

**Broadband for All: Harnessing ARPA for Effective Broadband Expansion** Hannah Faulwell, Austin Ford, Edward Guo, Muhammad Kamaruzuki Cornell University, Department of City and Regional Planning | May 2022

# The Big Picture

Innovative partnerships—working across sectors, agencies, and levels of government—help advance equitable broadband expansion efforts. Such efforts expand resources and ideas sharing and bolster local capacity, particularly in the areas of funding, determining need, and project implementation.

### Background

The COVID-19 pandemic made clear the necessity for comprehensive and equitable broadband coverage to ensure the well-being of American households and businesses in the modern digital era. States and local governments have taken advantage of the opportunity to use funding from the American Rescue Plan Act of 2021 (ARPA) toward broadband improvement. Many have also creatively promoted equity goals within these broadband expansion efforts.

ARPA has the potential to address several of the primary issues historically associated with broadband access in America:

- Funding concentration among few ISPs
- Unreliable FCC data regarding broadband coverage
- Device ownership disparities on the basis of income/age



We approach the issue of broadband equity through the "Three-A Framework," building off the structure established by Gonsalves (2017) to allow us to address these historical broadband challenges:



# **ACCESS:** Is the area served by the necessary infrastructure?

The FCC reports that 14.5 million Americans are without broadband access. In reality, the number is closer to 42 Million.

# **AFFORDABILITY:** Is reliable, high-speed internet affordable?

U.S. consumers pay some of the highest prices for broadband in the world at an average \$68.38 per month (compared to \$44.71 in Europe)

# **ADOPTION:** Do people have the means to use the broadband available to them?

Device ownership and digital knowledge differ greatly along age and income lines.

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#### **Case Studies**

Our team learned from a set of four outstanding projects using ARPA funding for broadband expansion. To learn more, visit <u>https://labs.aap.cornell.edu/sites/aap-labs/files/2022-</u>05/Faulwell%20etal%282022%29\_BroadbandForAllCaseStudies\_2.pdf

Niagara County/Orleans County, NY formed the Niagara-Orleans Regional Alliance (NORA) to address broadband needs. NORA, itself a creative and innovative partnership. leveraged several other cross-agency and cross-sectoral partnerships to advance their broadband expansion effort. First, NORA galvanized its collective power, fueled by ARPA funding, to attract the attention of federal officials, thus securing funding from other federal sources. Second, NORA partnered with local highway administrations to conduct comprehensive coverage mapping, thus providing accurate connectivity condition data where current data were incomplete, lacking, and uninformative. Third, partnerships with community groups such as the United Way in Orleans County allowed for adoption outreach efforts to proceed amongst populations most in need of connectivity assistance.

Franklin County, OH used a small portion of its ARPA funding to augment its Technology Access Pilot Program. Working with community partners, the county provided over 200 computers along with mobile hotspots and digital literacy training to vulnerable seniors. At the start of the pandemic, the county was able to identify the problems facing its vulnerable seniors through good communication and deep working relations with organizations serving the community. The devices and training provided by these partners have been integrated into the daily services of these agencies, prolonging program sustainability and ensuring lasting community benefits.

**Dutchess County, NY** used ARPA funding to conduct a county-wide broadband survey among its residents, business and organizations to determine broadband service quality and price. The survey (itself an outcome of a partnership between the local government and an independent nonprofit) is intended to provide accurate information on broadband conditions in the county. This, combined with the county's exploration of new technologies, will provide the basis for implementation of sound. immediate, and long-term actions to ensure reliable future broadband expansion. The county is also allowing the purchase of devices with community grant funds for libraries to expand broadband services to underserved communities.

Southern Tier, NY region counties harnessed both ARPA funding and NTIA grants to carry out previously-stalled comprehensive broadband infrastructure expansion and address gaps in connectivity for rural and low-income residents. Within these expansion efforts, Southern Tier officials paid particular attention to maintaining affordability for low-income residents by aiming to keep connectivity costs between \$45-\$70 per month, as well as providing subsidies for low-income residents. The flexibility of ARPA funding also allowed the region to bypass single-provider requirements and acquire funding for expansion without having to worry about pushback from private broadband companies previously operating in the area.

# Findings



Common themes throughout this set of case studies indicates that innovative partnerships (across sectors, levels of government, and agencies) enabled resources and ideas and ideas sharing, bolstering local capacity and allowing for better success in the crucial areas of **securing funding, determining need, and implementing programs**. Success in these areas led to greater equity in broadband expansion by more effectively addressing all issues of accessibility, affordability, and adoption.



Find more about this research at <u>https://labs.aap.cornell.edu/node/689</u>.

# **Policy Recommendations**

- Think holistically about broadband. Address broadband from all angles: accessibility, affordability, and adoption.
- Build and maintain partnerships. Leverage strategic partnerships to better meet broadband goals.
- Carefully plan programs for long-term maintenance and sustainability.

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