

FRANKLIN COUNTY Digital Equity Action Agenda



FRANKLIN COUNTY
DIGITAL EQUITY COALITION

Acknowledgments

This plan would not be possible without the many people and organizations who contributed to make this a community-wide Action Agenda for a better future in Franklin County.

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COMMUNITY STAKEHOLDERS

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A Letter from **MAYOR GINTHER**

Dear Neighbors,

The pandemic showed us more clearly than ever, that every resident must have full access to the digital world regardless of how much money they have. Opportunities for self improvement, social connection, and wealth building are endless online and are not limited to the zip code where you are born. The world is online, and we can't leave residents behind in accessing the opportunities available to them.

In Franklin County, there are 80,000 households without home internet, which is estimated at 200,000 residents.¹ This number doesn't show the tens of thousands of other residents that are barely making by financially and are at risk of not being able to pay next month's subscription bill. Reliable Internet should be as ubiquitous and affordable as water and electricity. The City of Columbus has over 1,000 miles of fiber that we intend to leverage to bring affordable, high-speed Internet to our opportunity neighborhoods in partnership with the Private Sector.

In coordination with affordable, high-speed Internet access, residents should have access to quality devices and skills training to do what they want and need to do online. This Franklin County Digital Equity Action Agenda is a comprehensive examination of digital equity in our community and identifies actionable steps we can take to make a meaningful step toward closing the digital divide. This work is an essential part of the City's Recovery and Resiliency plan. I commend the members of the Franklin County Digital Equity Coalition for their passion, commitment, and thoughtful efforts to advance digital equity.

Accessing services and paying bills online bring convenience that gives you time back, researching a new interest can lead to new life opportunities, working from home can benefit your quality of life, staying connected with friends online gives you community, monitoring your health can improve your wellbeing, and participating in online learning can increase earning potential.

I am proud to support the recommendations included in this Digital Equity Action Agenda to ensure these basic benefits can be experienced by all residents, not just those who can afford it.

I invite you to read the Digital Equity Action Agenda and get involved in building a more equitable and digitally inclusive Columbus.



The Honorable Andrew J. Ginther
Mayor, City of Columbus

¹ American Community Survey, "Table B28003: Presence of a computer and type of Internet subscription in household," U.S. Census Bureau, 17 March 2021.

A Letter from the **DIGITAL EQUITY COALITION**

On behalf of the members of the Franklin County Digital Equity Coalition (DEC), a dedicated group of over 30 Franklin County and regional organizations, representing government, education, healthcare, social service, private sector and non-profit organizations—working together to advance digital inclusion activities to achieve digital equity. The Coalition initially formed in response to the pandemic in March 2020. Founded by the Mid-Ohio Regional Planning Council (MORPC), Columbus Metropolitan Library, and The Columbus Foundation. We have been meeting nearly weekly for two years understanding the dynamics of the issue, sharing best practices, and planning how to sustain and scale this work into the future.

Building off of the 2021 [Digital Equity Framework](#) and two years of research, resident engagement, and program implementation experience, we share this well-informed document to inform investment, focus collaboration, and guide the next phase of implementation.

The DEC has developed this Action Agenda with the following guiding principles:

- Focus on greatly reducing or eliminating the digital divide for under-resourced households in Franklin County
- Acknowledge the history of systemic racism that has contributed to today's digital divide
- Keep residents at the center of this work, and engage lived experience experts in human-centered design (HCD) to advance the work
- Take iterative approaches to implementation, and adapt to the changing federal and national environment
- Collaborate in the spirit of the Columbus Way
- Build public-private partnerships to execute where it's feasible
- Make progress big and visible to other partners, and share learnings honestly and transparently
- Align with other strategic Franklin County initiatives(e.g., the Recovery and Resiliency Report, Franklin County Poverty Blueprint, Mayor's Climate Action Agenda, LinkUS, etc.).

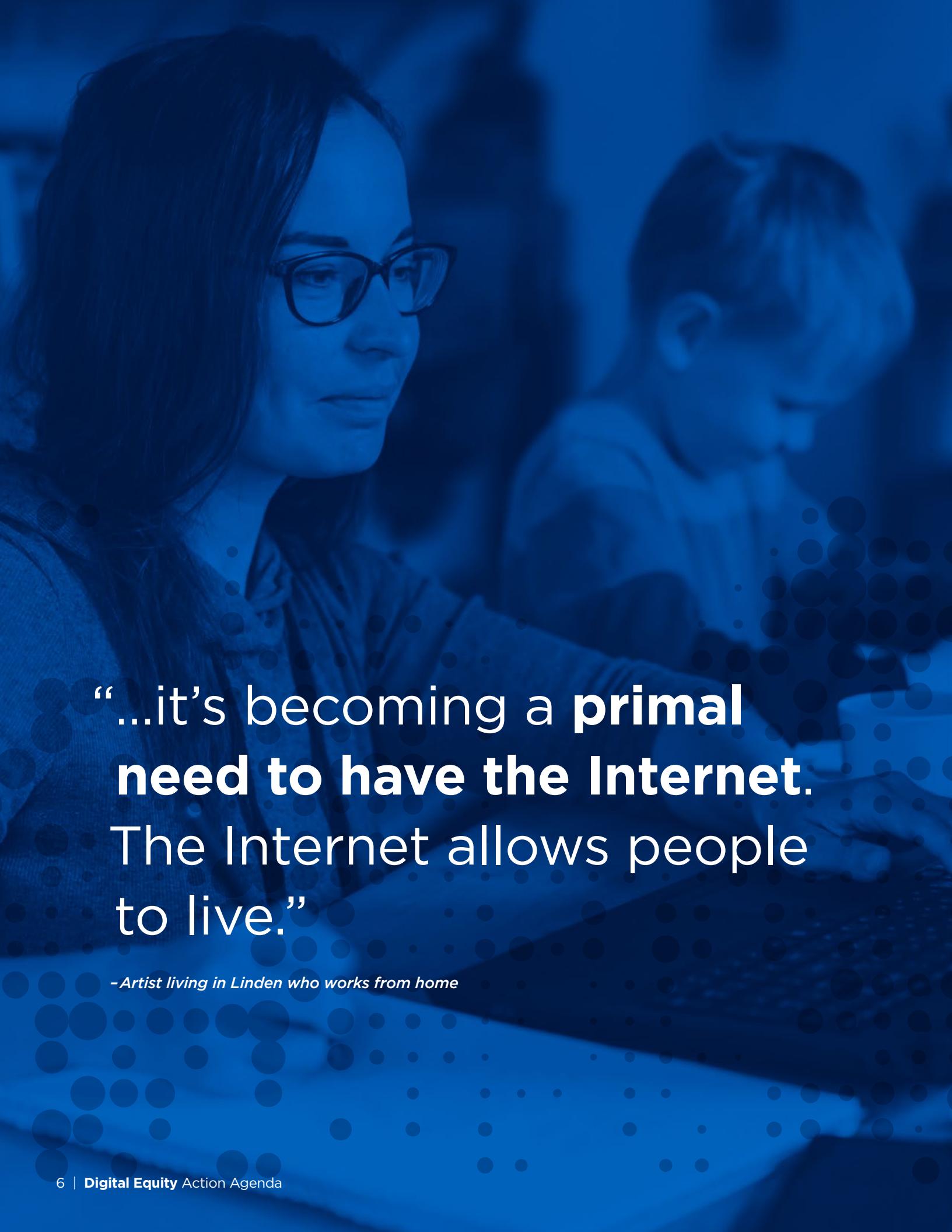
Residents were consulted in the understanding and development of the recommendations included, and we are committed to keeping residents at the center of this work moving forward. Internet Service Providers (ISPs) were interviewed as part of this planning process. It is important to acknowledge that while there is still much work to be done, ISPs in the Columbus market have made significant steps to closing the digital divide and we look forward to working with them to implement these recommendations.

Steering Committee Members



Introduction

FRANKLIN COUNTY
DIGITAL EQUITY COALITION

A blue-tinted photograph of a woman with long dark hair and glasses, looking down at a laptop screen. In the background, another person's face is partially visible. The image has a digital, networked feel with a dotted pattern overlay.

**“...it’s becoming a primal
need to have the Internet.
The Internet allows people
to live.”**

-Artist living in Linden who works from home

Executive Summary

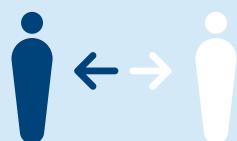
The **digital divide** is the gap we aim to close between those who have affordable access to connectivity, devices, skills, and support and those who do not. Though this divide has been apparent since the dawn of the Internet, socio-economic changes magnified during the COVID-19 pandemic demonstrated the need to level the playing field for digital opportunity now. **Digital Inclusion activities are necessary** to ensure under-resourced individuals have access to the Internet, including reliable connections

and skills needed to use the web. The pandemic accelerated digital transformation, changing how we learn, work, receive healthcare, obtain information, and connect with each other. Digital Inclusion activities must evolve as technology evolves.

Achieving digital equity will enable Franklin County's future prosperity – a future in which all individuals and communities have the digital capacity needed to fully participate in society, democracy and the economy.

DIGITAL DIVIDE

(The Problem)



The **digital divide** is the gap between those who have affordable access, skills, and support to effectively engage online and those who do not.

DIGITAL INCLUSION

(The Work)



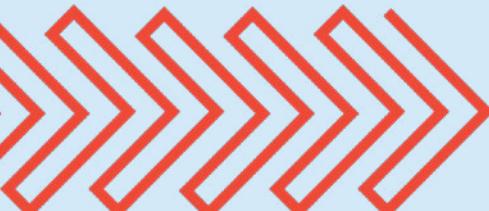
Digital inclusion refers to the activities necessary to ensure that all individuals and communities, including the most disadvantaged, have access to and use of information and Communication Technologies (ICTs). Digital inclusion must evolve as technology advances.

DIGITAL EQUITY

(The Goal)



Digital equity is a condition in which all individuals and communities have the information technology capacity needed for full participation in our society, democracy, and economy. Digital equity is necessary for civic and cultural participation, employment, lifelong learning, and access to essential services.



The Franklin County Digital Equity Action Agenda defines and articulates the issues, approaches and foundational work needed to achieve digital equity in Central Ohio. This Action Agenda builds upon Franklin County Digital Equity Coalition's (DEC) 2021 Digital Equity Framework, as well as over a year of coordinated crisis response efforts and human-centered design work. These efforts laid the foundation for a collaborative planning process that led to

this Agenda, focusing efforts on overarching priorities and high impact objectives that stand to make the greatest difference in closing the digital divide in Franklin County.

This Action Agenda precedes a more detailed implementation plan that will be developed based on funding decisions made by the City, County and others, and will detail strategies for execution.

1

DIGITAL EQUITY FRAMEWORK

Completed in Spring 2021

Articulation of the community's vision for closing the digital divide, identification of priorities, and framework for community organizing.

2

DIGITAL EQUITY ACTION AGENDA

Completed in Summer 2022

Articulation of the needs, approaches, and foundational work. Documentation of the resulting recommendations for funding and implementation.

3

DIGITAL EQUITY IMPLEMENTATION PLAN

Development of tactical, detailed operational plans of the funded objectives and strategies of the Action Agenda built off the initial framework.

4

EXECUTION & MEASUREMENT

Execution of the implementation plan, resulting in realization of the vision and delivery of goals.





PRIMARY OBJECTIVE

To make meaningful progress toward achieving Digital Equity, organizations and individuals in Franklin County must work to ensure all under-resourced residents have the digital resources necessary to live, learn, earn, and play in Franklin County, by:

- **Ensuring under-resourced residents have access** to residential Internet, connected devices, and digital skills training opportunities
- **At an equitable level of quality** that enables today's online experiences, and
- **At an affordable price** point for low-income households.



RECOMMENDATIONS

This Agenda is organized around
four broad and interrelated priorities.



1

CONNECTIVITY

Expand **reliable, high-speed residential internet** options in low-income neighborhoods in Franklin County at an **affordable cost** for under resourced households.



2

DEVICE ACCESS

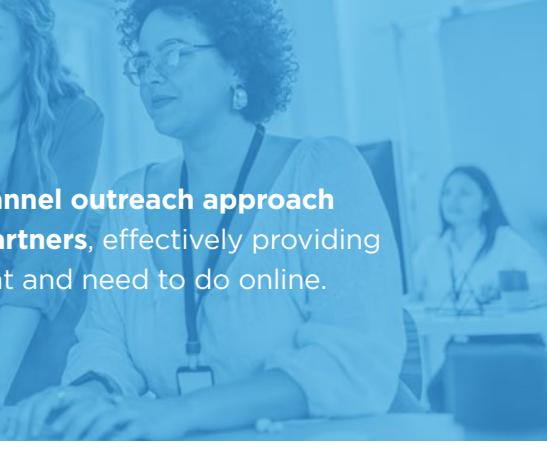
Create a sustainable stream of different types of **high-quality digital devices** that are available **at low to no-cost** to benefit Franklin County residents who need them.



3

DIGITAL LIFE SKILLS

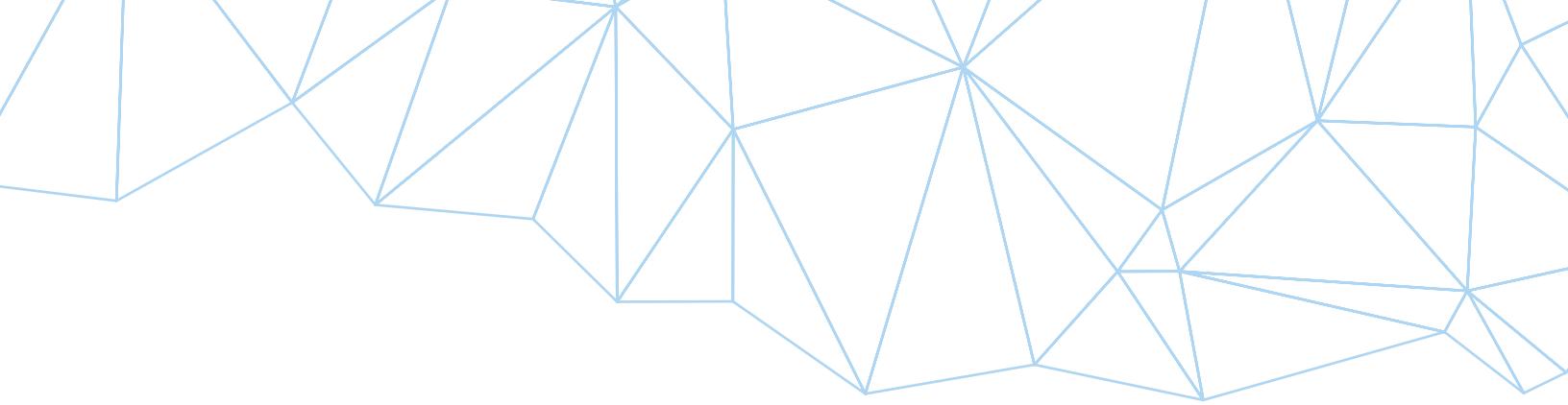
Expand and increase **access to digital skills training** with the addition of learning opportunities across provider organizations that **support residents' individualized needs** on a continuum from survival to career.



4

OUTREACH & ADOPTION

Establish and support a **coordinated, multi-channel outreach approach** that is activated by a **distributed network of partners**, effectively providing residents with information to do what they want and need to do online.



Underlining these priorities are **6 key initiatives to address the digital divide:**

CONNECTIVITY

- 1 High Quality Residential Internet for the Long-Term

DEVICES

- 2 Modern and Use-Case Devices for the Household

SKILLS

- 3 Four Priority Investments to Build Out the Digital Skills Ecosystem

- 4 Apply Digital Equity Lens Across Funding Priorities and Programs

OUTREACH & ADOPTION

- 5 Community-wide Campaign with Culturally Relevant Messaging

- 6 Community-wide ‘Digital Navigator Ecosystem’
Connectors, Ambassadors, etc.



COLLECTIVE GOALS

The recommendations in this Action Agenda work to achieve the following goals:

- **Meet today's standard now** with 100/100 Mbps as a modern day, minimally acceptable broadband speed, available by 2024 to under-resourced residents at a cost below 1% of their income.
- **Simultaneously, future-proof infrastructure by 2027** to ensure broadband infrastructure can deliver a minimum of 1 Gbps X 1 Gbps broadband service across the county by 2027 and at a price point for under-resourced residents that is no more than 1% of their income.
- **Promote a competitive environment** ensuring market forces produce multiple providers capable of delivering robust, competitively priced, and profitable broadband solutions meeting or exceeding 1 Gbps X 1 Gbps service.
- **Overall, reduce the number of households without a residential Internet subscription by 50%.**
- **Increase the number of households paying less than 1% of their income** for Internet connectivity, with a **60% adoption rate of eligible residents enrolled in ACP by 2026.**
- **Distribute at least 20,000 new computing devices by 2026 to households in need.**
- **Incrementally increase digital skill confidence and attainment** across population segments within under-resourced communities.

 In a recent survey conducted by the Franklin County Department of Jobs and Family Services (JFS), over three-quarters of respondents expressed the belief that **home Internet is as vital as rent, food, and transportation.**

IMPACT

By achieving these goals, residents will be empowered to advance themselves educationally, economically, physically, and socially. The DEC believes that significant progress can be made by implementing the recommendations made in this document, directly affecting 25,000 under-resourced residents in Franklin County.

Digital equity is key to reducing systemic inequities and driving prosperity. Progress toward closing the digital divide will benefit residents, the community and the economy.



For the **RESIDENT**

Expands opportunities and reduces inequities for individuals

- » Provides better access to basic needs in the modern world
- » Increases access to education and job opportunities, unlocking greater societal inclusion
- » Increases economic potential—students with reliable Internet access make \$2M+ more over their lifetime



For the **COMMUNITY**

Unlocks benefits across the community and society

- » Establishes upskilling, training, and new ways of learning in education through digital curriculum and skills building
- » Enables a more inclusive remote and hybrid workforce
- » Increases telehealth access, expands digital government, and supports a hybrid justice system



For the **ECONOMY**

Generates a positive return on investment for the economy

- » May create social return on investment for every dollar invested in digital equity
Ramsey County, Minnesota's [TechPak](#) partnership estimated a \$2.40 social ROI for every \$1 invested in digital access, achieved through increased earnings, education due to gains in digital skills, increased educational attainment, and improved school outcomes for children with access to a computer²
- » The presence of ultra-fast broadband leads to 3% average increase in new businesses formation

²Ecotone Analytics GBC and Ramsey County Investment and Support Efforts, "Closing the digital equity gap by providing technology tools, training and support," Ramsey County, January 5, 2021.

URGENCY TO ACT

The COVID-19 pandemic exposed the realities of the digital divide, while simultaneously accelerating the digital transformation of society, widening the gap even further. The impacts of the pandemic are still being understood, but it is clear that today there is:

- Increased inequity between those with and without digital access
- Accelerating rate of jobs that require digital skills
- Increased demand for digital skills across sectors including education, workforce development, social services, healthcare, and the justice system
- Clear growth in digital services and experiences that is only expected to continue to grow

The digital divide has been an issue since the inception of the Internet. While Internet use has become an inextricable part of society, the divide persists, demonstrating that the market can not close the gap on its own. In acknowledgement of this issue, the federal government has committed historic funding to solve the issue. In addition to the potential to tap into local funds (including bonds) and philanthropic sources, we are likely to see notable federal investment over the next five years:

\$100M – \$200M

Through federal broadband programs (e.g., ACP, ECF, BEAD)

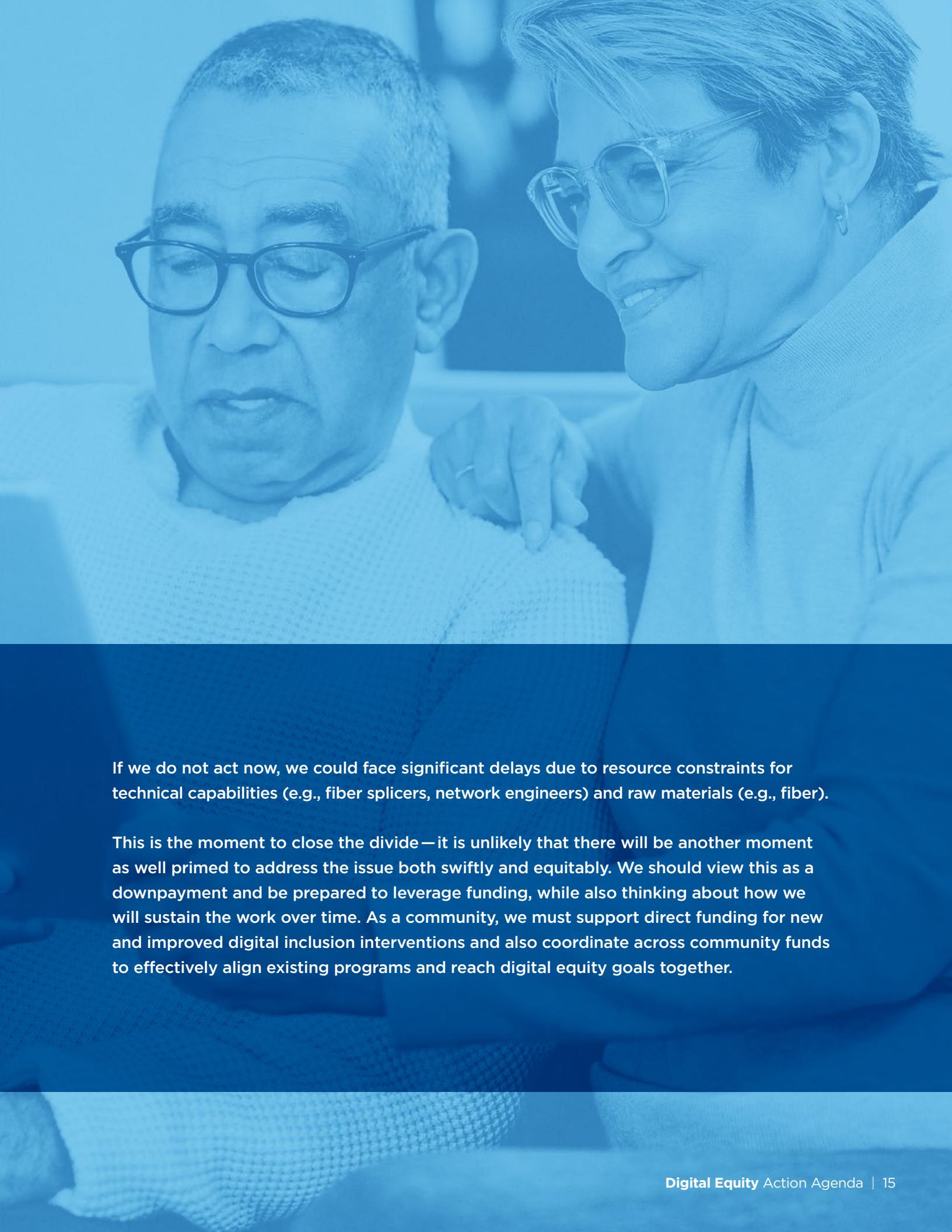
\$100M

Through State and Local Government Fiscal Recovery Funds and Capital Projects Funds

\$100M

Sector-specific funds across Education, Health, Housing

And potential to tap into other local funds (including bonds) and philanthropic sources.



If we do not act now, we could face significant delays due to resource constraints for technical capabilities (e.g., fiber splicers, network engineers) and raw materials (e.g., fiber).

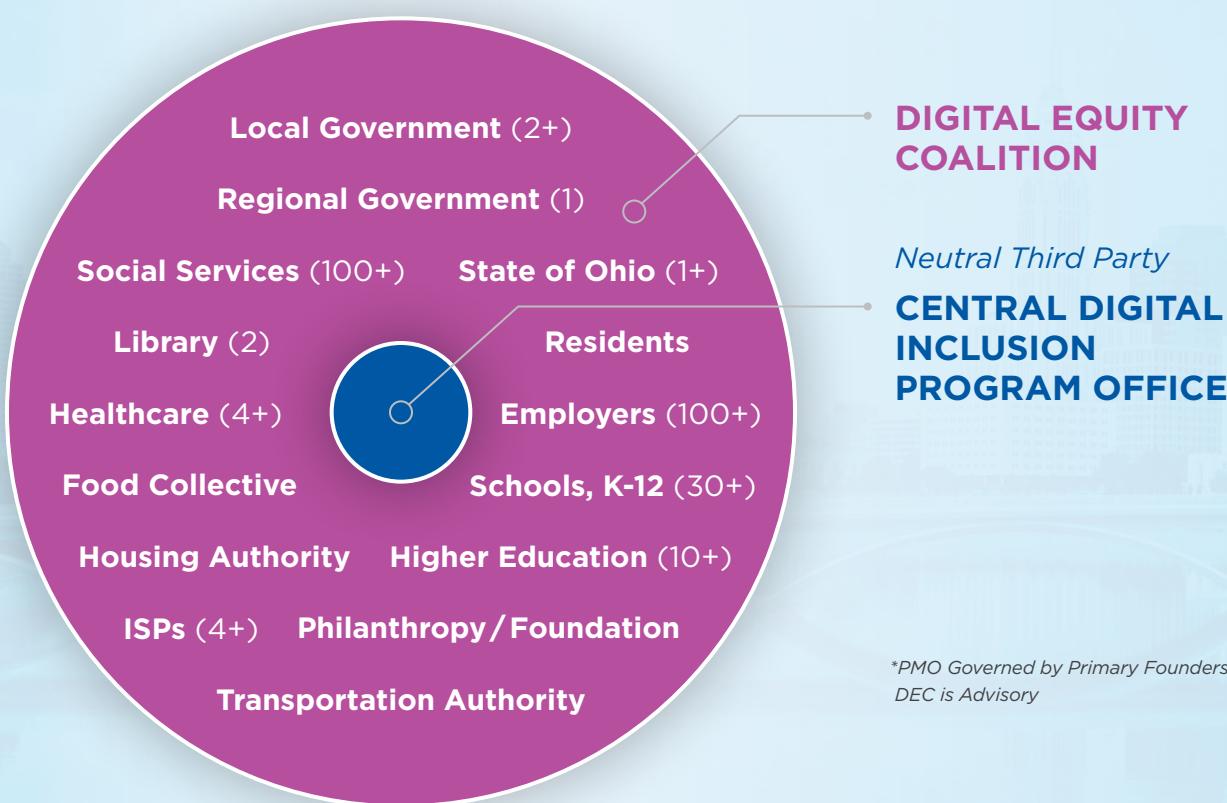
This is the moment to close the divide—it is unlikely that there will be another moment as well primed to address the issue both swiftly and equitably. We should view this as a downpayment and be prepared to leverage funding, while also thinking about how we will sustain the work over time. As a community, we must support direct funding for new and improved digital inclusion interventions and also coordinate across community funds to effectively align existing programs and reach digital equity goals together.

IMPLEMENTATION

Following this Agenda, implementation is expected to be closely coordinated and accomplished collaboratively by multiple partners. Requests for grant funds from local, state, and federal sources will be sought in alignment with partners. Mirroring the stakeholders involved in developing this report, partners from the following arenas will be engaged in implementation.

The work will be coordinated by establishing a Program Management Office (PMO) housed at Smart Columbus. The PMO will be responsible for aligning efforts to achieve four primary priorities and will function as a central hub.

Action Agenda implementation will occur gradually and purposefully so lessons learned can be iteratively applied over time. An implementation plan will follow this Agenda, and is expected to commence on or before January 1, 2023 and end five years later. One year, three year, and five year benchmarks have been established to gauge progress, using data from the U.S. Census Bureau's [American Community Survey](#) and a Franklin County Digital Equity Survey.



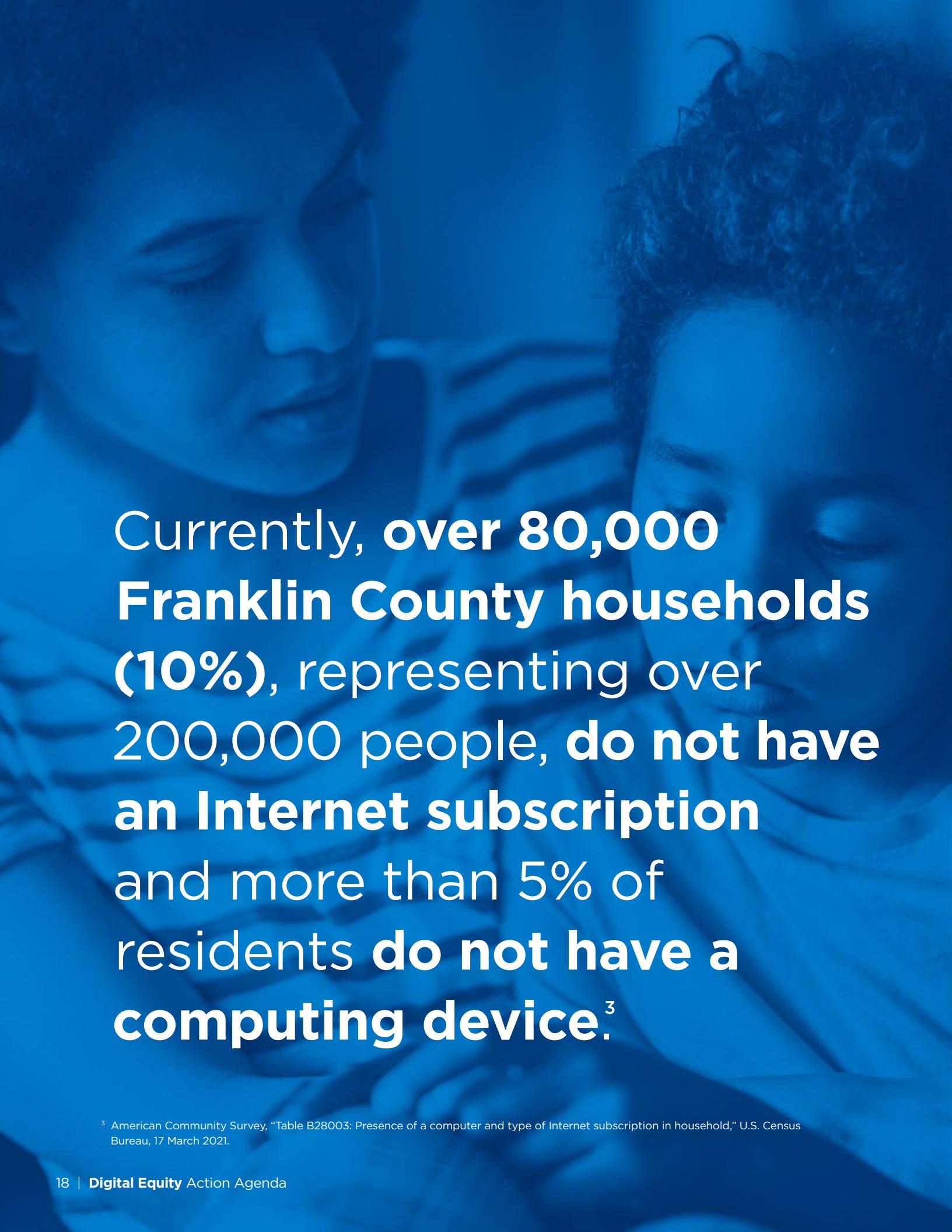


Access to modern digital **devices** and attainment of digital **skills** are needed to take full advantage of the internet and **enable digital equity**.

DIGITAL EQUITY COALITION

This Agenda was developed and will be championed by the Franklin County Digital Equity Coalition (DEC), a dedicated group of over 30 Franklin County and regional organizations, representing government, education, healthcare, social service, private sectors and institutions. The Coalition initially formed in response to the pandemic in March 2020.

Founded by the Mid-Ohio Regional Planning Council (MORPC), Columbus Metropolitan Library, and The Columbus Foundation, a number of Franklin County organizations began participating in informal, virtual meetings to more closely examine the status of broadband challenges for area residents. Over time, this organic gathering has grown to include additional business, government, education, nonprofit and social sector representatives. The DEC has been a model for civic cooperation and collaboration. The DEC is now coordinated by Smart Columbus and continues to meet several times each month. The momentum for this collective effort continues to increase.

A close-up photograph of a woman with dark, curly hair. She is looking down at a laptop screen, which is partially visible. The lighting is soft, creating a blue-toned atmosphere.

Currently, over 80,000 Franklin County households (10%), representing over 200,000 people, do not have an Internet subscription and more than 5% of residents do not have a computing device.³

³ American Community Survey, “Table B28003: Presence of a computer and type of Internet subscription in household,” U.S. Census Bureau, 17 March 2021.

Problem Background

The world is rapidly digitizing and too many Franklin County residents are being left behind without the Internet, devices, and skills necessary to fully participate online today, let alone in the future. The problem disproportionately impacts black and brown communities, and low-income families in general.

The following outlines the complexity of the issues that need to be addressed to achieve digital equity in Franklin County.

WHO IS MOST AFFECTED?

The [Franklin County Digital Equity Framework](#) published in 2021 states, “The digital divide is often framed as a challenge faced primarily by rural areas, yet minorities in urban communities face similar challenges affording, obtaining, and maintaining residential broadband access. Minority communities are especially vulnerable to the impacts from a lack of broadband access, devices, digital literacy, and technical support.”

A few months later the Brookings Institute published an online article titled, “[The benefits and costs of broadband expansion](#).” This article not only corroborates the framework’s assertion, but also gives it scale, citing in absolute terms that three times as many urban households lack broadband versus those in rural areas. While acknowledging those in urban areas typically have physical access to broadband networks, the article points out that, for many, service is unaffordable. For lower-income neighborhoods of color, the expansion of reliable, robust, and affordable Internet connectivity may well help address racial and socioeconomic inequities that have existed for decades.

Franklin County has residents in both rural and urban conditions who face similar and sometimes unique digital divide issues. This Agenda has been developed with specific focus on benefiting households and individuals who live below 200% of the federal poverty level. The Agenda’s objectives and strategies are also intended to be implemented with special emphasis on, and cultural relevance with, eight specific groups, each that have unique digital equity needs. These include the following:

DEMOGRAPHIC TO BENEFIT

DIGITAL EQUITY CONNECTION

Historically Underrepresented Populations	Those who have been denied access and/or suffer from systemic discrimination.	A 2016 report by the advocacy group Free Press found that systemic racial discrimination across multiple industries (including banking, housing, and credit) contributed to disparities in Internet access and adoption. ⁴
Housing Insecure	Those who are experiencing one of several different dimensions of accommodation problems, including affordability, safety, quality, insecurity, and homelessness.	Homeless youth engaged by The Columbus Foundation validated the essential nature of the Internet as each person was highly dependent on their phones for navigation and well-being. Inclusive strategies that enable connectivity beyond the home can help people stay connected.
Older Adults	Individuals who are 65 years of age or older.	Older adults must also be included in digital access efforts. In fact, older adults without access are more likely to experience a worrisome trend of isolation and loneliness. ⁵
Veterans	Those who served in the active military, naval, or air service.	During a recent interview with Secretary Denis R. McDonough, U.S. Secretary of Veterans Affairs, stated many veterans live in rural areas and have limited access to healthcare in those communities. The use of telehealth options are one of the many ways that veterans are able to access care regardless of where they live. ⁶
Disabled	Defined by the Americans with Disabilities Act (ADA) as a person who has a physical or mental impairment that substantially limits one or more major life activities, a person who has a history or record of such an impairment, or a person who is perceived by others as having such an impairment.	In 2020, the U.S. Department of Labor conducted two surveys and found that throughout 2019 and 2020, “workers with disabilities that had some form of internet subscription at home stayed employed at far higher rates than workers with disabilities who did not have an internet subscription at home.” ⁷
Students	Those engaged in PreK-12, vocational or trade school, and higher education.	The “homework gap” as defined by the Senate Joint Economic Committee accounts for students disproportionately affected by lack of device access, skills and connectivity enabling them to complete their homework and learn online. ⁸ The pandemic illuminated more connectivity issues. As of 2021, 9 in 10 U.S. parents report that their children have had some online instruction since the pandemic and of those respondents 30% said it has been very or somewhat difficult to help their children use digital tools. Parents with lower and middle incomes reported higher instances of difficulty. In particular, 37% of lower income parents report that their child had to complete homework on their cell phone and 25% reported students were unable to complete their homework due to no access to a computer at home. ⁹

⁴ Turner, S. Derek. “Digital Denied: The Impact of Systemic Racial Discrimination on Home-Internet Adoption” *Free Press*, 12 December 2016.

⁵ Fields, Jessica. “We are leaving older adults out of the digital world.” *TechCrunch*, 5 May 2019.

⁶ Veterans Health Administration Office of Connected Care. “Connecting Veterans to Telehealth Care.” *U.S. Department of Veterans Affairs*, September 2021.

⁷ “Disability and the Digital Divide: Internet Subscriptions, Internet Use and Employment Outcomes.” *U.S. Department of Labor*, June 2022.

⁸ Joint Economic Committee. “America’s Digital Divide.” *U.S. Congress*, 2 September 2017.

⁹ Schaeffer, Katherine. “What we know about online learning and the homework gap amid the pandemic.” *Pew Research Center*, 1 October 2021.

Justice Involved	Those who have had interactions with the criminal justice system as a defendant.	"lack of access [to internet and devices] leads to missed court appearances, inability to confer with counsel before life-altering legal proceedings and decisions, isolation from democratic processes, and inability to receive critical government services and safety information." ¹⁰
New Americans, Immigrants and Migrant Families	An individual in the U.S. who is aspiring to take the Path to U.S. Citizenship, or who has, in the recent past, become a naturalized citizen of the United States of America.	"Although New Americans account for about one-sixth of U.S. workers, they make up more than one-third of the workforce without digital skills." ¹¹ Statements like this not only highlight the need to invest in New Americans, but point to the impending danger if we don't. Having a workforce trained in digital skills is necessary to grow our economy.

¹⁰ Samuelson Law, Technology & Public Policy Clinic at UC Berkeley School of Law. "Cut Off From the Courthouse: How the Digital Divide Impacts Access to Justice and Civic Engagement." Next Century Cities, 4 March 2022.

¹¹ Cherewka, Alexis. "The Digital Divide Hits U.S. Immigrant Households Disproportionately during the COVID-19 Pandemic," Migration Policy Institute, 3 September 2020.

DISPROPORTIONATE IMPACT ON BLACK & BROWN COMMUNITIES¹²

- Those with lower incomes, people of color, and the less formally educated are disproportionately excluded from digital life.
- Households identified as making less than \$35,000 per year comprise a little over a quarter of all residences yet they constitute over 64% of those without an Internet subscription.
- Households self-identified as Black or African American alone constitute 22.5% of Franklin County's population. Over 13% of this population is without a computer or a broadband Internet subscription. Hispanic or Latino households make up 5.7% of the population. More than one in ten (12.3%) do not have a computer or broadband Internet subscription.
- This compares to Non-Hispanic Whites composing 62.2% of the population where only 6.1% are without a computer or broadband Internet subscription. Those without a high school diploma or equivalent are five times more likely to be without an Internet subscription than individuals who have a college education.

¹² American Community Survey, "Table CPO5: Comparative Demographic Estimates," U.S. Census Bureau, 17 March 2022.

ACCESS TO AFFORDABLE, HIGH-SPEED INTERNET

Today's demands for Internet in the household require more bandwidth than it did 10 years ago, and will need even more in 2030. Majority of current entry-level subscriptions offered by all ISPs are for 200–300 Mbps download speeds. The federal standard for underserved is anything below 100/20 Mbps. Based on the use cases for connectivity for a family, the Digital Equity Coalition believes 100 Mbps download and 100 Mbps upload speed is the baseline level of connectivity that should be available to every household in Franklin County.

Furthermore, this level of connectivity should be priced at 1% or less of household income. Under-resourced households spend a disproportionate amount of household income to purchase Internet. For example, the average annual residential wireline for 100 Mbps service in Franklin County today, before taxes and ACP, among the 3 wireline providers is \$41.66 per month or \$500.00 per year. For 1,000 Mbps (1 Gbps), the market average is \$79.99 per month or \$960 per year. Households earning an annual income of \$16K to \$30K, a 100 Mbps plan would represent 1.58% of their annual household expenditures. For a household earning \$150K-\$199K that same 100 Mbps bill is only .5% of annual household expenditures. The real contrast is when households go from 100 Mbps to 1,000 Mbps. For the first group, the 1,000 Mbps plan is 3.04% of annual expenses, for the second, only .46% more or .96%.

This Action Agenda recommends that we raise the expected minimum level of speed to 100/100 Mbps in the near term and 1,000 Mbps symmetrical by 2027 at a price point that is less than 1% of household income. **In the majority of low-income neighborhoods across Franklin County, the 100/100 Mbps baseline speed at or below 1% of household income for an under-resourced family is currently unattainable.**

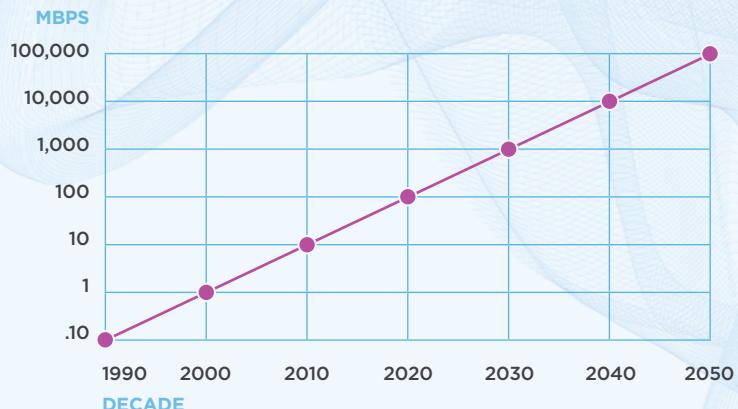
Upload speeds have become increasingly important, particularly for remote work and education as many users need to send data in order to interact with others in real time. For example, interactive webinars or file sharing alongside virtual meetings or lessons can require high quality upload speeds.

100/100 Mbps
Will Not be Enough
in the Future

Residential speeds are forecasted to be **above 100 Mbps by 2055**, that's 100 times what was consumed in 1990.

Average household internet consumption grew **38 times or 3722%** from 2010 to 2020.

AVERAGE URBAN/SUBURBAN SPEEDS IN MEGABITS PER SECOND



While the national goal of a minimum home speed has changed from 25 Mbps in 2015 to 100 Mbps in 2022, **many residential wireline provider's initial speed offered for customers is 200 Mbps, twice the current federal minimum**. And, for those with the financial means, 1,000 Mbps is the preferred service level.

ACCESSIBILITY VS. AFFORDABILITY

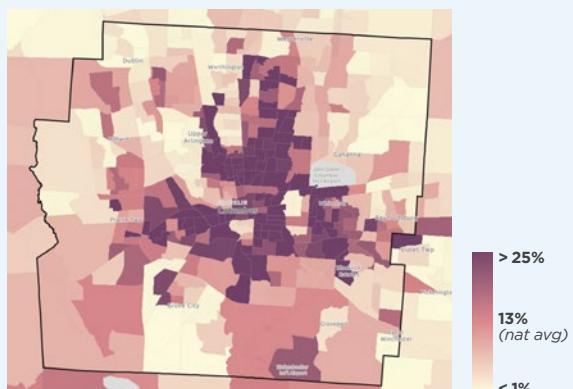
Research and mapping exercises have shown that fixed, in-home broadband Internet service is generally available to any resident living in Franklin County. The primary issues are (1) affordability of that access, and (2) the quality of service that is achievable with the infrastructure available in a neighborhood. Not every area of the county is served equally or prepared to meet household needs today or in the future.

Evidence of these conclusions can be seen in the following maps colored by census tract. The first set shows poverty status alongside the lack of residential Internet connectivity. The second set shows median household incomes and where modern digital fiber optic infrastructure is available.

Poverty and Internet Subscriptions

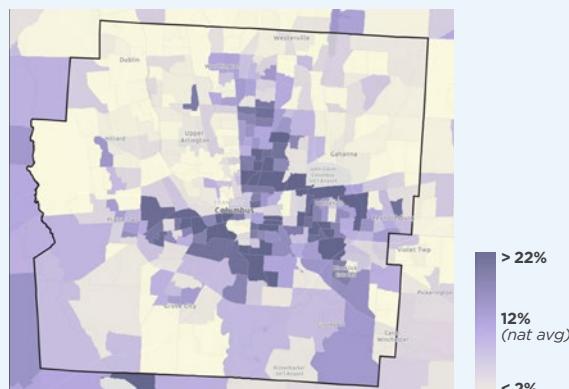
Poverty Status (ACS)

Percent of Population whose income in the past 12 months is below poverty level



Internet Connectivity (ACS)

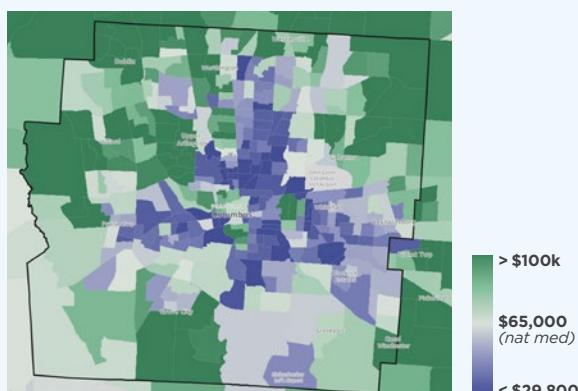
Percent of Households with No Internet Access



Income and Fiber Optic Infrastructure

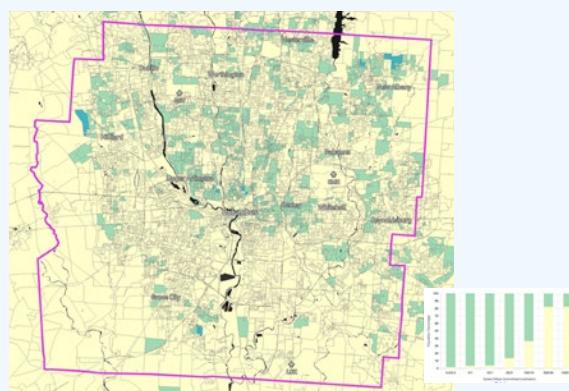
Median Household Income (ACS)

Median Household Income in past 12 months



FCC Availability (ACS)

Residential Wireless Fiber, 100/10 Mbps



AMERICAN CONNECTIVITY PROGRAM IS A CELEBRATED, SHORT-TERM AFFORDABILITY RELIEF

In the near-term, significant improvements have been made to affordable access to residential Internet through the Affordable Connectivity Program (ACP), the federal follow-up to the Emergency Broadband Benefit (EBB) Program. ACP provides \$30 per month (\$75 per month for those on Tribal lands) toward Internet service for households whose income is at or below 200% of the federal poverty level, providing significant relief to qualifying Franklin County residents.¹³ Eligible households can also receive a one-time discount of up to \$100 to purchase a laptop, desktop computer, or tablet from participating providers.

On May 9, 2022, the White House announced that 20 Internet service providers (ISPs) will make plans with 100 Mbps download speeds eligible for ACP in areas where the service is currently offered. This will help bridge the digital divide and provide meaningful financial relief for low-income households. However, there are a few considerations to take into account:

» Not Permanent

Fourteen billion dollars have been allocated to the Affordable Connectivity Program. The program will end when funds have been exhausted. It is expected funds will be depleted by or before 2026.

» Mobile Phone or Home Internet

Eligible residents have to decide if they want to apply the \$30/mo. to their phone bill or home Internet costs. For many under-resourced families, having a smartphone and phone plan is the most essential form of connectivity, and as a result many have used it for their phone bill rather than to lower the cost of home Internet.

» Speed Attainment Not a Guarantee

Not every provider can provide 100 Mbps speeds in the neighborhoods where the highest density of ACP eligible households exist.

» Low Upload Speed Plans

Upload speeds refer to the transfer rate connected devices can send rather than receive (download speeds). While the agreement reached with the 20 ISPs mentioned above calls for download speeds of 100 Mbps—a level of service that will accommodate a typical family of four's needs for receiving data—it did not specify minimum upload speeds, which are becoming more and more important. Fortunately, many of the 20 ISPs, including major carriers providing service in Franklin County, have agreed to provide at least 20 Mbps upload speeds.¹⁴

As beneficial as the ACP is, adoption remains a significant challenge. Near the conclusion of the EBB Program that preceded the ACP, it is estimated that less than 25% of eligible households had participated.¹⁵ Though the White House and experts estimate that 48 million American households qualify, less than 25% have enrolled as of May 23, 2022.¹⁶ The most recent data for Franklin County (through March 2022) shows 50,595 claimed subscribers, which is roughly 40% of eligible households.

¹³ The United States Government, "Fact Sheet: President Biden and Vice President Harris Reduce High-Speed Internet Costs for Millions of Americans." *The White House*, 9 May 2022.

¹⁴ Tepper, G., "Internet service providers commit to Affordable Broadband," *Benton Foundation*, 20 May 2022.

¹⁵ Noakes, S., "Path to digital equity," *Digital Promise*, 13 May 2022.

¹⁶ "ACP enrollment and claims tracker," *Universal Service Administrative Company*, 25 May 2022.

SYSTEMIC UNDERINVESTMENT IN LOW INCOME NEIGHBORHOODS

Many households in low-income neighborhoods throughout Franklin County cannot obtain 100/100 Mbps speeds even if they could pay for it. The “redlining” patterns of Depression Era practices denied services (typically financial) to residents of certain areas based on their race or ethnicity . The effects of this are still evident today, as low-income and predominantly black and brown communities suffer from a lack of access to food, jobs, healthcare, and quality education in reasonable proximity to where they live.

The Internet’s democratization of information, enablement of work from anywhere, and enhanced delivery of services open up the world to a user regardless of where they live—assuming you have the Internet to do what you want and need to do online. Unfortunately, market forces have prioritized the investment in and upgrades to digital infrastructure, such as fiber optic cable, to affluent and heavy commercial centers, consequentially leaving behind historically redlined neighborhoods and disproportionately affecting black and brown communities.

This market failure has compounded existing divides and reinforced reasons for mistrust by residents who have experienced inequity in many aspects of their lives. These realities must be acknowledged and understood to truly make a difference and not leave people further behind.



88% of respondents without Internet indicated cost as a top barrier to obtaining residential Internet.

- Jobs and Family Services Survey



COST FOR INTERNET IS NOT STANDARDIZED OR CLEAR TO THE CUSTOMER

Understanding the level of service one should receive for a given Internet subscription rate is confusing for most consumers. Like many residents, under-resourced residents engaged by the DEC lacked understanding of how to measure Internet speeds and advocate for themselves to ISPs. Furthermore, many residents shared first-hand stories of feeling cheated by the system due to hidden terms or unanticipated costs, contributing to a lack of trust.

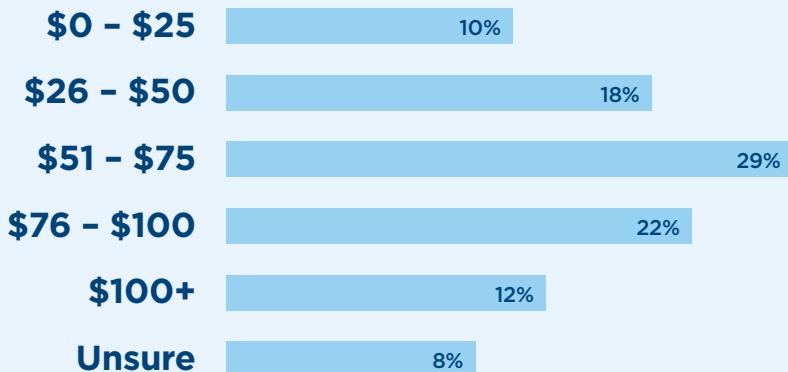
"Had WOW! for 3 years; it was \$25-35...then I got a bill for \$95. Called and told them I'm not paying that, but they said my contract ran out...got the run-around, then disconnected." -Resident with no other providers servicing their home

- 2/3rds of residents who prototyped an Internet comparison and optimization tool had first hand experiences with providers changing their service charge or were charged installation fees without their knowledge.

The standard price for broadband service throughout Franklin County ranges from about \$45 per month to over \$100 per month, not including taxes, fees, and equipment charges.

- Local survey work has found under-resourced residents are not paying a consistent rate for the Internet
- More than 60% are unaware of discount programs they qualify for such as ACP.

There is no standard price for internet.



Survey data from 2021 Digital Equity Coalition Survey of the Franklin County Jobs and Family Services client base.

Unfortunately, affordable Internet is often too slow to be adequate for a household's needs. Research by the National Digital Inclusion Alliance has found this is sometimes the result of "tier flattening," a term used to describe when ISPs eliminate cheaper rate tiers for low and mid-speed Internet access, except at the very slowest levels. This makes high-speed plans at higher prices the only viable option to meet household needs, but these higher prices are often unsustainable for low-income households.

Furthermore, ISPs invest in infrastructure based on where profit can be made relative to anticipated costs, revenue, and competitive pressures. Infrastructure maintenance and/or improvements are also made with an eye towards areas where people can afford the cost of enhanced services. When such strategic improvements and a lack thereof in certain areas are combined with tier flattening practices that eliminate low-cost plans, increased subscription costs leave residents in redlined areas with poorer Internet at higher costs.

LACK OF COMPETITION AND CHOICE IMPACTS COST

Compounding the issue of affordability is the limited options residents have in the market. While connectivity options do exist for nearly all residents, The Columbus Foundation's report on broadband access in the City of Columbus points out that ISP provider options can be quite limited, particularly in low-income areas. Two providers, AT&T and Spectrum, hold the vast majority of the residential broadband market in Franklin County. WOW!, recently acquired by Frontier and now known as Breezelane, is the only other ISP with a meaningful percent of market share at this time, although a recent market entrance by Starry has quickly added a new option for Franklin County residents in many areas.

Corollary to this issue is a phenomenon experienced by residents who live in multi-family units. Property owners often enact exclusivity agreements with certain ISPs. These agreements limit the choice of the building's residents to a single provider, effectively eliminating competition and the ability to shop around for more affordable broadband options.

"I live in a low-income neighborhood and it's not fair that there are limited options. I used to live in a more affluent neighborhood and there were so many options. It's not really a fair position to be in." -South Side resident with \$60 internet plan

"Doesn't matter who I have and how high of a speed I get, it still cuts out." -Single-mother in North Linden

"We have to put up with whatever we get for service."

-Mother in North Linden; has low-income plan with Service Provider

"I looked into [other service providers] because they are cheap, but they don't service this zip code. There are only so many options." -Self-employed Short North resident

"I'm not allowed by the landlord to have my own Internet installed" -Respondent, JFS Survey

Two Columbus neighborhoods located close to one another clearly illustrate the digital divide. Clintonville is just 3.7 miles from North Linden, yet Clintonville's median income is more than double North Linden's. Comparing Internet subscription offerings from the county's two largest providers shows plans that cost between \$50-\$55/month in both neighborhoods. However, two distinct differences emerge when looking more closely. The first is the percentage of disposable income it takes to purchase Internet connectivity from these providers is double in North Linden (1.7–1.8%) compared to Clintonville (0.8–0.9%). The second is that the maximum speeds available from one of the two providers at \$50-\$55/month is six times greater in Clintonville. Thus, as a percentage of disposable income, those with lower incomes pay more for less service.

 The financial burden to have residential internet is **2x as high** for a low-income neighborhood versus a middle-income neighborhood and gets **1/6th the speed**.

Neighborhood	North Linden	Clintonville
Households (Average Household Size)	12,911 (2.57)	16,051 (2.08)
Average Unemployment Rate	9.78	3.65
Average Median Income	\$38,099 (\$35,693)	\$84,664 (\$74,878)
Monthly 1% of Average Income	\$29.75	\$62.42
Spot Check/Speed Attainable	Max Speed 50 Mbps from AT&T	Max Speed 300 Mbps from AT&T
Internet as a Proportion of Disposable Income	1.8%	0.9%

HOW THIS PLAYS OUT IN REAL LIFE

In 2021, the Digital Equity Coalition deeply engaged with over fifty residents in 88 hours of discussion and surveyed 1,800 clients of Franklin County Jobs and Family Services to understand the lived experience of residents who have been digitally excluded. We found themes across their Internet adoption experiences that are summarized below.

'I stay connected through my hotspot or smartphone'

Research indicates there are 80,000 households without home Internet,¹⁷ although we struggled to get connected with any residents that were completely disconnected. Homeless youth to recently unemployed adults and seniors found ways to stay connected through a smartphone, hotspot, or a neighbor's WiFi connection that extended into their home.

"We had cable and WiFi, but couldn't afford to keep up [with the bills]. We had no Internet for about 4 months. I had to withdraw students from school because they were being marked as absent." -Mother of 5 from the South Side

"Was paying \$89 for 100mb... lost my job and couldn't pay. Neighbor lets me use his Spectrum Internet." -Single mother with one son

'I can't make my payment'

According to the Benton Institute for Broadband Society, "Some 32% of households are subscription vulnerable, that is, they struggle to maintain service and have a very difficult time affording service."¹⁸

"They (ISP) shut our household off for 2 weeks because we were late on our bill."

-Fairgate resident; multigenerational household with her mom and 3 kids; \$65/month Spectrum subscriber, also shares her Internet with her brother next door

"[I pay] \$69.99, but if you pay late, it's a \$20/\$25 late fee... when I lost a job, I was just trying to take care of necessities. But since I got a job I am getting back on top of it."

-Linden/Westerville resident; WOW! Customer with 6 people in the household, including four boys ages 2-15

'I Feel Stuck'

Due to fear of cancellation fees, potentially bad credit with a prior ISP, and/or lack of knowledge about other options, many residents feel stuck in the plans they are in and don't feel like they have any other option.

'Paying More than I Can Afford'

Due to the importance of home Internet and the need for quality speeds to do what a household wants and needs to do online, many residents will do everything they can to be connected with a high speed.

'I want Reliable Internet'

Half of the Respondents of the Jobs and Family Services survey reported experiencing unreliable Internet service. Residents we spoke with described their Internet connection most commonly as laggy, frustrating, or slow.

¹⁷ Data extrapolated from GIS information from Columbus Office of Technology and 2020 U.S. Census Bureau American Communities Survey.

¹⁸ Horrigan, J., "Three Data Points to Help Plan for Infrastructure Investment and Jobs Act Broadband Funding," Benton Foundation, 5 April 2022.

Below is a summary of the primary issues identified by residents that present challenges in the adoption and utilization of the Internet.

AWARENESS	Lack of Awareness – It's hard to learn what options there are, particularly low-income plans
	Lack of Understanding – The information online is really confusing
	Multi-unit Dwellings have Contract with Single Provider – Marketing exclusivity contributes to a residents' perception that they have no other option
CONSIDERATION	Lack of Transparency of Plans – Difficult to compare plans and providers apples to apples.
	Lack of Trust – Perception that there is a catch to any low-cost option.
	Lack of Motivation – Limited time and energy to research options.
ACQUISITION	Affordability of Adequate Plans – Average monthly cost for an unbundled Internet subscription is \$50, which is more than 1% of income for a low-income household.
	Lack of Service Availability – Not all ISPs service every area of the County equally.
	Prior Debt or Credit Score – Financial history follows a resident and can limit their eligibility and options.
UTILIZATION	Lack of Devices and Skills – The extent to which one's Internet connection is used can be limited by their skills and device capabilities.
	Subscription Vulnerability – Consistent bill payment can be challenging for some households.
	Unreliable Connection – Lagging Internet or inconsistent connection can make doing certain things online like work or school difficult.
ADVOCACY	Security and Privacy Concerns – The fear of being monitored or scammed prevents people from fully engaging online.
	Lack of Confidence – The complexity of the Internet can be intimidating and prevents people from asking questions or helping others.

ACCESS TO DEVICES

A 2021 Pew Research Center survey of U.S. adults clearly shows many of those living in households making less than \$30,000 a year must make hard choices about whether or not to spend their limited resources to acquire devices capable of accessing the Internet.¹⁹ Over a quarter of this group (27%) are smartphone-only users. Low-income residents are much more likely to rely upon a mobile phone as their only computing device. While mobile devices offer convenience and are useful for intermittent Internet access, they generally do not meet the needs of remote work or school, and relying on them as the sole source of access can significantly limit a person's ability to engage with digital resources.²⁰ These figures contrast sharply with the fact only 6% of those in households making \$100,000 or more have such limitations; devices capable of fully utilizing the Internet are nearly ubiquitous in these homes.

The same study found almost a fourth (24%) of adults in households making under \$30,000 do not own a smartphone at all. Additionally, 43% of adults with lower incomes have neither residential Internet nor a desktop or laptop computer, and a majority of Americans with low incomes are not tablet owners.

"I spent my stimulus check on a laptop for my call center job." -Mom of two with a remote call center job

"I have access to the Internet on my phone, but options are limited. I have to use the library's computers which means they're not readily available and have limited time usage. Having a computer with the Internet would enhance my life." -Quote from Jobs and Family Services Survey Respondent

"I have a Cricket plan. Use my phone as the main source of everything. I was at \$40 before, and I think I'll get to \$60—I get the highest deal they got. It changes how I use my Internet, I get irritated [when my data goes down.] They change my plan according to what I pay—you're deciding what to pay, looking at my bills, what I can afford to pay."

-Resident on the Southside with a family of 9

"I'm still searching for remote work. I Looked into an at home call center job, but I don't have a regular desktop computer so I can't qualify." -Mother of 5 from the South Side

¹⁹ Perrin, A. "Mobile Technology and Home Broadband 2021," Pew Research Center: Internet, Science & Tech, 11 May 2022.

²⁰ "Franklin County Digital Equity Coalition Framework," Franklin County Digital Equity Coalition, March 2021, pg 14.

Since the onset of the pandemic, the community has mobilized to fill the device gap as quickly as possible.



DEVICE DISTRIBUTION

- » **City of Columbus** – 20,000 Chromebooks purchased for distribution through CCS
- » **Columbus Metropolitan Library** – 2,500 Chromebooks and 150 tablets
- » **Leadership Columbus** – 500 computers distributed
- » **Columbus City Schools** – 43,000 devices

HOTSPOT DISTRIBUTION

- » **MORPC and ESC** – 2,300 hotspots
- » **Columbus Metropolitan Library** – 2,300 hotspots on long-term loan; another 200 hotspots in a circulating collection across all branches
- » **Columbus City Schools** – 6,000 hotspots

**As of the publishing of this Agenda, only four districts as reported by the Educational Services Center of Central Ohio do not have 1-to-1 device programs and those without such programs have reason to believe nearly all of their students do not have such a need

"We will be returning [school laptops] because they will be going to a new school in the same district. I'm not sure they will get a new device. Haven't found anything to get devices—tried community places—no church that offers assistance or vouchers/devices... We could go back to doing old paper and pen, but they've gotten really used to using the laptops." -Mom of four on the South Side

ACCESS TO DIGITAL SKILLS

While the excitement surrounding the recent announcement of Intel's historic investment in Central Ohio is understandable, Franklin County's emergence as a tech hub started long ago. Established private-sector companies with significant history in Franklin County have provided thousands of high-tech positions critical to business operations. In addition, TechCrunch announced in a 2022 article that over the last twenty years, venture capitalists have invested over \$3 billion in Columbus.²¹ Producing, attracting, and retaining the human talent necessary to meet current and future employment needs of these businesses requires investment in closing the digital skills gap and supporting workforce development efforts.

²¹ Hall, C., "Columbus, Ohio is quickly becoming the Midwest's Tech Hub," *TechCrunch*, 1 June 2022.

Augmenting and adding color to local facts cited above, the Bureau of Labor Statistics report in February of this year states “the pandemic has made IT workers even more important to the future economy, and the employment projections for these occupations have increased.”²² To meet immediate and long-term needs, this Agenda has a focus on digital life skills that span the spectrum, from using tech in everyday life, to using it in the workplace, and in career development.

Numerous organizations within the Digital Equity Coalition and across Franklin County have expertise in helping people increase their technical knowledge and skills. This Agenda recommends expanding existing initiatives and creating new ones aimed squarely at meeting our Region’s needs. More specifically this Agenda recommends a focus on:

- » Doubling youth participation in summer STEAM (Science, Technology, Engineering, Arts, and Math) programming.
- » Importing the “Tech Goes Home” program model from Chattanooga and Boston to provide contextual life skills training to parents of K-12 students, equipping them with devices and skills necessary to meet their unique needs.
- » Increasing participation in credentialed workforce development training. This is based on DEC investigations into what types of skills training make a long-term difference in economic prospects for participants.²³
- » Catalyzing tailored training programs specifically for older adults, people with disabilities, New Americans, and justice-involved individuals.

OUTREACH & ADOPTION

Addressing affordability and availability does not solve the problem in of itself. Digital inclusion work requires working with marginalized communities to facilitate adoption and utilization. Insights collected from the October 2021 Jobs and Family Services survey, resident feedback during design sprints, and comments from DEC members engaged with under-served communities indicate distrust and skepticism around the underlying motivation of both corporations and government intending to offer digital inclusion services. Much of this distrust stems from a history of negative experiences and broken promises that make people feel misled.

HISTORY OF NEGATIVE EXPERIENCES AND BROKEN PROMISES CREATE TRUST ISSUES WITH RESIDENTS

“Internet companies always suck you in with a reasonable price then raise their fees.”

-Jobs and Family Services Survey Respondent

“I’m getting a third of what I’m paying for. That sounds like something they would do, larger corporations are always trying to finesse you.” -30 year old who lives with her partner on the East Side

²² Hylton, S. et al., “Projected employment growth for fastest growing computer occupations,” U.S. Bureau of Labor Statistics, February 2022.

²³ Stratton, C. “Planning to maintain the status quo?” *The Journal of Community Informatics*, n.d.

“I don’t trust the government...I know for the year my rent will be the same, because I have a signed lease, it’s a guarantee. Without guarantees things just don’t happen. With other things, you just don’t know what it will be.”

Like what? Has there been a time when the government didn’t deliver?

“Yeah, with the government stimulus. If you [got the stimulus], then you can’t get your child credit when you work for it. There’s no reason to believe them.” -Co-design Sprint

Participant, household of 6 from Southside

Many residents in lower and middle income families face other basic needs challenges that must be met or linked to digital inclusion efforts to make them relevant and useful.

18% of respondents to the JFS survey (n=1839) reported: ‘home Internet is generally important, but if I were in a financial pinch I/we could go without it for a short period of time.

FREE INTERNET RAISES QUESTIONS

There is a stigma to overcome around accepting free services. For some, ‘free’ signals a less than quality, which may not be desirable. In general, residents engaged wanted to be sure they weren’t taking away from others who need it more.

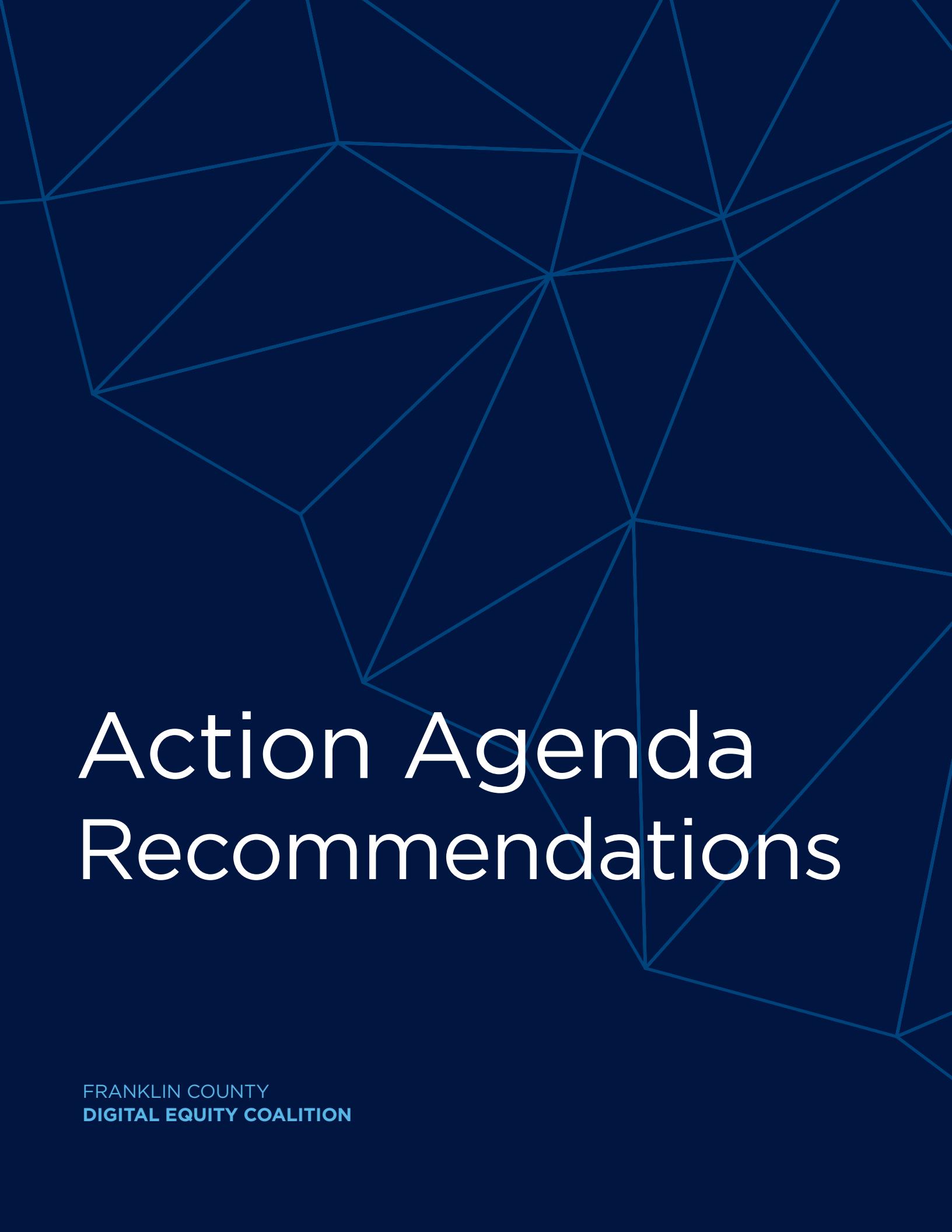
I probably would do free Internet, but I want to make sure I qualify...I just don’t want to take it away from somebody else who really needs it. Don’t want to cheat the system and take from others.” -Woman from South Side, volunteers at the Mid-Ohio Food Collective

“Maybe I should save that for someone more deserving. An insecurity issue I have, I guess... It’s like imposter syndrome—you’re fake and someone will find out that I don’t deserve it.”

-Mother of 3, described her family as ‘extremely low-income’

“Free would be great. My only concern would be how reliable and consistent it would be. Can only one device be connected? When I hear free, I want to hear more.” -Resident on the South Side who works from home with a roommate that is an avid gammer

“Free is good—all for that, but I didn’t want to complain [about pilot service being slow] because it was free.” -South Side mother who participated in Free Internet Pilot Program



Action Agenda Recommendations

FRANKLIN COUNTY
DIGITAL EQUITY COALITION

Summary

The following provides a high-level summary of the estimated impact, cost, and expected benefits of the four priorities and the 11 strategies that comprise this Agenda. Also included is the identification of the parties expected to lead on each strategy. Icons used in the legend to the right are used to convey this information in the matrix shown below.

“Projected Impact on Digital Equity” represents the expected effect each strategy will have on Franklin County’s efforts to reduce the number of households reporting a lack of residential Internet, modern computing devices, or the skills needed to use them.

“Estimated Cost” communicates a relative assessment of how expensive each strategy will be.

LEGEND

Projected Impact on Digital Equity

- ● ● ● Limited
- ● ● ● Moderate
- ● ● ● Considerable
- ● ● ● Expansive

Estimated Cost

- \$ Low
- \$\$ Medium
- \$\$\$ High
- \$\$\$\$ Very High

Lead Organization

City/County	City & County Government
PMO	Project Management Office
PMO/RFP	Project Management Office via Request for Proposal
PPP	Public-Private Partnership

FRANKLIN COUNTY

Digital Equity Action Agenda

PRIORITY 1 – OUTREACH & ADOPTION	PROJECTED IMPACT	ESTIMATED COST	LEAD ORG.
Community-Wide Messaging and Awareness Campaign	● ● ● ● ●	\$\$\$\$	PMO
Online Digital Inclusion Resource Portal and Internet Optimization Tool	● ● ● ● ●	\$\$\$	PMO / RFP
Community-Wide “Digital Navigator Ecosystem”	● ● ● ● ●	\$\$\$	PMO / RFP
Community Co-Design Program	● ● ● ● ●	\$	PMO
PRIORITY 2 – CONNECTIVITY			
Build Out Fiber to the Home (FTTH)	● ● ● ●	\$\$\$\$	City/County, PPP
Support Connectivity Improvements Across Franklin County	● ● ● ● ●	\$	PMO
PRIORITY 3 – DEVICE ACCESS			
Collective Purchasing of New and Used Devices	● ● ● ● ●	\$	PMO / RFP
Flagship Device Distribution Points	● ● ● ● ●	\$\$\$\$	PMO / RFP
Tech Support Services	● ● ● ● ●	\$	PMO / RFP
PRIORITY 4 – DIGITAL LIFE SKILLS			
Four Priority Investments:			
<ul style="list-style-type: none"> • Establish Tech Goes Home • Expand summer tech programs for youth • Provide financial support for residents upskilling • Establish a new competitive grant program 	● ● ● ● ●	\$\$\$	PMO / RFP
Apply a Digital Equity Lens Across Existing Funding Priorities & Programs	● ● ● ● ●	\$	PMO

The following sections organized by the Agenda's four priorities details the associated strategies, actions, and suggested key performance indicators (KPIs) over five years, starting with calendar year 2023. KPIs with "as evidenced by" statements that assign specific responsibilities to individual positions cannot be included until decisions about program management and budgets are firmly established. These will be presented in an implementation plan informed by this Agenda.

FRANKLIN COUNTY

Digital Equity Priorities



CONNECTIVITY

Expand **reliable, high-speed residential internet** options in low-income neighborhoods in Franklin County at an **affordable cost** for under resourced households.



DEVICE ACCESS

Create a sustainable stream of different types of **high-quality digital devices** that are available **at low to no-cost** to benefit Franklin County residents who need them.



DIGITAL LIFE SKILLS

Expand and increase **access to digital skills training** with the addition of learning opportunities across provider organizations that **support residents' individualized needs** on a continuum from survival to career.



OUTREACH & ADOPTION

Establish and support a **coordinated, multi-channel outreach approach** that is activated by a **distributed network of partners**, effectively providing residents with information to do what they want and need to do online.

All of these strategies should be implemented with an inclusive and equitable approach. Here are considerations for the approach to be taken across priorities from ChiByDesign's *Overcoming Barriers to Technology Adoption* report:

Alignment & Co-Creation

- » Customize solutions to specific groups within communities (i.e. multi-topic training, adaptive programming)
 - » Create feedback mechanisms (i.e. surveys)
 - » Provide resources for program model replication (i.e. playbooks)
 - » Co-create solutions with communities (i.e. partnerships with community organizations, dedicated space for community convening)
 - » Foster symbiotic community partnerships (i.e. financial incentives, volunteering)
 - » Build capacity for local stewardship (i.e. community member training, youth mentorship)
 - » Provide resources for skill development (i.e. designated community spaces for learning, training community stewards, digital literacy training)
-

Outreach & Adoption

- » Activate community spaces (i.e. live installation events, leveraging community spaces as hubs)
 - » Provide accessible modes of payment (i.e. community organization credits, loans to pay for devices, cash for groceries)
 - » Minimize onboarding labor (i.e. offer eligibility through existing programs, on-site registration)
 - » Culturally relevant messaging (i.e. social media campaign, trusted community voices, relatable imagery)
 - » Connect at the critical moments (i.e. make services available at moments of need)
 - » Mobilize community ambassadors (i.e. paid community ambassadors to advocate for programs/services, early adopter incentives, offering a variety of avenues to be an advocate)
 - » Ground solutions in community values and mindsets (i.e. design research to understand community values and mindsets)
 - » Identify eligibility through other programs (i.e. automatic eligibility through SNAP)
 - » Connecting to other relevant benefits and services (i.e. promotion of other benefits that people might need)
 - » Demonstrate intervention benefits to drive adoption (i.e. incentives for early adopters to share feedback, financial incentives for community organizations to install infrastructure)
-

Device & Technology Access

- » Demonstrate intervention benefits to drive adoption (i.e. incentives for early adopters to share feedback, financial incentives for community organizations to install infrastructure)
 - » Sustain reliable access to services (i.e. fixed-price or free access guarantee, regular and continued maintenance)
 - » Reduce cost of participation (i.e. sliding payment scale)
-

Skills Training

- » Build capacity for local stewardship (i.e. community member training, youth mentorship)
- » Provide resources for skill development (i.e. designated community spaces for learning, training community stewards, digital literacy training)
- » Activate community spaces (i.e. live installation events, leveraging community spaces as hubs)



“I don’t know what I am paying for in my plan, they are just buy buy buy and they don’t explain anything.”

-Mother of 5 near OSU East, looking for employment and paying more than \$50 a month for internet.

Fourteen residents participated in a week long engagement to analyze their connectivity experiences, **all but one expressed distrust with Internet Service Providers.**

PRIORITY 1

Outreach & Adoption



Establish and support a coordinated, **multi-channel outreach approach** that is **activated by a distributed network of partners**, effectively providing residents with information to do what they want and need to do online.

This priority will establish and support a coordinated, multi-channel outreach approach activated by a distributed network of partners who transparently provide residents with culturally relevant information that promotes engagement and adoption of solutions in all three major areas of the plan—connectivity, devices, and digital life skills.

Actions Today

GET THE WORD OUT

A coordinated multi-channel marketing and PR campaign activated across a broad spectrum of grass-roots and social service organizations.

CREATE AN ONLINE RESOURCE FOR 24/7 SUPPORT

A one-stop-shop online resource that connects residents and full-time professionals to information they need.

ENSURE THERE ARE PEOPLE AVAILABLE TO HELP

An ecosystem of people prepared to provide in person or on the phone support to residents across the County.

DESIGN PROGRAMS WITH RESIDENTS

Outcomes by 2028

RESIDENTIAL CONNECTIVITY

60% of eligible residents are enrolled in ACP

DEVICE ACCESS

Over 20,000 new devices have been distributed

SKILLS TRAINING

Over 5,000 residents annually receive digital skills training



All of the strategies and activities in this priority work to achieve adoption across the other priorities

The Outreach and Adoption priority includes four objectives; each objective includes specific strategies, activities, and key performance indicators.

1.1 | GET THE WORD OUT

Construct and execute a **messaging and awareness campaign** that connects with and supports the needs of under-resourced residents. Five strategies animate this objective.

1.1.1 Develop and use a unified **resident-facing brand and messaging campaign** that will be incorporated into an online portal and all other resident-facing information. This campaign will engage residents and community influencers, building trust by requesting and incorporating input on outreach and adoption efforts. It will use clear, easy-to-understand, and consistent messaging in all types of media, providing context in layman's terms. This strategy will develop a distinct brand and a suite of culturally relevant messaging and imagery resources that can be used plug and play by a broad and diverse set of community partners and residents.

KEY PERFORMANCE INDICATORS

Prior to:	Brand & Communication Pieces	Organizational Outreach
12/31/2023	Unique brand and major pieces of communications for use in print and digital media will be developed	A minimum of 40 organizations, including social service, private-sector, education, healthcare, utilities, government, and other nonprofit organizations will be engaged in using the brand campaign in their efforts
12/31/2025	Over 50 unique pieces of communications using the common brand and consistent messaging will be produced and distributed	A minimum of 60 organizations will be engaged in using the brand campaign in their efforts
12/31/2027	Over 100 unique pieces of communications using the common brand and consistent messaging will be produced and distributed	A minimum of 80 organizations will be engaged in using the brand campaign in their efforts

1.1.2 Create and execute a **comprehensive communications and marketing plan** that builds trust in communities most affected by the digital divide, transparently illustrating this initiative's importance to residents. This strategy will focus on making the case for change, promoting the Affordable Connectivity Program (ACP), and advancing adoption of connectivity, devices, and digital life skills. Related activities will include the following.

- » Employing Diffusion of Innovation theory to strategically identify and target innovators, early adopters, and early majority.²⁴
- » Distributing messaging across mass media outlets and social service, commercial/business, education, government, healthcare, and other nonprofit entities.
- » Designating an internal media manager to work with a media consultancy/public relations firm to: a) leverage new and existing communication pathways; b) advise and execute on all media buys; and c) develop & rigorously measure all media campaigns.
- » Developing social media campaigns using applications most frequented by residents to promote discounted connectivity, device availability, and skills training.
- » Making traditional media buys (radio, TV, print posters & flyers, door hangers, etc.) for marketing campaigns.
- » Coordinating promotional efforts led by a media manager with an instructional designer so resources in the digital inclusion portal (below) are aligned and consistent with information distributed across media outlets and social service, commercial/business, education, government, healthcare, and other nonprofit entities.
- » Cross-marketing with existing agencies (businesses, healthcare providers, government, utilities) that serve focused populations—New Americans, immigrants, and migrant families, older adults, students, people with disabilities, recipients of public benefits, and those without housing.
- » Using unique marketing channels (i.e. utility bills, childcare providers, car sales, coasters in bars and restaurants, and/or standard digital bill pay messages).
- » Translating materials in multiple languages with cultural context.

KEY PERFORMANCE INDICATORS

Prior to:	Awareness
12/31/2023	Over 10% of Franklin County residents over 18 years old will have awareness of Digital Equity efforts in all three areas.
12/31/2025	Over 25% of Franklin County residents over 18 years old will have awareness of Digital Equity efforts in all three areas.
12/31/2027	Over 50% of Franklin County residents over 18 years old will have awareness of Digital Equity efforts in all three areas.

²⁴ See “Diffusion of Innovation” in Appendix.

1.1.3 Focus on **grassroots outreach and engagement** to meet residents where they are—at neighborhood events, door-to-door, and other localized outreach strategies. Related activities will include the following.

- » Creating and maintaining outreach resources and event kits that community-based organizations can use to host events.
- » Engaging and building relationships with residents where residents are—at community events, culturally specific celebrations, religious observances and institutions, and other places where people with common interests typically gather (i.e. barbershops, coffee shops, daycares, healthcare venues, houses of worship, international grocery stores, neighborhood events, recreation centers, and schools).
- » Exploring the desirability and feasibility of mobile lab pop-up events in neighborhoods (i.e. mobile pop-ups with resources capable of promoting connectivity, device, and skills training awareness where residents live, work, and play).
- » Creating specific engagement methods with New American populations, including implementing multi-language and culturally appropriate access points (i.e. publicly accessible touch-screen devices with intuitive interfaces that support different languages); promoting connectivity, device, and skills training awareness; and developing an easy-to-use, accessible resource that groups with the ability to do the work can use to host events that help New Americans learn the basics of living online in America.

KEY PERFORMANCE INDICATORS

Prior to:	Number of Events	Door Knocks	People Made Aware of Project Benefits
12/31/2023	Over 20 events will have been held or attended	Over 500	Over 1,000 individuals
12/31/2025	Over 60 total events will have been held or attended	Over 1,500 total	Over 3,000 individuals
12/31/2027	Over 100 total events will have been held or attended	Over 3,000 total	Over 6,000 individuals



1.1.4 Run a **dedicated education campaign** leveraging the messaging and strategies detailed in the priorities above, specifically promoting adoption of Internet plans available through the Affordable Connectivity Program (ACP) as well as other low-cost, quality options that enter the market.

- » Developing effective message and distribution channels that provide clear information to residents in areas prioritized for FTTH construction, ensuring temporary wireless gap-filling opportunities are effectively broadcast and well understood.

KEY PERFORMANCE INDICATORS

Prior to:	ACP Enrollment
12/31/2023	Franklin County's ACP participation rate will be at 35% of total qualifying households
12/31/2025	Franklin County's ACP participation rate will be at 50% of total qualifying households
12/31/2027	Franklin County's ACP participation rate will be at 65% of total qualifying households

1.1.5 Intentionally build **Community Leader Engagement** in the work by promoting ongoing efforts across the community and educating on the realities and opportunities of increasing digital equity. Related activities will include the following:

- » Expanding the Digital Equity Coalition (DEC), broadening participation to include more organizations that can advance digital equity and inclusion.
- » Fostering cross-sector engagements between business, public service organizations, healthcare, etc.
- » Connecting narratives to other community action plans.
- » Developing a shared pitch deck that Digital Equity Coalition members and other community leaders can use to deliver a consistent shared message.
- » Developing and executing a community roadshow delivered by civic leaders that emphasizes the policy objectives of this plan.
- » Developing a quarterly newsletter and listserv to keep all stakeholders apprised of progress, including leaders, community-based organizations, front-line workers, Resident Ambassadors and those who comprise the Digital Navigator Ecosystem.

KEY PERFORMANCE INDICATORS

Prior to:	Public Presentations	Organizations Contacted	Briefings	People Engaged
12/31/2023	10 formal presentations	50	15	500
12/31/2025	30 total formal presentations	100 total	45 total	1,000 total
12/31/2027	50 total formal presentations	150 total	75 total	3,000 total

1.2 | CREATE AN ONLINE RESOURCE

Create a comprehensive Franklin County **digital inclusion resource portal** to be used by residents, digital connectors and digital coaches. Two strategies activate this objective.

1.2.1 Establish an **online resource portal**. For residents this will serve as a central access point to learn about access to affordable connectivity and devices, a central repository for basic skills tutorials and resources, and general information about what the community is doing to close the digital divide. For digital equity advocates, this is a go-to resource to stay current on new

offerings and developments. For Digital Connectors and Coaches, this is a tool they can use to aid their work with residents and coordinate across organizations. It is recommended that the online resource portal consist of at least the following features:

- » Searchable and easy to use database of local resources and programs;
- » A library of skills training content that residents can use independently and that coaches and other organizations can leverage for their trainings;
- » 24/7 chatbot feature to answer basic support questions;
- » Dynamic guides to assist residents with enrolling in ACP, skills programs, and acquiring a device;
- » The ability to transparently answer FAQs and communicate progress against the Digital Equity Action Agenda by the various partners; and
- » An Internet comparison and optimization tool (Strategy 1.2.2).

Related activities include:

- » Developing a resident-facing website leveraging human centered design to prioritize audiences, features, and messaging.
- » Developing a user journey for the portal informed by Human-Centered Design insights.
- » Publishing open-sourced plug-and-play materials for partners.
- » Populating the digital inclusion resource portal, providing the ability to locate, produce, post, and evaluate easily digestible content and messaging responsive to resident insights and needs. Resources will include short “10 Minute Tech” video tutorials that help novices navigate the resource portal and learn basic skills.
- » Procuring or designing and constructing tools that measure the efficacy of the online resource portal (i.e. Google Analytics).
- » Procuring or developing a FAQ and AI chatbot, populating it with known answers to common inquiries.

KEY PERFORMANCE INDICATORS

Prior to:	Click Through Rate*	Visitors	Conversion Rate**	Chatbot Responses
12/31/2023	> 5%	1,000	> 4%	1,000
12/31/2025	> 4%	10,000 total	> 3%	5,000 total
12/31/2027	> 3%	30,000 total	> 2%	10,000 total

* Percentage of people clicking a link to reach the portal

** Percentage of visitors who complete an action on the portal (e.g., look for connectivity or device options, ask a question, or sign-up for training)

1.2.2 Create an **Internet Comparison and Optimization Tool**, a component of the resource portal, providing easy-to-understand guidance for choosing, changing and enrolling in an Internet connectivity plan that works best for household needs. The tool goes beyond pricing and speeds, explaining relative costs and connectivity enhancements in context to usage. This tool is to be used by digital coaches in one-on-one support with a resident and residents alike. A prototype was developed for this tool and received positive feedback from residents. [Insights from this report can be found here.](#)

KEY PERFORMANCE INDICATORS

Prior to:	Visits to Tool	Engagement Time	Click-out to Plans	Diversity of Zip Code
12/31/2023	More than 500	Average > 30 seconds	> 4%	At least 11 of the 44 zip codes in Franklin County
12/31/2025	More than 4,000 total	Average > 30 seconds	> 3%	At least 33 of the 44 zip codes in Franklin County
12/31/2027	More than 9,000	Average > 30 seconds	> 2%	At least 40 of the 44 zip codes in Franklin County

RESIDENTS BETTER UNDERSTOOD THEIR INTERNET CONNECTIONS*

- Residents were excited to more knowledgeably affect change on their Internet service. Many were eager to learn about what they could do specifically to better understand their Internet to increase its performance.

“I think this is everything that we’ve been looking for and talking about since COVID [began]. I feel like we rely on the Internet more than ever, and this would be so helpful to understand not only how we’re using the Internet, but what could serve us best with all the things that we have.”

- Kayla, Resident of Opportunity Neighborhood

- Research uncovered the confusion that users experience regarding these complex concepts around Internet usage and metrics. It will be critical to develop and test messaging with Residents, ensuring the brand and the product are supported by clear, direct, and informational copy.
- Research indicates that this tool is valuable to residents, so we recommend bringing this to life through a strategic branding initiative and initial MVP design. Continuing to involve Residents through additional testing and validation will be critical to success.

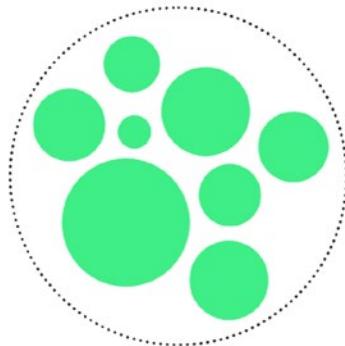
*User research conducted by ZoCo Design

Know how much Internet you need.

Explore how running multiple devices in your home impacts your internet performance. Select different Internet plans and adjust how many devices are active to find the balance that meets your lifestyle.

Try it out ➔

[Take me to available plans](#)



Select different Internet plans and adjust how many devices are active to find the balance that meets your lifestyle.

Plans and Speeds

- My Connection - 45.1 mbps
- New Plan up to 100 mbps
- New Plan up to 200 mbps

Devices and Activities

- Online Gaming - 2 +
uses up to 30 mbps
- Surfing the web - 3 +
uses up to 20 mbps
- Video Calling - 1 +
uses up to 25 mbps
- Amazon Alexa - 2 +
uses up to 2 mbps
- Streaming Video - 1 +
uses up to 20 mbps
- Smart Doorbell - 1 +
uses up to 5 mbps
- Smart Lighting - 0 +

+ Add Device

ⓘ Under Max Bandwidth: You have some bandwidth to spare.

Based on the amount of devices you're using, an internet plan that gives you **at least 200 mbps of bandwidth** should work for your lifestyle.

Bandwidth Limit:
200 mbps

Bandwidth Used:
102 mbps



ⓘ Minimal to no issues

ⓘ May experience lag or buffering

ⓘ Lag or buffering on multiple devices

1.3 | ENSURE THERE ARE TRAINED PEOPLE TO HELP

Creation of a community-wide ‘**Digital Navigator Ecosystem**’ made up of people across the ecosystem who are enlisted to assist residents in getting access to what they want and need to get online. Five strategies activate this objective.

1.3.1 Establish a community of 1,000+ Digital Advocates. Advocates, community organizers, and front line workers across hundreds of non-profit, education, government, and other entities understand the cause and effects of the digital divide, and are equipped with the basic understanding to help a resident get to the right resources. The implementation of this should be modeled after the existing Certified Tourism Ambassador Program at Experience Columbus. Related activities will include the following.

- » Developing a certification system based on Experience Columbus’s Certified Tourism Ambassador model.
- » Building centralized and distributed training resources.
- » Working with organizations that are part of the Human Services Chamber and other partner organizations to encourage organizations to participate in this program and train their full teams.
- » Delivering Digital Advocate training to social service, commercial/business, education, healthcare, utilities, government, and other nonprofit organizations.

KEY PERFORMANCE INDICATORS

Prior to:	Number of Individuals Trained	Number of Organizations Involved
12/31/2023	300	More than 20
12/31/2025	1,500 total	More than 100
12/31/2027	3,000 total	More than 200

COMMUNITY-WIDE “DIGITAL NAVIGATOR ECOSYSTEM”

LEVEL 1 Community-Wide Training	LEVEL 2 Anchor Institution Referral Network	LEVEL 3 Embedded Support Network	Ambassador Network
Digital Advocates – Deliver workshops, equipping front line workforce across hundreds of social service, education, government, and other entities with the knowledge, skills, and abilities needed to help those they serve bridge the digital divide. (Ex: Certified Tourism Ambassador Program)	Digital Connectors – Engage 10 anchor institutions to cross-train their team to assess and identify need, promote access programs, and refer/connect residents to the digital navigation support that will best help them. (Pilots occurring this year at Library, CMHA, and OhioHealth)	Digital Coaches – Engage 10 organizations with embedded/dedicated digital connectors, customizing digital inclusion services to the populations they serve; share lessons learned with other connectors. (Pilots occurring this year at Library, Jewish Family Services, and Goodwill)	Supported by a grassroots network (Ex: Moms2Be)

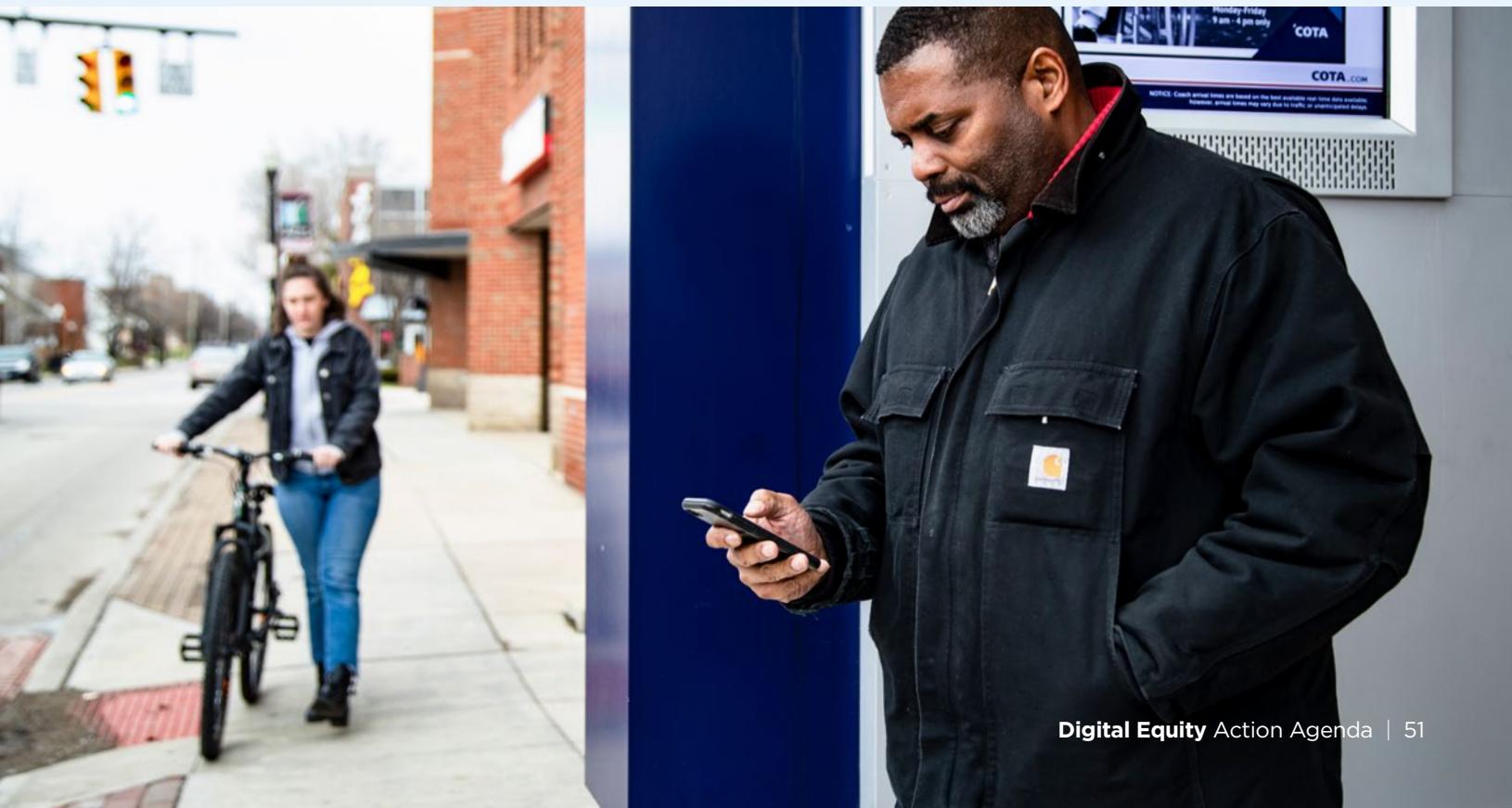
Central Support Tools – Develop baseline content, optimize for shared resources across navigator programs including a common ticketing and resource system that records and monitors service fulfillment. (Ex: Charlotte)

CASE STUDY

COTA's transition to mobile fair payment has increased access, cost savings, and convenience for the majority of riders. The initial challenges residents have experienced in using the technology, as documented by COTA, highlight the need for in person support. COTA randomly surveyed 90 of their riders who came into their customer experience center, of which only 61% had a smartphone and access to a home computer. A summary of the accessibility challenges that have caused longer customer service engagements include:**

- Some customers only use their phone for calls and do not know how to navigate to the app store.
- Seniors may need more time to transition and will benefit from more targeted training. COTA hosted several trainings at various nursing homes, both virtually and at their offices.
- Some customers have a smartphone, but they do not have a data plan. This makes using the Transit app impractical. As a mitigation, COTA offers a COTA Smartcard.
- Some customers who are not as tech savvy need assistance with navigating the multiple step process, this takes one-on-one time.
- When customers call in to inquire about the new way to pay, those calls take longer because explaining technical information or fare capping is more complex than answering 'where is my bus?'

** Insights provided by COTA



1.3.2 Establish a network of 10 Digital Connector programs at anchor organizations who serve a large, county-wide population. Anchor institutions are large county-wide institutions that serve a high volume of households in need on a regular basis, such as Columbus City Schools, Columbus Metropolitan Library, Mid Ohio Food Collective, OhioHealth, Columbus Metropolitan Housing Authority (CMHA) and Franklin County Jobs and Family Services. These organizations will cross-train roles on their teams to assess and identify needs, promote access programs, and refer/connect residents to the digital coaching that will best help them. Examples of the cross-trained roles may include but are not limited to Community Health Workers, Librarians, Case Managers, and School Counselors. Related activities will include the following:

- » Piloting connector models and collecting resident and staff feedback on best practices and lessons learned across organizations. Making these insights open source to other organizations.
- » Exploring and securing commitments from major anchor institutions to play this role including, but not limited to Franklin County Jobs and Family Services, City of Columbus Department of Neighborhoods, Mid Ohio Food Collective, Columbus Metropolitan Library, Columbus City Schools, Central Ohio Transit Authority, Columbus Metropolitan Housing Authority, Columbus State Community College, and the four major healthcare providers.
- » Creating an open source set of common needs assessment questions and protocols for healthcare organizations, education institutions, housing authorities, and other providers to use to identify needs in the populations they serve.
- » Establishing a network among cross-trained connector staff so that they can communicate and share information/resources in real time with one another.

KEY PERFORMANCE INDICATORS

Prior to:	Anchor Institution Digital Connectors will provide:
12/31/2023	Over 2,500 Referrals/Touchpoints
12/31/2025	A total of over 5,000 Referrals/Touchpoints
12/31/2027	A total of over 12,000 Referrals/Touchpoints



“They need that one-on-one, minute-by-minute help.”

-Senior resident when talking about how to help his peers who struggle with technology



1.3.3 The third level are **Digital Coaches** embedded within 10 organizations. These coaches are dedicated to customizing inclusion services to the populations they serve. Coaches are likely to be housed in direct service organizations such as Goodwill and Jewish Family Services. Some institutions like the Columbus Metropolitan Library may cross-train their librarians as Connectors (1.3.2) to refer residents to the Digital Coaches they have on staff. The difference between a Coach and a Connector is that Coaches are able to offer more customized and in-depth support that may look like spending 30 minutes assisting a resident in applying for ACP, teaching a class on basic digital life skills, or working with a family to understand the right Internet plan for their needs. Connectors are primarily focused on assessing and identifying a resident's need and referring them to the right coaching support. Related activities will include the following:

- » Piloting coaching models and collecting resident and staff feedback on best practices and lessons learned across organizations. Making these insights open source to other organizations.
- » Leveraging the National Digital Inclusion Alliance's network and best practices to inform development of programs and offerings.
- » Building targeted initiatives that serve older adults, working adults, people with disabilities, New Americans, immigrants, and migrant families, the housing insecure, students, and the historically underrepresented.
- » Delivering in-person support, providing service face-to-face in ways that are highly visible to those being served.
- » Identifying and collaborating with trusted caretakers and support providers who serve the disabled to ensure the Digital Coach Toolkit addresses their unique needs.
- » Establishing a network across the organizations for full and part time digital coaches so that they can communicate and share information/resources in real time with one another.

KEY PERFORMANCE INDICATORS

Prior to:	Anchor Institution Digital Coaches will provide:
12/31/2023	Over 3,000 digital navigation support engagements
12/31/2025	A total of over 13,000 digital navigation support engagements
12/31/2027	A total of over 23,000 digital navigation support engagements

1.3.4 Empower a grassroots **Resident Ambassador Network** to perform the vital role of helping build community around connecting people to digital equity and inclusion services. These people will be trusted community members who can encourage participation. This will include development of training resources and reporting standards for Resident Ambassadors that enable authentic community building and trusted information sharing.

- » Building out the design of Resident Ambassador program, leveraging learnings from Celebrate One and expertise of lived experience experts.
- » Developing word of mouth outreach focusing on peer to peer, family, faith leaders, educational institutions, healthcare, and cultural organizations.
- » Recruiting resident ambassadors to become members of the Digital Equity Coalition.
- » Compensating Resident Ambassadors for their time and expertise, including covering wrap-around costs burdened by the whole family such as childcare and transportation to support participation.

KEY PERFORMANCE INDICATORS

Prior to:	Number of trained resident ambassadors
12/31/2023	20 individuals attending two meetings per year
12/31/2025	40 individuals attending two meetings per year
12/31/2027	60 individuals attending two meetings per year

1.3.5 Create a set of Central Support Tools containing baseline content optimized for sharing across navigator programs. These tools will include a common ticketing and resource system that records and monitors service fulfillment. Related activities will include the following:

- » Creating a customizable Digital Navigator model founded on human-centered design research that has been informed by residents.
- » Developing a dynamically editable open source “training and support Toolkit” for community organizations. This Toolkit will remain current, facilitating consistent user experiences that point residents to training and clearly state the parameters of available support.
- » Creating and maintaining the Toolkit inclusive of the support Playbook, modifying recursively with feedback from end-users, digital advocates, digital connectors, digital coaches, and resident ambassadors.
- » Creating and maintaining a Resident Ambassador Playbook within the resource portal that contains strategies and associated resources.
- » Establishing regular opportunities to train/equip and get feedback from Resident Ambassadors.
- » Creating a simple collateral piece that is customizable to multiple audiences and organizations that demystifies the Digital Equity Plan and how connectivity, devices, and skills interrelate.

- » Coordinating the establishment of a cohesive call center model based on a 211-type system that connects people to essential community services (potential partnership with Lutheran Social Services).
- » Building Digital Navigator Ecosystem training scripts and resource requirements for all levels.
- » Reducing sign-up complexity by pre-qualifying residents for multiple programs at once using existing information from other County and City programs (i.e. Supplemental Nutrition Assistance Program, National School Breakfast and Lunch Program, Special Supplemental Nutrition Program for Women, Infants, and Children, Temporary Assistance for Needy Families, etc.).
- » Procuring or leveraging an existing Information Technology Service Management (ITSM) tool for delivery and fulfillment of support that includes content management facilities capable of hosting a dynamic knowledgebase and potentially integrating with Columbus Information Exchange (CIE).
- » Using the ITSM cited above to integrate ticketing systems used across partner institutions, reducing or eliminating any need for dual entry.
- » Designating a full-time curriculum and/or instructional designer to coordinate and synergize training who will work with the PMO (Project Management Office), Digital Navigator Ecosystem members, and others to populate and curate a resource portal that delivers content, facilitates services, and records and monitors service fulfillment.

KEY PERFORMANCE INDICATORS

Prior to:	Tickets Submitted	People Served	Service Requests Fulfilled on First Contact
12/31/2023	5,000	2,500	3,500
12/31/2025	A total of 25,000	A total of 12,500	A total of 17,500
12/31/2027	A total of 50,000	A total of 25,000	A total of 35,000

1.4 | DESIGN WITH RESIDENTS

Build community through Co-Design - Launch a Community Co-design Program to foster resident alignment, ownership and buy-in across the Digital Equity Action Agenda. This may include activating spaces for community co-creation, building capacity for local stewardship, or partnering with community organizations to facilitate interactions.

1.4.1 The first strategy associated with this objective, ‘**community co-design program**’ will use creative and participatory methods to promote shared decision making power, community building, and resident trust. Related activities will include the following.

- » Bringing representatives from all 8 priority populations in as DEC members to help define the program and support across priorities.
- » Ensuring there is a culturally and economically diverse composition in the research design.
- » Building the conditions for sustaining co-design through:
 - Support and sponsorship from the DEC.
 - Time allocation and budgeting to allow for convening, expert co-design consulting support, paying resident co-designers, and supporting design activities from discovery through prototyping and implementation.

KEY PERFORMANCE INDICATORS

Prior to:	Number of residents engaged in design process
12/31/2023	10 individuals attending two meetings per year; stipend and meeting costs
12/31/2025	20 individuals attending two meetings per year; stipend and meeting costs
12/31/2027	30 individuals attending two meetings per year; stipend and meeting costs



“It isn’t just about teaching people new skills; it’s about building trust + community”

- Resident Co-designer

“Don’t assume that you know what they want to learn. Ask them. Don’t build it based on our bias.”

- Resident Co-designer

A photograph of two young women, one with short brown hair and the other with long dark hair, looking down at a laptop screen together. They appear to be focused on the content displayed on the screen.

“We don’t know how we will be able to pay this month. I lost my job...but I still need it for [my GED] and for applying for jobs.”

- Mother on the South Side

“When you couldn’t go talk to someone in person and you didn’t have the Internet, it was like we lived in a small town and we were the only family there.”

- Single mother that went without Internet and cell service for four months before the Southside Affordable Internet Pilot

FRANKLIN COUNTY JOBS AND FAMILY SERVICES SURVEY RESULTS

- **76% of low-income residents** believe home Internet is as **important as rent, food, and transportation.**
- **50% of respondents** with home Internet indicated experiencing **frequently unreliable service.**
- **88% of residents** without home Internet indicated **cost as a top barrier.**

PRIORITY 2

Connectivity



Expand **reliable, high-speed residential Internet** options in low-income neighborhoods in Franklin County at an **affordable cost** for under-resourced households.

This priority encourages leveraging the 1,000 miles of dark fiber owned and operated by the City of Columbus to form a public-private partnership that results in the delivery of affordable, reliable, high-speed Internet connectivity to low-income neighborhoods. The priority also encourages efforts to increase competition and transparency in the existing environment to lower price points for residents and encourage continued investments by existing ISPs to upgrade their infrastructure in Franklin County.

This priority's objectives seek to solve three problems simultaneously:

- 1 Affordability of residential Internet,
- 2 inadequate Internet speeds, and
- 3 the number of under-resourced Columbus and Franklin County families living without residential Internet (estimated 80,000).

Key Milestones

- 1 **IMPROVE THE EXISTING MARKET**
- 2 **BRING FIBER TO THE HOME TO LOW-INCOME NEIGHBORHOODS**

2023-2026

Promote ACP and Encourage Infrastructure Upgrades

Build out Middle Mile and Form PPP

2027+

Central Support System

First Customers receive Fiber to the Home Service in Low-Income Neighborhoods

Two objectives are included in this priority, each with its own strategies, activities, and key performance indicators.

2.1 | BRING FIBER TO THE HOME TO LOW INCOME NEIGHBORHOODS

Build out Fiber to the Home (FTTH), providing low-cost, high speed, and reliable Internet connectivity to low-income neighborhoods.

2.1.1 Develop a residential Fiber to the Home (FTTH) broadband plan. A long-term plan to expand fiber-based residential and commercial connectivity options for residents of Franklin County. Related activities will include the following.

- » Completing review of the Closing the Digital Divide with Fixed Fiber to the Home (FTTH) or Premise Request for Information (RFI) and determining viability of a Public-Private-Partnership to extend city fiber as a community resource to deliver lasting, affordable, reliable, high-speed Internet connectivity.
- » Developing a FTTH investment plan that includes estimated design, construction, and operational budgets, along with prospective sources of funding that are shared and discussed with City and County partners.
- » Determining availability and access to capital whether local, state, or federal.
- » Obtaining stakeholders' investment decisions for community broadband.

KEY PERFORMANCE INDICATORS

Prior to:	Indicators
12/31/2022	Complete Request For Information (RFI) outcomes analysis and hold stakeholder briefing
12/31/2022	Determine cost estimates for design, build, and operational budgets associated with FTTH initiative

2.1.2 Leverage Federal Middle Mile Resources. Apply for federal funding from the Infrastructure Investment and Jobs Act (IIJA) to help build out middle mile infrastructure for delivering lasting, affordable, reliable, high-speed Internet to under-resourced households.

- » Researching Federal Middle Mile Notice of Funding Opportunity (NOFO) and gaining commitments for required financial and/or in-kind contributions.
- » Creating and submitting a response to Federal Middle Mile (Infrastructure Investment and Jobs Act, Div. F, Title IV, Sec. 60401, Enabling Middle Mile Broadband Infrastructure) Request for Proposal.

KEY PERFORMANCE INDICATOR

Prior to:	Indicator
12/31/2022	Submit application for Federal Middle Mile Infrastructure Grant

2.1.3 Create a Prioritization Procedure for FTTH buildout. This involves the establishment of a methodology for determining the order by which the FTTH build-out will take place based on funding, digital equity needs, density of households, and technical feasibility.

- » Soliciting broad-based input on FTTH prioritization decisions.
- » Developing a transparent prioritization methodology for determining the order in which FTTH investments will be made.

KEY PERFORMANCE INDICATORS

Prior to:	Indicators
12/31/2023	Establish and publish FTTH prioritization methodology
12/31/2023	Review and revise

2.1.4 Issue a **Request for Proposal (RFP)**, soliciting private investment in the FTTH initiative, ensuring reliable, robust, affordable, and long-lasting Internet connectivity options are available to all Franklin County residents. Related activities will include the following.

- » Developing and issuing of a Fiber to the Home (FTTH) Request for Proposal (RFP) that emphasizes deployments in under-resourced neighborhoods and private partner profitability.
- » Sharing FTTH Request for Proposal to prospective private partners.
- » Developing a public policy framework for a FTTH Project that addresses asset use, ownership, and governance of the project.

KEY PERFORMANCE INDICATOR

Prior to:	Number of entities responding to RFP
12/31/2023	Equal or greater than 4

→ We are seeking partner(s) with the capital, willingness, and expertise as private operator(s) to leverage the City and County assets to provide high-speed solutions that are affordable, reliable and sustainable. Transparently, the DEC itself does not intend to operate a fixed residential or commercial municipal broadband service in Columbus and Franklin County.

2.1.5 Buildout residential FTTH broadband, expanding affordable, reliable, high speed fiber optic options to residences and commercial entities in under-resourced areas of the County using excess capacity from Smart City Internet of Things (IOT) ecosystem and Franklin County Emergency Management & Homeland Security modernization initiative. Related activities will include the following.

- » Implementing FTTH construction plans from design phase using vendors selected from the RFP process.
- » Implementing FTTH operational plans based on design phase, RFP responses, and prioritization decisions.

KEY PERFORMANCE INDICATORS

Prior to:	Completion of FTTH design, construction, and operational plans	Percentage of dwellings in target areas that have access to FTTH
12/31/2023	In process	NA
12/31/2025	Complete	NA
12/31/2027	Revise based on feedback	10% of dwellings in target area

2.1.6 Establish and publish FTTH privacy and security best practices. The primary activity will be to establish policy that leads to the development and publication of best practice online safety and security guidelines tailored specifically to FTTH.

KEY PERFORMANCE INDICATORS

Prior to:	Privacy and security policies for FTTH
12/31/2023	Complete
12/31/2025	Review and revise based on feedback
12/31/2027	Review and revise based on feedback

2.2 | IMPROVE THE EXISTING MARKET

Support Connectivity Improvements across Franklin County that encourage greater competition in the market, lower price points for customers, infrastructure improvements that increase speed availability, and bridge connectivity gaps experienced by residents.

2.2.1 Expand areas with free public WiFi by working with government entities and public-benefit organizations to extend service where possible. Related activities will include the following.

- » Work with LinkUs Planning Team to identify where public WiFi and broadband will be made available and how that will help improve resident connectivity.
- » Understand and expose the use cases and benefits to the WiFi onboard COTA and CCS buses. Share those benefits with residents in the Outreach and Adoption priority activities.
- » Partner with City of Columbus Department of Technology and Rec and Parks to develop a plan for bringing WiFi to all Rec Centers.
- » Explore possible options for a WiFi 6 Pilot.

KEY PERFORMANCE INDICATORS

Prior to:	Parks with public WiFi	Total Number of Locations with Public WiFi
12/31/2023	=> 4	Establish baseline
12/31/2025	=> 10	=> 15 additional cumulative
12/31/2027	=> 20	=> 30 additional cumulative

2.2.2 Opportunistically stand up neighborhood based affordable Internet connectivity programs when there is a clear need and available resources. Related activities will include the following.

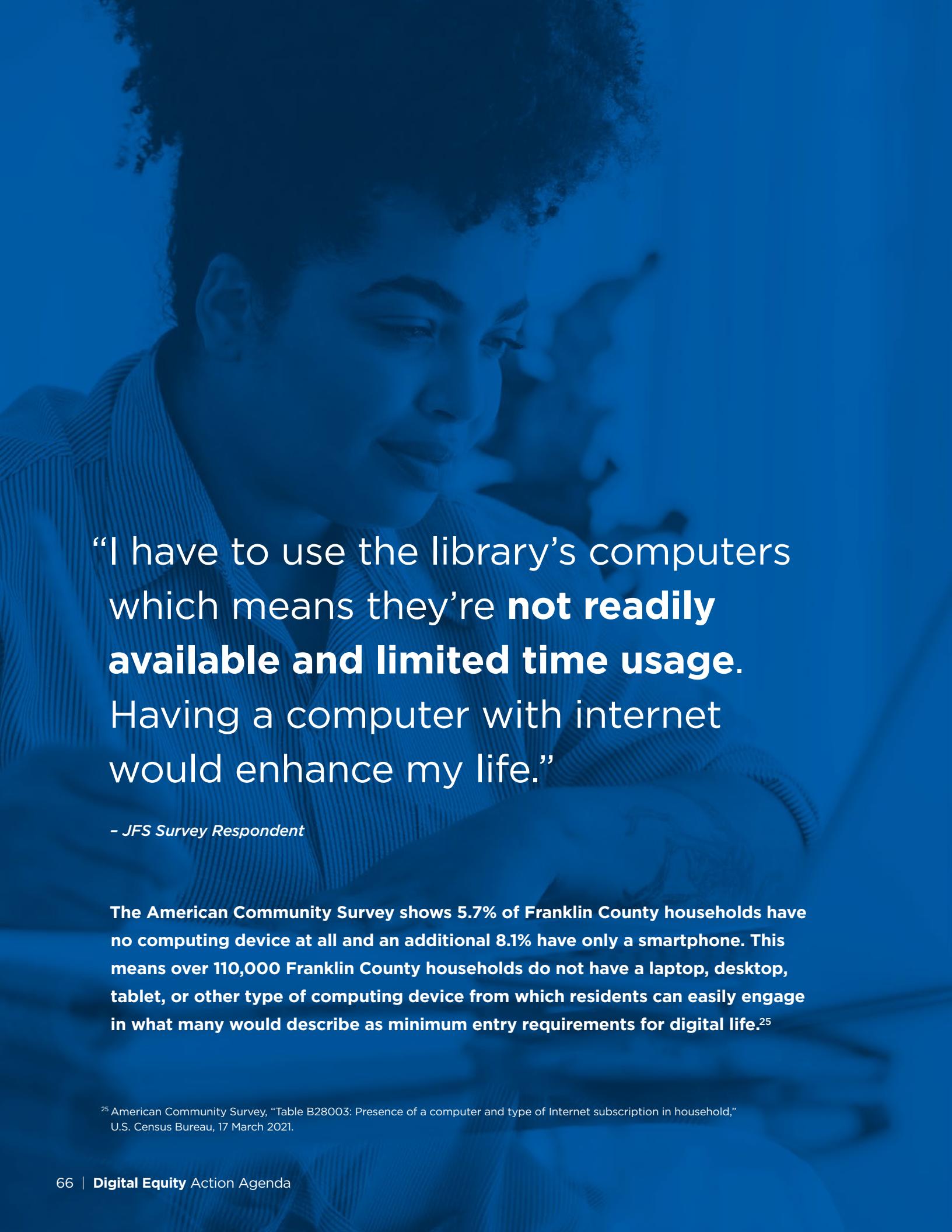
- » Explore partnership with Sustainable Columbus on a Fiber to the Home program in American Addition to coincide with their Smart Home project.
- » Explore working with healthcare providers, developers, and others to offer affordable connectivity to their constituencies.

2.2.3 Create an influence model to increase choice and quality accessible to under-resourced residents. Related activities will include the following.

- » Address policy and permit policies and processes that are counter-productive to desired ISP expansion and investment in infrastructure.
- » Regularly engage with existing ISPs through the Digital Equity Coalition.
- » Explore working with healthcare providers, developers, and others to offer affordable connectivity to their constituencies.
- » Promote resident speed tests frequently and often.
- » Publish connectivity maps and available plans transparently for residents and stakeholders. Incorporate this into Adoption and Outreach Priority activities.

KEY PERFORMANCE INDICATORS

Prior to:	Publish Connectivity Maps	Number of ISPs Engaged	Number of Business Days Required for Pole Permitting
12/31/2023	Complete	Semi-annual meetings established	Benchmarking and process improvements complete
12/31/2025	Update	=> 4 ISPs	Processing time halved
12/31/2027	Update	=> 6 ISPs	Maintenance of streamlined processing time

A woman with dark hair and glasses is smiling and holding a smartphone in her right hand. She is wearing a light-colored, ribbed sweater. The background is blurred, showing some foliage.

“I have to use the library’s computers which means they’re **not readily available and limited time usage. Having a computer with internet would enhance my life.”**

- JFS Survey Respondent

The American Community Survey shows 5.7% of Franklin County households have no computing device at all and an additional 8.1% have only a smartphone. This means over 110,000 Franklin County households do not have a laptop, desktop, tablet, or other type of computing device from which residents can easily engage in what many would describe as minimum entry requirements for digital life.²⁵

²⁵ American Community Survey, “Table B28003: Presence of a computer and type of internet subscription in household,” U.S. Census Bureau, 17 March 2021.

PRIORITY 3

Device Access



Create a sustainable stream of different types of **high-quality digital devices** that are available **at low to no-cost** to benefit Franklin County residents who need them.

The lack of adequate devices impedes one's ability to advance educationally, obtain public services, engage in online commerce, compete on a level playing field for employment, or take advantage of digital healthcare services.

Objectives and strategies of this priority were developed with these considerations in mind:

- » New devices are more equitable than used.
- » There are few digital device vendors and/or refurbishers located in Franklin County that cater to low-income residents.
- » While Franklin County residents can purchase devices through several online sites that offer discounts to qualifying individuals, the scarcity of such entities with a physical presence is a barrier for many potential users, especially those lacking the skills or comfort with online commerce.
- » Devices should be given to households with the requisite skills training and therefore integrated with priority four's strategy of establishing the 'Tech Goes Home' training program in Franklin County.
- » Purchasing and distributing new devices in bulk also would help streamline technology skills training and support for fewer types of devices rather than supporting a patchwork of different donated equipment.
- » There is a large need for a wide range of device types and features that can enable residents to take advantage of opportunities in today's digital economy.

“The new computer is quite literally a godsend, as we did not have technology like that at home for her.”

- Mother of a child who attended CCAD STEM Camp and received a device through a grant from the City of Columbus

USE CASE	DEVICE TYPE & FEATURES	STANDARD	SIZE OF THE PROBLEM ^{26,27}
Daily Life & Basic Survival	Smart Phones	iOS and Android operating systems capable of running apps required to take advantage of transportation and banking applications	<ul style="list-style-type: none"> 12.6% of Franklin County households don't have a smartphone Unknown how many residents don't have current OS capable devices
Education (K-Higher Ed)	Chromebooks/iPads Pre-K - Touchscreen	New Devices	<ul style="list-style-type: none"> 46,500 amount of CCS students and 40,000 Franklin County students in K-12 (outside of CCS) on free and reduced lunch
	Higher Capability Laptops	New or Used	<ul style="list-style-type: none"> 106,204 College students in Franklin County
Workforce Development & On-the-Job Needs	More powerful software-capable devices and supporting accessories	40% New and 60% Used	<ul style="list-style-type: none"> Workforce and/or tech training programs reach 1,900 residents a year
Telehealth & Disabled Needs	Touchscreen, Tablets and Wearables	80% New and 20% Used	<ul style="list-style-type: none"> 157,000 seniors (65+) in Franklin County Monthly use of Medicaid's telehealth services grew by 35X in Ohio in 2020 <u>149,130</u> disabled residents in Franklin County

²⁶ Bureau, U. S. C. (n.d.). COMPARATIVE SOCIAL CHARACTERISTICS IN THE UNITED STATE. Explore census data. Retrieved June 9, 2022, from <https://data.census.gov/cedsci/table?q=United+States&t=Education&g=0500000US39049&d=ACS+5-Year+Estimates+Comparison+Profiles&tid=ACSCP5Y2020.CP02>

²⁷ One year after expansion, Medicaid providers and their patients... - Ohio. (n.d.). Retrieved June 9, 2022, from <https://medicaid.ohio.gov/news/press-release/03-24-2021-one-year-after-expansion-medicaid-providers-and-their-patients-continue-to-embrace-telehealth>

DISTRIBUTION OF DEVICES THROUGH:

- » Distributed upon completion of basic Skills Training program (i.e. Tech goes Home)
- » Integrated distribution through programs with healthcare institutions, workforce development programs, etc.
- » Distributed on a need basis through anchor institutions such as libraries, Jobs and Family Services, schools and higher education institutions



New, modern devices are **essential** to using important online tools.

COTA recently transitioned to mobile fare payment as a way to access and pay for transportation. Insights from their roll out showed that many residents had challenges with the quality of their devices:

- Some customers have government-issued phones that may not have the latest operating system, which may cause a different experience for COTA team members when assisting.
- Certain operating systems did not appear compatible with the latest version of Transit App.

3.1 | DEVICE ACQUISITION

Coordinate collective purchasing power across anchor institutions to acquire new and used devices that meet residents' needs. There are four associated strategies.

3.1.1 Establish standards for device procurement and distribution. These standards will meet resident needs and assure quality, equity, and affordability. Related activities will include the following.

- » Establishing new device standards informed by resident needs and tech experts.
- » Obtaining consensus on needed devices and procuring equipment best suited to end-user needs as well as costs and associated support requirements.
- » Working with Columbus City Schools and other public sector partners to determine development of bidding process

KEY PERFORMANCE INDICATOR

Prior to:	Standards for all eligible devices
12/31/2023	Standards for all eligible devices (e.g., desktops, laptops, tablets, adaptive devices, etc.) established

INSIGHTS FROM HEALTHCARE DEVICE NEEDS RESEARCH

Research Conducted by ZoCo Design

"I don't need the best device on the market, but I don't want it to be obsolete in a year."

→ Though price was a huge factor in our participants' decision-making on new devices, they also wanted to avoid getting a device that will become obsolete in a year. They don't need the newest or best device, but they wanted to make sure whatever they got had the most updated software, features, etc. Participants mentioned getting new devices to be able to use Zoom or Google Meet in 2020.

"I need enough phone storage for photos and videos of my family."

→ Especially for young mothers, the amount of storage their new devices had—especially cell phones—was very important to them. Combined with camera quality, this was a highly requested "feature," even if it was cloud-based storage.

3.1.2 Develop and release a **device purchase Request for Proposal (RFP)** designed to ensure multiple organizations can use a common purchase agreement to procure the best devices at the lowest price. Related activities will include the following.

- » Requiring support warranty specifics within device RFP responses.
- » Ensuring device procurement is closely aligned with outreach and digital navigator life skills training and connectivity programs through collaboration between and among program managers responsible for each of these three areas.
- » Funding device procurement for long-term loan programs at public libraries and other community-based organizations with opportunities for embedded skill development.
- » Funding student 1:1 devices needs to address the homework gap and support those taking advantage of the Columbus Promise.

KEY PERFORMANCE INDICATORS

Prior to:	Number of responses to RFP	Number of organizations purchasing off the RFP	Number of devices purchased from procurement agreement
12/31/2023	RFP issued	=> 3	=> 500
12/31/2025	=> 5	=> 5	=> 3,000
12/31/2027	NA	=> 8	=> 8,000

3.1.3 Establish device partnerships, the establishment of formal relationships with device refurbishers and Original Equipment Manufacturers (OEMs) like (Google, Apple, Intel, Microsoft, etc.) creating mutually beneficial new device acquisition or donation arrangements that benefit residents. Related activities will include the following.

- » Conducting a landscape assessment of current device refurbishers capable of providing devices that meet residents' needs
- » Exploring the potential of creating a 'cash for clunkers' type program where pre-qualified residents turn in an old device and receive new replacement equipment.

KEY PERFORMANCE INDICATORS

Prior to:	Number of partnerships	Cost savings from partnerships
12/31/2023	=> 5	=> \$20,000 savings over retail
12/31/2025	Number maintained	=> \$40,000 savings over retail
12/31/2027	Number maintained	=> \$60,000 savings over retail

Three device refurbishers/distributors cited below continue to be significant contributors to addressing the device gap in Franklin County:

- Human-I-T, a nonprofit and social enterprise, creates equitable access to opportunity by providing devices, Internet access, digital skills training, and tech support for communities left on the wrong side of the digital divide. At the same time it empowers businesses and organizations to do good by diverting technology from landfills to protect our planet.
- PCs for People, dedicated to providing computers and mobile Internet to low-income individuals and nonprofits. PCs for People is also a partner in the South Side connectivity pilot project.
- Sage Sustainable Electronics whose purpose is to make the world more sustainable by extending the life of electronics.

3.1.4 Establish corporate device partnership that promotes connections among those supporting device donation and refurbishment efforts. This strategy will also support and encourage companies engaged in Smart Columbus Acceleration Partner program to fulfill their device donation and/or funding commitments. Related activities will include the following.

- » Conducting a landscape assessment of what large corporate businesses involved in the Smart Columbus Acceleration Partner program are already doing with their devices.
- » Exploring an alternative to corporate device donation that ultimately encourages device recycling and refurbishing, but redirects the financial return to a 'Community Digital Equity Fund' that can be used to purchase new devices for residents.
- » Soliciting new partners and commitments to the digital equity fund or preferred device refurbishers.
- » Prioritizing large organizations to be the tone-setters: City of Columbus, Nationwide, Ohio Health, the Ohio State University, etc.

KEY PERFORMANCE INDICATORS

Prior to:	Companies donating funding or devices	Devices donated	Increase in digital equity fund
12/31/2023	=> 20	=> 400	=> \$4,000
12/31/2025	=> 60	=> 2,400	=> \$24,000
12/31/2027	=> 100	=> 4,000	=> \$40,000

3.2 | DEVICE DISTRIBUTION

Establish **flagship device distribution points** that intersect with places where residents already go. There are three associated strategies.

3.2.1 Distribute new devices through the Tech Goes Home Skills training Program (4.1).

Related activities will include the following:

- » Securing funding for device purchases
- » Procuring devices through objectives in 3.1
- » Coordinating device storage as necessary with easy access for course instructors
- » Develop eligibility criteria

3.2.2 Identify trusted anchor institutions to serve as device distribution points. Anchor institutions are large county-wide institutions that serve a high volume of households in need on a regular basis, such as Columbus City Schools, Columbus Metropolitan Library, Mid Ohio Food Collective, and Franklin County Jobs and Family Services. Related activities that these institutions may pursue will include the following:

- » Incentivizing job-related and/or credentialed training with equipment and software necessary to complete training and pursue employment.
- » Equipping students enrolled in Columbus Promise with a new device.
- » Engaging healthcare providers to correlate digital device distribution efforts with anonymized healthcare outcomes of recipients.
- » Engaging with Ohio Means Jobs, the Workforce Advisory Council (WAC), and other providers as distribution points or clearinghouses for workforce programs from which to distribute devices.
- » Connecting customers with digital skills training and support at the point of delivery, in a trusted setting like a library or school.

KEY PERFORMANCE INDICATORS (for 3.2.1 and 3.2.2)

Prior to:	No. of sites with reg. hours distributing new devices	No. of new devices distributed	No. of sites with reg. hours distributing refurbished devices	No. of refurbished devices distributed
12/31/2023	=> 10	=> 770	=> 10	=> 193
12/31/2025	=> 30	=> 7,705 cumulative	=> 30	=> 1,926 cumulative
12/31/2027	=>50	=> 19,262 cumulative	=> 50	=> 4,815 cumulative

3.2.3 Set up **device donation and distribution tracking**, the construction of a consolidated online system for tracking donations and provisioning of devices, integrating it within the Online Resource Portal. Related activities will include the following.

- » Establishing a competitive RFP process for construction of an online donation tracking and distribution system.
- » Working with refurbishers and those providing new devices to track and report the distribution of assistive and adaptive equipment, tablets, smart watches, fitness, and/or electronic health monitoring hardware.
- » Training partner organizations to track distribution in a common manner.

KEY PERFORMANCE INDICATORS

Prior to:	Develop and implement device donation and provisioning system	No. of visits to online resource portal associated with device donation and distribution
12/31/2023	Complete development	=> 1,000
12/31/2025	Review and revise	=> 5,000 cumulative
12/31/2027	Review and revise	=> 12,000 cumulative

3.2.4 Efficient **distribution**, collaborating with distribution partners to determine the efficacy of dissemination efforts. Connect those providing digital life skills training with device providers, as well as those offering need-based discounts on new devices. Related activities will include the following.

- » Creating an assessment with those distributing devices to determine which dissemination strategies work best with discrete populations.
- » Working with program managers to create a voluntary assessment designed to gauge changes in recipients' use of telehealth resources after device donations.
- » Incenting job-related and/or credentialed training with equipment and software necessary to complete training and pursue employment.

KEY PERFORMANCE INDICATORS

Prior to:	No. of days devices will sit in stock prior to distribution
12/31/2023	=< 21 business days
12/31/2025	=< 14 business days
12/31/2027	=< 7 business days

3.3 | DEVICE SUPPORT

Organize tech support services available to those receiving devices. There are three associated strategies.

3.3.1 Establish the **scope of support services**, creating easy-to-understand support parameters, citing precisely what tech support services can and cannot be provided. Related activities will include the following.

- » Convening a committee of Digital Equity Coalition partners with experience providing technical support to make recommendations regarding the scope and scale of technical support that will be part of the digital equity plan.
- » Exploring the desirability and operational feasibility of assigning residents into a “Buddy System” that provides them a dedicated person they can call on for first-line support.
- » Exploring the opportunity for corporate volunteers to assist with device tech support.

KEY PERFORMANCE INDICATORS

Prior to:	Create and publish support services handbook with clearly stated service expectations and boundaries
12/31/2023	Complete support services handbook
12/31/2025	Review and revise
12/31/2027	Review and revise



3.3.2 Codify device manufacturer's support responsibilities. Related activities will include the following.

- » Establishing relationships with vendors supplying devices.
- » Assembling warranty information from vendors supplying devices, cataloging it for use by device recipients and those providing tech support.
- » Codifying all warranty information that can be shared with residents and tech support professionals and open source the information on the resource portal.

KEY PERFORMANCE INDICATORS

Prior to:	Negotiate and publish device suppliers' support responsibilities on portal
12/31/2023	Post device suppliers' responsibilities on portal
12/31/2025	Review and revise
12/31/2027	Review and revise

3.3.3 Organize tech support services available to those receiving devices. Related activities will include the following.

- » Creating and issuing an RFP or contract for tech support that incentivizes a responsible company capable of providing tier one support deemed necessary.
- » Ensuring the collection and reporting of metrics that assess support performance are included in RFP requirements.

KEY PERFORMANCE INDICATORS

Prior to:	Create and issue support RFP with required metrics	Average tech support service satisfaction rating	Net Promoter Score
12/31/2023	Standards published and posted	=> 3.0	=> 0
12/31/2025	Support assessment published relative to current standards	=> 3.25	=> .2
12/31/2027	Support assessment published relative to current standards	=> 3.5	=> .4

A close-up photograph of a woman wearing a hijab, looking thoughtfully to the side. She has dark hair and is wearing a patterned top. In the background, another person's face is partially visible.

“Someone teaching should be approachable and patient. The learner may not have basic skills so patience is key.”

- New American from Digital Navigator Sprint

“There’s not a one size solution for all; we must be willing to **customize to the unique needs of our community/population.”**

- Resident Co-Designer

PRIORITY 4

Digital Life Skills



Expand and increase **access to digital skills training** with the addition of learning opportunities across provider organizations that **support residents' individualized needs** on a continuum from survival to career.

This priority is crucial because access to devices and the Internet is not enough to close the digital divide; residents also need to know how to access what they want and need online. Digital life skills and abilities are essential to promoting online safety and security, gaining objective information, making social connections, advancing education, engaging in the modern economy, increasing workforce competitiveness, and accessing healthcare services.

Across the three levels of skills training, the Digital Equity Coalition recommends three new priority investments, as well as the creation of a competitive grant fund to spur innovation in tailoring digital skills training to seniors, disabled, justice involved, and new American populations.

	LEVEL 1	LEVEL 2	LEVEL 3
	Intro to Using Tech in My Life <i>Devices & Usage Email & Messaging Social Media Banking Community Resources Safety & Privacy</i>	Using Tech in My Life <i>Telehealth Social Media Banking Community Resources Safety & Privacy</i>	Using Tech in Work & Career <i>Career Exploration Education & Training Credentials Employment Opportunities Productivity Software Safety & Privacy</i>
Under-Resourced Residents	PRIORITY 1	Establish Tech Goes Home Training Program	
K-12 Students		PRIORITY 2	Expand Summer STEM Programming and tech training in summer employment for Franklin County youth
Adult Workers		PRIORITY 3	Provide payment for those who complete and/or participate in tech skills training
Seniors	Establish competitive grant fund to support inclusive training programs that meet the unique needs of the group		
Disabled, Justice Involved, New Americans	PRIORITY 4		

4.1 | NEW SKILLS TRAINING OPPORTUNITIES

Focus on **four priority investments** to build out the digital skills ecosystem, each with its own strategy.

4.1.1 The first strategy associated with this objective calls for expanding **summer STEM (Science Technology Engineering and Mathematics) programming and tech training** within youth employment opportunities. Related activities will include the following.

- » Conducting an inventory of current providers, funding, and capacity.
- » Securing funding for Summer STEM programs.
- » Developing and issuing an RFP for funding and programming.
- » Exploring opportunities to influence and increase summer youth employment opportunities in STEM fields that incorporate skills training.
- » Considering alignment with Girls Scouts and their STEM campus programming.
- » Aligning summer programming investment across city, county, and other foundations to maximize impact on closing the digital divide through immersive summer experiences.

KEY PERFORMANCE INDICATORS

Prior to:	Number of youth participating in STEM and/or STEAM events will double
12/31/2023	25% more participants than baseline year (2022)
12/31/2025	50% more participants than baseline year (2022)
12/31/2027	100% more participants than baseline year (2022)

“Learning happens in many different forms and for many different reasons. Be inclusive in the ways we’re designing these learning experiences.”

- Resident Co-Designer

It's important to note that many people do not exclusively develop digital skills in discrete, isolated, or artificial environments. Usually, such skills are frequently developed in authentic contexts where use of a particular skill or set of skills is intertwined with personal tasks or vocational work requirements. Occasionally, skills also involve the use of new hardware or software tools.

- Two residents in a design sprint to understand device needs for healthcare access, described a need/want for **education and guidance when experiencing a new device or technology**.
- One enjoyed the **language in her banking app that walked her through the process of depositing a check, step by step**. This language gave her confidence that she could complete the task, whereas before she felt a lot of dread.
- Another resident shared her **struggles when switching from an Android phone to an iPhone**. However, once she spent time on the new phone, she gained confidence.



4.1.2 Import the Tech Goes Home Training Program for Families to Franklin County in partnership with schools and social service organizations. Tech Goes Home is a digital inclusion program first introduced in Boston, Massachusetts and later transplanted and adapted in Chattanooga, Tennessee. The version of this program that will be used in Franklin County will use an incentive-based model that provides a free or low-cost computing device to encourage participation in 15 hours of contextually relevant digital skills training to under-resourced adults. Partnering with schools and other nonprofits, free courses will be designed to help residents develop digital skills and habits that help them live, work, learn, and play in Franklin County. Strong affiliation with local schools will have the added benefit of connecting parents to the schools their children attend, a strategy known to have positive effects on academic achievement.

Related activities include:

- » Benchmarking the Tech Goes Home training model from Chattanooga, focusing on the following
 - Use of a train-the-trainer model
 - Providing Google Certification via Certified trainers
 - Emphasizing safety and security
 - Providing on-site high-touch training
 - Compensating participants
 - Providing childcare services and transportation for training.
 - Using a device as an incentive for successfully completing training.
 - Engaging school principals.
- » Developing pilot program and assess efficacy
- » Securing partnerships with School principals

KEY PERFORMANCE INDICATORS

Prior to:	No. of households participating in Tech Goes Home	No. of schools participating in Tech Goes Home	No. of sites where Tech Goes Home training takes place
12/31/2023	=> 963	=> 5% of all schools with K-6 students	=> 20
12/31/2025	=> 9,631 cumulative	=> 10% of all schools with K-6 students	=> 100 cumulative
12/31/2027	=> 24,077 cumulative	=> 20% of all schools with K-6 students	=> 200 cumulative



4.1.3 Provide payment to those who complete and/or participate in tech skills training.

Related activities will include the following.

- » Developing funding logic to compensate residents while completing workforce training.
- » Exploring how to leverage existing Workforce Innovation and Opportunity Act (WIOA) funding to create more free tech training.
- » Aligning funding decisions to business and corporate employment pathways, including client-services (e.g., banking, healthcare, transportation, utilities, etc.).
- » Coordinating Workforce Development Efforts alongside funding—Connect with the Columbus Metropolitan Library, Goodwill, Jewish Family Services, the Ohio Department of Jobs and Family Services, OhioMeansJobs, the Workforce Development Board, and other providers to leverage outreach and participation.
- » Prioritizing models that work, such as cohort training that leads to credentials and paid positions upon successful completion.
- » Leveraging existing online training resources to credential, reskill, and upskill employees, rewarding those successfully completing training with devices and/or connectivity.
- » Exploring alignment with existing funded programs (Ex: Per Scholas' black woman tech training initiative funded by Franklin County).



“Teach digital skills the way they want to learn them, not the way we want to teach them.”

- Resident Co-Designer

4.1.4 Establish a competitive grant program to **expand existing and stimulate new individualized and inclusive digital skills training** that targets: older adults, those with disabilities, the justice involved, and New Americans, immigrants, and migrant families. Related activities will include the following.

- » Working with the Columbus Foundation to determine feasibility and structure.
- » Securing funding for a grant fund.
- » Hosting informational sessions with potential applicants to discuss research learnings and best practices from other coalitions in the NDIA network - a) networked engagements for seniors; b) online survival and economic advancement for New Americans, immigrants, and migrant families; and c) assistive and adaptive technology training for those with disabilities.
- » Using the DEC Activity Matrix to identify training opportunities and/or gaps associated with discrete focus group populations.
- » Creating a rubric to assess level (intro, life, work, career) and efficacy—including online safety and security concerns—of existing and future training/skills programs.
- » Developing culturally appropriate digital training programs with supportive wrap-around services (e.g., transportation and child care) for New Americans.

KEY PERFORMANCE INDICATORS

Prior to:	No. of organizations submitting applications for funding	No. of organizations funded	No. of older adults participating in training
12/31/2023	=> 20	=> 10	=> 207
12/31/2025	=> 60	=> 30	=> 2,072 cumulative
12/31/2027	=> 120	=> 60	=> 5,179 cumulative

(continued)

Prior to:	No. of those with disabilities participating in training	No. of New Americans participating in training	No. of justice involved participating in training
12/31/2023	=> 104	=> 155	=> 104
12/31/2025	=> 1,036 cumulative	=> 1,554 cumulative	=> 1,036 cumulative
12/31/2027	=> 2,590 cumulative	=> 3,884 cumulative	=> 2,590 cumulative

4.2 | EXPANSION AND SUSTAINMENT OF SKILLS TRAINING

Apply a digital equity lens across existing funding priorities and programs.

4.2.1 Influence funders to use existing funding streams

to further close the digital divide.
Related activities will include the following:

- » Forming partnerships with the Columbus Foundation, City of Columbus and Franklin County to guide this work.
- » Mapping the local philanthropic grant funds and government programs that likely fund digital inclusion work but may not overtly use that language today (EX: Corporate philanthropic fund that focuses on STEM career pathways).
- » Identifying local philanthropic grant funds and government programs that have the potential to more directly impact the digital divide but do not consider that yet in their criteria (EX: Youth Summer Employment Programs, these could prioritize funding employment opportunities in tech jobs above others).
- » Educating funders on digital inclusion language that they can use to attract more applicants.
- » Sharing best practices across funders for how to measure impact in affecting the digital divide.

KEY PERFORMANCE INDICATORS

Prior to:	Form partnerships	Map funding opportunities	Identify funding opps.	Educate funders	Share best practices
12/31/2023	Establish partnerships	Map existing funds & programs	Identify prospective funds & programs	Include digital inclusion language within Pitch Deck	Develop Bi-Annual Digital Equity Survey
12/31/2025	Maintain	Review & update	Review & update	Review & update	Deploy survey, analyze results, & create next targets
12/31/2027	Maintain	Review & update	Review & update	Review & update	Deploy survey, analyze results, & create next targets

4.2.2 Influence program owners and funding seekers to incorporate digital inclusion components in their work. Related activities will include the following:

- » Mapping the landscape and forming partnerships with ongoing skills training providers.
- » Educating program providers on the digital divide and helping them see themselves as a critical part of the digital inclusion ecosystem.
- » Informing program providers of national digital inclusion and digital equity grants for which they may qualify.
- » Creating a toolkit and resources to help program providers better incorporate digital inclusion and digital equity strategies in their offerings and/or funding proposals.
- » Sharing best practices across program providers about how to measure impact in affecting the digital divide.

KEY PERFORMANCE INDICATORS

Prior to:	Map & form partnerships	Educate program providers	Inform program providers	Create toolkit & resources	Share best practices
12/31/2023	Establish map of skills training	Establish common curriculum with providers	Create online resource with current grant info	Create & publish toolkit	Create best practices
12/31/2025	Review & update	Review & update	Review & update	Review & update	Review & update
12/31/2027	Review & update	Review & update	Review & update	Review & update	Review & update

4.2.3 Advocate for current and future, both immersive and direct, digital skills training programs to incorporate and emphasize:

- 1 Online safety and security** in all levels of digital life skills training
- 2 Contextual training** for distinct purposes and/or audiences.
- 3 Assistance and connection to device access and affordable home Internet**
- 4 Brand agnostic approaches** to meet resident needs across Apple, Microsoft, Google, and other device manufacturer products.
- 5 Reduction of social isolation and improvement to mental health**

- » Using the DEC Activity Matrix to identify training opportunities and/or gaps associated with discrete focus group populations.
- » Developing a rubric that assesses training programs against priority components and the need to ensure online safety and security concerns are addressed across all levels.
- » Creating a compendium of online safety and security resources that can be contextually applied to different skills training levels and programs.
- » Creating skills training evaluation that can be adjusted for context and level of complexity.

KEY PERFORMANCE INDICATORS

Prior to:	Identify training opportunities	Develop safety & security rubric	Create online resources	Create skills training
12/31/2023	Create DEC Activity Matrix gap analysis & use findings	Develop safety and security rubric	Develop safety and security compendium	Develop adjustable skills training evaluation instrument and embed within RFPs
12/31/2025	Review & update	Review & update	Review & update	Review & update
12/31/2027	Review & update	Review & update	Review & update	Review & update

Implementation

FRANKLIN COUNTY
DIGITAL EQUITY COALITION



Intersectional Execution

The priorities and strategies are inter-related, below is a future story of the various ways a resident will benefit from the ecosystem of solutions and support that is architected in this Action Agenda.

*Naomi has a good relationship with her Jobs and Family Services case manager and feels comfortable disclosing that she is not sure how she will pay her Internet bill next month. Because her case manager was cross-trained as a '**Digital Connector**,' Naomi is immediately supported with information about how to enroll and qualify for free Internet through the **Affordable Connectivity Program (ACP)** as well as information about how to access support in the future from '**Digital Coaches**.' While completing the application, she experiences a few challenges uploading the required documents. She calls the '**Digital Coach**' at the Columbus Metropolitan Library who helps her convert a tax document into a PDF and upload it to successfully complete her application.*

*A month into ACP, her 'Digital Coach' from the Library follows up with her to check in on her experience. Through this conversation the 'Digital Coach' walks her through an **Internet optimization simulation** that indicates she needs to move her router to a more ideal location to support streaming. Naomi takes an interest in continuing to learn more and **enrolls in the Tech Goes Home program**.*

*At her Neighborhood Library branch, Naomi completed 15 hours of **digital skills training through the Tech Goes Home program** and **received a new computing device** for her family. With the increased confidence in her digital skills, she **joins the Resident Ambassador network** to help others in her community.*

*When **fiber Internet service** was introduced in her neighborhood through a partnership with the City of Columbus and Franklin County, she was one of the first to enroll and spread the word to her neighbors.*



Governance & Coordination

Initiatives of the magnitude outlined in this Agenda require coordination and governance. An organizational structure capable of meeting the operational and accountability standards expected of funded enterprises that maintains the spirit of collaboration and collegiality built since March of 2020 when the Digital Equity Coalition formed is needed. Proposed are two bodies, one that will formally govern; another that will provide advisory guidance based on lived experience comprising and working with the target population.

The governing body will be composed of community members responsible for the funds allocated to Franklin County digital equity projects. This body will determine goals, funding levels, and establish the Program Management Office (PMO) with appropriate fiscal management. The Digital Equity Coalition will serve as the advisory committee of the governing board, offering formal recommendations to the governing body on a regular basis. The DEC shall be composed of entities with deep experience providing private and public services to the under-resourced as well as residents who have lived experience with digital exclusion.

Both bodies will establish bylaws that address their common and distinct purpose, authority, expectations, membership, terms, attendance, voting regulations, quorum rules, officers, and meeting frequency. The governing body will have the authority to approve both sets of bylaws.

A central PMO will answer solely to the governing body but will only be as effective as the engagement and support of the entities and members of the DEC. The PMO will facilitate meetings for the governing board and DEC, and will be responsible for, but not limited to the following functions:

- » **Ensure direct link to initiative / community goals** - Monitor projects and programs and ensure they link to community goals.
- » **Help win support for important initiatives** - Build support for projects and activities.
- » **Standardized methodologies to support scale** - Help document what works to avoid duplication and wasted time and effort. Increase efficiencies and speed to value.
- » **Achieve outcomes not possible without a coordinated effort** - Facilitate collaboration across a wide range of projects.
- » **Performance Measurement** - Facilitate common measurement tools for understanding the evolution of community need and progress to goals.
- » **Leverage tools, support and mentoring** - One-stop-shop office for a wide range of tools, ideas, support and mentoring.

Staffing of the PMO should be sized in context to the scale of the ambition and implementation of the funders. Based on the scope of this Agenda, it is proposed that the PMO be housed at Smart Columbus and the following roles should be considered:

- » Program Director
- » Program Coordinator
- » Communications Director
- » 4 Program Managers—one for each of the four priority areas
- » Senior Instructional Designer
- » Senior research/Data analyst

Policy & Advocacy

Advocacy will be a primary and ongoing function of the DEC and its individual members. The DEC's advocacy efforts should be educational in nature, becoming the source of truth around what the community needs as it pertains to digital equity. Acting in this manner—rather than being exclusively concerned with requesting or influencing funding decisions—has fostered mutually beneficial relationships among numerous government officials and public-policymakers. This neutral approach unifies the county-wide voice on this important topic, preventing the cacophony caused when too many voices are heard at one time on the same issue.

Advancing Franklin County digital equity efforts requires advocacy at the federal, state, regional, and local levels to both government and private sector ISPs alike.

FEDERAL ADVOCACY

Federal advocacy should focus on (1) educating policymakers about the realities of the digital divide in Franklin County, (2) sharing the progress and accomplishments made by members of the DEC, and (3) advocating for the success of grant applications and supportive policies.

At the national level a great deal of the DEC's advocacy efforts have been informed through its association with the National Digital Inclusion Alliance (NDIA) an organization whose mission is to advance digital equity by supporting community programs and equipping policymakers to act. NDIA has provided counsel regarding how best to approach historic opportunities in funding emanating from the CARES Act, the American Rescue Plan, and more recently, the Infrastructure Investment and Jobs Act (IIJA).

Moving forward, once it is determined what competitive funding members of the DEC pursue, the DEC should leverage the policy leadership at MORPC and the Columbus Partnership to incorporate these priorities into the Columbus Region Coalition's federal funding priority requests.

STATE ADVOCACY

State advocacy should focus on (1) educating policymakers about the realities of the digital divide in Franklin County, (2) sharing the progress and accomplishments made by members of the DEC, (3) engaging in Broadband Ohio planning processes, and (4) advocating for the success of local grant applications and supportive policies.

Efforts at the state level are largely focused on engaging with Broadband Ohio, a government office whose vision is to bring high-speed Internet access to every Ohioan and build a best-in-class broadband network in Ohio. The DEC is privileged to have Broadband Ohio's Director, Peter Voderberg, as a member. Guidance and information about digital equity across the state, including the recent release of maps highlighting Ohio's broadband availability gaps, has provided informed and constructive direction.

LOCAL ADVOCACY

At the regional and local levels, the DEC has been exceptionally fortunate to have significant engagement and leadership from the City of Columbus and Franklin County guiding the work. These members are regular conduits to administration priorities. Nonetheless, it will continue to be important to educate elected officials on the realities of the digital divide in Franklin County, (2) the progress and accomplishments made by members of the DEC, and (3) the status and priorities of funding. It will be increasingly important to engage the other municipal governments and encourage their participation and support of the Action Agenda. This engagement can be most easily facilitated through MORPC.

PRIVATE SECTOR ISPS

From a somewhat unusual perspective, the DEC's advocacy efforts also involve private sector parties, especially Internet Service Providers (ISPs). Advocacy related to the Affordable Connectivity Program adoptions and exploration into the possibility of public-private partnerships (PPP) that enable digital infrastructure improvements are inextricably linked to these commercial enterprises. DEC is grateful to its ISP members for their steadfast commitment to addressing the digital divide and their willingness to consider new ways of collaborating and doing business.

PRIORITY CONSIDERATIONS

Numerous issues and challenges related to digital equity have surfaced during DEC deliberations and the construction of this Agenda. Many will require the development of official policy emanating from the governing bodies responsible for discrete jurisdictions. Below is a list of the policy items that were identified during the construction of this document. This is not comprehensive and likely there will be more priorities identified.

NATIONALLY

- » Champion establishment of “nutrition labels” on Internet service plans that spell out precisely what consumers receive when making purchases.

STATE

- » Champion Internet service affordability challenges in a manner similar to that used to combat accessibility concerns.
- » Create education standards that equate modern computing devices to textbooks.

CITY & COUNTY

- » Encourage use of municipal broadband assets to establish public-private partnerships that equip under-resourced areas of the county with modern infrastructure capable of delivering reliable, low-cost, high speed Internet bandwidth into the foreseeable future.
- » Improve the efficiency of permitting processes needed for infrastructure that will address the digital divide.
- » Encourage issuance of a resolution prohibiting landlords from engaging in exclusivity agreements for Internet connectivity.

DIGITAL EQUITY PMO

- » Privacy and Security Policy - Develop policies that assure privacy and security best practices are included in all digital life skills training regardless of their level.

HEALTHCARE PARTNERS

- » Include approaches for acquiring digital access data within frontline health screening procedures (e.g., health workers’ screening procedures).
- » Assess impact of future telemedicine reimbursement rates on level of offerings.

Monitoring & Reporting

Key Performance Indicators (KPIs) for strategies in the four priorities are cited within the Action Agenda's Recommendations section. An initial assessment after one year will ensure initial progress is assessed as quickly as practical so initial lessons learned can be effectively and expeditiously applied. The subsequent two-year cadence will match the interval of a 'Bi-Annual Digital Equity Survey,' an instrument that will be created to inform the overall effort and specifically designed to report on KPIs, especially those listed immediately below.

KEY PERFORMANCE INDICATORS (KPI)

The 16 indicators below are considered the most critical to making sure anticipated progress is taking place at the desired pace.

OUTREACH & ADOPTION

1. Affordable Connectivity Program (ACP) Enrollment across Franklin County
2. Number of online resource portal visitors
3. Number of referrals/touchpoints Digital Connectors provide
4. Number of support engagements provided by Digital Coaches
5. Number of people served (as measured by support tickets)

CONNECTIVITY

6. Submission of application for Federal Middle Mile Infrastructure Grant
7. Completion of Fiber to the Home (FTTH) design, construction, and operational plans
8. Percentage of dwellings in target areas that have access to FTTH

DEVICES

9. Number of new devices distributed
10. Number of refurbished devices distributed
11. Average (device) tech support service satisfaction rating

DIGITAL LIFE SKILLS

12. Number of residents participating in Tech Goes Home
13. Number of adults completing credentialed workforce development trainings
14. Number of students participating in funded Summer STEAM programs
15. Number of residents impacted by funded programs
16. Amount of dollars available to support digital inclusion work



BI-ANNUAL DIGITAL EQUITY SURVEY

The Bi-Annual Digital Equity Survey will use modern survey and evaluation methodology. It will be designed to accurately assess feedback from all of Franklin County, taking limitations of those not able to participate online into account.

Emphasis should be placed on the following:

- » Articulating clearly the goals of the survey
- » Providing easy-to-follow directions with well-defined data privacy assurances
- » Ensuring a statistically significant number of people participate in key demographic areas including but not limited to race, income level, educational attainment, and residential geographic area
- » Survey is conducted digitally and in person to capture feedback from those who may not be able to connect
- » Survey should be available in multiple languages
- » Keeping the survey length to a minimum
- » Assuring measures are taken of all KPIs
- » Using closed-ended questions to minimize survey time
- » Maintaining survey consistency over multiple administrations so progress over time can be accurately assessed
- » Posting results of each Bi-Annual Digital Equity Survey on the project portal



Developing the Agenda

FRANKLIN COUNTY
DIGITAL EQUITY COALITION



Process

The Franklin County Digital Equity Action Agenda was constructed using DEC insights gleaned from coordinated crisis response and resident engagement work that began in 2020. Community values, as articulated in the [Columbus Way](#), ground this Agenda in collaboration, inclusivity, fellowship, ambition, and the common good, as well as in principles of accountability, respect, integrity, and trust.

The six-month process to document this Agenda was collaborative and emphasized the importance of including a diverse set of perspectives and implementers across the community. The process incorporated a number of inputs both locally and nationally. This approach ensured a comprehensive awareness of the dynamics surrounding the digital equity space, including the changing federal funding landscape and community specific considerations. It also incorporated viewpoints on cultural competency and implementation capabilities across organizations. The following outlines the steps and approximate amount of time devoted to major building blocks of this Agenda.

Ecosystem Alignment (7 Weeks)

- » **Stakeholder Interviews**—Facilitated stakeholder interviews to align on shared goals and priority focus areas
- » **Community Activity Matrix**—Collected data to map existing digital inclusion activity across the community

Understand Needs & Best Practices (12 Weeks)

- » **Sizing the Need**—Research to understand size of the need through data
 - Supply side: infrastructure, speeds, costs
 - Demand side: household tech access, key barriers
- » **National Best Practice Assessment** (NDIA Conference, San Antonio, Chattanooga/Tech Goes Home, Charlotte, and ChiXDesign Comparisons)
- » **Codifying local understanding of needs**—Identified learnings from local efforts underway in Franklin County today

Create a Strategy to Address the Needs (7 Weeks)

- » **Facilitated 9 workshops** to assess technical & financial requirements and pressure test solutions
- » **Recommend solutions** and path forward for program priorities

DELIVERABLES OF THIS ACTION AGENDA

- » **Alignment across key stakeholders on the objectives** (e.g., focus areas, adoption levels, sustainable solutions)
- » **Understanding of the barriers** to access including availability, affordability, and adoption
- » **Recommendations to close the gap** impacting under-resourced households, students, older adults, veterans, workforce, disabled, New Americans and the justice involved
- » **Roadmap and activation Agenda** with timelines, milestones, stakeholder roles, and required investment for key initiatives

NATIONAL BEST PRACTICES

The DEC examined existing digital equity plans and projects while conceiving this Agenda. The Digital Equity Coalition has also benefited from the National Digital Inclusion Alliance's active involvement in meetings and planning, sharing best practices and making introductions to those doing similar work across the country.

The Columbus Foundation, Columbus Metropolitan Library, and Smart Columbus sent representatives to NDIA's Net Inclusion conference, bringing home models and examples for Franklin County. Notes from the conference can be found [here](#):

- » Many communities were further ahead with a civic infrastructure in place for how they do this work.
- » Our collaborative spirit and human-centered design approach has helped us advance quickly with unique ideas.
- » This isn't about a stand alone hotline—it's about weaving digital inclusion into everything.
- » Many people are doing digital inclusion work, they just don't call it that today.
- » Tie this work to economic development. Make sure we tell the story about this as a means to opportunity and economic prosperity, not just filling a gap.
- » Human-centered approaches bring the provider network and broader ecosystem together, and are essential to seeking resources and serving residents best. No one entity can do it alone.

Below is a list of existing plans and projects that have most shaped our thinking as we move forward.

INITIATIVE	RELEVANT APPLICATION TO THE DEC AGENDA
Coordination & Governance	Action Plan and investment framework a model —San Antonio/Bexar County
	Resident Voice in the Coalition Model —Detroit has a resident council that approves grants of \$50,000 or below, and Seattle pays residents with first hand experience with digital exclusion to be active leaders in their coalition
	Office of Digital Equity in Charlotte coordinates digital equity efforts from a central hub

Outreach & Adoption	<p>LA media Buy—Local organization ran a \$330,000 campaign and saw an increase of 43% increase in EBB adoption in one month; 38 Media Outlets; LA county departments emailed and texted clients; 1400 calls a month > in December = 5K</p>	Evidence that traditional media works and is important to include in the Action Agenda.
	<p>Hunts Point Community Network in the Bronx, NY—program has resulted in 40,000 subscribers and strong grassroots digital justice narrative</p>	Reinforcement and inspiration for what's possible with a mobilized grassroots network of residents, which is the intention of the 'Resident Ambassador' network proposed in the Action Agenda.
	<p>Digital Navigator Programs—Salt Lake City Library employed dedicated navigators, Cleveland coordinated Navigators across several organizations, and Charlotte coordinated Navigators across several organizations via a central hub.</p>	These models informed the digital connector and coaches model recommended in this Action Agenda and has directly informed the hiring of digital coaches at the Columbus Metropolitan Library, Jewish Family Services, Goodwill, and others.
	<p>Online Resource Portal—Doors (Harvard Medical School Model)—Healthcare as an access point for digital skills training—skills.digitalpsych.org</p>	Inspiration for content and usability of the online resource portal recommended.
	<p>Digital C in Cleveland—Their investment of over \$1,000 per new user onto their network demonstrated the cost and complexity of resident adoption.</p>	Reinforced the need for making Outreach and Adoption its own priority in the Action Agenda and the cost is a reference used in budgeting.
Connectivity	<p>Fiber to the Home Models Chattanooga; Colorado Springs</p>	Leading inspiration and examples for leveraging public infrastructure to bring fiber to the home in low-income neighborhoods.
	<p>CBRS Pilots in Cleveland and San Antonio—San Antonio used Motorola for a large deployment during the pandemic and Cleveland has used PCs for People.</p>	Peer group to monitor progress and performance against the C-Bus WiFi pilot as both used vendors Columbus did.
	<p>RFI/RFP Approach—Cuyahoga County, San Antonio—Cuyahoga County and San Antonio were early leaders in putting out RFPs for connectivity. San Antonio's RFI approach demonstrated the need to test the waters for interest.</p>	The City of Columbus and Smart Columbus issued an RFI in 2021. Both of these were referenced in the process.
Skills	<p>Tech Goes Home—Chattanooga & Boston—A model linking adult skills development to device distribution and K-12 education.</p>	Recommendation to replicate this program in Franklin County.

PARTNER INTERVIEWS

Beginning in December 2021, the Digital Equity Coalition interviewed representatives from over 25 leading community organizations that are actively pursuing efforts to close the digital divide. The purpose of these interviews was to understand how the digital divide shows up in their work, what associated challenges it presents to their respective missions, if and how progress is being measured, and the identification of resources and initiatives that could be incorporated within the Agenda.

INSIGHTS

Though articulated in light of each partner's unique mission, the following are key points raised multiple times during interviews.

The Challenge

- » Broadband is a basic right—a common utility on the order of electricity, water, heat, and sewer.
- » Many changes produced by the pandemic are becoming permanent. This is likely to widen the gulf between haves and have nots. The schism between people equipped to advance themselves in the digital world and those who are not will become more persistent if we do not address this divide.
- » How we effectively search for and obtain information, educate, find and apply for services or employment, purchase goods and services, attain personal fulfillment, and collaborate socially are increasingly dependent on connectivity, devices, and skills.
- » The digital divide is far more than just a lack of devices and connectivity. It manifests in people's lives in complex, distinct ways that are combined with other forms of inequity and adversity. As a consequence, solutions often require wrap-around services that address the whole person or family.

The People

- » Showing dignity and establishing trust are imperatives when approaching the under-resourced. Trust is difficult to cultivate, thus adherence to Human-Centered Design principles is seen as integral to successful inclusion efforts aimed at addressing the digital divide.
- » Emphasis should be placed on “awareness and marketing” through trusted local sources that meet people where they are.
- » Social media is an increasingly important tool for successful outreach to the under-resourced.
- » There is great need in many communities for basic training that includes profound focus on digital safety, security, and privacy.
- » The need for digital skills is contextual. Such skills are best learned within circumstances that require their use.
- » Device needs are dependent on individual needs. One device often does not meet the needs of all members of a household.

Implementation

- » Partners have near universal appreciation for the collegial manner in which collaboration among members of the Digital Equity Coalition has been managed without a formal governance structure. However, nearly all recognize the potential benefits of tighter coordination and formalization. Partners expressed preference for a central “hub” that coordinates but does not dictate.
- » Many Coalition members say the “iron is hot now” as they call for a definitive action plan that can “move the needle” on digital equity.
- » Internet Service Providers (ISPs) have favorable views about a potential public-private partnership that promotes digital equity, though there are varying opinions about what form that should take.
- » There is widespread appreciation for the innovative ways ISPs have increased access and reduced financial obstacles to those who urgently needed connectivity when demand spiked in the early days of the pandemic.
- » There is near universal desire for improvements to pole permitting processes in order to expedite the build-out of broadband infrastructure.
- » Members greatly value guidance from the National Digital Inclusion Alliance (NDIA).
- » The Columbus Metropolitan Library is widely recognized as a trusted community resource.
- » Many DEC members believe their organizations have specialty areas in which they can provide digital life skills training.
- » Numerous organizations were enthusiastic about using their resources in outreach efforts (e.g., OSU extension agency).
- » Innovative outreach ideas for using youth as digital ambassadors were expressed.
- » Some DEC members believe it is important for device recipients to pay something to preserve personal dignity and promote ownership.
- » The development of coding skills in elementary schools is an important component in the effort to eliminate the digital divide.

“We went from using technology as an enrichment tool to relying on technology to continue our business mission! It went from an expense center to a critical enabler of our mission.”

- V. Vandhana Veerni, CIO, Columbus City Schools

The Action Agenda

- » A digital equity plan that combines a compelling vision, organizational structure, and solid metrics for gauging success is critical to any Franklin County digital equity initiative.
- » The benefits of coordination among partner institutions is well recognized, however there is appreciation for the challenges that inevitably accompany closer alignment.
- » Many DEC members want to see a focus on economic development activities within this Action Agenda. They see efforts dedicated to improving residents' opportunities to advance their financial prospects as imperative to making permanent positive change.
- » Franklin County's digital equity efforts will greatly benefit from more data about under-resourced populations in Franklin County. There is a need for firm digital equity measurement standards as well as the establishment of benchmarks and milestones.

ACTIVITY MATRIX

Partner interviews contributed to an ongoing effort to identify resources and programs designed to address the digital divide. The resulting catalog, the [Digital Equity Coalition Activity Matrix](#), highlights Coalition resources and helps identify existing gaps. The following outlines insights gleaned from this investigation.

INSIGHTS

The Community Activity Matrix concluded **that filling critical gaps in Franklin County's digital equity ecosystem include the following components:**

- » A common resident-facing online destination for current information on connectivity, device access, and digital skills training options.
- » Trained people who encourage participation, and navigators equipped to assist people with consideration and adoption.
- » A coordinated and consistent marketing and communications campaign using common branding to promote awareness and encourage participation
- » Innovative outreach through utility bills, houses of worship, food pantries, community events, barbershops, and other places where people already gather
- » Coordination among existing organizations and programs, common outreach and adoption, support for existing efforts and the creation of new programs where gaps are identified
- » Policy measures to address identified barriers:
 - Affordable housing standards
 - Internet service exclusivity agreements in Multi-Dwelling Units (MDUs)
 - Student device access to address the homework gap
 - Pole permitting to facilitate digital infrastructure improvements
- » Affordable Connectivity Program (ACP) promotion, coordination, and tracking
- » A coordinated and intersectional device access resource that helps recipients and donors alike
- » Tailored programming and support for training that is enabled and encouraged by devices that meet needs.



Notable Connectivity Acknowledgements

- 1.** An affordable, future-proofed, high speed residential Internet option particularly in opportunity neighborhoods and Poverty Blueprint areas is needed
- 2.** There will be WiFi available on all forms of public transportation; including all Columbus City Schools and COTA buses
- 3.** WiFi is available in all temporary housing shelters
- 4.** LinkUS corridor plans could allow for public WiFi at transit stops along corridors
- 5.** There remains opportunity for WiFi expansion in public spaces

STAKEHOLDER WORKSHOPS

The DEC solicited broad stakeholder input to inform this Agenda over a series of nine workshops. Along with residents, coalition members were invited to attend all sessions with a request that each organization send representation to at least two sessions.

The first set of four work sessions constituted an “improvement round.” The first session was devoted to the overall plan; the following three focused on individual priorities. The goal of these sessions was to ideate and revise the objectives and strategies under each priority area.

The second set of work sessions, dubbed the “red team round,” were dedicated to thoroughly reviewing a detailed outline of the priorities, objectives, strategies, preliminary key performance indicators, and general budgetary estimates.

The DEC Steering Committee met regularly throughout the planning process to align and agree on major components of the Agenda. Members of the Steering Committee participated in a half day work session to refine the product of the stakeholder sessions.

An additional stakeholder worksession of 20 residents, community organizers, and members of the DEC was facilitated by ChiXDesign. This led to the following insights now reinforced throughout the plan:

- » Basic needs of residents need to be met before they will consider purchasing Internet services.
- » Internet access must be available all around Columbus, not just in the home.
- » Connecting Internet access to ‘money making’ ventures (e.g., sneaker selling) is critical for adoption among young people.
- » On the ground organizations (Food Soldiers, churches, etc.) are best positioned to ensure the success of the initiative, but need resources for collaboration.

Information Sources

Enormous amounts of quantitative and qualitative data has informed this Agenda. Data sources include national, regional, and local references from research that spans decades, live interviews, formal surveys, results from pilot projects, prototypes and design sprints.

NATIONAL DATA SOURCES

U.S. Census Bureau's American Community Survey	The foundational source of data used in this Agenda is from the Census Bureau's American Community Survey (ACS) 2020 5-Year Estimate Tables.
Federal Communications Commission (FCC)	Data from the Federal Communications Commission (FCC) has been used primarily to determine Internet connectivity availability. The presence of digital redlining can be seen using FCC Geographic Information System maps , however the maps do not provide affordability data.
Universal Services Administration Company's (USAC)	The Universal Services Administration Company's (USAC) Affordable Connectivity Program (ACP) tracker provides information about the number of claims made for participation in that program. Up-to-date summary information about enrollments can be found by state and zip code, however county-specific data is typically not current.

LITERATURE REVIEW

A review of the literature surrounding digital equity and inclusion issues informed the construction of this Agenda. Those that impacted deliberations in meaningful ways are briefly described, along with a succinct description of their primary contributions.

Publications

Broadband Communities	Articles from the Broadband Communities magazine provided valuable insights into the telecommunications industry especially as it concerns fiber optic investments and market share information.
Brookings Institute	Besides comprehensive information on national efforts to expand broadband, research from the Brookings Institute provided much needed perspective on the nature of digital inequities in urban areas.
Bureau of Labor Statistics	The Bureau's Beyond the Numbers publications have provided thoughtful data and forecasts that have helped guide the development of recommendations in this Agenda.

Journal of Informatics	This journal, along with a follow-up webinar interview with one of its contributors, Caroline Stratton, Ph.D., the author of Planning to maintain the status quo? enhanced DEC's understanding of what types of digital skills training have lasting impact that affect the economic trajectory of under-resourced people. It also helped identify plans from other cities that were used for comparison purposes.
McKinsey & Company	Key contributions from McKinsey & Company included meaningful observations about public-private partnerships and socio-economic changes in the United States that were produced by technology and the pandemic. ²⁸
National Public Radio	NPR provided historical perspectives important to the story of digital inequity.
Pew Research Center	Pew research provided analysis from novel surveys that cross referenced discrete information related to digital equity, animating several important aspects of this Agenda's message.

²⁸ Beckers, F. and Stegemann, U. "A smarter way to think about public-private partnerships." McKinsey, 10 September 2021.

DEC members have examined digital equity and inclusion with a wide-angled lens. According to key insights in an article published by McKinsey & Company, the following barriers stand in the way of sustainable, inclusive economic growth for everyone:²⁹

- » Americans are less optimistic about future growth over the next five years and this is especially true for people of color.
- » Many Americans live precariously from an economic perspective. Less than half of all Americans say they could cover expenses for more than two months if they lost their job. This finding appears related to the level of education. Only 38% of those without a college degree say they could cover expenses for more than two months.
- » 49% say most Americans have opportunities to find good jobs. This may be attributable to the large number of people who have quit their jobs and the on-going recovery from the COVID-19 Pandemic.
- » Barriers to economic opportunity vary by group with some citing caregiving responsibilities, others citing age, race, gender, or sexuality identity issues.
- » The jobless cite physical (30%) and mental health (15%) and the need to take care of family (12%) as barriers.

²⁹ Bulcho, Nathnael, et al. "American economic opportunity in 2022." McKinsey, 13 December 2021.

Literature from Organizations Devoted to Digital Equity

Benton Institute	Committed to bringing open, affordable, high-performance broadband to all people in the U.S. to ensure a thriving democracy, research from the Benton Institute has provided timely information, particularly about legislation and policy affecting equitable access to connectivity.
Digital Promise	Research on educational innovation that includes discerning observations about outreach, adoption, and advocacy from Digital Promise has helped inform this Agenda. Digital Promise's vision is that all people at every stage of their lives have access to learning experiences that help them acquire the knowledge and skills they need to thrive and continuously learn in an ever-changing world.
National Digital Inclusion Alliance (NDIA)	Likely the organization whose work has influenced the DEC's deliberations most significantly, NDIA has helped define the very meaning of digital equity and inclusion included in this Action Agenda. It has provided current insights about advocacy related to pending legislation, detailed analysis about legislation that has passed and been placed into law, guidance about policy associated with legislation, vital research on digital inclusion best practices, and perhaps most importantly, connections to others engaged in the movement to ensure everyone has the opportunity to use technology to live, learn, work, and thrive.
RISE	Ramsey County Investment and Support Efforts—RISE's publication of information about the social return on investment from digital equity projects helps others make the case for such expenditures.
US Ignite & Altman Solon	The combination of US Ignite's desire to help smart communities drive high-impact solutions and Alman Solon's deep expertise in telecommunications strategy development produced a foundational model for describing the options municipalities have when considering broadband expansion. ³⁰ This model continues to have a significant impact on deliberations about improving the infrastructure upon which Internet connectivity depends.

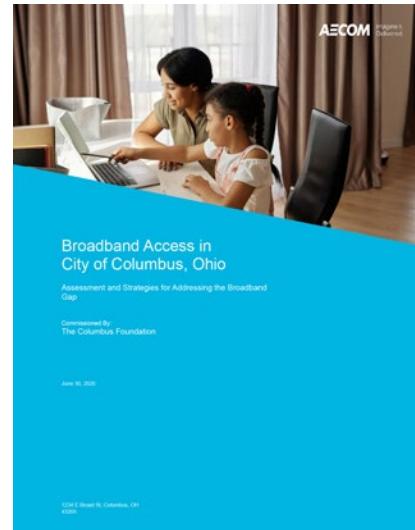
³⁰ "Broadband models for unserved and underserved communities." US Ignite & Altman Solon, 9 July 2020.

LOCAL DATA SOURCES

BROADBAND ACCESS IN CITY OF COLUMBUS, OHIO

AECOM, commissioned by The Columbus Foundation

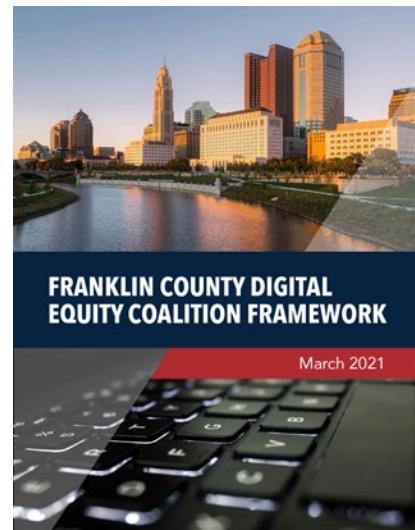
Thanks to The Columbus Foundation's support, AECOM assessed and reported on the Region's broadband assets and opportunities. Published in June 2020, the [Broadband Access in City of Columbus, Ohio report](#) includes a guide for the short-, medium-, and long-term possibilities for increasing broadband adoption. The report found that gaps in broadband adoption across Columbus are largely due to barriers across various demographics perpetuated by economic challenges, technology literacy, and obsolete technology to connect to the Internet. A second AECOM report issued in September 2020, also generously commissioned by The Columbus Foundation, provided detailed feasibility guidance about broadband pilot deployments that might be considered.



FRANKLIN COUNTY DIGITAL EQUITY COALITION FRAMEWORK

Franklin County Digital Equity Coalition (DEC)

Foundational to much of the work being pursued and accomplished by the DEC, the Framework created in March 2021 guides this Agenda.



TECHNOLOGY & BROADBAND ACCESS BRIEF

Mid-Ohio Regional Planning Commission (MORPC)

A comprehensive look at digital equity conditions in the spring of 2021, MORPC's [Technology & Broadband Access report](#) contains thorough descriptions of the many salient issues addressed in this Agenda. Those include clear identification of regional challenges such as device access beyond smartphones, ISP exclusivity agreements in multi-dwelling units, the homework gap and chronic absenteeism in K-12 education, limited digital skills training opportunities, the threat posed by misinformation, and the disproportionate digital equity burden experienced by people of color.

MARKET SIZING BY CITY OF COLUMBUS

The Columbus City Department of Technology's Geographic Information Systems (GIS) team enhanced data from the U.S. Census Bureau's American Community Survey (ACS) by combining it with local data on individual land parcels. The team aligned parcels with census tracts to identify areas with low median incomes that cross census tract boundaries.

Unlike the ACS data, the City of Columbus' model shows a granular count of households within a census tract and employs local data analysis that is regularly updated and that includes geographic boundaries not used by the U.S. Census Bureau. Consequently, the data model used for this Action Agenda provides a more accurate and up-to-date count of housing units than what is provided by the ACS.

RESIDENT DIGITAL ACCESS SURVEY

Franklin County Jobs and Family Services & Smart Columbus

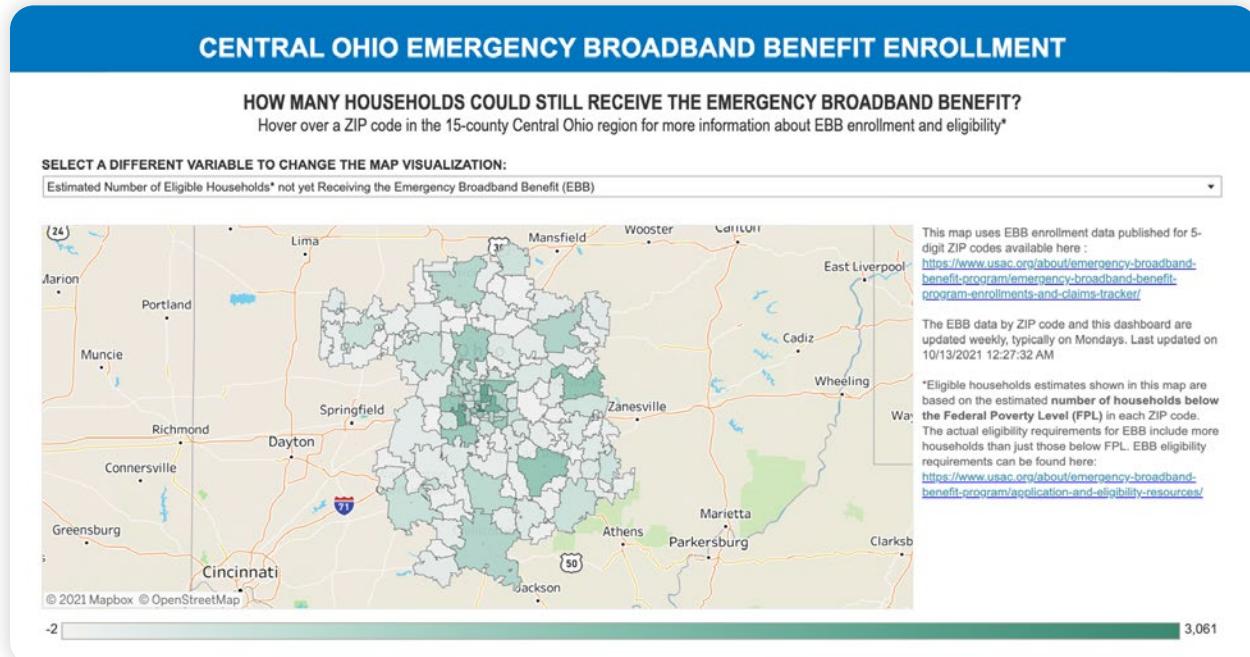
The Community Internet Access and Affordability Survey conducted between October 7–15, 2021 was completed by 1,839 Franklin County residents from 40 different zip codes. Solicitations were sent to over 120,000 email addresses associated with Franklin County Supplemental Nutrition Assistance Program (SNAP) recipients. Key quantitative and qualitative findings included the following:

KEY INSIGHTS

- » Of people without home Internet, 89% mention cost as a very important factor.
- » 77% reported Internet access is a top priority alongside rent, food, and transportation.
- » Paying bills, work, and access to information were the three most important tasks respondents said they did online.
- » Unreliable service was cited as the second biggest issue behind expense.
- » 21% have someone outside their household who depends on their Internet connection.
- » 77% said access to the Internet is 'very important' or 'extremely important' to maintaining their personal wellbeing.
- » For the 25% of Franklin County households living on less than \$35K annually, \$60 per month for Internet is at least 2% of their total income.
- » 40% consider their Internet unreliable.
- » 27% experience unreliable Internet usage multiple times a week.
- » 61% of subsidy-receiving households were not aware of the Emergency Broadband Benefit (EBB), now replaced by the Affordable Connectivity Program (ACP).
- » Only 15% of respondents were satisfied with their Internet service.
- » 41% said it wouldn't matter to them if the government provided the service, although 20% would be less likely to want it.
- » The more community partners involved, the more trust.
- » 41% were more amenable to low-cost Internet connectivity offered by the community if a group of community organizations provided the service.

EBB DASHBOARD BY MORPC

The Mid-Ohio Regional Planning Commission has been a leader in promoting digital equity since far before the COVID-19 Pandemic struck and has helped the DEC and local governments across the region understand enrollment of EBB by zip code through a tableau dashboard.



INTERNET SPEED TESTS

MORPC and City of Columbus

MORPC engaged Buckeye Interactive to incorporate a speed test tool on the [Franklin County Digital Equity Coalition website](#). This speed test app is a critical supplement to publicly available federal and state level data on broadband adoption and service quality. Gathering crowdsourced, point-level data on Internet speeds and service quality is a best practice for understanding community digital equity needs. The success of the tool relies on collecting many data points across the community, so broad & ongoing promotion of the tool (and hosting the widget on as many member org websites as possible) is critical to creating usable data.

The City of Columbus also has the ability to access [local speed test data through Ookla](#).



INFORMAL ACCESSIBILITY ASSESSMENT

Smart Columbus

Smart Columbus conducted bandwidth accessibility tests using Internet Service Providers' online resources to corroborate the presence of digital redlining that affects resident's ability to obtain high-speed reliable Internet connectivity. This was done by selecting 5 random addresses in identified City of Columbus opportunity neighborhoods. These tests clearly indicated that not all geographic areas within the county are equal when it comes to access to high speed connectivity. While the Affordable Connectivity Program (ACP) provides subsidies for high speed Internet, its effect is muted if there is no access to enabling modern infrastructure.

QUALITATIVE DATA

The Columbus Foundation and Smart Columbus

Another significant source of data informing this Agenda comes from the DEC's application of Human-centered Design (HCD). This work has primarily been facilitated locally by The Columbus Foundation and Smart Columbus, with deep coaching support afforded by Bloomberg Philanthropies as part of the City of Columbus' selection as one of 50 Champion Cities in the Global Mayor's Innovation Challenge from June - November 2021. Further detail and insights from this broader portfolio of work is shared in the following section.

Human-Centered Approach

Human-centered Design (HCD) is an approach to problem solving that puts people at the center of the process. It utilizes a set of methods to deeply understand people—their wants, needs, motivations, behaviors, and pain points—frames opportunities, and centers solutions on solving real human needs. The process includes building empathy for people, clearly defining their needs, bringing diverse perspectives to the table to solve those needs, and quickly testing and iterating solutions to carry forward. This results in product and service solutions that are desirable, viable, and feasible to help ensure adoption and success at scale.

In the context of digital equity, HCD is a way to design programs, policies, and services that are tailored to the needs of people who are most impacted. Whether they are parents navigating online learning for their children or young adults looking for career opportunities that require learning new digital skills, HCD ensures they are deeply involved in every step of opportunity definition and solution creation. Doing this generates trust, agency, and a sense of ownership among residents that are essential to solution adoption and sustainability. It requires a shift in mindset from creating solutions for people to creating solutions with people.

APPLICATION & PROCESS

The Coalition employed HCD to build empathy, ideate, prototype, and make recommendations entailed in this Action Agenda. The recommended actions in this Agenda have each been informed, generated, or validated by residents with lived experience in digital exclusion.

The HCD process involves: 1) understanding problems, 2) generating and testing new ideas, 3) delivering solutions, 4) measuring impact that informs a feedback loop grounded in real world experience, and 5) refining improvements iteratively.

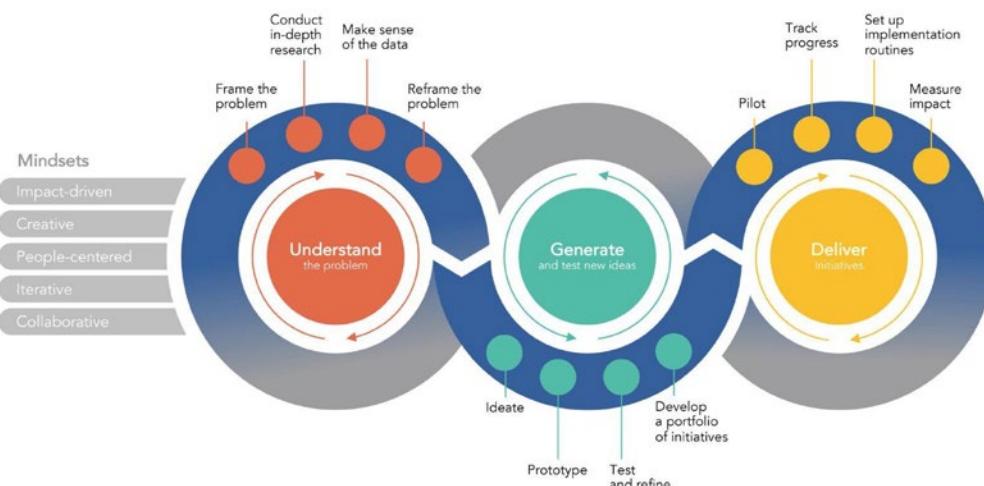


Diagram by Bloomberg Philanthropies

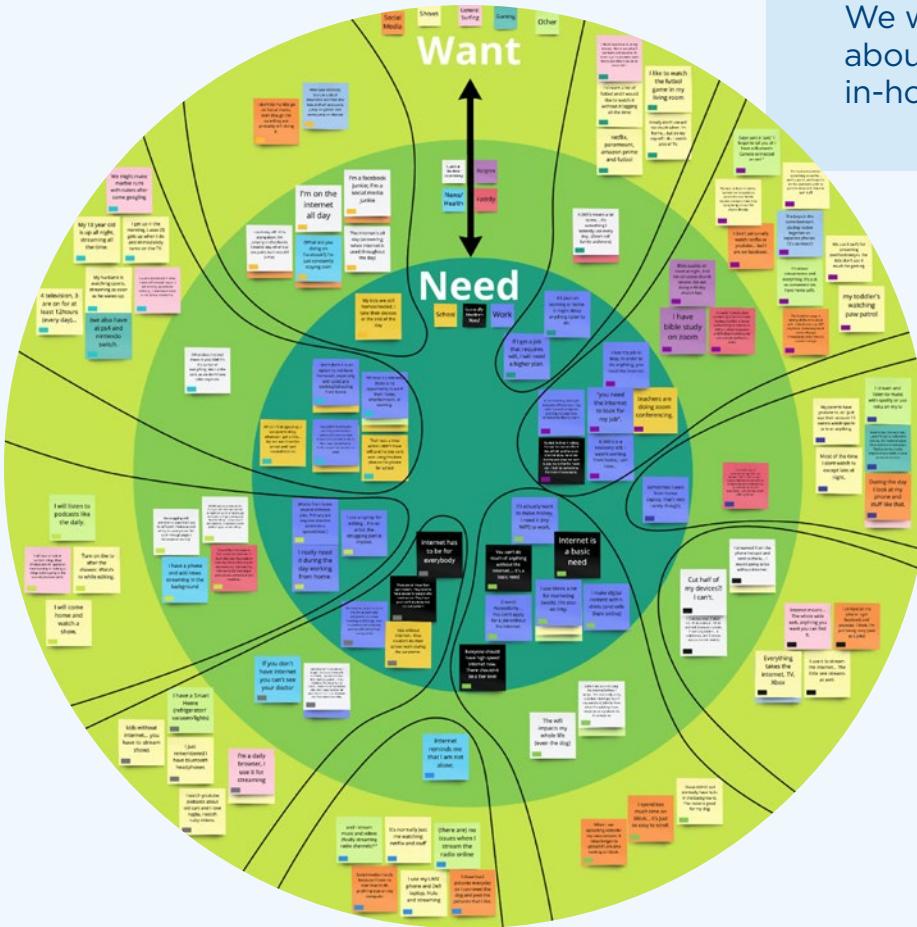
This work has primarily been facilitated locally by The Columbus Foundation and Smart Columbus, with deep coaching support afforded by Bloomberg Philanthropies as part of the City of Columbus' selection as a Champion City in the Global Mayor's Innovation Challenge from June - November 2021.

The table below summarizes the various HCD ethnographic research and testing and learning sprints that were conducted in coordination with this work.

1	March 1–5, 2021	How might we ensure people experiencing poverty can use technology in all the ways they want to and need to?	Co-design Sprint	12 Residents	TCF
2	March – May, 2021	South Side Free Internet Pilot — Testing desirability and viability of free residential Internet	Test	70 Residents	Smart & City of Columbus
3	June 30 – July 2, 2021	Exploring why people on the South Side are saying no to free Internet . Trying to understand what is beneath the answer.	Co-design Sprint	12 Residents	TCF & Smart
4	July 21–23, 2021	Understand the user journey of those participating in the free Internet pilot	Existing Pilot Participant Interviews	5 Residents	Smart
5	July 27, 2021	Understand profile and need of residents applying to enroll in free Internet program	Analysis of enrollment surveys	298 Residents	Smart
6	August 5–6; August 12, 2021	Test resident response to messaging and imagery associated with low to no-cost Internet programs and deepen understanding of motivations	Focus Groups	13 Residents	Smart
7	September 8–30, 2021	Understanding residents' relationship with household Internet and what is adequate speed to meet their needs.	4 days of speed tests, 3 times a day and 2 interviews	10 Residents	TCF & Smart
8	October 28, 2021	Understand if an Internet comparison and Optimization and/or education tool would be valued by residents	Prototype Test – Two rounds of 50-minute interviews	13 Residents	Smart & ZoCo
9	October 2021	Quantify residents' priorities, current state of Internet access and understand desirability of future low-cost option	Online Survey	1,839 Residents	Franklin County Jobs and Family Services & Smart

10	November 2021	Understanding what, if any, help seniors and New Americans may need with technology	Co-design sprint; 6 community designers	18 hours of interviews	TCF, CML, Jewish Family Services
11	December 2021– March 2022	King-Lincoln Free Internet Pilot — Testing desirability and viability of free residential Internet	Test	278 Residents	Smart & City of Columbus
12	April 2022	Understand resident barriers to using technology for telehealth , accessing health records, and scheduling.	Design Sprint	Provider Workshop & 5 Resident Interviews	Smart & ZoCo
13	May 2022	Deeper understanding of the systemic barriers perpetuating digital inequity for Black and Brown communities and innovative strategies to address them across sectors	Workshop and Literature Review	Workshop with 20 residents, organizers and service providers; and analyzed 75 data points	Smart & ChiByDesign
14	May 2022	Understand how rural residents want and need to access home Internet .	Design Sprint	20 Residents	Smart, Broadband Ohio, & Harvard Biz School
15	March–May 2022	Understand the specifics about how residents want to receive technology help .	Co-Design Sprint & Prototype Testing	8 Community Designers	Library & TCF

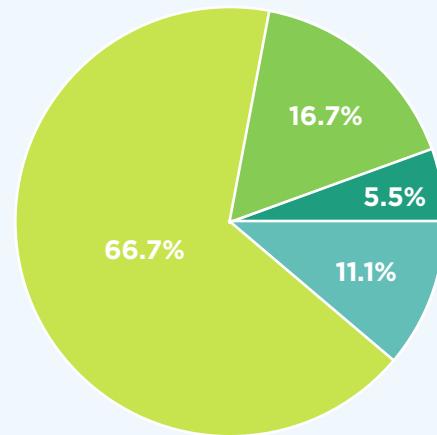
How the Internet is Used...



Cbus WiFi: Feedback on Your In-Home Wifi

We want to hear your ideas about what is important regarding in-home internet service.

What best describes how you deal with internet problems?



- I usually ask for help right away
- I'll try to fix it myself before asking for help
- I can usually fix it myself before asking for help
- I'm the person people ask for help



In-Home WiFi is a Basic Need

90% mentioned using in-home wifi for at least 4 unique activities

100% mentioned using in-home wifi for at least 3 unique activities

70% mentioned using it everyday to a point of dependency

80% mentioned using in-home wifi for School/Work

FOUNDATIONAL INSIGHTS & RESIDENT STORIES

CONNECTIVITY

Many residents described themselves as dependent on their Internet service for both need-based tasks as well as entertainment.

"I don't think it is an option to not have home WiFi, especially with COVID and working or schooling from home."

- Mother of 2 from North Linden

"Had cousin's daughter through the foster system - I would have custody court I needed to attend through Zoom and I needed to have Internet."

- Woman living with no home Internet

"I have bible study on zoom. Teacher's are doing zoom conferencing. It's about convenience."

- Parent of 4 from Linden area for the detail and structure of this Action Agenda

Residents have urgent and necessary needs for the Internet far beyond education. It is a critical part of everything they do from paying bills, to doing homework and personal research, to maintaining their social well-being.

"When you couldn't go talk to someone in person and you didn't have Internet, it was like we lived in a small town and we were the only family there."

- Mother from South Side, went without Internet and cell service for four months before the pilot started

"I don't leave the house much, especially being low income and being limited at what I can do. [...] It was the Internet that gave me a voice [and] reminds me I'm not alone"

- Woman from South Side, lives alone

RESIDENT STORY:

A very busy mother from Westerville is a nurse during her day job. At night, she helps her husband with bookkeeping at his construction job. Somehow, she also finds the time to clothe and feed her 7 children, of which one has a disability and goes to therapy 3 times a week. She uses the Internet for tasks like paying bills, swapping shifts for work, finding a healthy dinner recipe, grocery shopping and more because she simply doesn't have the time to do them any other way. She's practically always using the Internet, and her kids are being raised the same way. For this family and many others in Columbus, quality, reliable home Internet is a necessity.

 **Frustration occurs when cost and quality do not feel aligned.**

"[My Service Provider] keeps raising the prices. It's not really getting any better. The prices don't really match the quality"

- *Woman near South Side, frustrated by the limited choices of Internet providers*

 **Household size does not necessarily correlate to monthly Internet expenses.**

From two research sprints with the appropriate data (n=14), household size and monthly WiFi costs were found to be weakly correlated.

 **There is no standard price for accessing the Internet.**

From the JFS Survey (n=1839), the estimated standard deviation of monthly costs was approximately \$35. (self-reported data, may be skewed by subsidies)

 **Reliability is key to perceived quality Internet service.**

"Basic Internet should be stable and consistent."

- *Brand/Messaging pilot participant*

 **Residents want a choice of Internet provider.**

"I'm so glad I've got options now that [another service provider] is here.

- *Parent from South Side, lives in a household of 9*

 **Barriers of back bills inhibit desired provider changes.**

"I owe money to service providers but don't currently have the means to pay them in order to restore service."

- *JFS Survey Respondent*

"[I] got behind on bills and was turned off. Too expensive to reconnect. Because of no regulations related to apartment communities contracting or allowing only one service provider, I cannot afford to get a new less expensive option."

- *JFS Survey Respondent*

 **Bundled plans are still prevalent, but many are switching.**

"Everybody I know bundles. We cut the cord, so we don't have cable anymore. I just have the Internet now."

- Parent of 2 from North Linden, homeschools her toddler

 **Low-cost Internet is not as desirable as quality Internet. Some will pay to get what they need.**

"I mean, just give me what I paid for. If I pay for your fastest speed, that's what I expect each and every time. Don't slow me down or try to cap me at a certain point."

- Co-design sprint participant

 **People are skeptical of 'free' Internet and don't believe it will be quality. The no-cost Internet option itself needs to be high quality, dependable, easy to use, and guaranteed for an extended period of time. Be straightforward if it is not an equal substitute for market Internet.**

"I wouldn't like it—it sounds sketchy; free—makes me wonder, is it going to bust? I worry about problems and if it will work ok?"

- Father from South Side

"I don't believe the Internet could be free for everyone. Someone will lose out if I get it."

- Mother of 8 from South Side

 **Internet access should be extended all around Columbus, not just within the home.**

"I have always wondered about the City of Columbus providing free WiFi, [...] expanding it and it would be everywhere. I would definitely try it out."

- Mother near Linden area, 8-person household

RESIDENT STORY:

A middle-aged man from the South Side finished his seasonal employment and found himself again without a job. As a way to cut costs, he quit cable and changed Internet plans to a free, low-income option. Unfortunately, the WiFi was extremely unreliable which made it difficult for him to search for other jobs online. The call center was not very helpful, and the provider still billed him for unexpected installation and equipment fees. It was such a bad experience that the man has become very skeptical of free offerings and assumes that it is not worth the effort.

DEVICE ACCESS

→ Residents have many devices but not necessarily the types and features they need (i.e. laptops or desktop computers) to engage in certain activities online.

“So it can be depending on what you’re looking at and the format that it’s in, like you have to zoom a lot or scroll a lot to read some of the documents and things. So that can be a bit of an inconvenience when I’m using my phone. If I had a preference, I’d probably use a tablet more often to do that.”

- Resident participant in device access sprint with ZoCo

“I don’t have a computer; I just use my phone for Internet access. During COVID, my work hours went down...”

- Co-design sprint participant from South Side

→ Parents do not like to prioritize one person's needs over another in the household.

“It was impossible when I was trying to homeschool during COVID. I’d end up saying, Somebody’s gonna have to get off so the other can do school. [...] That’s not right.”

- Single Mother of 3 from North Linden

RESIDENT STORY:

A mother caring for multiple children with chronic health conditions wants to be able to easily manage her family's care using her medical provider's online portal. However, she only has a phone and it's difficult to navigate all the forms and features on mobile. This results in her missing important information and struggling to keep tabs on everything that she needs to monitor.

DIGITAL LIFE SKILLS

→ Residents using EBB were hesitant to speak up about low speeds.

"I had no idea that these speeds are a third of what I am paying for. [...] If I were to complain about the service it wouldn't be right. Especially since I am getting a large amount of it paid for."

- Woman near Franklin Park

→ The stigma of confusing technology is a barrier to learning more.

"I have no idea what [speeds] I am supposed to be getting. [...] I'm illiterate with this stuff."

- Single Mother of 5 near Nationwide Children's Hospital

→ Many residents have had bad experiences online, resulting in security and privacy concerns.

"I got my information stolen before. The web gives hackers easy access to your stuff. I don't have a lot, so if they steal from me I feel it... My family does everything online...We are online constantly. But, I worry about doing some things online...I had to order a birth certificate online and didn't feel safe."

- Mom of 3

"My concern is more around surveillance and what privacy do we have as a people. My concern is that they would be watching what I do online."

- Woman living in Livingston Park

RESIDENT STORY:

An elderly man on a fixed income got facebook and email so that he could stay in touch with his daughters. A couple months ago, he was tricked into sharing his banking information. Now it's time for him to renew his benefits, but he's nervous to enter any of his sensitive information online.

OUTREACH & ADOPTION

Residents have become accustomed to lackluster service when they have discounted or subsidized Internet options.

"Being at home more during the pandemic, the Internet has been valuable. The Internet is a good thing for me. I'm not going to complain because it's really cheap. It constantly keeps going in and out though. The Internet seems to cut out a lot here. Neighbors have similar experiences."

- Resident living with her family and receiving \$10/month Internet

Basic needs of residents need to be met before they will consider engaging in Internet/technology services.

"I have no idea what [speeds] I am supposed to be getting. [...] I'm illiterate with this stuff."

- Single Mother of 5 near Nationwide Children's Hospital

Many residents have had bad experiences online, resulting in security and privacy concerns.

"My church pays for my bills, but they don't pay for my Internet bills"

- Mom of 4 near Linden Township area

18% of respondents to the JFS survey (n=1839) reported: 'home Internet is generally important, but if I were in a financial pinch I/we could go without it for a short period of time.'

Connecting Internet access to 'money making' ventures (e.g. sneaker selling) is critical for adoption among young people.

"My son does graphic design and he uses the laptop for that. He makes fortnite headers for people on the Internet."

- Mother of 5 describing device uses for her 12-year old son

 **Trusted community members, neighbors, and on the ground organizations (Food Soldier, churches, etc.) are best positioned to ensure the success of the initiative but need resources for collaboration. People are more inclined to trust systems or leaders who have mutual respect, are relatable, are transparent and show vulnerability.**

"I really respect Food Soldiers. They are doing a really good job in the community. I trust them so I would trust information from their people. They give good info on stuff and I trust Rochelle."

- Co-design sprint participant

"There was a time when I was unemployed and when I would go to the food bank. If I got stuff I wouldn't use I would take it to my neighbor. He has five kids and his wife doesn't work. They are seven on one paycheck, but they would never go to the food bank themselves. I got 20 lbs of frozen chicken burgers and I just took it to them. It was okay because it was a gift from Susan. It wasn't charity."

- Co-design sprint participant, has lived in Hungarian Village for 21 years

RESIDENT STORY:

A family of 4 has been without home Internet the last couple weeks, getting by with the data plan on their phones. This works for the short-term, but buffering and lagging become a source of frustration, especially towards the end of the month when their usage is being capped. The parents saw an advertisement for subsidized Internet but were too skeptical to click the link. That Saturday while attending a church event, they learned the program is real and that their family qualifies.

 **Trust must be earned through relationship building in order for digital inclusion efforts to be adopted and successful.**

"I fairly trust the welfare system. They haven't let me down yet. I know my case worker since I was 18. I am 44. It started out that I have trust issues. But then she did what she say she was going to do. She got done what I needed her to. I earned her trust and she earned mine."

- Mother of 5 from South Side

"Food Soldier's at the top for sure for me; they're people like me; they serve a lot of people, they get overwhelmed and they keep at it. To me, that's love, win or lose, they're in for the right reasons."

- Anthony

RESIDENT STORY:

A mom from Hilltop had pandemic concerns and wanted to homeschool her children, but her Internet speeds weren't fast enough to handle multiple devices at a time. She hadn't switched providers because she didn't believe it would be more reliable. She ignored online ads and avoided grocery store salesmen. Eventually, she switched providers because of a recommendation from her neighbor. "I'm so glad I switched!"

→ **Distrust with ISPs stems from perceived greed and a lack of transparency.**

"It feels like an invasion of privacy.. What do they want with me and why do they care about this community? Companies put profits before people."

- *Resident living on the west side*

→ **The frequency of changing rates creates issues.**

"Internet companies always suck you in with a reasonable price then raise their fees."

- *JFS survey Respondent*

→ **Residents want transparency of terms and conditions, particularly when offered low-cost or no-cost plans.**

"The more incentives the more worried I get about what I am accepting. They [government] are offering a lot because of something."

- *Brand/Messaging sprint participant from Olde Towne East*

"If something is free, I want to look for hidden messages, quality, and how long it is free."

- *Brand/Messaging sprint participant, uses the data on her tablet for Internet*

 **Distrust with the government stems from a history of broken promises, feeling misled, and privacy concerns.**

"I don't trust them. The government system period. George Floyd all going on—local government is a problem... They lie."

- *Parent from South Side, household of 9*

"I don't trust the government...Without guarantees things just don't happen...There's no reason to believe them."

- *Co-design Sprint Participant, household of 6*

"My nephew would ask if they are going to spy on us."

- *New American, lives by the Reeb Avenue Center*

 **There is a stigma to overcome around accepting free services. Residents don't feel like they 'deserve' the service and may be taking away from others who need it more.**

"I probably would do free Internet, but I want to make sure I qualify...I just don't want to take away from somebody else who really needs it. Don't want to cheat the system and take from others."

- *Woman from South Side, volunteers at the Mid-Ohio Food Collective*

"Maybe I should save that for someone more deserving. An insecurity issue I have, I guess... It's like imposter syndrome—you're fake and someone will find out that I don't deserve it."

- *Mother of 3, described her family as 'extremely low-income'*

CONTINUING AND EXPANDING HCD IN THE WORK AHEAD

This Agenda is built on a strong foundation of resident input, and it is important to continue centering those most impacted in the work ahead. Continuing to align the vision of digital equity and strategies for digital inclusion in a way that is relevant to residents will foster the necessary buy-in and excitement around the work to drive community digital transformation. Opportunities for expanding HCD include:

Engage extremely disconnected residents.

Due to the urgency of this work and limitations in gaining access to residents without basic connectivity capabilities to engage in HCD activities during the pandemic (i.e. a smartphone, email address, and Facebook account), much is still unknown about the experience of extremely disconnected and disengaged residents. Bias exists in the resident insights gathered leading up to this Action Agenda due to the primarily remote nature of research necessary during the COVID-19 pandemic. HCD work moving forward should seek to bring residents who cannot easily interact virtually to the table as they are the most impacted and therefore the most critical stakeholders in this digital inclusion work.



Engage lived experience experts from all 8 target population groups.

Insights from first hand lived experts have not yet been adequately gathered in the disabled, students, and justice involved populations. HCD work moving forward should seek to build inroads with trusted community partners in all 8 target population groups in order to create avenues for bringing unheard and difficult to reach voices to the table.

Deepen understanding of program requirements for each priority population in each priority area initiative.

While key initiatives have been identified to deliver a comprehensive digital inclusion Agenda, the details of each program are yet to be defined. Much design work is needed to challenge assumptions, reframe problems, tailor solutions that are relevant to different key resident groups, and build energy and momentum for digital transformation throughout the region. HCD and co-design approaches can help ensure program designs are appropriately matched with desired experience journeys for each key population group.

Understand barriers to adoption that need to be overcome.

Achieving digital equity will require a community wide digital transformation. Resident expertise can help define messaging, identify learning and support gaps, tailor solutions to ensure relevance, and build the buy-in necessary for changing entrenched behavior.

Move beyond resident consultation and feedback to co-design.

Delivering on the expanded HCD opportunities above will require a deeper and more intentional level of practice moving forward. Co-designing with those most impacted can help manage work across complex problems by building alignment around creative solutions and driving momentum for action. This means pushing past developing solutions in isolation, or consulting with the community on pre-determined solutions—and instead bringing residents into a collaborative partnership. Co-design prioritizes relationships by using creative tools and building community capability along the way. It fosters trust through inclusive convening to share knowledge and decision making power.

Projects & Pilots to Date

Numerous pilot projects launched as emergency digital equity stopgaps or programs intended to test the viability of solutions have been initiated since the beginning of the COVID-19 Pandemic. All of the following projects/programs started in response to the pandemic and several more are in the design stage.

DEVICE DISTRIBUTION

Central Ohio Hotspot Access Pilot Program

A partnership between the Educational Service Center of Central Ohio, Mid-Ohio Regional Planning Commission (MORPC), and PCs for People to offer hotspot devices and a one-year unlimited data plan to eligible central Ohio households with a K-12 student for a one-time cost of \$20.

- » Results = This program distributed approximately 2,300 hotspots with the help of PCs for People

Refurbished Device Availability Pilot Program

In response to the COVID-19 shutdowns in the spring of 2020, members of the 2020 Leadership Columbus class connected with PCs for People to provide refurbished computers to low-income families in central Ohio. Seeded with donated computers from Columbus Metropolitan Library, three computer distribution events were held in May and June through which approximately 500 computers were distributed. A grant from the Columbus Metropolitan Library Foundation reduced the \$80 cost of the computers to \$20 for eligible families. Building on the partnership with PCs for People, the Central Ohio Broadband Access Pilot Program expanded the refurbished computer distribution effort. Grants from the City of Columbus, Franklin County, and multiple corporate funders made desktop computers available for \$20 and laptops available for \$50 to low-income families with K-12 students across Central Ohio. The program has also expanded the corporate computer donation efforts, with approximately two dozen local organizations having donated computers to date.

Columbus City Schools (CCS) Distribution

CCS provided each student with a Chromebook and more than 15% of students with hotspots. The district also setup WiFi repeaters on all 113 CCS buildings so the community could benefit from WiFi during the pandemic. Since the onset of the pandemic, CCS has collected data on the rollout of technology and has applied lessons learned to their new technology plan which entails CCS becoming a complete 1:1 district by the 2022-2023 school year and having complete technology integration in schools to become centers of 21st century learning.

- » **Columbus City Chromebook Funding**—With a separate grant from the City of Columbus, CCS was able to purchase roughly 20,000 Chromebooks to make one available to every student enrolled.

School Device Programs

Similar to CCS, several other school districts have developed one-to-one device strategies to provide every student with a digital device. There are important considerations to take into account related to these programs:

- » While these school district programs are key to getting devices into the hands of students, many have to be returned to the schools upon completion and generally have restrictions on software and Internet access, meaning they are limited in addressing the other digital access needs of the household.
- » In addition to the limitations imposed due to the devices belonging to the school, because they were purchased with one-time funds they are vulnerable to a lack of ongoing funding to refresh outdated devices in the future. This often is not a sustainable model beyond the lifecycle of the devices purchased during the pandemic.

Columbus Metropolitan Library (CML) Digital Access Programs

Since the beginning of the COVID-19 Pandemic, CML used Emergency Connectivity Funds from the American Rescue Plan Act to distribute 2,500 Chromebooks, 2,300 hotspots, and 150 tablets to residents as long-term loan items. In addition, a circulating collection of 200 hotspots are available from every CML location.

ADDITIONAL DEVICE PROGRAMS

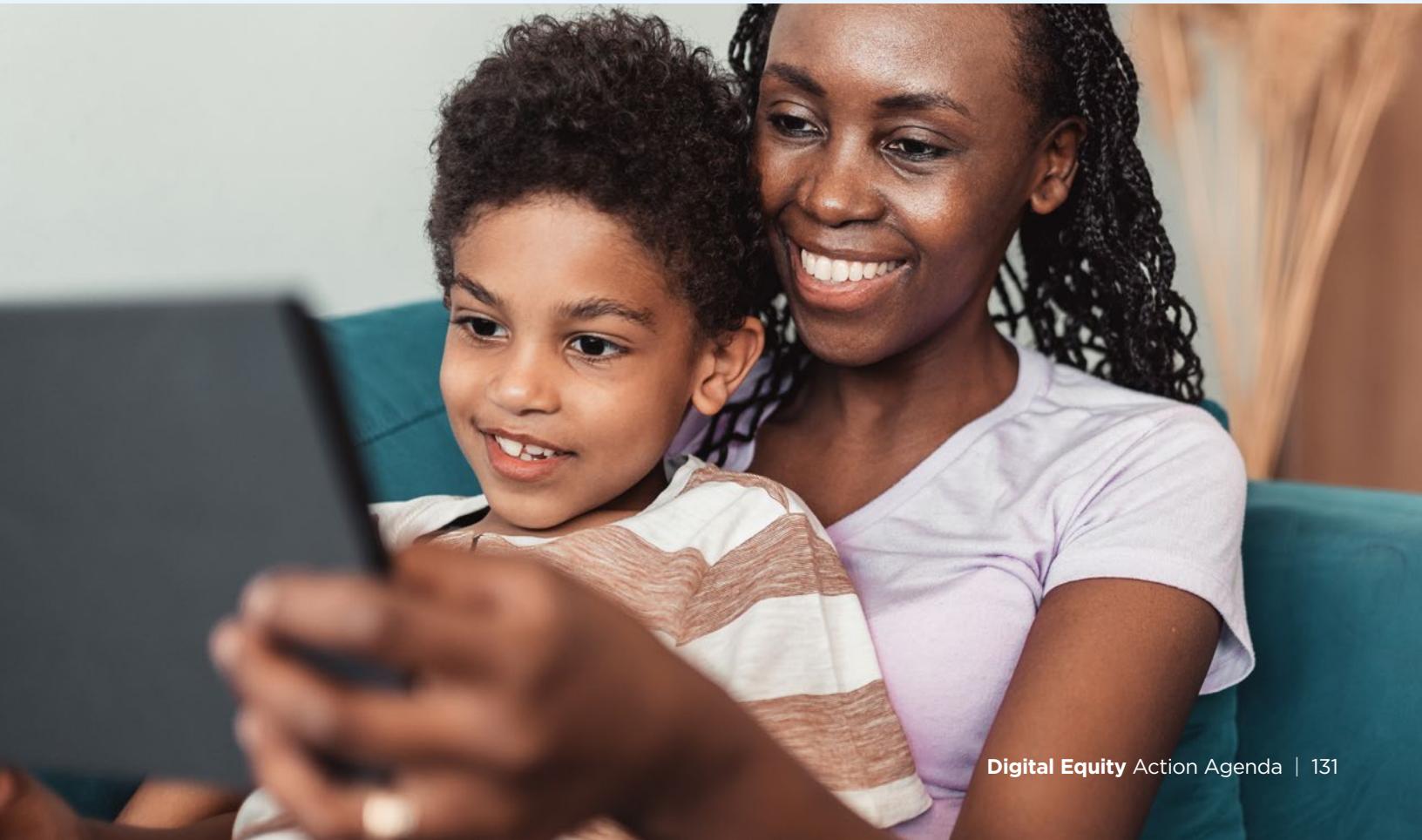
DEC interviews with community anchor institutions also highlighted many programs that included the provisioning of devices. Notable examples include the following:

- » **Columbus Metropolitan Housing Authority's (CMHA) Making Connections Project** installed new computer labs in eight of their communities using Ohio Capital Impact Corporation's (OCIC's) Huntington Digital Inclusion initiative.
- » **CMHA distributed 50 laptops and 50 hotspots** with one year of service to residents in their communities.
- » **The Community Shelter Board installed computers and increased Internet connectivity**, particularly at family shelter houses throughout the county.
- » **Goodwill distributed devices** to be used for workforce development purposes generously sponsored by philanthropic business partners.
- » **Ohio Health provided iPads** along with the delivery of primary care, women's health services, and prenatal care, regardless of one's ability to pay directly to residents, through their Wellness on Wheels program
- » **OhioMeansJobs Center Computer Lab** enables people to look for work. The OMJ Center operator is Equus Workforce Solutions and career service providers include Goodwill, the Columbus Urban League, Jewish Family Services, and others.
- » **The Central Community House's Technology Access Program (TAP)**, sponsored by Charter Spectrum, distributed Chromebooks and hotspots to help seniors maintain/increase social connections during the COVID-19 pandemic.
- » **The Columbus Foundation's Emergency Response Fund supported device provisioning for social service agencies** who were forced to quickly transition to remote work during the pandemic.

- » The Columbus Metropolitan Library's computer labs remain a valued access point for customers.
- » The Ohio State University's Digital Flagship program equipped all incoming students from fall 2018 to spring 2022 with iPads and made skills training available.
- » The Workforce Development Board provisioned laptops to support its workforce development programs administered by various partners.

INSIGHTS

- Demand for devices was still high even though most households were located in school districts that provide devices and hotspots for students. School-provided devices alone are unable to meet our residents' technology demands.
- If purchasing equipment in advance, secure storage was an important consideration. It becomes an even more important consideration when determining the efficacy of scaling a device distribution program.
- Device needs are going to evolve as time goes on. There is an increasing need for tech support and replacement devices because devices have finite life cycles.



DIGITAL SKILLS PROGRAMS

Digital Skills 101 Workshops

Goodwill Columbus and Columbus Metropolitan Library partnered to restart in-person Digital Skills for Life courses at seven libraries beginning in November 2021. That count doubled in January 2022 with courses being offered in 14 locations. To-date approximately 300 people have participated.

The Technology Access Project (TAP) for Older Adults

Developed by the Central Community House, located in the Near East side of Columbus. The Central Community House is a non-profit community center, part of the settlement house movement that brought social services to underserved neighborhoods. TAP was developed with the objectives of maintaining/increasing social connectedness during the COVID-19 pandemic, and supporting Village Central's mission of helping seniors live safely and comfortably in their homes. To date, 186 seniors have participated in TAP.

- » Findings reveal that access to technology (i.e. Chromebooks, hotspots), combined with training, increases seniors' ability to connect with family and friends and to participate in social activities which combat isolation. The evaluation also found that the TAP training program increases seniors' confidence levels, as it relates to utilizing technology. It was determined, though, that many seniors still struggle with applying some technology skills, suggesting a need for refresher courses and next level training. The evaluation found that seniors who have access to technology are more socially connected and less isolated.³¹

“That’s our senior citizen group. That’s where I go for help. I go on Wednesday and Tuesdays for a computer class. Most of the people that I know of who need help, I send them to Central...When that class stops though in December...I don’t know what’s going to happen.”

- Senior

³¹ Kabore, T. et al. “The Technology Access Project (TAP): Decreasing Social Isolation for Seniors during the COVID-19 Pandemic and Beyond.” Central Community House, 2021.

Summer STEAM Programs

The City of Columbus' Department of Technology worked through Smart Columbus to award \$437,500 in grants to support the expansion of three summer Tech training programs for Columbus youth in 2021. The City has renewed this effort with an investment in 3 programs in 2022.

ARTSWAY - Columbus Summer Tech Youth Mural Program	6 session cap for high schoolers to complete a mural and infuse technology using adobe creative suite and applying augmented reality (AR) technologies that allow a mural to "come to life" as an animated feature viewed through a smart phone screen.	46 Students completed the program from 17 schools
CCAD College Preview is an in-residence pre-college program	An in-residence pre-college program that ran from July 11-July 31, 2021 focused on animation. All four students were provided a Dell Precision 3351 laptop, upgraded to 6-cell batteries and supported with a year of Basic Warranty Service. Further specs include 256 GB system storage drive, Intel Core i7 10th Gen 10850H 2.7 Ghz Processor. This laptop is ideal for students undertaking digital animation. Students keep these laptops in perpetuity.	4 Female CCS Students
METRO Summer STEM Camp	One week camp programs included Minecraft Mathematics, Minecraft Manufacturing, Minecraft Maps, Cybersecurity Bootcamp, Scratch Coding, Lego Robotics, CAD and 3D Printing, and video production. Fund were also used to purchase STEM kits that include Lego Robotics, Sphero robotics, Arduino and Circuit Playground, BrainCo Neuromaker robotic hand, video equipment, and storage totes for kits supplies to be used at PAST, at partner sites and/or loaned out to schools or partners. To-date, these kits have been used in summer programs and at Maker Mania events where participants get hands-on experience coding robots and other STEM based activities.	400 Columbus city students





"I want to be a part of this program to gain more hands-on experience with graphic design, learning how to better use programs like Creative Suite. I also really want to participate in a community project."

"I want to be a part of this program because it combines my interest in both STEM and art to design a mural. I am passionate about drawing and expressing through art, and this program is a great opportunity for me to explore augmented reality technologies. Collaborating with other students in Columbus sounds exciting as well."

"One of the biggest things I learned was how to do digital art on photoshop and aftereffects. One of my favorite things I learned was how to upscale art in many different ways."

Digital Navigators

Goodwill Columbus, Jewish Family Services, Columbus Metropolitan Library, OhioHealth, Columbus Metropolitan Housing Authority, RemotEDx, Central Community House, and Columbus Rising have partnered to pilot coordinated Digital Navigator initiatives.

LOW COST INTERNET CONNECTIVITY EXPANSION

EBB Adoption

43,718 Franklin County Residents took advantage of EBB. As of March 2022, ACP Adoption in Franklin County (through March 2022) shows only 50,595 claimed subscribers.

CMHA Spectrum Internet Deal

The Columbus Metropolitan Housing Authority is covering the cost for Spectrum Internet for over 4,500 households across 18 communities for 5 years. Residents receive up to 200 Mbps Internet service, a modem and router at no cost to them.

Pilot of CBRS

Led by the City of Columbus and Smart Columbus, an affordable Internet pilot on the South Side anchored by Reeb Avenue Community Center, is bringing temporary affordable Internet service to nearby residents. Identification and selection of this area was informed by (1) data from Columbus Public Schools that showed expressed need for Chromebooks and hotspots, and (2) the technical feasibility of access to fiber optic infrastructure and base station height.

Key lessons from these ongoing pilots that are central to the community's future long-term investments to address the digital divide include the following.

1. Wireless solutions are suitable for providing connectivity options for certain network uses; they may not be ideal for all Internet uses, especially when video-streaming to or from residential households.
2. Wireless radio placements are expensive and time consuming for both supplier-provided transmission sites, but also for consumer adjustments necessary to achieve optimal network performance. Achieving optimal wireless performance requires adequate density and continual throughput management.
3. Many residents do not have an adequate understanding of the decision factors in choosing a suitable broadband plan, nor do they understand the nature of what they are paying for in terms of cost-benefit, or how to ensure that they are receiving those benefits.
4. Precision in determining the number of disconnected households remains difficult and is a moving target, due in part, to a lack of adequate data and continuous changes in consumer choices, technology, and provider market investments.
5. Although residents benefit from short-term, low-cost options, what residents in low-income neighborhoods want and need is what most broadband consumers want, and that is high-speed, affordable, and reliable Internet service.

OUTREACH AND ADOPTION

Introduction of New Market Option with Starry

Since the onset of the pandemic, Starry entered the Central Ohio market as a new alternative for in-home Internet service via a proprietary dense millimeter wave technology. The City of Columbus and Smart Columbus partnered with Starry to bring the service at a low-cost price point to the Near East Side. This pilot resulted in enrollment of nearly 200 near-east households for one year of free service with a low-cost option post-pilot. Learnings from this pilot program are highlighted below.

Resident Survey Results

- » 87% of residents polled responded that access to Internet at home is essential
- » 76% of residents polled responded that the quality of Internet connection provided through Starry was better than what they are used to and provided excellent connection
- » 76% of residents polled responded that if/when given a choice they will continue using the Starry Internet service
- » 63% of residents polled responded that they feel Starry Internet is the best option for them at this time
- » 80% of residents polled answered positively to recommending this service to friends, families and/or neighbors.



Technical Performance

This solution offers robust connectivity at very competitive rates. Residents were overall satisfied with the service they received for no cost. Unfortunately, some residents who wanted the services couldn't be served because their home didn't provide adequate line-of-sight to the base station. It was the intention of the pilot to serve single family homes as well as apartment units. Apartments where the base stations were located made up a majority of the participating households, whereas many single family homes did not qualify for service. Another potential obstacle in single family home adoption was the fact residential units being served needed to install an outdoor antenna, requiring owner/landlord approval.

Resident Recruitment to Participate in the Pilot

Starry led the coordination of 45+ Community events including - Winter Wear Gift Drops, Family Fun days with local food trucks, and Community Dinners. Smart Columbus contracted the National Center for Urban Solutions (NCUS) who went door to door alongside Starry, completing 1,600+ Door-to-Door. This substantial resident engagement across the neighborhood converted to 278 initially enrolled customers in King Lincoln.

INSIGHTS & LESSONS LEARNED

- **In person engagement is critical for success.** 100% of Pilot sign ups resulted from onsite engagement. In addition, creating an “event” to drive interest and attendance was critical. Food, giveaways and other incentives were important to draw residents’ attention.
- **Strong relationships with onsite building managers is key.** Developing a strong partnership with MDU management was important for enabling meaningful engagement with residents (scheduling, access, etc.). Strong relationships with building management also facilitated increased awareness and amplification of the Pilot offering and helped smooth access for installations.
- **Building trust across the community.** Repeated visits, demonstrated care with working in the community. Becoming a familiar face was important. All of these aspects were critical to building trust in the community and gaining success in signing up Pilot households.
- **The sign up flow and qualification process was not ideal.** The separate sign up process for the free program was complex and required additional explanation to residents, who often were confused about the program and offer.
- **Need Clear Messaging.** The door hanger collateral developed wasn’t effective in helping residents navigate the sign up and qualification process. There should have been simplified “next steps” as direct email or phone calls, even if it would have created more manual work.
- **Avoiding brand confusion is important.** Working with the NCUS team was awesome for Starry, but it became clear that more branding was needed to differentiate the different representatives for the customer.
- **The launch of the Affordable Connectivity Program (ACP) proved challenging.** With a big national push on ACP (from the government and all providers), there was resident confusion around understanding the “best offer” and some distrust around whether the programs were legitimate. Often it felt like the programs were ‘competing’ against each other.
- **Weather matters.** Good weather brings more people out to events and with lingering COVID issues over the last year, programming in-person events was challenging. We saw an uptick in resident engagement when the weather improved!

Data Model

DATA ANALYSIS & COMPARISONS

The same level of intentionality used to establish the priorities, strategies, and activities aimed at addressing the inequities of the digital divide were used in determining the size and scale of this Action Agenda. Using business intelligence developed by Columbus City's Office of Technology's Geographic Information System (GIS) team, a data model was developed to: 1) analyze relative need in areas of the county where the digital divide is most acute; and 2) create an empirical process for determining the size of the overall challenge.

Using the U. S. Census Bureau's American Community Survey (ACS) as its foundation, the Columbus GIS team created processes that enable a far more granular and refined look at digital equity in Franklin County. This has been accomplished by relating countywide parcel data to Census tracts used in the ACS. The coupling of this data provides a solid framework for making data-driven decisions, particularly when identifying specific areas of need that cross census tract boundaries as is the case with Opportunity and Poverty Blueprint Neighborhoods. This innovative process also keeps records current and more accurate as extrapolations use property records that are regularly updated.

A model was created using this enhanced data set that includes all Opportunity and Poverty Blueprint Neighborhoods as well as all areas of the county where the median household income is below a 200% poverty level (adjusted for the average household size in Franklin County³²). This poverty level is being used to align precisely with the level used to determine eligibility for the Affordable Connectivity Program (ACP) mentioned previously. The excerpt from this data set shown to the right shows the 25 areas of focus used to size this Action Agenda. The identification of these areas is not meant to imply the digital divide does not reveal itself in other locations throughout the county. It is being used as an empirical and defensible way to establish an overall size and scope of the Agenda.

Area	Median Income	% w/o Device	% w/o Internet
Harmon Road Corridor	\$ 16,397	39.73	50.16
East Columbus	\$ 20,280	13.39	35.07
Airport	\$ 22,193	13.44	34.23
Franklinton	\$ 24,646	17.60	40.68
South Linden	\$ 25,504	20.99	28.10
State of Ohio	\$ 25,526	18.58	33.24
Livingston Avenue Area	\$ 31,859	13.11	23.95
Milo-Grogan	\$ 32,085	17.62	25.84
North Central	\$ 35,542	13.58	23.70
North Linden	\$ 38,099	10.98	15.81
Near East	\$ 40,790	11.24	16.09
Northeast	\$ 43,023	9.70	14.31
Whitehall	\$ 45,591	8.02	13.90
Mid East	\$ 46,894	10.58	20.17
Wolfe Park	\$ 47,056	5.50	6.50
Greater Hilltop	\$ 48,025	9.16	18.38
Urbancrest	\$ 50,699	7.91	11.40
South Side	\$ 50,932	9.57	18.75
South East	\$ 53,796	3.33	11.38
Fifth by Northwest	\$ 54,427	3.45	8.99
Northland	\$ 54,531	6.79	10.77
Far South	\$ 54,675	11.13	15.58
Reynoldsburg	\$ 57,798	4.68	13.04
Obetz	\$ 65,201	3.24	8.38
Far East	\$ 66,349	5.12	9.51

³² The Federal Poverty Level is typically shown for a family of four, however the average household/dwelling size in Franklin County is 2.5. Consequently, calculations for 200% of the poverty level have been adjusted accordingly.

Important to note in the data set created by the Columbus GIS team is refinement of the term “household” used within the Census Bureau’s data. This is because Franklin County’s ability to drill down to the parcel level not only permits the identification of neighborhoods that cross Census tract boundaries, it also facilitates the ability to cross-reference which parcels contain Multi-Dwelling Units (MDU). These are multiple but separate housing units such as apartments and duplexes. This provides far greater clarity and accuracy with respect to the actual number of individual dwellings there are in a particular area.

Following the establishment of the base data model, research was conducted on what adoption rate is likely to be achieved within a Franklin County Digital Equity Plan. Anecdotal interviews with individuals leading similar initiatives in other cities illuminated challenges associated with connecting with under-resourced households. In nearly all cases, participation rates were quite low despite significant monetary investments in outreach. Locally, this finding was corroborated in outreach efforts associated with the Columbus connectivity pilots. The closest large-scale empirical evidence of this challenge came from the Federal Communications Commission’s Emergency Broadband Benefit program which provided low-income households subsidies for broadband service from May through December 2021. Overall participation in this program was approximately 20% of eligible households.³³ Taking these factors into account, but wanting to be aspirational when establishing targets, this Agenda and associated budget is calculated on a 30% participation rate.

Using statistical analysis that estimates the number of households likely to be eligible based on the criteria cited above yields a total of 80,257 households. An anticipated adoption rate of 30% means 24,077 households would stand to benefit from the digital equity plan evolving from this Agenda.

³³“A Roadmap for Affordable Broadband: Lessons from the Emergency Broadband Benefit.” USC Annenberg Research Network on International Communication, January 2022.



Appendix

FRANKLIN COUNTY
DIGITAL EQUITY COALITION



Terms & Definitions

DIGITAL EQUITY PLAN ACRONYMS AND DEFINITIONS

- » **ACS** – The American Community Survey administered by the U.S. Census Bureau is the premiere source for detailed population and housing information in the United States.
- » **Bandwidth** – The throughput, or ability to move information through or from a communication device, system or subsystem, and is usually measured in quantities of data per second such as kilobit, megabit, or gigabit.
- » **Broadband** – High-speed Internet access that is always on and faster than the traditional dial-up access. Standards for what constitutes “high speed” change over time.
- » **CBRS** – Citizens Band Radio Service. Wireless broadcast spectrum designated by the Federal Communications Commission (FCC) that is shared among three tiers of users with varying levels of access based on licensing. This spectrum can be used for Internet connectivity.
- » **CML** – The Columbus Metropolitan Library.
- » **DEC** – Digital Equity Coalition. The broad coalition of over 30 social service, commercial/business, education, government, healthcare, and other nonprofit entities that formally banded together in spring 2020 to respond to the immediate need to address gaps in digital equity, particularly as it concerned K-12 education when the COVID-19 pandemic struck in spring 2020.
- » **Dark Fiber** – Fiber optic cable which is not currently connected to active communications equipment.
- » **Digital Divide** – The gap between those who have affordable access, skills, and support to effectively engage online and those who do not.
- » **Digital Equity** – Digital equity is a condition in which all individuals and communities have the information technology capacity needed for full participation in our society, democracy, and economy.
- » **Digital Inclusion** – The activities necessary to ensure that all individuals and communities, including the most disadvantaged, have access to and use of Information and Communication Technologies (ICTs).
- » **Digital Redlining** – Discrimination by Internet service providers in the deployment, maintenance, or upgrade of infrastructure or delivery of services. The denial of services has disparate impacts on people in certain areas of cities or regions, most frequently on the basis of income, race, and ethnicity.
- » **FTTH** – Fiber to the Home. This is infrastructure that brings fiber optic cable into a residence, providing fast and reliable Internet connectivity.
- » **Hotspot** – A small separate device or a service on a smartphone that creates limited WiFi coverage for nearby devices using a cellular data network.

- » **Households & Dwellings** – These are synonymous terms used in this plan. Both refer to a single housing unit (one house, one half of a duplex, one apartment in a multi-unit building). Household is a term used by the American Census Bureau in the American Community Survey (ACS) when reporting data by census tracts. The term dwelling is derived from local data analysis updated more regularly than Census data within geographic regions not used by the Census Bureau. Consequently, the term dwelling is presumed to provide a more accurate and up-to-date count of housing units than what is provided by the ACS.
- » **IIJA** – Infrastructure, Investment, and Jobs Act. This is Public Law 117-58 passed by the 117th Congress and signed into law on November 15, 2021. It provides a total of \$65 billion for broadband investments.
- » **IOT** – Internet of Things. Networked hardware and software devices, typically sensors that have the capacity to exchange data that inform users or other technologies.
- » **ISP** – Internet Service Provider
- » **MDU** – Multi Dwelling Unit, a building with multiple tenants
- » **Middle Mile** – The infrastructure (usually fiber optic) between global Internet networks and local networks that enable Internet connectivity for homes, businesses, and community institutions.
- » **MORPC** – The Mid-Ohio Regional Planning Council
- » **Public-Private Partnership (PPP)** – A partnership relationship between public and private sector entities for the purpose of delivering a project or service.
- » **Tier Flattening** – Term used to describe when Internet Service Providers (ISPs) eliminate cheaper rate tiers for low and mid-speed Internet access, except at the very slowest levels. The effect is to make higher-speed and higher-priced plans the only viable alternative to meet household needs, often at prices that are not sustainable for low-income households.

Digital Navigator Pilots

Goodwill Columbus - Digital Coach

Current Status: GWC currently has one Digital Coach who facilitates trainings on Beginning Computer Skills and How To Use Your Tablet/Phone at CML branches, Reeb Avenue, Community Connections, OMJ and at GWC. We are looking to expand to two Digital Coaches to work in other community locations.

Future Status: We hope to have someone who will create or co-create with other partners, content that will cover material from all the identified levels from the larger group. Those levels include Introduction to Computers, Skills for Life, Skills for Work (can't remember the exact levels from last week). We won't be creating content for Careers in Tech, that program for us is fully operational on a small scale relative to the size of our team and scope of work. We also hope to have a Hub Coordinator who will coordinate outreach, training, and partnership collaboration.

Jewish Family Service - Digital Coach

Digital Coaches will provide support by helping individuals find affordable Internet, obtain low-cost or free devices and provide digital skills trainings and tech support through both one-on-one assistance and group trainings. This will often be embedded into the work we do with clients. We hope to have someone who will create, or co-create with other partners, digital training modules that will be developed and recorded in our in-house studio space. We also hope to support a Hub Coordinator who will coordinate outreach, training, and partnership collaboration.

CMHA - Digital Connector

Residents will be able to connect with them in-person and over the phone and will also have a self-directed option they can use to access digital resources. The Digital Connector will complete assessments of residents' digital needs, create individualized plans to address their needs, refer residents to services, and follow up with residents to manage the execution of their plan.

Ohio Health - Community Health Worker

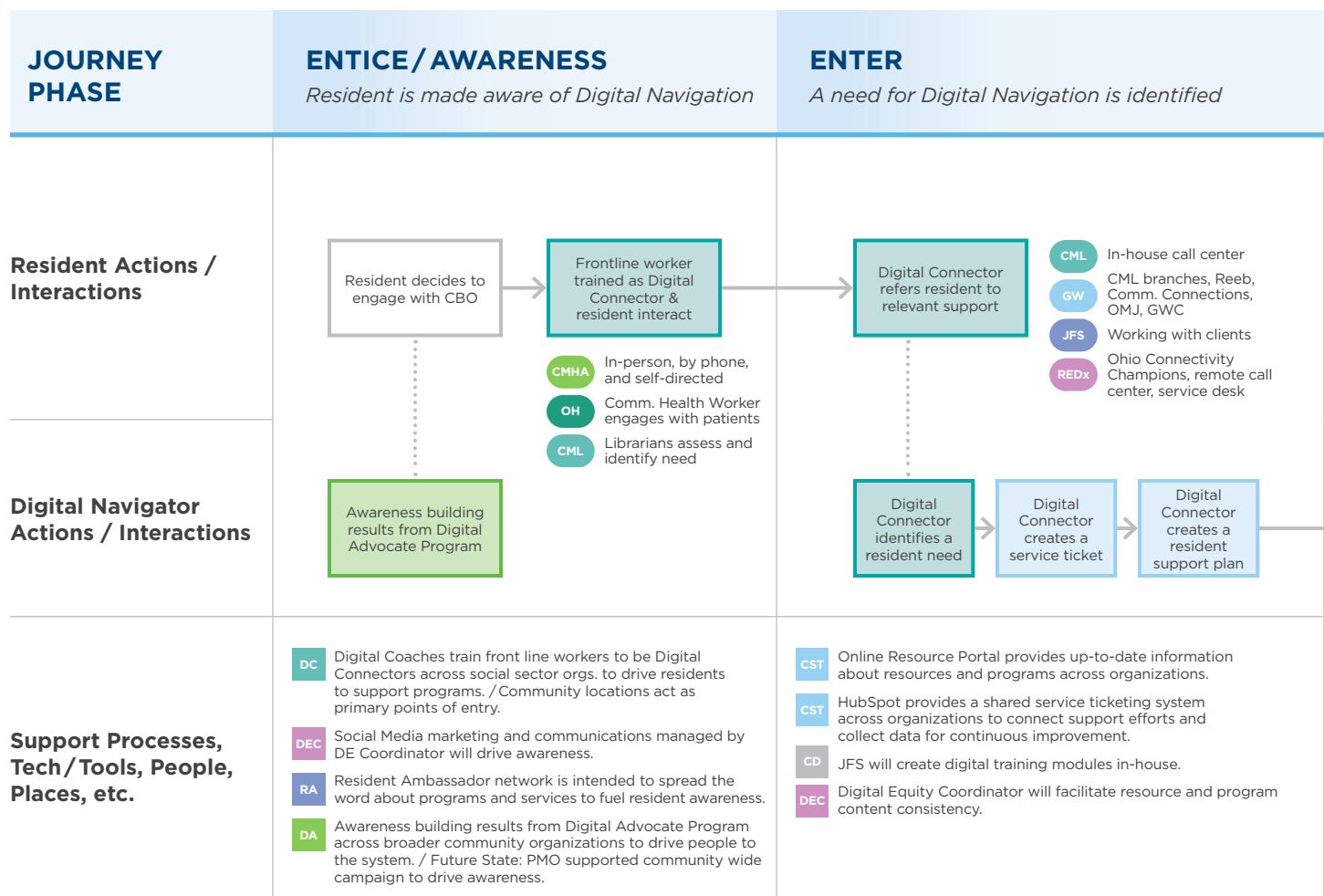
In association with the Cbus WiFi 2022 Internet service pilots, two full-time staff will provide the following outreach: attend community events to promote the program by contacting existing OhioHealth patients that live within the two priority neighborhoods – South Side and King-Lincoln. They will provide education to qualifying families on the SMART Columbus digital equity resource, benefits and utilization. They will also assist qualifying families with enrollment via SMART Columbus website and in arranging transportation to pick up device offered. They will provide education on utilization of Internet to engage, promote, and support health and well-being. In addition, they will assist with enrollment into OhioHealth MyChart and utilization of tool, while also providing information on “Where To Go For Care” (Primary, Virtual, Urgent, Emergency).

RemotEDx - Ohio Connectivity Champions

Ohio Connectivity Champions are a team of 15 remote customer service agents who assist families in finding affordable and reliable Internet through a call center and service desk. We focus on Internet acquisition.

Columbus Metropolitan Library - Digital Coaches

CML currently employs 2 Digital Coach employees. The delivery model was planned as a central call center model. In reality, we have an in-house call center who is the first round for any intake, they will be transferring or creating tickets for the Digital Coaches. Both Coaches will be working with customers primarily by phone.



Participating Pilot Organizations

CMHA	CMHA
OH	OhioHealth
CML	Col. Metropolitan Library
GW	Goodwill Industries

Orgs. that will be joining:
Central Community House
Columbus Rising

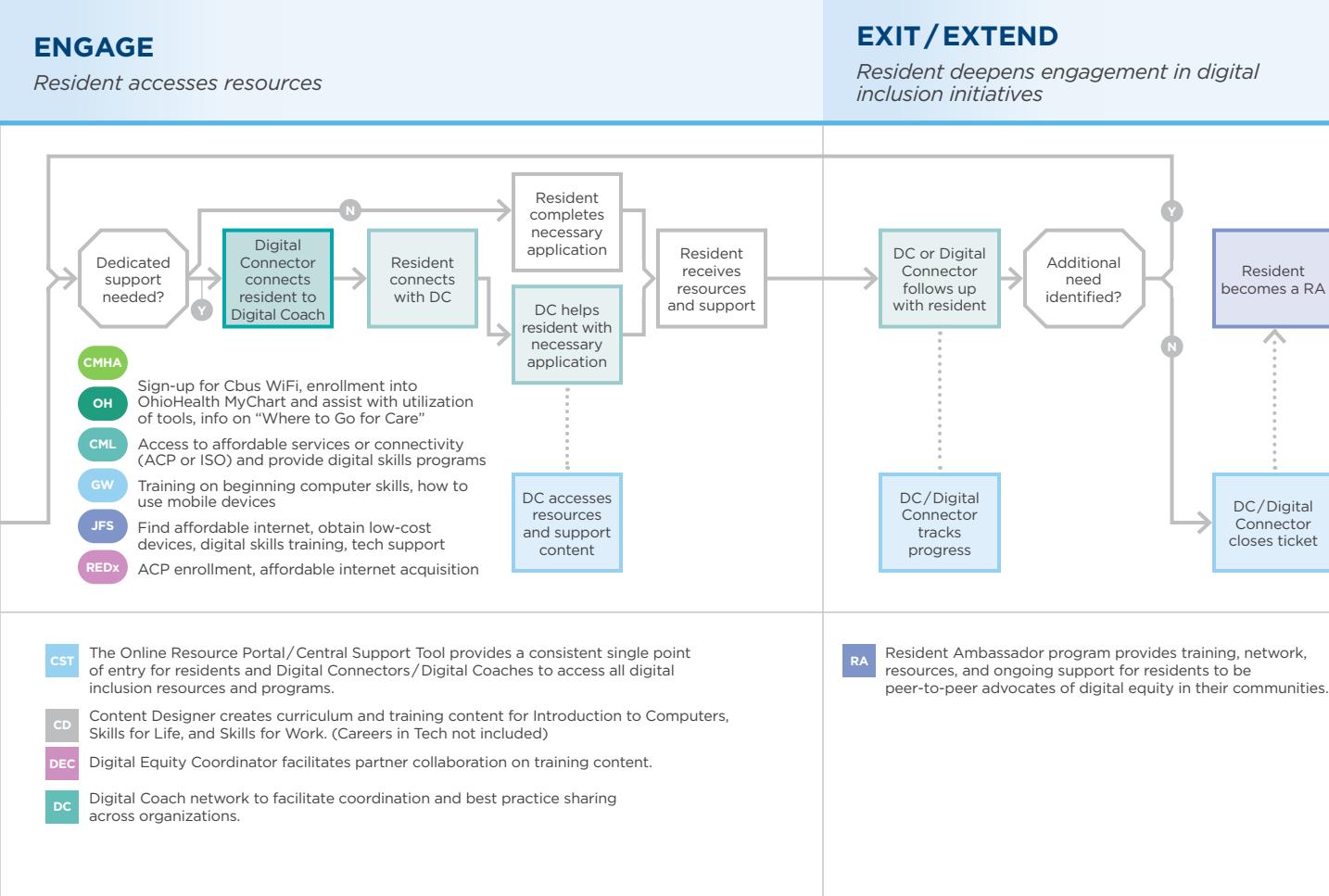
Roles & Central Functions

DA	Digital Advocates
DC	Digital Connectors
DC	Digital Coaches
CST	Central Support Tool

RA	Resident Ambassadors
DEC	Digital Equity Coordinator
CD	Content Designer

We've talked about the option for some referrals to branch staff if people need local help. Our Digital Coaches are being trained to support digital inclusion efforts, including access to affordable devices or connectivity (ACP or low cost ISO programs) and to provide (or refer to) digital skills.

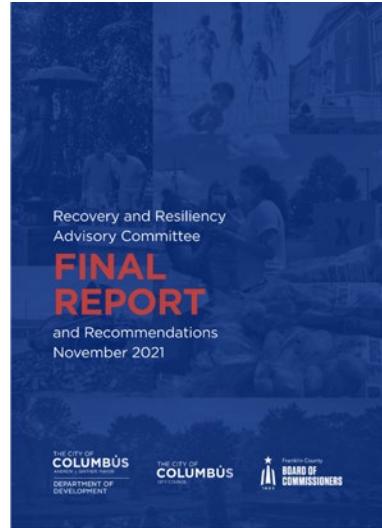
We are focused on not being too prescriptive about customer needs: customers set the success metric with their requests. To start, our Digital Coaches will support our recent device distribution project by proactively reaching out to those customers who recently received a device or hotspot connectivity.



Recovery & Resiliency Report Recommendations

This Action Agenda aligns with key recommendations from Columbus' Recovery and Resiliency Advisory Committee's Final Report is critical. The following recommendations from the 2021 report are of particular note:

- » **Recommendation #16:** The Recovery and Resiliency Committee recognizes the significant progress of the Franklin County Digital Equity Coalition and recommends strong alignment and coordination to create an affordable, reliable, high-speed Internet option for low-income residents, promote adoption of Internet services, improve digital equity skills and technical support, and expand device access in the city of Columbus' eight opportunity neighborhoods and the five Franklin County Poverty Blueprint areas.
- » **Recommendation #17:** The Recovery and Resiliency Readiness Committee recommends the city of Columbus and Franklin County create a grant program for eligible organizations working in the city of Columbus eight opportunity neighborhoods and five Franklin County Poverty Blueprint areas to increase adoption of broadband services, improve digital life skills, increase device access, and provide technical and digital navigation support and skills training.
- » **Recommendation #18:** Create a governance and oversight organization to manage the City, County and school district(s) investment in broadband infrastructure.
- » **Recommendation #19:** The city of Columbus hires a Digital Inclusion program officer to increase the City of Columbus' Department of Technology organizational bandwidth and to ensure direction, coordination, implementation and execution of the Digital Inclusion recommendations.
- » **Recommendation #20:** Create a "hotspot" bank for short-term broadband accessibility for households within the eight opportunity neighborhoods and five Franklin County Blueprint areas while the "network"...is being built and/or if the federal broadband benefit is no longer available.
- » **Recommendation #21:** Industry Aligned Short-Term Credential Ecosystem: Align area providers offering short-term, certificate programs for living-wage+ jobs (Per Scholas, CSCC, OhioMeansJobs Center, etc.) with area jobs data and employer need to create a regional, comprehensive, diverse talent pipeline across industry sectors aligned with One Columbus and JobsOhio data. Fund student certificate completion beyond traditional WIOA funding model (remove burden of paying for certificate from the individual).



Provide funding to support skill development as an on-ramp for certification programs (e.g., job-related ESL, digital skills), case management to address barriers to student success, and employment coaching for job readiness skills. Prepare employers to receive employees from these programs by developing meaningful employment onboarding programs, including on-the-job learning and apprenticeships. Use Hospitality Diversity Apprenticeship program as an emerging best practice for long-term funding sustainability.

- » **Recommendation #22:** Regional Youth/Young Adult Career Exploration and Work-Based Learning System: Increase current system capacity by aligning existing programs funding additional career coaching/employment navigators for youth and young adults. Fund additional capacity to focus on the high school classes of 2020, 2021 and 2022 beyond IKIC/WDCBO program and CSCC's Forward Together. Fund capacity to work with area employers to scale successful earn and learn models. Reenvision the area's approach to youth summer jobs.

DIFFUSION OF INNOVATION MODEL

One of the best known social science theories, the Diffusion of Innovation, developed by E.M. Rogers suggests that adopters of new innovations will do so in five distinct categories or groups. These include:

- » **Innovators**—These are people who want to be the first to try the innovation. They are venturesome and interested in new ideas. These people are very willing to take risks, and are often the first to develop new ideas. Very little, if anything, needs to be done to appeal to this population. 2.5% of population.
- » **Early Adopters**—These are people who represent opinion leaders. They enjoy leadership roles, and embrace change opportunities. They are already aware of the need to change and so are very comfortable adopting new ideas. Strategies to appeal to this population include how-to manuals and information sheets on implementation. They do not need information to convince them to change. 13.5% of population.
- » **Early Majority**—These people are rarely leaders, but they do adopt new ideas before the average person. That said, they typically need to see evidence that the innovation works before they are willing to adopt it. Strategies to appeal to this population include success stories and evidence of the innovation's effectiveness. 34% of population
- » **Late Majority**—These people are skeptical of change, and will only adopt an innovation after it has been tried by the majority. Strategies to appeal to this population include information on how many other people have tried the innovation and have adopted it successfully. 34% of population.
- » **Laggards**—These people are bound by tradition and very conservative. They are very skeptical of change and are the hardest group to bring on board. Strategies to appeal to this population include statistics, fear appeals, and pressure from people in the other adopter groups. 16% of population.

Communication and marketing to these five groups is likely to be different—the messages and frequency of communication for each of the five groups will be different, as the decisions to participate—the motivations to participate are unique each group. Early successes in outreach

and adoption of digital inclusion programs and services are most likely to be group 1. This group also is a strong component to reach group 2 and group 3, as success for group 1 turns them into evangelists for groups 2 and 3.

Spending time understanding the needs of these groups, especially 1 through 3, aka end-user design of programs and services will be vital to achieving outcomes and impacts, in other words achieving digital equity.

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KEY PERFORMANCE INDICATORS^{ab}

^ahttps://docs.google.com/document/d/1YaRPlZG_XoJcAyMZAUS0GDSa60EPwiBaTHhPin45d84/edit

^bBecause KPIs were not completed within the outline, particularly for Connectivity and Digital Life Skills, they are missing below. **However**, knowing they *had* to be established and there *had* to be congruency among all the KPIs, a separate document with all of them was created. Please see [KPI Summary](#), a Google Doc upon which comments can be added.



**FRANKLIN COUNTY
DIGITAL EQUITY COALITION**