing this data solely for the purposes of identifying unserved areas to utilize funding mechanisms to deploy broadband implementation projects is dangerous because it may point to areas that are already served or, worse, continually bypasses areas that are in dire need of broadband deployment funding but are always overlooked. We do applaud the FCC for recently passing the Broadband Data Act, which will allow for a more refined data collection process, but there is no timetable for roll-out at the time of this testimony. Yet funding has been distributed to states, counties, and municipalities via the American Rescue Plan Act (ARPA) to deploy broadband implementation projects in areas that are considered to be unserved. This means we cannot wait for the Broadband Data Act to refine the data collection process and we need to enable and empower our counties to efficiently focus on identifying broadband gap areas.

Considering these data collection delays, Beaver County has taken a hands-on approach to determine the exact number of broadband serviceable locations that exist within Beaver County. We have refined our existing broadband map in Beaver County by partnering with Michael Baker International, who utilized Geographic Information System (GIS) software to develop machine learning algorithms to determine

probable locations that may be considered broadband gap areas. Once these potential gap areas were defined, we validated them via a boots-on-the-ground approach to (a) speak with residents and businesses on their lack of broadband access, (b) perform utility pole inventories to verify physical broadband infrastructure, (c) perform mobile broadband speed tests, and (d) provide the citizens with a doorhanger to direct them to a public broadband survey and speed test application. We performed this field work at over 2,000 different rural locations throughout the County during the summer of 2021.

We also spoke candidly with over a dozen internet service providers (ISPs) during this process and entered into non-disclosure agreements, with those who were willing, to acquire network lines and refined broadband location GIS datasets from the providers. Finally, we also collected residents' feedback via phone calls, e-mails, and inquiries through the county's website on broadband issues. Through this process we have determined with confidence that 2,359 broadband serviceable locations in Beaver County lack access to high-speed internet. This number is much higher than the number derived using FCC Form 477 data, which is 1,042 households per U.S. Census data.

The public survey we developed and placed on www.connectBeaverCounty.com allowed for comments from residents. Many impactful comments were received, essentially cries for help, such as the following that validate the need for broadband in rural areas:

"We almost moved out of state due to poor internet and another job opportunity. Internet access in our area is terrible and I have to leave home daily to access better internet." – Resident, Potter Township

"I am thrilled to be moving back to Beaver County where I grew up. However, it has been a shock to find out how difficult it is to secure high-speed internet service that will serve our family and my business needs." – Business Owner/Future Resident, Chippewa Township

"Cell service is the only internet access available where I live. No DSL, cable, or fixed wireless." - Resident, Chippewa Township

"Internet needs to become a service utility like gas and electric, not an expensive extra. Every household needs internet access." – Resident, Bridgewater Borough

"We really dislike only having satellite as our only option. It is slow, doesn't work well, and is expensive for the level of service provided." – Resident, South Beaver Township

"Two different internet service providers quoted us \$20,000 to extend their services to our area. We have no fixed broadband, we use our smartphones and mobile devices." – Resident, Independence Township

"We currently have to stagger our internet usage, as only one or two family members can be on the internet at a time. This makes working from home and schoolwork very difficult." – Resident, Green Township

"There is cable internet 1 mile north and 1 mile south of where I live. There is also fiber within 1 mile, but no one will offer me high speed connectivity." – Resident, Ohioville Borough

Below are statistics derived from this study:

- The top answers from the public broadband survey question related to barriers to broadband access were "I cannot get access to faster service" (49%) and "I cannot afford faster service" (20%).
- Broadband survey respondents who work or learn at home at least 40 hours per week more than doubled after the COVID-19 pandemic (35%) compared to pre-COVID (16%).

- Of the 560 fixed broadband speed tests taken, 46% of download speeds fell below 25 Mbps which is the FCC's definition of broadband. Of these locations, 89% were in rural areas.
- Of the 560 fixed broadband speed tests taken, 42% of upload speeds fell below 3 Mbps which is the FCC's definition of broadband. Of these locations, 92% were in rural areas.
- Of the 5,595 mobile broadband speed tests performed utilizing the top three mobile wireless provider networks (AT&T, T-Mobile, and Verizon), 58% fell below the FCC's definition of broadband download speed and 64% fell below the FCC's definition of broadband upload speed. Over 85% of these records were in rural areas.
- Over 2/3 of the broadband public survey respondents were located in areas designated as rural via the U.S. Census Bureau.
- Over 80% of locations visited by field staff to determine broadband access needs were located in areas designated as rural via the U.S. Census Bureau.
- 124 structures visited by field staff to determine broadband access needs were found to no longer exist (i.e., structure was razed). These were locations within unserved census blocks where FCC Form 477 showed a need for broadband.

Utilizing the results of this study, the county now has a broadband roadmap in-hand and is positioned to solve the digital divide utilizing ARPA funding to partner with ISPs for deployment projects. The main idea is this - engaging and leveraging funding at the local government-level (i.e., counties) to solve the digital divide, instead of relying on federal data collection and federal funding auctions, ensures that these long-standing issues can be resolved by the entities who know their local geographies, demographics and associated needs the most. For example, the FCC's Rural Digital Opportunity Fund (RDOF) places funding directly in the hands of ISPs per FCC Form 477 data whereas our position aligns with ARPA rulings to ensure funding is leveraged by local governments to resolve connectivity issues. Also, we encourage the Commonwealth to scale and utilize Beaver County's data collection methodology and overall approach to ensure our families, friends, and coworkers living in rural areas are no longer overlooked when considering broadband implementation funding.

Furthermore, we encourage the House of Representatives to put forth policy that would allow funding to create competition in areas where only one broadband service provider exists. Though a lack of broadband was the number one issue identified during the Beaver County study, the second most common theme was that many citizens only have access to one provider – and the data we've collected does support this claim. Since these areas are considered to be served, government funding typically is not applicable for broadband deployment projects within these geographies. Allowing for competition would likely reduce the price of service and improve service offerings.

Thank you for your consideration on continuing to support the deployment of broadband implementation projects in rural areas of the Commonwealth. We appreciate the opportunity to address you and for your kind attentions. If at any time you have any questions or would like further input, please do not hesitate to reach out.

Sincerely,
Lance Grable and Jeremy Jurick