A series from the **Alternative Funding Innovation Lab**

Alt Funding Field Guide

Building sustainable funding for digital adoption

Housing

By Catherine Crago Blanton

Connect Humanity

With support from **Mission Telecom Giving**

The **Alt Funding Field Guide** is a series of publications produced by Connect Humanity's Alternative Funding Innovation Lab. It makes the case that digital inclusion programs create economic value across multiple sectors, and sets out how those sectors can co-invest to sustain the work.

This sector guide examines the public and affordable housing sector, exploring where digital inclusion creates value for residents and housing providers, who the potential co-investors are, and how to structure co-funded initiatives.

All chapters can be found at connecthumanity.fund/alt-funding-guide/

Published July 2026

How to cite: Crago Blanton, C. (2026). Housing. *Alt Funding Field Guide: Building sustainable funding for digital adoption*. Connect Humanity. connecthumanity.fund/alt-funding-guide/housing

Author

Catherine Crago Blanton is a digital opportunity leader, blending expertise in technology, cultural insight, and policy to bridge divides both global and local. Previously, she led *Unlocking the Connection*, the Austin Housing Authority's initiative to bring broadband, devices, and digital skills to every resident of Austin's public and affordable housing. She is the National Digital Inclusion Alliance's 2023 Charles Benton Digital Equity Champion and was a 2020 Policy Fellow at the Johns Hopkins Economic Mobility Forum.

Acknowledgements

The series was led by Samantha Schartman, who convenes the Alternative Funding Working Group. It was made possible by Mission Telecom Giving. We are particularly grateful to Mark Colwell for championing this work.

Blair Levin and Karen Mossberger served as senior editors for the series, and we thank them for the rigor and generosity they brought to the manuscripts. Anthony Schmucker, MA, served as a senior editor for this chapter. We thank the practitioners, sector partners, and funders who shared their experiences and offered feedback on this sector guide.

Series production: Calum Cameron, Connect Humanity

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Section 1: Sector overview

Housing is more than shelter. It is a platform for opportunity that enables families to build good lives, agencies to deliver services, and communities to thrive.

The U.S. housing crisis intersects with nearly every dimension of American economic and social life, from educational outcomes and workforce participation, to public health, civic engagement, and community resilience in times of crisis. This network of interrelated impacts makes critical the work of those who sustain housing accessibility, like housing authorities, developers, community service providers, and neighborhood advocates, who work in concert to preserve existing affordable housing and create new units for families, seniors, and individuals who would otherwise face housing insecurity or homelessness.[1]

This complex ecosystem — federal, state, and local governments, private and public capital, and increasingly corporate and philanthropic partners — has a unique responsibility to treat digital enablement (affordable broadband, appropriate devices, and the skills to use them) as essential infrastructure. Residents are now required to navigate online systems to work, pay bills, schedule appointments, complete homework, and build community. These systems can help reduce intergenerational poverty, giving residents a platform to earn qualifications, grow their income, and in some cases, exit public and affordable housing.

Practitioners looking to secure investment beyond traditional grant funding can look to build funding partnerships with potential co-investors who have a direct stake in overcoming the realities of public and affordable housing. For housing ecosystem providers, these benefits are:

- Digital infrastructure and skills can bring down the *high cost of being poor* for low-income populations
- For an unhoused family, a housing subsidy is life-changing, but without affordable internet and digital skills, a resident's new address can limit access to education, healthcare, and jobs, limiting the family's long-term trajectory
- There is always an unmet need. Very low-income people need a complex set of services and supports to exit poverty. Internet access — often the onramp for these services — is often unreliable, expensive, or absent for these populations
- Affordable housing provider budgets are increasingly constrained. Connected, digitally literate residents can help property owners lower costs such as energy consumption, thereby lowering overall operational costs

[1] US Department of Housing and Urban Development. *HUD releases 2024 AHAR report*. HUD Exchange.

The high cost of being poor

Being poor is not cheap. Classic examples include paying high fees to cash paychecks, relying on high-interest short-term credit, purchasing smaller quantities at higher per-unit prices, and paying penalties such as late fees for utilities and rent. Small disruptions — a cut work shift, an illness, a car repair — can trigger a financial disaster with high stakes, including the potential loss of a housing subsidy from eviction.

For housing providers, this means rent payment volatility, costs related to crisis response, and higher resident turnover. Housing assistance helps stabilize rent, the largest family expense, while resident services and digital tools work to reduce the ongoing poverty premium that creates family instability and higher costs for affordable housing operators.

A human lens: stability enables mobility

Consider Mara,[2] a single mother with two children who had been living in her car for two years. When she becomes eligible for a public housing unit, her life begins to stabilize. She now has affordable, predictable rent set at 30% of her income. She will need a wide range of supportive services to achieve stability.

In the first 90 days, with support from property and resident services staff, she enrolls in benefits to cover food and transportation. She subscribes to affordable internet service and completes 24 hours of digital literacy training, which earns her a device. Her children are still emerging from the crisis of homelessness and she can't work a full shift and be home after school. So she applies to become a Digital Ambassador, receiving a $250/month stipend for helping neighbors enroll in medical benefits online.

That stability allows Mara to make long-term decisions. She gives up a second job and studies for her GED. She enrolls in courses at the local community college, earning a Certified Nursing Assistant credential. As her income rises, her rent adjusts gradually but never spikes unexpectedly.

Over time, Mara and her family's economic position improves. At some point they may transition to market-rate housing or homeownership, opening an affordable unit for the next family in need. This stability-enabling-mobility logic underpins public and affordable housing policy. Digital opportunity accelerates every step in that journey.

[2] This case is based on a real public housing resident. Names and identifying characteristics have been changed to preserve confidentiality.

Making home a helpful anchor

"Location, location, location" is not only true in business. Geography matters for access to opportunity. After months or years[3] on a housing waitlist, a resident's key to a new public housing unit or a Section 8 Voucher represents a critical milestone in escaping poverty. However, access to critical services like quality schools, childcare, social services, jobs, stores and public transit, can remain elusive. Childcare from neighbors and family may be far away. Nearby work, ladders of income opportunity, and skills training may disappear. Mismatched work schedules[4] and travel time can cause residents to lose wages and face transportation and childcare costs. Digital tools can help residents overcome some of these geographic limitations, by providing timely, virtual options during optimal hours.

What is public housing?
Public housing is housing stock that is owned, governed and funded by the U.S. Department of Housing and Urban Development (HUD). About 3,300 local public housing agencies (PHAs) manage 1.2 million units of public housing.[5] About 150 PHAs, just 5%, own 60% of public housing units.[6] Public housing authorities administer over 1.2 million Housing Choice Vouchers, which provide renters a subsidy to use on the private rental market.

PHAs may form nonprofit subsidiaries to own affordable housing or partner in housing joint ventures. PHAs that purchase market-rate broadband for subsidiary housing units may be able to negotiate portfolio discounts for public housing units. Some PHAs create a 501(c)(3) nonprofit subsidiary to help deliver the resident service mission. These can hold program-restricted donations from other public, private, and philanthropic donors.

Digital inclusion as a force multiplier

For residents, digital opportunity expands access to education, workforce training, telehealth, and the ability to engage in civic life. It also provides a cost-effective way to engage with housing administrators. Taken together, these outcomes mean broadband is a *super social determinant of health*.[7] For example, a senior living in a digitally connected building has telehealth services, social connections, and tools that support aging in place. This in turn improves their quality of life and reduces the need for costly interventions. Similarly, families with digital tools can complete homework, apply for jobs, manage finances, and access preventative healthcare more efficiently and conveniently.

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[3] In 2021, the Center on Budget and Policy Priorities reported HCV wait times of up to eight years.
[4] Shi Y. *Bridging the divide: temporal inequality as a neglected dimension in sociological research*. Independent researcher; 2025.
[5] US Department of Housing and Urban Development. *Public housing developments* [GIS dataset on the Internet]. HUD Open Data; [cited 2026 Jun 30].
[6] Council of Large Public Housing Authorities. *Public housing* [Internet]. CLPHA; [cited 2026 Feb 1].
[7] Sieck et al., "Digital Inclusion as a Social Determinant of Health."

For housing providers, resident digital opportunity can be just as transformative. Most administer increasingly complex housing portfolios with ever fewer resources. When residents have internet access and digital skills property owners can communicate more quickly, reduce operational costs for digital work orders, online payments, and streamline remote service coordination. Connected residents can access more "just-in-time" services that prevent eviction, reduce crisis interventions, and stabilize tenancies.

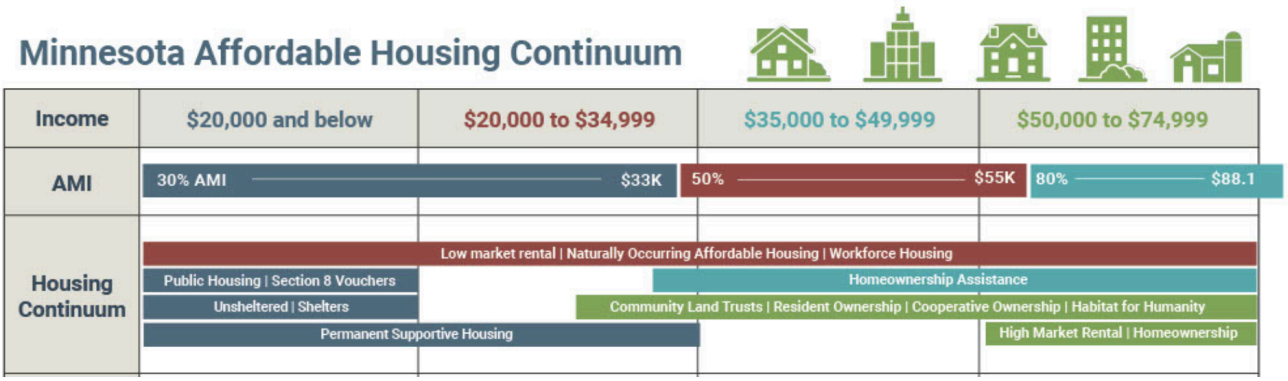

Figure 1: A State Affordable Housing Continuum.

Note: Communities use a housing continuum to illustrate the range of housing options from homelessness to stability. Digital opportunity practitioners can use it to identify target populations and align the services they offer with the priorities of housing providers, policymakers, and potential co-investors. Source: Minnesota Housing Partnership, 2025 State of Housing Continuum, accessed March 13, 2026, 2025 State of Housing Continuum.

A sector ready for sustainable funding models

The good news is that the Department of Housing and Urban Development (HUD) has more than a decade of experience leading ConnectHomeUSA (CHUSA), a national digital inclusion initiative with proven results. CHUSA has convened telecommunications providers, device manufacturers, software companies and digital literacy organizations to solve the problem of digital exclusion in public and Indian housing communities.

While CHUSA doesn't directly fund the more than 100 PHAs that have participated since its launch in 2015, it has nevertheless shown positive economic and social outcomes. It produced almost $27 million in value by 2023, as measured by the number of connected residents and devices distributed (72,500 households were connected and more than 30,000 devices were distributed).[8] CHUSA has been a trailblazer in making the case for co-investment, as partners recognize the downstream economic value is far higher. The

[8] US Department of Housing and Urban Development, Office of Policy Development and Research. *ConnectHome initiative: final report*. Washington (DC): US Department of Housing and Urban Development; 2018 May.

evidence of PHA success is cited throughout this chapter, and dozens of participating PHAs have sustainably funded their programs past their CHUSA participation period.

Despite the value of digital opportunity in the affordable housing space, housing regulators do not universally require broadband infrastructure, affordable service and devices, or digital skills training. Housing-based digital inclusion initiatives are often limited to short-term grants and pilot programs, and vulnerable to changing leadership priorities. Federal initiatives have contributed to the growth of digital opportunity programs, including through American Recovery and Reinvestment Act (ARPA) investments, HUD and state tax program broadband requirements in new developments, and temporary expansion of eligible funding during the CARES Act period.[9] What is lacking is a sustainable funding architecture.

Because the value created by digital transformation extends well beyond residents, housing providers need not rely solely on federal grants. Digital opportunity leaders can secure multiple co-investors by providing services that measurably benefit residents, housing providers, and produce ripple effects that accrue to a wide range of balance sheets — from social service agencies to schools, employers, and local government.

What this chapter explores

Housing is a strategically important sector for building digital transformation partnerships. As place-based anchor institutions with long-term control over assets and responsibility for financial and community outcomes, housing providers have direct relationships with residents, operate within formal governance and accountability structures, and are well-suited to test and institutionalize sustainable alternative funding approaches.

This chapter explores the public and affordable housing ecosystem as a sector ready for sustainable digital inclusion funding, detailing:

- Where value is created
- The housing landscape and stakeholder groups with co-investment potential
- Co-funding models with benefits that accrue to a diverse range of stakeholders
- Practical pathways for aligning digital inclusion with housing priorities

[9] US Department of Housing and Urban Development. *CDBG-CV broadband quick guide* [Internet]. Washington (DC): US Department of Housing and Urban Development; 2021 Jun.

Section 2: Where value is created

Crafting the co-investment rationale for housing providers starts with resident outcomes, from the first 90 days to the next generation. Housing providers[10] also see a cost-benefit on their own balance sheets when residents use digital tools.

This section demonstrates how digital capacity, together with other resident service programs, amplifies three major opportunity areas critical to housing stability and resident opportunity. To make the case concrete, we follow two hypothetical residents, Ashley and James, through a single housing stability challenge — food security.

Next we explore how digital capacity helps housing providers meet their regulatory mandates and mission. To make the case for shared benefit concrete, this section itemizes potential cost avoidance, efficiency savings, mission alignment, and value created when resident and housing provider digital capacity work hand-in-hand.

Resident opportunity incentives

A housing subsidy stabilizes a household. Residents leverage that housing stability to access opportunities that can help them achieve long-term stability. Education, overcoming transportation and childcare barriers, and housing stability are three critical resident opportunity areas that digital tools enable.

Opportunity area: education

Housing provides the stability required for learning. Education breaks the cycle of poverty. Studies show children have higher homework completion rates[11] when they can do it at home, with the added benefit of more parent time.[12] Homework is increasingly assigned and completed online. HUD's ConnectHomeUSA initiative was launched precisely to close the homework gap for K-12 students in HUD-assisted housing, where too many were forced to sit outside local businesses to access unreliable Wi-Fi. Public access points like libraries have limited hours and time caps.

A 2018 HUD evaluation of more than 2,700 newly connected ConnectHomeUSA households found that in-home access to internet service and computers produced impressive results: 98% reported improved school performance, 85% reported helping children with homework, and 51% reported that communicating with the school became

[10] Housing providers include PHAs, affordable housing owners, voucher landlords, and affordable housing property management companies.
[11] Richtel M., *U.S. program will connect public housing residents to web* [Internet]. New York Times. 2015 Jul 15.
[12] Child & Family Blog. *How parents' education shapes child inequality* [Internet].

easier. The biggest hurdles are faced by about 60% of public housing residents, who are single parents. Of those who used the internet for adult education, 75% researched how to participate in GED and college courses.[13]

Opportunity area: transportation and childcare

Connected housing helps residents mitigate the lack of access to transportation and childcare, the two challenges most responsible for missed classes,[14] missed medical appointments, cancelled workshifts, and delayed access to food and medicine. These costs are often avoided when parents have virtual options. In addition, transportation is increasingly digitizing, with apps for rideshare, demand-response transit, e-bikes, and scooters which can help residents find faster, safer transportation routes.[15]

Opportunity area: housing stability

A resident in a unit with affordable broadband, a device and digital skills support has a significant housing stability advantage over a resident without. Even with housing assistance people in poverty are vulnerable to eviction, especially in the first 90 days. While there are many reasons for this instability, the need for food, utility costs, medical supplies and clothing often compete with rent payments. Connectivity and digital skills can help residents access and manage their frequently underused benefits.[16] Housing stability therefore improves when residents are connected and have the digital skills to close the "*needs-to-benefits gap*," the difference between what a person needs to exit poverty and the benefits they are eligible for.

> *The rent eats first.*
>
> — Megan Sandel, MD, MPH, describing how low-income families prioritize paying rent first, foregoing medicine, food, and utilities.[17] Digital skills help close the needs-to-benefits gap.

Housing stability is even affected by a family's need for connectivity. Broadband costs are a largely hidden variable in resident housing budgets. Needs-based systems that assess cost burden don't include internet service as a utility, so the cost is not considered when

[13] HUD, *ConnectHome Initiative: Final Report*.
[14] Williams B, et al. *For student parents, the biggest hurdles to a higher education are costs and finding child care* [Internet]. The Education Trust; 2022.
[15] Prohibitive cost, location and availability of safe options are persistent childcare and transportation barriers.
[16] HUD policy and service coordination guidance acknowledge the high correlation between benefit delays and rent arrears, and the resolution of arrears when food supports are accessed.
[17] Sandel M. *Housing as a platform for health*. *Social Interventions Research & Evaluation Network*.

a resident's monthly rent payment is calculated. Yet for the lowest-income households, the combined cost of broadband, devices, and digital literacy training is a housing stability issue. A 2025 Federal Reserve Bank of New York study[18] found that low- and moderate-income households spend an average of 2.43% of monthly income on broadband alone — nearly five times the share paid by higher-income households.

Opportunity in action: residents Ashley and James

Imagine two residents, Ashley and James.[19] From the outside their lives look remarkably similar. They live across the street from each other at different housing properties on the same block. They are each single parents of two children. They work for the same employer. Both apply for SNAP benefits. Both need the food bank 15 times per year to help feed the family. However, they are on opposite sides of the digital divide, with repercussions detailed in table 1 below.

While James spends less than 1% of his annual income securing supplemental food, this costs Ashley almost 3% of her income.[20] James can use his additional income to purchase more goods and services for his children while Ashley has to secure supplemental food and other basic needs through public agencies and emergency funds. These additional tasks means Ashley loses work shifts, leading to further loss of income and stress on social and public service agencies.

For every 100 households like James', housing providers could report an additional $142,500 in household income. They could see an increase of up to $42,750 in rental payments for households that preserve 15 four-hour work shifts per year.[21] In addition, providers can avoid lost rent collection and staff time responding to residents' crisis needs. In this example, digital capacity is a net positive for the investment with impact that ripples across residents' lives.

Table 1: Comparative Advantage of Digital Tools for Supplemental Food Benefits

Action to Secure Food	Ashley	James
Digital Capacity: Affordable home broadband; property-based discounted device and digital navigation	**No** Travels to library, wait time, limited access, or idle car outside business.	**Yes** Pays $15 per month for internet, learns on site and pays $125/device
Applies for food bank benefits	Waits for an in-person appt. Forgoes a four-hour work shift	Virtual appt. Applies with online navigator
Secures food bank boxes, with remaining items from grocery store	Forgoes a four-hour work shift to get bus to three food banks and the grocery store	Allocated box on portal. Picks up during work break Uses SNAP card online to order grocery delivery

[18] Nair A. *Broadband affordability: assessing the cost of broadband for low- and moderate-income communities in cities* [Internet]. New York: Federal Reserve Bank of New York; 2025 Sep.
[19] This is a composite, hypothetical, conceptual example. These are not specific individuals.
[20] See Appendix A for assumptions and interpretations.
[21] Ibid

Address household income impact	Loses 15 four-hour work shifts and five additional four-hour work shifts to replace lost income	Keeps 15 four-hour work shifts totalling $900 per year and saves on food costs

Local housing provider incentives

Digital capacity is more than just a basic necessity, driving impacts that ripple across residents' lives. Enabling this capacity helps the housing sector fulfill its longstanding goal of helping residents move up the economic ladder and achieve quality of life.

Affordable housing providers aim to reduce generational poverty. When they succeed, more families can benefit from housing. Educational opportunity and supportive services help achieve this goal. Conversely, housing instability results in long-term negative educational outcomes. For school-aged children, housing instability fuels chronic absenteeism.[22] Lack of a high school degree is the single greatest risk factor for young adult homelessness.[23] Children born into poverty who earn a college degree have an 84% chance of leaving the bottom income quintile, "decoupling their financial future from their parents' economic starting point," according to the Pew Charitable Trusts.[24]

Digital capacity supports GED attainment, providing incremental higher wages, and work-from-home opportunities. GED holders have better access to full-time employment, jobs with benefits and post-secondary training. GED holders earn on average $7,000-9,000 more than those without, and often use the qualification as a stepping stone to additional educational attainment and higher salaries.

Residents who increase their income over time — through housing stability, education, upskilling or remote work — can reduce use of public benefits and have more discretionary income. This is important because tenant rent revenue represents over 30% of public housing funding and almost 50% of operating funding. Thus, each $100 monthly increase represents up to $1,200 per household.

As a single parent earns a GED, a CNA credential and an Associate's Degree in Nursing, income could rise from 30% to 50% to 80% of AMI, expanding her housing options from deeply subsidized housing to other affordable housing, including workforce housing.

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[22] National Center for Homeless Education. *Chronic Absenteeism and Student Homelessness in America: School Years 2018-19 to 2020-21*.Greensboro (NC): University of North Carolina at Greensboro; 2022.
[23] Morton MH, Dworsky A, Samuels GM**.** *Missed opportunities: youth homelessness in America*. Chicago (IL): Chapin Hall at the University of Chicago; 2017.
[24] Pew Charitable Trusts. *Pursuing the American Dream: Economic Mobility Across Generations*. Washington (DC): Pew Charitable Trusts; 2012.

Digital transformation initiatives can also help PHAs comply with regulations, engage residents, and achieve greater mission effectiveness by streamlining administration. For example, connectivity and digital skills can help PHAs cost-effectively administer the HUD-mandated Admissions Occupancy Plan (ACOP), by enabling online applications and recertifications. Resident participation in the PHA's annual plan or Resident Council can increase dramatically when virtual options are offered.

Shared value for residents and housing providers

Digital skills practitioner services can translate directly into co-investment opportunities that support at least three of a housing provider's mandates: housing stability, resident opportunity, and operational excellence.

Housing Stability

Table 2. Housing stability from digital enablement

Digitally enabled residents (affordable broadband, devices, skills)	**Housing provider benefits**
• Awareness of available assistance, reducing needs-to-benefits gap • Adoption of digital financial services • Securing basic needs, increase income with upskilling	• Reduce late and missed payments and arrears • Reduce staff time on resident emergency assistance • Reduce use of housing provider emergency needs funds • Potentially reduced eviction costs
• Greater compliance with landlord administrative requirements	• Increase administrative timeliness, efficiency, with lower costs

Potential co-investors include: Community Reinvestment Act (CRA) regulated financial institutions; basic needs agencies; nonprofit emergency funds administrators; private sector employers with low- and living-wage jobs; alternative philanthropic funding via basic needs nonprofits.

Resident Opportunity

Table 3. Resident opportunity from digital enablement

Digitally enabled residents (affordable broadband, devices, skills)	**Housing provider benefits**
• Improve K-12 performance • Access hybrid after school programs and online educational tools	• Meet PHA mission to reduce intergenerational poverty by increased earnings[25]

[25] Currie J, Yelowitz A. *Are public housing projects good for kids? J Public Econ.* 2000;75(1):99-124.

• Increase household income through remote education[26] • Greater remote work opportunities	• Decrease the need for emergency rental assistance • Improve access to income opportunity beyond the property neighborhood with little incremental cost
• Improve access to resident services • Complete and graduate from resident services programs with consistent virtual access	• Achieve cost effective resident recruitment and higher retention • Reduce staff coordination time • Decrease per person completion cost
• Greater civic participation via virtual public meetings and tools	• Stronger resident input to guide city initiatives and budget priorities

Potential co-investors include: school districts and higher education agencies; private sector edtech companies, low- and living-wage employers, workforce development agencies; and city or county civic engagement functions.

Operational Excellence

Digital adoption can increase efficiency for housing providers by reducing demands on staff time, automating repetitive tasks, and enabling residents to "pull" information rather than wait for it to be "pushed." This works only when a critical mass of residents adopt and trust agency digital services.

Table 4: Operational excellence from digital enablement

Digitally enabled residents (affordable broadband, devices, skills)	**Housing provider benefits**
• Conserve energy by up to 8% of electric bill,[27] or $50-100 per unit per year, with internet-enabled thermostats[28] • Secure $55-$250 for enrolling and adopting energy efficiency tools • Change energy behaviors as residents monitor consumption	• Save and reallocate energy costs at properties where the housing provider pays utilities • Secure $5,500 to $25,000 in federal[29] municipal[30] incentives per 100 households • Decrease emergency utility assistance requests by 10-20%[31] • Save costs with digital building controls, remote maintenance
• Pay rent online, securely and efficiently	• Savings in staff time used to manually

[26] Horrigan J. *Understanding the Return on Digital Skills Investment Starts with Assessment*. Benton Institute for Broadband & Society; 2025 Nov 13.
[27] Berger J, Adams B. *Low-income multi-family smart thermostat pilot*. APPRISE; 2022 Sep.
[28] US Department of Housing and Urban Development. *HUD Better Buildings Challenge: Multifamily Sector*. US Department of Housing and Urban Development.
[29] ENERGY STAR. ENERGY STAR Rebate Finder [Internet]. U.S. Environmental Protection Agency.
[30] The Tech Influencer. Utility rebates by state 2025: Thermostats, demand response, and heat pumps [Internet].
[31] U.S. Department of Health and Human Services, Office of Community Services. Low Income Home Energy Assistance Program (LIHEAP) [Internet].

• Reduce transaction costs with fewer checks and money orders • Easily submit work order requests • Increase trust and accountability	process checks, money orders • Save from $3-10 per work order (intake cost), or $33,000 to $100,000 per year per 1,000 work order intakes[32, 33] • Enhance predictive maintenance and resource allocation decisions
• Access property information and events more reliably • Secure emergency referrals quickly during emergency events	• Reduce communication costs, e.g., fewer staff hours, fewer flyers • Improve "ground truth," decision making during emergencies

Potential co-investors include: device manufacturers and companies that already have city and state government customers, utility agencies, smart building device and software manufacturers; financial services providers; emergency response agencies.

Taken together, the three core areas identified above outline a case for co-investment. The value to residents and housing providers is measurable, and extends beyond the housing provider's balance sheet. Section 3 identifies the partners best positioned to benefit.

[32] In 2015, the 311 call cost averaged $3-4 for simple calls and $11 or more for complex calls. One city reported a 50% cost reduction when residents used apps to schedule some services. Newcombe T. *311 upgrades make it cheaper to connect with citizens*. *Governing*. 2015 Jun 8.
[33] New York City Housing Authority. NYCHA press release [Internet]. New York (NY): New York City Housing Authority; 2020 Feb 12 [cited 2026 Jul 1].

Section 3: Co-investment partnership opportunities

When resident digital capacity meets housing provider digital transformation the returns show up on the balance sheets of diverse co-investors. The realities of public and affordable housing described in Section 1 create both challenges and opportunities for collaboration. This section examines potential co-investors — their motivations, financial incentives, and the entry points for most accessible digital skills providers.

Cities, counties, and school districts

Most housing providers have long-standing relationships with cities, counties and school districts. Each has its own governance, budgets and contracting requirements. Each has public engagement and participation requirements.

Cities can help fund broadband and can influence the telecommunications companies they regulate to provide services that benefit affordable housing agencies. Cities get better, more equitable data when low-income system users and consumers adopt digital tools. This helps prioritize budgets, improve service and product design, and improve civic participation and trust.

Public Health Department. Residents are healthier with access to timely public health interventions including accurate information, intervention, telehealth, remote monitoring and emergency response. More than 50% of residents in low-income housing are older adults and people with disabilities. People in public and affordable housing experience higher rates of chronic illnesses. The **Boston Housing Authority** sought to reduce ER visits and improve chronic disease management through digital telehealth programs by partnering with **Boston Public Health** and **Boston Public Libraries**.[34]

Energy Department. Low-income residents are locked out of city-run internet enabled digital thermostat programs if they can not afford internet and smart home devices. When a northeastern utility installed digital thermostats at a public housing authority, it provided user training and Wi-Fi in one-half of its properties, resulting in a decline in energy expenses.[35] In January 2018, **ecobee** donated 776 thermostats to the **Toronto Community Housing Corporation** (TCHC) to help it contribute to the city of Toronto's "A Better Tomorrow" climate change action plan.

[34] Massachusetts Broadband Institute. *Boston Housing Authority Launches Digital Literacy Courses*. MassTech; 2025 Apr 10.
[35] Berger J, Adams B. *Low-income multi-family smart thermostat pilot*. APPRISE; 2020 Sep.

Transportation Department. Digitally-powered transportation is increasingly a bridge public transportation departments rely on. A car is unaffordable for many affordable housing residents. A resident can use micro-transit (scooters, ebikes) and ride hailing (Uber, Lyft) to get to a location they otherwise could not or to avoid lengthy wait times between major routes. Many cities require micro-transit companies to make annual memberships free or affordable for low-income residents. Transportation apps streamline provision and tracking of transportation vouchers. Data helps decision-makers streamline bus routes and build new hubs. Ride share apps reduce the time cost of public transit and enable medical transport voucher use, ensuring residents keep appointments and yielding a strong return on investment for healthcare providers.[36]

The **Austin Housing Authority** secured cash and in-kind sponsorship from CapMetro and Austin Energy's EV program with support from MetroBike and BikeTexas to help seniors register online for free ebike membership, use apps to find the safest route to the grocery store, and practice using apps to check out and return the ebikes.[37]

County governments often also govern rural or unincorporated area infrastructure. They often oversee health care systems and have varied funding sources. Place-based digital health initiatives help reduce county budgets.

School Districts are typically governed by elected trustees and have their own budgets. Student home connectivity helps school districts achieve student performance, save money, and in five states prevent loss of state funds when students miss school.[38] Students with in-unit broadband have higher math scores.[39] Jobs requiring better math skills are growing at twice the rate of other jobs, with wages more than double the median.[40] Parents can better adopt parent-teacher portals.

School districts are not legally required to provide broadband connectivity for students, but they are responsible for providing access to instruction when learning moves online.

Collaboration between a school district, a city, and a housing provider is a common co-investment structure. School districts may co-invest in wireline broadband and adoption when public housing properties are in underinvested areas where hotspots don't perform well. School districts may also invest in after-school place-based youth service agencies, which are potential co-investors in digital literacy services.

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[36] HealthCity. *Subsidized non-emergent medical transportation and health equity* [Internet].
[37] Austin Energy. *Expanding Metrobike to HACA Residents* [video]. YouTube; 2021 Sep 20.
[38]Mollenkamp D. *School Districts Lost Federal Funds. Will Students Lose Digital Access?*. *EdSurge*. 2025 Feb 11.
[39] National Center for Education Statistics. *Indicator 16: Internet access*. Condition of Education; 2017.
[40]Matusek S. *Nation's* Report *Card Shows U.S. Students Still Struggling in Math, Reading, and Science*. *Christian Science Monitor*. 2025 Sep 9.

The **Akron Metropolitan Housing Authority** (AMHA). Barberton City Schools contributed $50,000 for community Wi-Fi on public housing properties to provide a permanent Wi-Fi solution to improve student connectivity and school engagement for 468 children in 272 units. Contributors included: the City of Barberton ($20,000), the Barberton Community Foundation ($18,000) and AMHA ($65,000).[41]

Social services and community-based organizations

Service coordinators at affordable housing properties work closely with residents to connect them with nonprofit social services agencies for longer-term case management.[42] Some carry a case load of 30-70 residents, coordinating food assistance, benefits, job training, healthcare and even clothing. Residents with digital skills can serve themselves with online resources, helping coordinators and agencies serve more clients.

The entry point for digital skills providers, and the co-investment pitch, is based on a growing nonprofit capacity focus area: digital transformation. When agency clients adopt digital tools[43] agencies can provide more frequent touchpoints at a lower cost.

Social services agency data and insight from a housing-based service coordinator can help build a persuasive case for how digital skills can close service gaps. Practitioners can segment solutions for two types of agency clients by asking: "who can we serve more effectively?" and "who are we missing?"

> *At public housing sites, we are serving the people we never see – the people who can't make it to us.*
>
> — Senior executive of a regional social services agency, on the need to adapt programs that work well at service centers to the population at public and affordable housing properties

The **Greater Chicago Food Repository** provides food pantry assistance at several Chicago Public Housing Authority sites. It provides digital navigation to residents for SNAP and other benefits assistance. French nonprofit **Efficience Solidaire Creative** has a partnership with public housing sites in Lille (**Habitation à Loyer Modéré**) to serve about

[41] US Department of Housing and Urban Development. *Akron Metropolitan Housing Authority: Braided and Property-Specific Funding Strategy Connects Residents*. HUD Exchange.
[42] Harris M. *HUD-Funded Service Coordinator Programs: Resident Opportunities and Self-Sufficiency Service Coordinator Program, Family Self-Sufficiency, and Service Coordinators in Multifamily Housing for the Elderly and Disabled*. National Low Income Housing Coalition; 2025.
[43] National Institute for Nonprofit Digital Advancement (NINDA). *National Institute for Nonprofit Digital Advancement*. NINDA.

10% of their residents who refuse to, or cannot, adopt digital tools to administer their housing benefits.

Employers and retailers as co-investors

Private sector co-investment in housing-based digital skills makes good economic sense for employers because the location and concentration of public housing affects local labor markets, infrastructure, property values, and taxes. People who live in subsidized housing are part of the local workforce, customers of local businesses, and neighbors to offices, hospitals, stores, schools, and places of worship.

The largest employers in an area, anchor companies, often help shape local investments and chamber of commerce priorities. Anchor companies are helpful allies to digital skills leaders, but small divisions of companies, e.g. warehouse, customer service, and manufacturing have responsibility for producing business value too.

Digital infrastructure and skills investment in public and affordable housing can be directly tied to business outcomes that support business value:

- **To reduce employee turnover** and commute-related attrition, an operations manager may advocate for digital workforce training to fulfill service agreements or municipal concessions in a particular area.
- **To drive employee loyalty** and meet ESG goals, a chief administrative officer may offer employee volunteer opportunities or digital skills as an employee benefit.
- **To increase brand awareness** or acquire new customers, a marketing director may hire resident ambassadors and digital navigators focused on a specific product.
- **To demonstrate shared values** and community commitment, a government affairs executive may invest in digital infrastructure and services to advance an issue, like equitable education or new transportation options in a specific location or area.

Digital skills providers can identify entry points by working to understand each decision maker's motivation for co-investment.

> *"This supporting investment for Project Overcome... will empower residents to make progress in our fast-paced world."*
>
> — V.J. Smith, Manager, Corporate Social Responsibility and Tribal Affairs, Marathon Petroleum. El Paso-based Borderplex Connect's *Project Overcome* offers free and affordable high-speed in-unit broadband to 330 PHA units in Marathon's targeted geographic area.

Internet service providers (ISPs) are a critical partner for housing providers because the locations of public and affordable housing are often under-connected and underinvested. Low-income housing properties that are multi-dwelling units (MDUs) give ISPs the ability to connect dozens or hundreds of customers through a single building, reducing the costs of acquiring new customers. Digital skills providers can find the right entry point by understanding the constraints and payoffs to the ISP.

First, digital literacy practitioners can help ISPs build trust by providing place-based, high-touch registration assistance. Many low-income consumers say they don't trust ISPs because subsidy applications are difficult to navigate, or discounts and rates are unclear or expire without warning. Practitioners can patiently educate consumers on site.

Next, practitioners can help ISPs offset lower profit margins by making digital skills relevant so that consumers subscribe for the long term. The amount very low-income consumers can pay monthly without sacrificing basic needs like food, utilities and medicine is about $10 to $25 per month.[44] Affordable internet service may require combining corporate philanthropy with Lifeline and other subsidies. EveryoneOn.org maintains a locator tool for subsidies available to people in public housing.[45]

ISPs must justify a capital investment in infrastructure upgrades. While nearly all new MDUs are fiber ready, more than 50% of PHA units were built before 1975.[46] Older wiring and materials add a "last 100 feet" problem to the traditional last mile challenge. Getting service from the curb to each unit in older buildings costs $700 and $1,600 for fiber per unit and $1,100 per unit for Wi-Fi.[47] Broadband quality can vary from property to property and within a property as small as 1,000 by 2,000 feet. Rural PHAs have different priorities and challenges, but data and appropriate digital interventions from organizations like Rural LISC can help with cost-benefit analyses.[48] Adoption investment generally drives up subscription rates, enabling the ISP to improve its service.

> Read the Telecommunications chapter of the *Alt Funding Field Guide* for a full discussion of opportunities for co-investment partnerships with ISPs

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[44] Nair A. *Broadband Affordability: Assessing the Cost of Broadband for Low- and Moderate-Income Communities in Cities*. Federal Reserve Bank of New York; 2025 Sep.
[45] EveryoneOn. Find low-cost internet, computers, and free training [Internet]. Available from: EveryoneOn Find Offers
[46] Docter B, Galvez M. *The Future of Public Housing: Public Housing Fact Sheet.* Urban Institute; 2020.
[47] Jenny Miller, Senior Director of Government Affairs, Education Superhighway, interview by author, March 27, 2026.
[48] Local Initiatives Support Corporation (LISC). Digital opportunity [Internet].

Computer device and app makers often have Corporate Social Responsibility goals tied to low-income markets. Many are keenly focused on developing workforce pipelines and brand loyalty in the areas where their technologies are made and sold.

Regulated banks supply the majority of equity in state and market tax credits for affordable housing, motivated by the Community Reinvestment Act (CRA). Investments to close the digital divide are now eligible for CRA credit.[49] In areas where the bank doesn't have a branch,[50] banks often provide employee volunteer time, cash, or gifts-in-kind.

Healthcare providers and insurers increasingly invest in both affordable housing and housing-based health interventions, including in connectivity and digital skills. Public housing residents often have complex health conditions[51] and are high system users; 2.5 million low-income individuals in housing have a disability and about 1 in 4 people in public housing are seniors. Almost 70% of large PHAs have formal MOUs with primarily nonprofit health partners and 50% share health data.[52] While a housing subsidy reduces emergency department visits and increases primary care visits,[53] according to CLPHA, public housing residents "do not necessarily have better health outcomes and often report lower health status."[54]

One example is **UnitedHealth Group**, whose affordable housing investments surpassed $1 billion in 2024, in part through the Health & Housing Fund, a partnership of Stewards of Affordable Housing for the Future and the National Affordable Housing Trust.[55] UnitedHealth Group funds lending programs that use tablets to address social isolation for residents and enable virtual wrap-around health support. Natural entry points to pitch place-based patient digital skills services are with corporate social responsibility or patient advocate roles in companies focused on health and housing.

Philanthropies as co-investors

Foundation giving for public and affordable housing "has been courageous in some ways and neglectful in others," according to Inside Philanthropy.[56] Less than 2% of $577 billion

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[49] Barton J. *Closing the Digital Divide: A Framework for Meeting CRA Obligations*. Federal Reserve Bank of Dallas; 2016.
[50] Gruenberg MJ. *Remarks by Chairman Martin J. Gruenberg*. Speech presented at: Federal Deposit Insurance Corporation; 2023 Oct 24.
[51] National Center for Healthy Housing. *Housing and health* [Internet].
[52] Lucas, S. Connecting fragmented systems: Public housing authority partnerships with the health sector [Internet]. *Cityscape: A Journal of Policy Development and Research*. 2018;20(2). Available from: HUD User Cityscape, Vol. 20 No. 2, Chapter 6
[53] Habitat for Humanity. *Research series: How does housing impact health?* [Internet].
[54] Council of Large Public Housing Authorities; Public and Affordable Housing Research Corporation. *Mapping the evolution of PHA health initiatives* [Internet].
[55] UnitedHealth Group. *UnitedHealth Group expands housing investments to $1 billion* [Internet].
[56] Inside Philanthropy. *Giving for Housing and Homelessness*. Inside Philanthropy [Internet].

in U.S. philanthropic funding went to housing and homelessness in 2023. Most of that funding is focused on stemming the affordable housing crisis by building new units (rarely), or investing in community development corporations and pooled funds, sometimes with an explicit social justice lens.

An underdeveloped entry point for digital skills practitioners could be through the housing investment divisions of the large, endowed foundations, LLCs, smaller foundations, and corporate philanthropy. The pitch is to align with foundations' interests in maximizing their housing infrastructure investment by applying digital skills training to improve housing security, including housing stability.

As above, philanthropies may see digital skills services as a way to build digital capacity in existing social services grantees. Co-investment could focus on upskilling resident services staff and residents to use digital tools to access services and reduce administrative cost.

Philanthropy has a track record in housing that is growing. For example, the HUD Council on Foundations award program has highlighted impact investing foundations like Annie E. Casey and Community Foundations support infrastructure and resident services across the U.S.[57] Place-based investment streams combine their missions, such as health, workforce, with housing. Kresge Foundation and Health Futures Funds have both recently done this.[58] Corporate CRA-eligible philanthropy, such as JPMorgan Chase's $40 million philanthropic fund and Citi Foundation's $50 million grants are layered on affordable housing debt and equity of $5 billion and $60 billion respectively.[59]

State agencies as co-investors

Economic Development Agencies

Digital skills practitioners may find entry points with state education or economic development agencies, who are charged with ensuring student achievement helps drive state revenue. A 10% increase in 8th grade National Assessment of Educational Progress (NAEP) math scores in 2003 was associated with an almost 1% increase in the state's annual job growth rate, and a 1.5% increase in state tax, resulting in an estimated range for each state of $411 million to $8 billion per state.[60]

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[57] US Department of Housing and Urban Development. *The Secretary's Award for Public-Philanthropic Partnerships: Housing and Community Development in Action (2024)*. HUD User.
[58] National Center for Healthy Housing. *Philanthropic Funding*.
[59] US Department of Housing and Urban Development. *The Secretary's Award for Public-Philanthropic Partnerships: Housing and Community Development in Action (2024)*. HUD User.
[60] American Action Forum. *A Recipe for Prosperity: Quality Educational Standards and Economic Growth*. American Action Forum.

Universities and Community Colleges
Housing instability is one of the strongest indicators of course non-completion and delayed graduation. Community colleges sometimes partner with housing authorities to reduce housing instability for students.[61] In addition, community college students who live in assisted housing have higher persistence with access to digital tools. Place-based housing services for university students also drives community engagement and local student enrollment, and mitigates the risk of neighborhood changes impacting enrollment.[62]

Digital skills practitioners may find entry points for co-investment from universities and community colleges that are working with a housing provider to provide devices, training, evaluation and even student internships.

In 2022, the **Durham Housing Authority** received a $40 million Choice Neighborhoods Implementation Grant from HUD to redevelop two public housing properties. Duke contributed $1 million to this partnership effort, and in-kind staff provide K-12 supportive services and healthcare provider enrollment to local residents.[63] In 2016, the **Austin Community College** partnered with the **Austin Housing Authority** to establish a Digital Inclusion internship that by 2025 provided over 200 IT students with more than 300 semester-long paid internships to refurbish and deploy donated devices and provide residents training needed to adopt online tools, including a rent payment portal.[64]

Workforce Development Agencies
The Broadband Equity, Access, and Deployment (BEAD) Program is a $42 billion federal program administered by states to achieve universal broadband access. Workforce development and housing-based deployment are eligible components of BEAD. According to NTIA, 30% of states plan to allocate $350 million in BEAD funding to workforce investments.[65] For these investments, public and affordable housing is a source of labor supply and geography, home to a disproportionate number of work-able adults in the low-to-living wage income band.

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[61] Federal Reserve Bank of Richmond. *Innovative Housing Solutions for Community College Students*. *Community College Insights*. 2025 May 9.
[62] Ehlenz M. *Universities and Affordable Housing: Seven Case Studies*. Penn Institute for Urban Research; 2023 Jul 5.
[63] Ibid.
[64] Austin Community College. Teaching and Learning at ACC. *Digital Inclusion Internship: Real Experience, Real Impact* [video]. 2026 Jun 23.
[65] Arbuckle W. Ramping up the BEAD workforce: 5 things states, ISPs, and construction firms can be doing now [Internet]. Available from: NTIA Blog: Ramping up the BEAD Workforce

State Broadband Offices

Public or affordable housing properties represent many of the "unserved" locations in states, because they are "difficult to serve" or in rural areas. Economic and community development outcomes depend on access to affordable broadband, devices, and digital literacy services. That is why the broadband offices of the states of Maryland[66] and Virginia[67] sit in their state housing and community development agencies. A substantial minority of states explicitly mention public, HUD-assisted, affordable housing or ConnectHomeUSA in their BEAD plans, but most consulted public and affordable housing stakeholders. Digital opportunity leaders can learn from their findings.

State housing finance agencies as fiscal sponsors

Digital skills practitioners may find entry points to potential co-investors through their state-created housing finance agency (HFA). HFAs offer valuable information: how digital opportunity is provided, which developers have funding that require digital infrastructure and skills, and which housing funders will apply for housing tax credits that require broadband infrastructure and skills.

HFAs translate federal housing policy into creating local affordable homes.[68] HFAs are the primary allocators of affordable housing development financial tools like the Low-Income Housing Tax Credit (LIHTC), funding 15-30% of new multi-family housing in states across the U.S. each year.[69] HFAs in California, Connecticut, Nevada, Rhode Island, and Massachusetts have special funds dedicated to digital infrastructure and skills.

HFAs set digital opportunity policy through LIHTC rules that determine which projects will win tax credits. Developers who compete for dollar-for-dollar tax credits can subsidize 30% or 70% of affordable units in an affordable housing development.[70]

Forty LIHTC-allocating states prioritize broadband and digital skills as a mandatory or points-generating feature of affordable housing; 13 states reference minimum required internet speeds.[71]

For private investors in affordable housing, broadband infrastructure may be included in the "capital stack" — the amount of one-time funding needed to build a development. But

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[66] Maryland Department of Housing and Community Development. *Office of Statewide Broadband*.
[67] Virginia Department of Housing and Community Development. *Broadband*. Richmond (VA): Virginia Department of Housing and Community Development.
[68] National Council of State Housing Agencies. *State Housing Finance Agencies: At the Center of Affordable Housing*. National Council of State Housing Agencies; 2024.
[69] Ibid
[70] Novogradac. *About the LIHTC*. Affordable Housing Resource Center.
[71] National Housing Trust. *Strengthening Low Income Housing Tax Credit Allocations*. National Housing Trust.

ongoing broadband service, digital literacy skills classes and devices are often not investments that yield direct benefits to the housing infrastructure (asset) itself. However, many investors recognize that these services improve *asset performance*, (e.g., lower turnover, fewer evictions, energy efficiency, increased income) so they work to secure other funding to pay for digital adoption programs.

Digital skills practitioners could find opportunities to help LIHTC recipients make up for underperforming resident services, or build digitally-powered resident services that LIHTC funding may support.

U.S. Department of Housing and Urban Development (HUD)

Digital skills practitioners who aim to build sustainable co-invested initiatives for housing-assisted people must be familiar with HUD, the federal agency that is the primary engine for affordable housing. HUD finances construction, housing preservation, rental assistance, and community development activities, all of which are potential entry points for digital skills providers. HUD regulates how housing is provided at the local level. It shapes the capital stack and influences resident service program design. Digital skills practitioners need not become housing experts; your local housing provider can tell you which HUD issues affect their work. To refine your ability to shape meaningful solutions, you need only follow a single HUD-regulated issue that can be affected by digital skills.

Subsidized housing comes in all forms and sizes, for all kinds of people, from a high-rise for single seniors to a one-story home for a family. Public housing is built, maintained and owned by a variety of HUD programs.[72] Public housing authorities may also administer Housing Choice Vouchers, which provide a subsidy for a family to use in the private rental market. HUD also regulates affordable housing developed with private funds.

In all cases, HUD uses Area Median Income (AMI) thresholds adjusted to family size to determine who is eligible for an income-restricted unit. For example, in Denver, the median income for a food service technician is $26,240, about 50% of AMI. If that worker supports a household of four, their adjusted household income is less than 30% of AMI.

Funding support and sources

HUD policy frames broadband as a housing stability input and a way for people in HUD-assisted housing to access opportunity, which furthers HUD's mission.[73] HUD allows housing agencies to use Community Development Block Grants (CDBG) and Community

[72] HUD regulates: HUD Public Housing; HUD Native American Programs (ONAP); HUD funding to states and localities; HUD Multifamily Housing; USDA Rural Development Multifamily Housing; state allocated Low Income Housing Tax Credits (LIHTC.)

[73] HUD's 2016 Rule, *Narrowing the Digital Divide Through Installation of Broadband* requires physical broadband infrastructure in new or substantially rehabilitated properties. In 2021, HUD *guidance* provided in-home internet service as an eligible use of public housing operating funds.

Service Block Grants (CSBG) grants, tenant participation funds and operating or capital budgets to fund broadband and digital literacy services.

HUD also funds resident service programs that provide digital literacy training. In 1990, Congress established the first Family Self-Sufficiency program. In 2026, to contribute to the overall economic health of HUD-assisted communities, HUD budgeted $255 million to self-sufficiency programs for "the employment, financial stability, health and economic empowerment of HUD-assisted residents … to support aging in place and living independently for seniors and residents with disabilities."[74]

Blended or braided?

The majority of today's U.S. public housing stock was developed with federal funding from HUD alone. HUD grants like Resident Opportunities for Self-Sufficiency go directly to the PHA. Multiple funding sources, for affordable housing or digital skills, must be braided or blended.

In braided funding, program goals and operations are integrated, but the money is kept separate. An ISP may pay for broadband, job training paid by workforce dollars, telehealth training and devices could be paid by a foundation. The PHA may pay for staff.

In blended funding, all the money goes into one account. One set of rules guides all spending, budgets are flexible, and reporting is consolidated.

Most housing providers must braid funds. To blend funds, they may need a nonprofit subsidiary or to cooperate with a community development finance institution (CDFI) that can do so legally.

Most PHAs do not have HUD resident services program grants, some offer resident services through partners and some don't offer these services at all. Digital skills practitioners can still enable housing providers to meet the resident opportunity mission by using digital skills training and tools to enable: PHAs with HUD resident service grants exceed their goals; PHAs that deliver educational and resident services through partnerships to reach more residents; PHAs that do not offer onsite resident and educational services build a critical digital onramp to opportunity.

[74] US Department of Housing and Urban Development. *Fiscal Year 2024 Congressional Justification: Self-Sufficiency Programs*. US Department of Housing and Urban Development; 2024.

Section 4: Alt-funding models in housing

The purpose of this section is to describe how diverse co-investors come together to support two resident-housing provider goals: greater housing stability and resident opportunity.

Model 1: Digital housing stability services with braided funding

Housing stability efforts focus on basic digital services: broadband, device use and digital skills, to enable critical needs and quality of life. Detroit, Michigan and Arlington, Virginia illustrate two cases providing insight on creative use of public assets with diverse co-investors.

Table 5: Detroit Housing Commission project snapshot

Detroit Housing Commission | Detroit, MI | 450 households	
The Detroit Housing Commission was established in the 1930s and currently serves over 3,000 public housing households; in 2023 it administered more than 6,000 housing choice vouchers.	
Funding sources	
Public	Federal (AmeriCorps / American Connection Corps)
State	Merit Network, Wayne State University
Private	Corporate Social Responsibility & Brand Awareness: Rocket Community Fund, Rocket Classic “Changing the Course”
Philanthropic	Local: Rocket Community Fund is foundation-style funding, Detroit-centered initiative

Founded in 1966, Michigan-based Merit Network is the nation’s longest-running nonprofit network, operating a 4,000-mile broadband system. With Rocket Community Fund and Detroit Housing Commission, the initiative delivers free, in-unit high-speed internet for four years and then at $18 a month, using a 10 Gbps backbone. Outcomes are aimed at digital literacy, workforce, and senior-quality-of-life benefits.

Table 6: Arlington County project snapshot

Arlington County Department of Community Planning, Housing and Development | Arlington, Virginia, via Affordable Homes and Communities and True Ground Housing Services	
Two nonprofit affordable housing developers representing 70 affordable housing properties advance digital equity by partnering closely with Arlington County. Partnerships with employers and the nonprofit social services organizations enable innovative policies to benefit residents.	
Funding sources	
Public	County, City
State	LIHTC points support True Ground's provision of community Wi-Fi
Private	CSR + Brand: JBG Smith, Comcast, T-Mobile
Philanthropic	CapitalOne Foundation, Best Buy Foundation, Raspberry Pi Foundation

In fall 2024, Arlington County's Department of Community Planning, Housing and Development launched a Digital Equity Initiative with $2.8 million in funding from JBG Smith, a developer of the National Landing smart city project. In exchange, the developer will use ConnectArlington's dark fiber for 75 years with a 24-year option, and an additional $700,000 due for a future section of dark fiber.[75] (Arlington's dark fiber infrastructure was built to connect county buildings, schools, hospitals and libraries.)[76]

The impetus for the JBG Smith partnership was a 2023 Arlington Broadband Marketplace study that expanded on FCC and US Census digital divide data by surveying internet service quality, bandwidth, provider competition, and digital literacy skills at affordable housing units.[77] The team found nearly 50% of units had three or more providers, but about 5,000 units had no competition. The average cost of 100Mbps symmetrical internet service was unaffordable for over 21,000 households.[78] A handful of housing providers that offered free or discounted Wi-Fi through bulk agreements reported the expense was difficult to justify because fewer than 50% of households registered for service.

In 2025, ConnectArlington's first digital-equity focused Notice of Funding awarded seven grantees a total of $500,000 in digital skills programming funds.[79] Grantees will provide 1,600 residents with digital skills training. Two nonprofit affordable housing providers are

[75] Arlington County, Virginia. *County Board Approves Agreement with JBG SMITH for Dark Fiber Access*. Arlington County Newsroom; 2021 Jul 20.
[76] Arlington County, Virginia. *Broadband Resource Evaluation and Needs Assessment: Overview*. Arlington (VA): Arlington County; 2023 Apr.
[77] DeVoe J. *Arlington Looks to Bridge Digital Divide with County-Owned Fiber Network*. *ARLnow*. 2023 Jan 6.
[78] Arlington County Digital Equity Initiative; Housing Association of Nonprofit Developers (Housing&). *Where Home & Homepage Intersect: Ensuring Digital Opportunities for All* [video]. YouTube; 2025 Oct 10.
[79] Arlington County Digital Equity Initiative.

building on these digital equity efforts to eliminate barriers to education, healthcare access, and encourage participation in Resident Council via online meeting tools.

Affordable Homes and Communities (AHC) is a nonprofit housing provider (not a PHA) with 55 properties, including 23 in Arlington. Digital inclusion is integrated into all resident services. AHC is developing a "comprehensive, modern, digital access strategy" using a recent digital equity assessment. All properties in the development pipeline are slated to offer residents free in-unit internet. Capital One has provided internet service and devices to AHC residents.

True Ground Housing Services has 23 properties, with 19 in Arlington. Since 2022, the True Ground resident services department has worked with its real estate department to ensure all new properties have free Wi-Fi and access, at the cost of $100,000-200,000 per building and $30,000 per year for service.[80] This investment does not guarantee adoption. Adoption varies by property. At one property residents may receive a $25 reimbursement for any internet subscription of their choice, but only 25% of households have requested it. Residents can access donated and leased devices and digital literacy services. Electronic newsletters, email and push notifications for food, for example when fresh vegetables are available to residents, are proving successful.

> *Over 45% of our residents pay over 40% of income in rent. If digital equity is going to stretch them to two more hours of work, to meet the uptick in rent, and we have to raise rent 5%, we don't want to do that. How can we create subsidy programs where the cost is not being passed on to residents?*
>
> — Marquan Jackson, Vice President of Resident Services, True Ground Housing Partners

Jackson says to ensure residents prioritize the internet for economic mobility, HUD should allow residents to deduct it from the income that is used to calculate rent. Currently residents pay rent based on their income minus utilities like electricity and gas. True Ground uses its own rent income to help pay for resident internet service.

[80] Ibid.

> *Digital Infrastructure... goes hand-in-hand with the housing we provide. Without reliable, affordable internet access and the skills to navigate the digital world, our residents are locked out of opportunity.*
>
> — Melanie Ficke, Assistant Director, Affordable Homes & Communities (AHC) [81]

Model 2: Resident opportunity with blended funding

Table 7: Housing Authority of the City of Los Angeles project snapshot

Housing Authority of the City of Los Angeles (HACLA) | Los Angeles, California	
HACLA's nonprofit subsidiary, Build Hope Inc. Foundation (BHI) is the home of its digital inclusion services. HACLA serves 16,000+ residents in 6,800+ PHA units, and administers 6,500+ housing choice vouchers.	
Funding sources	
Public	City of Los Angeles Mayor's Office
State	California State University Dominguez Hills (CSUDH)
Private	CSR + Market: Starry Connect, AT&T, Comcast
Philanthropic	National: EveryoneOn Regional: SoLa Foundation

In 2020, HACLA's Digital Equity and Education team partnered with Starry Connect[82] to provide $15 per month 30 Mbps broadband connections to more than 600 households in Los Angeles' Del Rey neighborhood. Then, AT&T agreed to provide $15-30 per month broadband at 12 properties. Subscription rates varied widely among these properties, ranging from 13% to 78% of residents adopting service.

Co-invested ladders of income opportunity for residents is key to the program's success. In 2024, the LA Mayor's Office funded 54 resident Digital Ambassadors. Aged 18 to 30, they complete 20 hours of training by EveryoneOn. Ambassadors earn $20 per hour to help residents register for the internet, use email, bank online, and use telehealth. Some work at the SoLa Foundation's state-of-the-art city public computer labs, which feature e-sports and AI education. Comcast helps fund HACLA's CareerConnect Ambassadors to run pop-up computer labs at transitional housing sites for unhoused Angelenos.

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[81] Arlington County Digital Equity Initiative; Housing Association of Nonprofit Developers (Housing&). *Where Home & Homepage Intersect: Ensuring Digital Opportunities for All* [video]. YouTube; 2025 Oct 10.
[82] Housing Authority of the City of Los Angeles. *Starry Partners with the Housing Authority of the City of Los Angeles to Expand Affordable Broadband Access*. *HACLA News*. 2024 Jun.

Administrative interns complete 1,000 hours of paid service maintaining and loaning laptops and devices at one of HACLA's nine Lending Library labs. They promote "earn and learn" digital literacy classes that helped 1,500 residents earn devices by 2025. CSUDH provides refurbished devices and technical support for two years. Several interns are now full-time HACLA employees.

> *Usually I go to construction. This is the first job I've had where I get to sit down with people and help them.*
>
> — HACLA Digital Ambassador, as reported by Licia Villalta, MPA, Program Manager, HACLA

Villalta says the willingness and patience to help residents gain basic work skills — such as how to show up on time, how to dress, etc. — is the key to the program's success.[83]

Table 8: City of Pharr project snapshot

Pharr Housing Authority | Pharr, Texas	
Founded in 1952 with 75 units, the Pharr Housing Authority has grown to 1,063 units: 247 public housing units and 828 units for Housing Choice Vouchers holders. It also operates Sunset Senior Village, a three-story, 80-unit development for seniors.	
Funding sources	
Public	Federal: HUD Community Development Block Grant (CDBG) District: Pharr-San Juan-Alamo School District (PSJISD)
State	Texas Broadband Office Workforce Development Grant, area workforce agencies
Philanthropic	Regional: Methodist Health Ministry Local: Valley Baptist Health Foundation, PossAble Dream Foundation

In 2019, the City of Pharr in the Texas Rio Grande Valley was one of America's worst connected cities. There was no competition. Just a single private internet service provider. Following a Federal Reserve Bank of Dallas-funded feasibility study, city leaders sought state approval to build and operate a municipal fiber network.

Pharr Connect, a city-owned broadband network, now serves more than 13,000 homes – 53% of households – with 500Mbps symmetrical service for $25 per month. In 2026, thanks to a $700,000 federal grant, the Pharr Housing Authority launched Pharr Connect

[83] Council of Large Public Housing Authorities (CLPHA). *Housing Is: Transforming Public Housing Through Digital Inclusion and Innovative Programs Webinar* [video]. YouTube; 2025 Mar 12.

at three public housing properties with over 300 units.[84] The school district pays for internet service for any household with a PSJISD student. Consumers save nearly $9 million per year using Pharr Connect.

City control of the fiber network created a need to develop workers for the job. In 2026 the Texas Broadband Office awarded $4.3 million to launch Pharr ConnectU, a tuition-free workforce program that will train 240 local residents to deploy, engineer and design broadband networks. A $500,000 local match coupled with support from Methodist Health Ministry brings the investment total to $4.8M. Connect Humanity provides technical support and leadership.

> *We're going to be able to control the priorities, the schedules, and... provide an excellent service to our community... to make sure every resident is able to connect... at the highest speed available at the most affordable prices.*
>
> — José Peña, IT Director, City of Pharr.

[84] KRGV. Pharr expands city internet service to 300 housing authority homes [Internet]. Weslaco (TX): KRGV; 2026.

Section 5: How to build a co-invested pilot

This section translates the groundwork and learnings of this chapter into practical steps. Consider it a guide to a first meeting with a housing provider and a critical housing stakeholder, with practical steps to move from identifying an opportunity to delivering value at a housing property.

1. You are the first co-investor. Before asking for investment, you must be clear about the unique value you bring to housing residents, providers, and the ecosystem partners they work with. Even a well-designed, well-funded program can falter when faced with the housing realities described in Section 1, so lead with your highest-performing service.

Why and *how* you do this work matters to co-investors. Two digital opportunity providers may look nearly identical in their 990s, with similar revenue, staffing, and services. But they may differ in how they operate, their assets, capabilities, and funding logic.

Table 9: Digital Skills Practitioner (DSP) organizations must clarify their value to co-investors

Dimension	DSP A: Trusted Provider	DSP B: Trusted Advisor
Highest and best use	Delivering direct services (digital skills training, resident support) at scale, e.g., 10, 30-person cohorts per quarter with 75% completion rate for three key skills.	Designing and aligning partnerships and services across stakeholders, e.g., 2, 10-person cohorts per quarter with 80% completion rate for a custom range of skills.
Core strength	Program delivery, curriculum, resident engagement, outcomes tracking. Rely on housing providers to market, coordinate, assess. Governance: Lower to moderate. Strong program administration.	Structuring partnerships, aligning incentives, facilitating collaboration. Administrative capacity to manage multiple co-investor funds. Governance: Moderate to high. Strong stakeholder management.
Positioning to co-investors	Delivers finite services reliably, with repeatable cost. Measures and refines outputs (skills, participation, completion) for a single co-investor.	Defines and creates programs with partners. Agile. Measures strategic outcomes for cross-sector alignment, i.e. housing, workforce, health.
How to engage co-investors	Secure funding to deliver defined services; tailor program to partner priorities.	Engage partners to co-design, ensure co-investor funding investment is synergistic.
Where this approach is strongest	Stable environments where service delivery is the primary gap; outcomes can be measured by co-investors.	Complex environments requiring cross-organization effort, rapid learning, shared co-investor measures.

2. Develop a point of view. Your assessment of your best value to the housing ecosystem depends on your point of view. Apply the principles in Sections 1-4 of this chapter to your local assisted housing resident and provider environment. As you build relationships with potential co-investors, you'll gain insights on your assumptions and co-develop digital skills solutions to shared problems. Your point-of-view is a living framework from which to "define the uses" — as described in the financing framework that grounds the *Alt Funding Field Guide*.

Table 10: Localizing a point of view that helps define how funds will deliver results

Point of view by section	Action Pathway: Create a point of view for local co-investment
Section 1 lays out the sector's size and purpose, the principles that shape it, and its current realities	• Review your municipal housing/community development department's affordable housing plan. Map your area public[85] and affordable housing agencies and properties. • Visit the municipal telecommunications office or demographer to identify broadband access and quality at specific properties. • Assess the current realities of people in assisted housing with neighborhood/housing advocacy nonprofits. Which digital interventions can reduce the most costly problems?
Section 2 establishes who benefits and how much	• Review your local housing provider strategic plan. • Meet with housing resident services staff. Which resident needs are most salient? Ask staff to rank the benefits in Tables 2-4, "Co-creating value for residents and housing providers." • Which potential co-investment partners does the agency already partner with? • Identify opportunities to survey residents about their needs. Leverage CHUSA's survey tools and toolkits.
Section 3 identifies the co-investors, their motivations, and entry points for skills providers	• Survey municipal departments, then social services agencies, schools, and hospitals for digital skills services, infrastructure needs. Compare notes with CHUSA PHAs similar to yours. • Identify community college and university workforce development goals that depend on digital skills. • Identify philanthropies with interest in digital transformation. • Meet with chambers of commerce and employers to identify needs in specific areas. Interview chamber leaders with a track record in public private partnerships and social good.
Section 4 provides two real-world funding models that can be used as templates	• With an understanding of your highest and best role, define your offering in support of housing stability and resident opportunity. • Compare successful cases to the aims and structural elements of your local ecosystem. Review CHUSA funding/delivery models. • Conduct benchmark meetings with relevant model leaders; focus on strategies and pitfalls relevant to your local case. • Ask for templates: MOUs, policies, presentations. • Leverage learnings by Interviewing digital skills providers who succeeded — and who failed. Join NDIA.

[85] US Department of Housing and Urban Development. *Public Housing Contacts*. HUD.gov [Internet]. [cited 2026 Mar 12].

> *Relationships don't happen overnight. Take the time to invest in your financial partners well before you actually need them.*
>
> — Hunter Hook, Managing Director, Communications Banking Group, CoBank

3. Create a co-investment value statement for each stakeholder.
The grounding framework of the *Alt Funding Field Guide* provides a structure to identify the value proposition for each potential co-investor. Your value in a co-investment partnership is based on your careful analysis of your highest and best use; your value to a co-investor is based on your deep understanding of their needs.

Always begin with the resident in mind, including residents and resident services staff at every step, from program design to evaluation. The value each co-investor earns may not be directly related to the two central funding structures posed here. However a sustainable effort centers the housing provider's mission effectiveness.

Collective co-investment theses should align to promote:

- Housing stability: ensuring residents can use digital tools for basic needs for food, utilities, health and other basic supports
- Resident opportunity: applying digital tool access and skills to accelerate resident participation and completion of education and workforce goals

A co-investment thesis describes what the digital skills practitioner can do to create value for a resident and a housing provider. It then identifies how the value is relevant to a co-investor directly. If a co-investor is a private employer, that value statement can be extended to shareholder value. If a co-investor is a public entity, such as a government or nonprofit, that value can be extended to the public.

To ensure your co-investment theses can pass muster with housing provider decision makers, test them against the three distinct perspectives and quoted examples below.

The **compliance perspective** is risk-adverse to administrative burden. Quantify agency investment; ask how the initiative can guard the core mission. Will it improve compliance?

"Because families enroll in the [federal broadband subsidy] program through [its website], there's no added administrative burden beyond helping encourage enrollment." ... "Including broadband in utilities allowances "would be inadvisable." [It] "could become an unfunded

mandate."[86] - PHADA, whose 1,900 PHA executives, focus on operational realities, feasibility and funding.

The **operational feasibility** perspective avoids disruption, preserves staff time and improves customer service. Does the initiative leverage existing well-run activities with little added cost?

"*[Seattle Housing Authority] 'form[ed] a cross-departmental digital communications group' and created subgroups focused on "data collection, digital equity and emergency communications*.[87]" - NAHRO, whose broad membership of housing and community development professionals focus on ethics, best practices and capacity building.

The **strategic opportunity** perspective looks for sustainable revenue and system-level transformation. Does the initiative enable strategic plan goals through external partners?

"*Workforce development is paramount to what we do as a Housing Authority," said Housing Authority of the City of Pittsburgh Executive Director, Caster D. Binion. "We're committed to removing any and every potential hurdle for our residents during their efforts to achieve self-sufficiency.*"[88] - CLPHA, whose ~70 large urban PHA members administer 60% of U.S. units. Membership focuses on infrastructure and policy for opportunity and economic mobility.

Structure the ask — one co-investor at a time

Two program models map to the two funding architectures in Section 4. The examples below loosely follow the value creation structure outlined in the financing framework that grounds the *Alt Funding Field Guide*.

A **housing stability model** focuses on basic digital services — broadband adoption, device access, and foundational digital skills — that enable residents to close the needs-to-benefits gap, pay rent, submit work orders online, manage utilities, access healthcare and enroll in affordable broadband, earn refurbished devices and use digital skills training portals. A typical entry-level engagement serves new residents in their first 90 days, the period of highest eviction risk. Cost per resident ranges from $100 to $500 depending on intensity, typically one to ten hours of service. At two proximate properties with 25 new residents each, a 50-resident pilot runs roughly $12,500 — a scale accessible to most co-investors as a first commitment.

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[86] Public Housing Authorities Directors Association. *HUD News: Broadband Subsidy Available to HUD-Assisted Families* [Internet]. PHADA Breaking News.
[87] National Association of Housing and Redevelopment Officials. *NAHRO Journal – Bridging the Digital Divide in Seattle* [Internet]. *NAHRO Journal*.
[88] Council of Large Public Housing Authorities. *Housing Authority of the City of Pittsburgh Continues to Bring 'Wow' Factors with Unveiling of Workforce Wheels* [Internet]. News release; 2025.

Worked example: housing stability pitch to a municipal utility co-investor

A digital skills provider has consulted with a local housing provider about how to support its strategic plan energy efficiency goals. The housing provider's development department has identified a 200-unit property where installation of digital thermostats will accomplish multiple goals: reduce the cost of utilities for residents; reduce staff trips to change the thermostat when residents who have low mobility; secure points for an upcoming annual inspection; and ensure a higher percentage of low-income MDU residents enroll in the utility's demand-response program.

Uses: Provide 50 residents per quarter with affordable broadband adoption support, digital thermostat enrollment assistance, and energy management skills training over a six month period. Cost: $15,000 per quarter.

Value to the primary co-investor: *Utility:* Avoided cost and labor coordinating utility assistance, disconnections and collections. Potential municipal, state and federal incentives for achieving MDU and low-income housing installation goals, and benefits to taxpayers of avoiding peak rates.

Value to other co-investors: *Residents*: Each enrolled household saves an estimated $50 to $100 per year on energy costs. The household receives a $100 incentive for joining the program, followed by a $150 incentive for sticking with the program for six months. *Housing Provider:* For each 50 enrolled households, the housing provider can preserve $500 per month in emergency utility assistance funding, and 40 hours of staff time per month coordinating emergency assistance and checking utility bills for residents. Depending on municipal incentives and adoption rates, housing providers could see $2,750 to $12,500 per 50 households in spending capacity, based on households receiving incentives and saving on energy bills. *Corporate device donor*: positive brand recognition; goodwill with national energy regulator.

Ask: *Housing Provider:* $5,000 co-investment toward digital skills services from Operating budget per 50 households. *Utility*: $10,000 for digital skills training per 50 households. *Corporate device donor:* $1,500 at-cost rate for digital thermostats per 50 households. Funds braided.

A resident opportunity model provides structured digital skills pathways linked to education, workforce, and civic participation goals. A monthly master service agreement format works well: a fixed number of service hours for a capped caseload, in a mix of group and one-on-one settings, both virtual and in-person. A 60-client cohort with access to eight hours of monthly support requires roughly two dedicated staff at approximately $12,500 per month, or $208 per client per month. Participants can also serve as digital ambassadors — a peer navigation role that reduces cost per household while creating workforce development value as a co-benefit.

Worked example: resident opportunity pitch to community college co-investor

A digital skills provider has consulted with a local housing provider about the potential for GED attainment among residents with K-12 aged children. The digital skills provider learns a local community college has a new auxiliary building near three public housing properties with over 600 units and 120 work-able adults without GEDs. It is only open during business hours. GED program attrition in that zip code is 40% higher than in other areas.

Uses: Enroll 60 housing residents per year in a monthly digital skills cohort linked to the college's GED and workforce certificate pathways. Provide refurbished device access, affordable broadband navigation, volunteer stipend-paid position opportunities, and eight hours per month of combined group support and one-on-one instruction. Cost: $12,500 per month, or $150,000 annually.

Value to the primary co-investor: *Community College:* In many states, each retained student generates state per-enrollment funding; Estimated 20% persistence improvement rate, decreased cost per completed student.

Value to other co-investors: *Residents*: Each GED completer could earn an additional $8,000 per year, with additional job training and certificates. *Housing Provider:* For each 10 completing households, reduced emergency assistance and possible increased unit availability due to children's educational and economic potential based on parent's educational attainment.

Ask: *Housing Provider:* $20,000 co-investment from an allowable fund. *Community College*: $50,000 in cash or leveraged funding. *Corporate CSR program with workforce development agency investment:* $50,000. *Local foundation:* $30,000.

4. Manage the co-creation process

Prepare to start slow and small to go fast. As above, public and affordable housing agencies are highly regulated, capacity constrained, and serve families that you may not see at social service centers. Place-based services produce results for residents and accrue benefits to co-investor balance sheets over a one- to 20-year horizon.

Consider multiple small pilots with several iterations punctuated by "learning cycle events," such as collecting quick survey snippets or 30-minute focus groups. Include all participants and co-investors in sharing and evaluating learnings. Even if you don't achieve goal metrics in the first few iterations, the documented lessons learned will ultimately inform co-investment that can scale. Lessons can also illuminate gaps or potential co-investors that should be invited to the table.

Conclusion

This chapter has argued that digital opportunity is essential infrastructure for residents in public and affordable housing. Resident digital capacity helps housing providers interrupt the barriers keeping families from self-sufficiency: the high cost of being poor, geographic isolation from opportunity, and barriers to housing stability.

CHUSA's decade-long results demonstrate that digital tools can accelerate education, access to healthcare, workforce development, and civic participation. But digital skills — and the enabling infrastructure, affordable broadband and devices — are not yet integrated into the architecture of poverty policy. This means digital skills practitioners have a critical role to play in digital transformation for the nation's most vulnerable residents, housing providers, and the array of housing stakeholders that depend on public and affordable housing communities.

Housing provider systems can seem opaque; housing providers have good reason to scrutinize initiatives that can derail compliance, impede operational excellence and distract from strategic goals. However digital skills providers can measurably help residents gain digital skills so housing providers' digital tools can achieve those goals. People in poverty need a complex set of financial supports, talented case managers, and time to trust the institutions, aids, and tools that can help. Digital tools can't do it alone. But at scale, digital capacity may enable many families to accelerate their access to family self-sufficiency and quality of life, ultimately achieving housing stability and their dreams of education, work, health and community participation much more timely, and much more cost-effectively.

By seeing themselves as the first co-investors, digital skills providers can serve in, and catalyze, sustainable digital housing opportunity coalitions. They can help housing co-investors develop a shared language for the social, financial, operational, and economic benefits that accrue to stakeholders and communities. With an affordable broadband, device, and digital skills roadmap in place, your area's affordable housing community can thrive as an economic engine and a source of community enrichment.

WHAT TO READ NEXT

The series

The Framework, *Samantha Schartman & Brian Vo*
The case for change and the financial framework the series is built on, including Connect Humanity's approach to structuring co-investment partnerships.
connecthumanity.fund/alt-funding-guide/framework/

Education, *Dr. Jen Vanek & Samantha Schartman*

How digital access drives outcomes across K–12, postsecondary, and adult education — and why co-investment is needed to sustain it.
connecthumanity.fund/alt-funding-guide/education/

Healthcare, *Dr. Amy Sheon*

How digital access and literacy shape patient outcomes and health system costs — and the financial case for health sector co-investment.
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Why ISPs already have a business case for digital inclusion — and how partnerships can generate more sustainable funding.
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Workforce development, *Samantha Schartman & Dr. Roberto Gallardo*
Employer and workforce system investment in digital skills as a talent and economic development strategy.
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Get in touch
If you are a practitioner exploring co-investment partnerships, a sector partner thinking about how this framework applies to your organization, or a funder considering supporting pilots, let's talk: **info@connecthumanity.fund**

References

Acosta, S., & Gartland, E. (2021, July 22). Families wait years for housing vouchers due to inadequate funding. Center on Budget and Policy Priorities.

American Action Forum. (n.d.). A recipe for prosperity: Quality educational standards and economic growth.

Arbuckle, W. (2024). Ramping up the BEAD workforce: 5 things states, ISPs, and construction firms can be doing now. National Telecommunications and Information Administration.

Arlington County Digital Equity Initiative, Housing& Association of Nonprofit Developers. (2025, October 10). Where Home & Homepage Intersect: Ensuring Digital Opportunities for All [Video]. YouTube.

Arlington County, Virginia. (2021, July 20). County Board approves agreement with JBG SMITH for dark fiber access.

Arlington County, Virginia. (2023, April). Broadband resource evaluation and needs assessment: Overview.

Austin Community College. (2026, June 23). Digital Inclusion Internship: Real Experience, Real Impact [Video].

Austin Energy. (2021, September 20). Expanding MetroBike to HACA Residents [Video]. YouTube.

Barton, J. (2016). Closing the digital divide: A framework for meeting CRA obligations. Federal Reserve Bank of Dallas.

Berger, J., & Adams, B. (2020). Low-income multi-family smart thermostat pilot. APPRISE.

Child & Family Blog. (2016, February). Young children of parents with less education face inequality: They miss out on 1,000 hours of vital care.

Council of Large Public Housing Authorities, & Public and Affordable Housing Research Corporation. (n.d.). Mapping the evolution of PHA health initiatives.

Council of Large Public Housing Authorities. (2025). Housing Authority of the City of Pittsburgh continues to bring the W.O.W. factors with the unveiling of the Workforce on Wheels CyberBus 2.0.

Council of Large Public Housing Authorities. (n.d.). Public housing.

Currie, J., & Yelowitz, A. (2000). Are public housing projects good for kids? Journal of Public Economics, 75(1), 99–124.

DeVoe, J. (2023, January 6). Arlington looks to bridge digital divide with county-owned fiber network. ARLnow.

Docter, B., & Galvez, M. (2020). The future of public housing: Public housing fact sheet. Urban Institute.

Ehlenz, M. (2023, July 5). Universities and affordable housing: Seven case studies. Penn Institute for Urban Research.

ENERGY STAR. (n.d.). ENERGY STAR rebate finder. U.S. Environmental Protection Agency.

EveryoneOn. (n.d.). Find low-cost internet, computers, and free training.

Federal Reserve Bank of Richmond. (2025, May 9). Innovative housing solutions for community college students. Community College Insights.

Gruenberg, M. J. (2023, October 24). Remarks by Chairman Martin J. Gruenberg. Federal Deposit Insurance Corporation.

Habitat for Humanity. (n.d.). Research series: How does housing impact health?

Harris, M. (2025). HUD-funded service coordinator programs: Resident Opportunities and Self-Sufficiency Service Coordinator Program, Family Self-Sufficiency, and Service Coordinators in Multifamily Housing for the Elderly and Disabled. National Low Income Housing Coalition.

HealthCity. (n.d.). Subsidized non-emergent medical transportation and health equity.

Horrigan, J. (2025, November 13). Understanding the return on digital skills investment starts with assessment. Benton Institute for Broadband & Society.

Housing Authority of the City of Los Angeles. (2024, June). Starry partners with the Housing Authority of the City of Los Angeles to expand affordable broadband access.

Housing Authority of the City of Pittsburgh. (2025, October 7). The HACP continues to bring the W.O.W. factors with the unveiling of the Workforce on Wheels CyberBus 2.0.

Inside Philanthropy. (n.d.). Giving for housing and homelessness.

KRGV. (2026). Pharr expands city internet service to 300 housing authority homes.

Local Initiatives Support Corporation. (n.d.). Digital opportunity. Rural LISC.

Lucas, S. (2018). Connecting fragmented systems: Public housing authority partnerships with the health sector. Cityscape: A Journal of Policy Development and Research, 20(2).

Maryland Department of Housing and Community Development. (n.d.). Office of Statewide Broadband.

Massachusetts Broadband Institute. (2025, April 10). Boston Housing Authority launches digital literacy courses.

Matusek, S. (2025, September 9). Nation's Report Card shows U.S. students still struggling in math, reading, and science. The Christian Science Monitor.

Mollenkamp, D. (2025, February 11). School districts lost federal funds. Will students lose digital access? EdSurge.

Morton, M. H., Dworsky, A., & Samuels, G. M. (2017). Missed opportunities: Youth homelessness in America. Chapin Hall at the University of Chicago.

Nair, A. (2025, September). Broadband affordability: Assessing the cost of broadband for low- and moderate-income communities in cities. Federal Reserve Bank of New York.

National Association of Housing and Redevelopment Officials. (2021, August 5). Bridging the digital divide in Seattle.

National Center for Education Statistics. (2017). The condition of education 2017. U.S. Department of Education.

National Center for Healthy Housing. (n.d.). Housing and health.

National Center for Homeless Education. (2022). Chronic absenteeism among students experiencing homelessness in America: School years 2016–17 to 2020–21. University of North Carolina at Greensboro.

National Council of State Housing Agencies. (2024). State housing finance agencies: At the center of affordable housing.

National Housing Trust. (n.d.). Strengthening Low Income Housing Tax Credit allocations.

National Institute for Nonprofit Digital Advancement. (n.d.). National Institute for Nonprofit Digital Advancement.

New York City Housing Authority. (2020, February 12). New version of MyNYCHA mobile app released with new features designed to increase ease of use and transparency.

Newcombe, T. (2015, June 8). 311 upgrades make it cheaper to connect with citizens. Governing.

Novogradac. (n.d.). About the LIHTC.

Pew Charitable Trusts. (2012). Pursuing the American Dream: Economic mobility across generations.

Public Housing Authorities Directors Association. (n.d.). HUD News: Broadband subsidy available to HUD-assisted families.

Richtel, M. (2015, July 15). U.S. program will connect public housing residents to web. The New York Times.

Sandel, M. (n.d.). Housing as a platform for health. Social Interventions Research & Evaluation Network.

Shi, Y. (2025). Bridging the divide: Temporal inequality as a neglected dimension in sociological research.

Sieck, C. J., Sheon, A., Ancker, J. S., Castek, J., Callahan, B., & Siefer, A. (2021). Digital inclusion as a social determinant of health. npj Digital Medicine, 4, Article 52.

The Tech Influencer. (2025). Utility rebates by state 2025: Thermostats, demand response, and heat pumps.

U.S. Department of Health and Human Services, Office of Community Services. (n.d.). Low Income Home Energy Assistance Program (LIHEAP).

U.S. Department of Housing and Urban Development, Office of Policy Development and Research. (2018, May). ConnectHome Initiative: Final report.

U.S. Department of Housing and Urban Development. (2017). Narrowing the digital divide through installation of broadband infrastructure in HUD-funded new construction and substantial rehabilitation of multifamily rental housing.

U.S. Department of Housing and Urban Development. (2021, June). CDBG-CV broadband quick guide.

U.S. Department of Housing and Urban Development. (2024). Fiscal year 2024 congressional justification: Self-Sufficiency Programs.

U.S. Department of Housing and Urban Development. (2024, December). The 2024 Annual Homelessness Assessment Report (AHAR) to Congress, Part 1: Point-in-time estimates of homelessness.

U.S. Department of Housing and Urban Development. (n.d.). Akron Metropolitan Housing Authority: Braided and property-specific funding strategy connects residents. HUD Exchange.

U.S. Department of Housing and Urban Development. (n.d.). Better Buildings Multifamily Initiative.

U.S. Department of Housing and Urban Development. (n.d.). Public housing contacts.

U.S. Department of Housing and Urban Development. (n.d.). Public housing developments [GIS dataset]. HUD Open Data.

U.S. Department of Housing and Urban Development. (n.d.). The Secretary's Award for Public-Philanthropic Partnerships: Housing and Community Development in Action (2024). HUD User.

UnitedHealth Group. (2024). UnitedHealth Group expands housing investments to $1 billion.

Virginia Department of Housing and Community Development. (n.d.). Broadband.

Williams, B., Bitar, J., Polk, P., Montague, G., Gillispie, C., Waller, A., Tadesse, A., Elliott, K. C., & Nguyen, A. (2022, August 17). For student parents, the biggest hurdles to a higher education are costs and finding child care. The Education Trust.

Appendix

Appendix A: conceptual value of digital food assistance

Interpretation

This conceptual model assumes that a household with digital access can obtain the same food assistance while avoiding most of the lost work time associated with in-person benefit acquisition. The model treats lost wages as an opportunity cost, not direct cash expenditure.

Digital access generates a positive net benefit in the scenario of acquiring a single benefit — food — 15 times per year. The value comes from James' ability to maintain work hours and earnings while still accessing food assistance. The cost James incurs for internet and devices are outweighed by the value created from reduced missed work and improved access to benefits. Ashley forfeits $900 in lost benefits due to time away from work.

James' additional income should not be viewed as "discretionary income." Households earning 30% of AMI face gaps between income and basic living costs each month; financial gains are absorbed by essential expenses.

Therefore, Ashley's missed work shifts securing food assistance cause an even greater gap between her income and what is needed each month, pushing her family into greater instability, and almost certainly additional lost work shifts related to securing additional benefits in-person.

At scale, the net value per 100 households generates positive cost-benefit for housing providers and social agencies alike.

	Ashley No Digital Tools	**James** Digital Tools	**Per 100 HH** No Digital Tools	**Per 100 HH** Digital Tools
Benefit				
Work 4 h. Shift @ $15/hr (Dallas 30% AMI benchmark of $31,700 for a 3-person household.)	$ -	$ 900	$ -	$ 90,000
Supplemental Food Value @ 15/yr	$ 900	$ 900	$ 90,000	$ 90,000
Net Value Created	$ 900	$ 1,800	$ 90,000	$ 180,000
Costs				
Internet @ $15/month	$ -	$ 180	$ -	$ 18,000
Device @ $120/year	$ -	$ 120	$ -	$ 12,000
Transportation @ $5 per trip	$ 75	$ 75	$ 7,500	$ 7,500
Net Costs Incurred	$ 75	$ 375	$ 7,500	$ 37,500
Result — Net Value	$ 825	$ 1,425	$ 82,500	$ 142,500