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## Apartment WiFi: How Building-wide Wireless Networks Can Close the Broadband Gap in Multi-Family Housing

July 25, 2024

Current approaches to closing the broadband gap are focused on full deployment of fiber-to-the-home. But improvements in building-wide wireless network technology provide new options for quick and cost-effective broadband deployment in multi-family buildings, by placing access points throughout the property and then connecting the entire building to fiber. This approach is how Wi-Fi is provided in hotels today. This session provided an overview of the technology involved, and explored delivery strategies that leverage municipal, industry, and federal digital equity funding sources.

Key insights from the discussion included:

- **Multifamily housing concentrates broadband need, but also broadband opportunity.** Adeyinka O. Ogunlegan, VP of Government Affairs for EducationSuperHighway explained that some 25% of households without access to affordable broadband—6 million people or 3.7 million households nationwide—live in multifamily housing. However, this is also an opportunity for deploying broadband in ways that respond to concentrated demand for low-cost deployment.
- **In-building wireless can work in public housing and other multi-family settings with concentrated need.** As Tony Schloss, General Manager of EducationSuperHighway's Apartment Wifi program explained, owners and operators of affordable multi-family housing around the country are adopting an approach used in hotels and market-rate multi-family buildings—using wireless distribution within buildings rather than incurring the high cost of running fiber to each unit.
- **Cities need to cultivate a digital equity ecosystem.** As Rhia Pape, Executive Director at San Antonio Digital Connect explained, infrastructure alone isn't enough to deliver the full benefits of broadband connectivity to urban communities. Orchestrated efforts to mobilize contributions from private sector

partners and collaborations with community organizations are critical to ensuring that the needed devices, skills, and other support resources are in place, too.

- **Bulk purchasing is a secret weapon.** Public sector organizations need to exploit their purchasing power. As Danny Fuchs, Partner, HR&A Advisors, recounted how public housing authorities have had success securing significant discounts on bulk broadband when investing in internet upgrades for their properties. Layering these approaches with grants, subscriber fees, and other sources of capital financing and operating revenue can give cities a much wider toolkit to structure successful broadband projects.

### **Links from the Conversation**

- [Digital Equity Competitive Grants Program](#), NTIA
- [Apartment Wi-Fi](#), EducationSuperhighway

### **About the Tech and Innovation Center Series (T&IC)**

The T&IC series is dedicated to helping local leaders navigate and understand the large quantities of information from the federal government on the nearly 400 funding opportunities available through the Bipartisan Infrastructure Law. The 2 year series is focused on how cities can leverage technology to improve their federal infrastructure funding proposals during 2023 and 2024. Programs focus on helping cities improve their proposals in response to Notices of Funding Opportunities (NOFO's) by adopting state-of-art technologies, expanding their technology capacity, and integrating aspirational technology “moonshots” for their cities.

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