LakeCounty

LAKE COUNTY DIGITAL GROWTH INITIATIVE

LAKE COUNTY

BROADBAND & DIGITAL EQUITY ACTION PLAN

APPENDIX A. PROJECT DETAILS

Contents

The Broadband & Digital Equity Action Plan includes seven strategies and eleven actionable projects Lake County can implement

	Goal	Strategy Recommendation	Supporting Projects
Availability & Access	*Expand countywide access to reliable, high-speed broadband infrastructure*	1 Facilitate expansion of broadband service to un- and underserved areas	1-1 Support the BEAD Process
		2 Enact policies to streamline and coordinate broadband infrastructure deployment	2-1 Implement a Dig Once Policy
		3 Increase free, public internet access in high-need areas	3-1 Pilot Public Wi-Fi Hotspots
Adoption & Affordability	*Remove barriers to affordable internet, device access, and digital skills training*	4 Increase access to affordable internet and digital devices	4-1 Device Distribution Campaign
			4-2 ACP Outreach and Enrollment Campaign
		5 Improve digital literacy and training opportunities	5-1 Expand Digital Navigators
			5-2 Coordinate Digital Literacy Programming
Governance & Sustainability	*Build an ecosystem of local partners to drive digital inclusion efforts*	6 Create a governing structure for the coordination of county broadband and digital equity activities	6-1 Hire a Digital Equity Manager and Broadband Coordinator
			6-2 Create a County-led Digital Equity Coalition
			6-3 Launch a County Digital Equity Resource Website
		7 Establish a funding mechanism to support long-term project sustainability	7-1 Establish a Digital Equity Fund

Support the BEAD Process

STRATEGY 1 Facilitate expansion of broadband service to un- and underserved areas

Project Description

According to FCC data, 98% of Lake County locations are considered "served" by broadband infrastructure since they have access to broadband at speeds of 100/20 Mbps or higher.[1] The remaining 2% (3,870) of locations are eligible for funding through the Broadband, Equity, Access and Deployment (BEAD) Program. BEAD funding will be administered by the State of Illinois through a competitive subgrantee process that will award ISPs grants to deploy infrastructure to connect all unserved and underserved locations in the State. While the State will be responsible for administering the BEAD program, Lake County can support the process in the following ways:

1. **Support the BEAD Challenge Process:** As required by the BEAD Program, each state will conduct a process where stakeholders can challenge whether a location or Community Anchor Institution (CAI) is considered served, underserved or unserved.[2] The purpose of the challenge process is to determine the number of BEAD eligible locations and to ensure coverage data is accurate. Units of local governments, nonprofits and broadband service providers are eligible to submit challenges. According to the Illinois Office of Broadband (IOB), the challenge process is expected to run sometime between December and January, during which eligible entities will have a two-week period to submit challenges.[3] Lake County can promote the challenge process by publishing informational content on County websites and social media platforms. The County and community organizations can consider partnering to assist interested residents with performing speed tests and submitting challenges. Given the short timeframe, the County can consider targeting outreach efforts to areas with limited or inconsistent broadband service (as identified by data and community engagement), such as Newport Township, Round Lake Park, and Grayslake, as well as multiple dwelling units and/or housing authority properties or designating a community anchor institution to lead outreach and submit resident challenges to the state portal (currently in development).
2. **Supporting ISPs to apply for BEAD funding:** The County can engage with ISPs ahead of the BEAD subgrantee process and encourage them to submit applications for serving the unserved and underserved locations as well as CAIs. Through outreach the County can potentially encourage multiple ISPs to bid to serve eligible Lake County locations, thereby increasing competition and maximizing use of federal funds. The Connect Illinois Initial Proposal Volume 2 outlines scoring criteria for the BEAD subgrantee selection process. The State will allocate 4% weight to evidence of community support, and 4% for verified financial commitment from the community. The County can provide letters of support to ISPs it finds are congruent with its goals, which will result in a higher score for that ISP and potentially improve its selection chances.

Impact

Rationale	By supporting the BEAD process, Lake County will help all unserved and underserved locations across the county gain access to broadband at speeds of 100/20 Mbps or higher.
Potential Risks	ISPs do not claim all unserved and underserved locations
KPIs	# of county broadband serviceable locations served by broadband at speeds of 100/20 Mbps or higher
Estimated Cost	N/A
Potential Partners	ISPs, Illinois Department of Commerce Office of Broadband, Illinois Broadband Lab, Local Governments, Nonprofits, Lake County Housing Authority, Lake County agencies

Broadband, Equity, Access and Deployment (BEAD) Program

The BEAD Program was established through the Infrastructure Investment and Jobs Act and makes available $42 billion to expand high-speed internet access by funding planning, infrastructure deployment and adoption in all 50 states, territories and the District of Columbia. The program is the single largest federal investment in broadband to date and provides a historic opportunity to connect all households with high-speed internet infrastructure.

**[1] Served Locations: locations with speeds greater than or equal to 100/20 Mbps. Underserved Locations: locations with speeds of less than 100/20 Mbps and greater than or equal to 25/3 Mbps. Unserved Locations: locations with speed less than 25/3 Mbps; [2] FCC Data; [3] These dates are tentative and are subject to change by the Office of Broadband*

Support the BEAD Process

Implementation Roadmap

Estimated Timeline	**Short-Term (6-12 months)** Illinois Office of Broadband anticipates that the BEAD challenge process will be held in December or January. The BEAD subgrantee selection process is planned to be held in 2024.

Phase 1: BEAD Challenge Process

1.1 Engage the Special Committee on Broadband to align on a plan for supporting the BEAD Challenge Process

1.2 Publish informational content about the challenge process on County websites

1.3 Support interested residents, organizations and local governments with submitting challenges, as feasible

Phase 2: BEAD Subgrantee Process Support

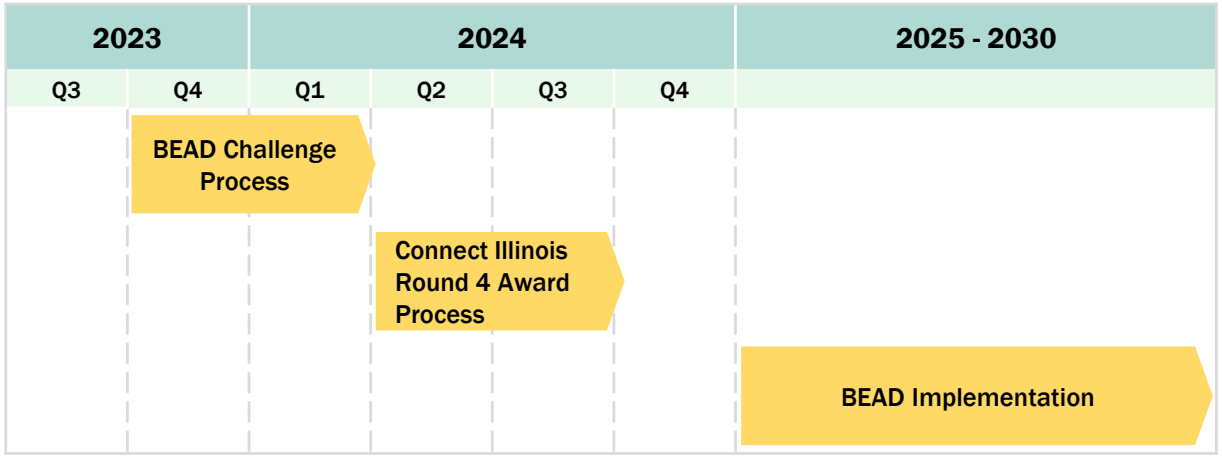
2.1 Have discussions with ISPs and encourage them to apply for BEAD funding to connect unserved and underserved locations in Lake County

2.2 Provide Letters of Support to selected ISPs

Phase 3: BEAD Implementation

3.1 Provide permitting support and access to ROWs to ISPs connecting unserved and underserved locations through the BEAD program.

Estimated BEAD Timeline



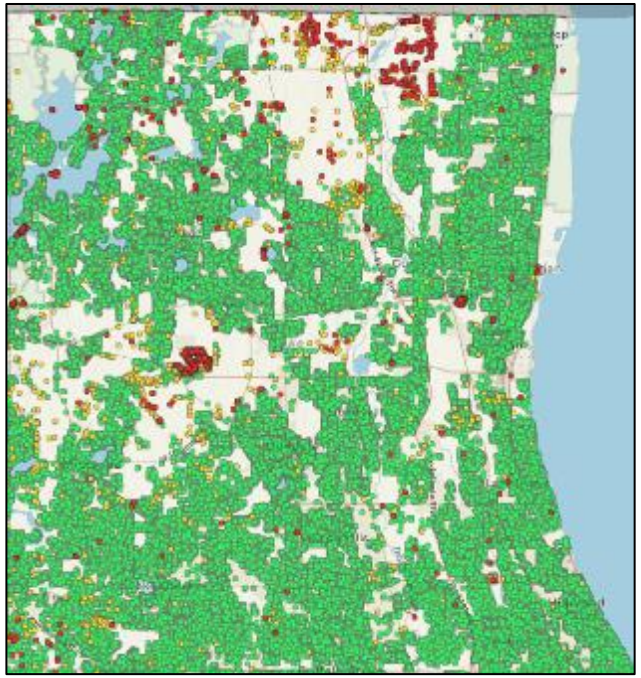
Note: Connect Illinois Round 4 is the name for Illinois' BEAD subgrantee selection process. The Challenge Process timeline is an estimate from the Illinois Office of Broadband and may change.

Thinking Beyond BEAD: Competitive RFP and Grant Process for Fiber Deployment

To increase fiber access for residents and businesses, the County can supplement the broadband infrastructure buildout resulting from BEAD, by creating its own **County-run grant process for strategic fiber deployment**. This process would involve the County awarding ISPs funding in exchange for binding commitments to expand last-mile fiber connections to residents and businesses. Municipalities that have run similar processes have been able to secure large investments from private ISPs by committing limited public funds. For instance, in 2021 Vanderburgh County in Indiana entered into a $40 million public-private partnership with AT&T to expand fiber service, where AT&T invested $30 million, and the County provided $10 million of American Rescue Plan Act (ARPA) funds. In 2022, McHenry County released an RFI for a Broadband Network Partnership for the County's existing and planned fiber network.

Support the BEAD Process

BEAD-Eligible Residential Locations

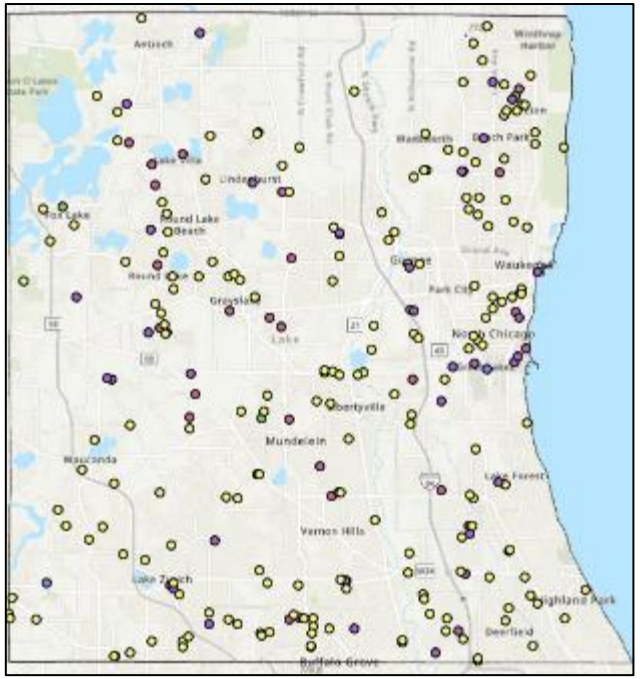


Source: Map was screen-captured from the Illinois Broadband Lab Map on 10.26.23

Legend

- Unserved Residential Locations (<25/3 Mbps)
- Underserved Residential Locations (≥25/3 Mbps but < 100/20 Mbps)
- Served Residential Locations (≥100/20 Mbps)

BEAD-Eligible Community Anchor Institutions



Source: Connect Illinois BEAD Initial Proposal Volume I

Legend

- School or Institute of Education
- Libraries
- Health Clinic/Center, Hospital, Medical Provider
- Public Safety Entity
- Community Support Organization

BEAD Eligible Residential and Business Locations

There are approximately 3,870 unserved and underserved locations (including both residential and business locations) that are eligible for BEAD funding in Lake County.[1] Currently, these locations do not have access to broadband infrastructure at speeds of 100/20 Mbps or higher. The largest concentrations of underserved and unserved locations can be found near Old Mill Creek, Newport Township, Round Lake Area and Grayslake. As part of the BEAD process, ISPs will receive funding to connect these locations with high-speed broadband infrastructure.

BEAD Eligible Community Anchor Institutions (CAIs)

According to the BEAD program, CAIs are eligible for BEAD funding if they do not have access to broadband at speeds of 1000 Mbps/1000 Mbps (symmetrical 1 gigabit speeds) or higher. In Lake County, there 285 BEAD eligible CAIs that are dispersed throughout the county. As a preferred BEAD technology, increased build out of fiber-to-the-premises (FTTP) infrastructure can help in providing CAIs with symmetrical 1 gigabit speeds. If ISPs are awarded funding to upgrade eligible Lake County CAIs to 1 gigabit service, fiber infrastructure may be expanded in areas across the county.

It is important to note that the BEAD program includes a prioritization framework which requires the State to award funding in a manner that ensures deployment of service to all unserved locations. If the State has sufficient funds, it must deploy service to all underserved locations. If the State can fund all unserved and underserved locations in its jurisdiction, it should allocate remaining funding to connect eligible CAIs. Given this prioritization framework, it is likely that Illinois may not have sufficient BEAD funds to deploy service to CAIs. However, Illinois has indicated that CAIs may be eligible for future rounds of State-led broadband grants.

[1] The number of unserved and underserved locations was derived using Version 2 of the FCC BDC data and Version 2 of the FCC Location Fabric.

Implement a Dig Once Policy

STRATEGY 2 Enact policies to streamline and coordinate broadband infrastructure deployment

Project Description

Many local communities across the country are adopting policies or streamlining existing processes to encourage public and private investment in broadband infrastructure. **Lake County can consider adopting a Dig Once policy, which provides a framework for streamlining and coordinating major infrastructure improvements.** Dig Once policies can take different forms depending on the goals of the municipality. One type of Dig Once policy focuses on infrastructure by requiring (or encouraging) the opportunity for the installation of broadband infrastructure during excavation projects (e.g., roadway improvements, sewer construction, or utility projects). This minimizes right-of-way disruptions and reduces the need for costly excavations. By sharing the cost of installing infrastructure between multiple stakeholders (e.g., telecommunications companies, utilities, and government agencies), a Dig Once policy can result in cost savings for all parties involved. In fact, a study from the US Government Accountability Office found that coordinating broadband and roadway projects could result in savings of up to 33% per mile in high density areas and up to 16% per mile in rural areas. The second type of Dig Once policy is less focused on infrastructure build-out requirements, and more on better coordinating departmental cross-communication so multiple investments can be made simultaneously (e.g., upgrading water and sewer lines while rehabilitating a roadway).

In August 2023, Illinois approved the Dig Once Act which states that multiple Illinois departments including the Department of Transportation and the State Toll Highway Authority will work with the statewide One-Call Notice System to develop rules "to reduce the need for the relocation of public water and wastewater infrastructure and to promote the deployment of broadband infrastructure and underground utility facilities in an efficient and competitively neutral process for all road, highway, tollway, and expressway projects."

Building upon the Illinois Dig Once Act, Lake County can consider enacting a Dig Once policy in that would promote the opportunity for the installation of broadband infrastructure (such as conduit or fiber) during construction projects in County-owned right-of-way. Important considerations for the County in adopting a Dig Once policy include:

- **Prioritization:** The County should identify and prioritize Dig Once projects that will maximize the use of broadband infrastructure and promote the County's long-term goals. Potential prioritization factors the County should consider include 1) ability to install conduit over longer and continuous passages, 2) interest from potential ISP partners in expanding broadband service in the area, 3) proximity to government buildings and community anchor institutions and, 4) lack of existing fiber infrastructure in the area.
- **Staffing:** Given the high-level of coordination required by a Dig Once policy, the County should consider designating staff that will be responsible for the implementation of the policy. The staff would identify suitable projects for Dig Once and coordinate between different County departments, local municipalities and third-party entities. Some places (like the City of Chicago) have established dedicated Project Coordination Offices (PCOs) to review proposed infrastructure projects and facilitate cooperation.
- **Ownership:** Broadband infrastructure installed during a Dig Once project can be privately or publicly owned. Publicly-owned infrastructure could be used by the County for its own purposes or leased to ISPs interested in expanding broadband service in the area. If installing publicly-owned infrastructure, the County should determine which department will be responsible for the ownership and maintenance of the infrastructure.
- **ISP Coordination**: Prior to installing infrastructure, the County should engage ISPs to access whether there is interest in utilizing the infrastructure to expand broadband service to residents and businesses. Without early coordination with ISPs, the County runs the risk of installing infrastructure that may not be utilized. Additionally, to better facilitate coordination the County may consider maintaining a list of ISPs interested in expanding broadband service and regularly providing them updates on upcoming projects.

Implement a Dig Once Policy

Project Description

- **Delays:** Stringent requirements such as clauses that prevent re-excavation within a certain period of time, can negatively impact the goals of a Dig Once policy by delaying or hindering development projects. Hence, the County should ensure that any adopted Dig Once rules or polices do not discourage private development.
- **Geospatial Mapping/Software**: The County can facilitate coordination between utility companies, ISPs and County departments by publishing maps that show locations of future planned infrastructure projects. Additionally, the County can consider making the location of County-owned infrastructure publicly available for ISPs interested in leasing the infrastructure.

The primary goal of a Dig Once Policy is to support internal and external coordination on infrastructure projects, reduce duplicative right-of-way disruptions, optimize infrastructure installation (either in partnership with providers or via public-owned infrastructure), and achieve cost savings. **The County can consider identifying joint trenching opportunities for County-owned conduit installation during Dig Once projects.** Pilot joint trenching projects can be assessed on their capacity to support a future middle-mile fiber network that connects County government buildings and community anchor institutions (see Appendix E: Potential Fiber Expansion Models for more detail). In the long-term, Future considerations may also include conversations with the State to identify any planned expansion of the Illinois Century Network backbone for this purpose. **Other complementary ways Lake County could improve its policies and practices to streamline broadband infrastructure deployment include:**

- **Streamline Permitting and Designate a Single Point of Contact:** The County may consider a review of its own permitting practices to identify ways to streamline permits for broadband deployment, including an increase in e-permitting and expedited options. Additionally, the County can designate a single point of contact that is responsible for processing permits. This can simplify and streamline the permitting process for broadband deployment, reduce bureaucracy and delays, and help address potential coordination concerns.
- **"One Touch Make Ready:"** Lake County may also consider adopting a One Touch Make Ready Policy ("OTMR") which would allow a single construction crew to perform all the necessary work to make a utility pole ready for new wires to be installed. Typically for broadband providers, gaining access to utility poles is often a long, costly and difficult process. The reason being because majority of utility poles are owned by electric utilities or telecommunication companies, rather than local governments. Hence, a new provider interested in entering the market has to contact the owner of each utility pole to which they would like to attach. Each company that owns wires on the utility pole then must send a crew to assess the pole and if necessary, move any wires to create space for the new attachments. This process of making a utility pole ready for new infrastructure can take almost a year and is often subject to numerous delays. By streamlining the process, a OTMR policy can minimize delays and reduce costs, thereby encouraging private investment in broadband infrastructure within communities.
- **Making Lake County "Broadband-Ready" through the State's Certification Program:** As part of its BEAD program, Illinois plans to support local governments in promoting broadband preparation and potentially providing certifications to counties that are "broadband-ready". To be certified as "broadband-ready" counties will need to adopt the following best practices: a dedicated point of contact for broadband projects, electronic forms, reviewing permit applications within 20 business days, and prompt inspections.

The County can work to **engage local municipalities** to assess whether there is appetite for coordinating on Dig Once and streamlined permitting efforts.

What is Conduit?

Fiber optic conduits are rigid and durable tubes that are placed underground to protect the individual fiber stands that make up the broadband network. Digging a trench and installing conduit underground is the costliest component of a broadband network build—due to the high cost of excavating and rehabilitating the ground. As a result, installing conduit when the ground is already being excavated can result in cost savings when constructing a broadband network.

Implement a Dig Once Policy

Case Studies

Chicago, IL

In 2012, the City of Chicago created the Project Coordination Office (PCO) under the Department of Transportation (CDOT) with the aim of coordinating construction projects across city agencies and private companies to minimize disruptions of the roadway. The PCO regularly reviews proposed infrastructure projects to reduce conflicts and increase cooperation. For example, if two utility companies have projects that are planned for the same location just a few months apart, the PCO can encourage the companies to perform the projects sequentially and share the cost of restoring the roadway. The City dedicates approximately $5 million dollars annually for funding the PCO office. According to CDOT, the PCO has saved the City $251 million in construction costs since 2012. To facilitate better coordination, PCO worked with partners to develop a custom asset mapping platform that provides details on current, past and future infrastructure projects in the public right of way.

Arlington County, VA

Instead of enacting a Dig Once policy, Arlington County has proactively sought agreements with utility providers to install conduit and fiber infrastructure during projects that excavate the public right-of-way. For instance, the County entered into an agreement with Dominion Virginia Power, where Dominion was required to install conduit and fiber along the public right-of-way. Arlington County has used this fiber infrastructure to help build a fiber network called ConnectArlington, that connects county buildings and schools.

San Benito County, CA

San Benito County, part of the Central Coast Broadband Consortium (CCBC), implemented Dig Once practices through its multi-use streets policy. The Dig Once practice requires that county roadway construction projects include installation of underground utility conduit. The County also encourages local jurisdictions to adopt similar policies. Additionally, the CCBC also has dig once related policies which recommend that any trenching projects have a 60-day window during which they notify telecommunication or other utility providers who may be interested in installing conduit, about the project.

Santa Cruz County, CA

With the aim of expanding broadband infrastructure throughout Santa Cruz County, the Board adopted a Dig Once ordinance in 2015 that states that all reconstruction or repaving of the county right-of-way will include the provision of telecommunications infrastructure wherever practical and feasible. Additionally, the County developed conduit specifications for construction projects as well as a master lease agreement which outlines the general terms and conditions upon which the County can lease telecommunications infrastructure to third party entities.

Dakota County, MN

Dakota County leveraged a Dig Once approach to expand a fiber network that connects public institutions across the county. In fact, more than 250 nodes were connected using just $1 million in County funds. In the 1990's, Dakota County began laying down broadband infrastructure such as conduit or fiber during roadway excavation projects. To streamline the process, the Information Technology Department custom built a software which informs all relevant agencies whenever someone requests a permit to work in the county's right-of-way.

Stakeholder Insights

"They put a bike path in front of our house and tore up our road…but [they] didn't put in what we really need."

Implement a Dig Once Policy

Impact

Rationale	A Dig Once Policy can help Lake County departments and third-party entities to coordinate and support the efficient deployment of broadband infrastructure.
Potential Risks	• Implementing the policy may require upfront investments in legal and regulatory changes, staff training, and the establishment of coordination mechanisms. • Coordinating various stakeholders, including utility providers, telecom companies, and construction firms, can be complex and may lead to conflicts or delays if not managed effectively. • ISPs may not be interested in joint trenching or other voluntary Dig Once measures.
KPIs	# of feet of conduit/fiber installed
Estimated Cost	• Costs in Year 1 are estimated at $0 for policy development. Excludes the cost of staff time. • Installing County-owned conduit via joint trenching during a capital project can potentially raise individual total project cost by ~3%.[1] This cost can be recouped if the County leases the conduit to a private ISP. If the County pilots the installation of conduit at three projects per year, total cost for is estimated at $600,000. • Conduit installation costs vary significantly based on project type. Using an example of an existing county infrastructure project, the approximate cost of installing conduit via joint trenching was $15 per linear foot. [2]
Potential Partners	Illinois Office of Broadband, Local Governments, ISPs, Utility Providers, Lake County Departments (DOT, Public Works, Planning, IT, etc.)
Long-Term Funding	County general operating funds, permitting fees, utility/ISP investments

[1] The ~3% cost estimate is based on high-level engineering estimates and is validated by the following sources: FTTH Councils America and Neo Connect; [2] The $15/foot is based on engineering estimates from our engineering partner. See following pages for more detail.

Implementation Roadmap

Estimated Timeline	**Short-Term (6-12 Months)** Initial policies could be implemented within a year, with long-term expansion to occur over a multi-year process.

Phase 1: Planning and Coordination

1.1 Establish a working group of county agencies involved in infrastructure projects and/or permitting processes. Have working group review internal processes and align on desired scope and outcomes for a Dig Once policy.

1.2 Draft a Dig Once policy and identify mechanisms to streamline permitting. Get buy-in from working group on proposed updates.

1.3 Designate staff to lead coordination efforts.

1.3 Reach out to ISPs to begin discussing possible joint trenching opportunities.

Phase 2: Policy Implementation

2.1 Obtain the required approvals to enact a new policy and/or update permitting practices.

2.2 Establish clear communication channels between county agencies, ISPs and utility providers to coordinate infrastructure deployment.

2.3 Begin implementing updated rules and/or processes.

2.4 Promote joint trenching opportunities with ISP partners as aligned with future planned exaction projects.

2.5 Identify areas that can benefit from the installation of County-owned conduit.

Phase 3: Expansion

3.1 Consider engaging with local municipalities to promote locally enacted dig once policies and cross-jurisdictional streamlining of permitting practices

3.2 If County-owned conduit is installed, explore options to lease excess conduit to ISPs

3.3 Leverage County-owned conduit to expand middle-mile fiber to government buildings and community anchor institutions

Implementation Example: Installing conduit during a planned excavation project could result in potential overall cost savings of 57%

Context: Conduit are reinforced tubes that are required to protect fiber optic cables and their installation is a major expense for fiber projects. If the County installs underground conduit infrastructure it can subsidize the cost for ISPs to deploy fiber connections to residents and businesses, thereby encouraging private investment in fiber infrastructure in the county. Additionally, the County can place fiber within the conduit that can be utilized for the County's own purposes such as improving traffic signals or providing fiber connections to government facilities.

Approach

The County can take advantage of excavation projects such as traffic signal upgrades, redevelopment, or stormwater improvements to install conduit infrastructure, utilizing a joint trenching approach. **Joint Trenching** is the process of using one common trench to install multiple utilities underground. This process minimizes the cost of installing conduit and reduces disruptions of the county right-of-way. If the County aims to expand the conduit network beyond the pathway of the excavation project, it will need to dig a separate trench solely for the conduit installation (**Hybrid Joint Trenching** approach).

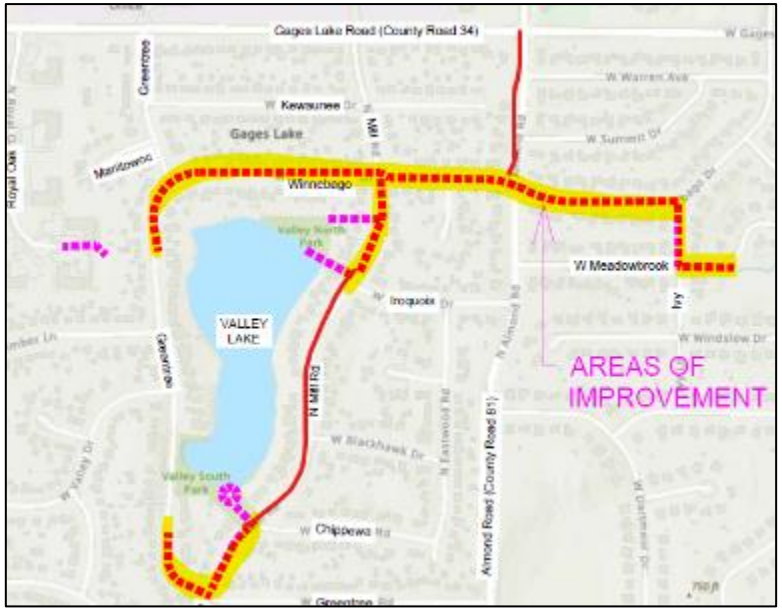
Hybrid Joint Trenching Example

Project: The Wildwood Area Stormwater Infrastructure Improvements Project began in August 2023 and includes the installation of approximately 6,800 LF of storm sewer. Using this infrastructure improvement project as an example and making some assumptions on the construction timeframe and sequence we can estimate the additional cost to the project if the County were to lay conduit infrastructure underground, concurrently with the project.

Design: The potential conduit network design, as illustrated in the map to the right, will pass approximately 150 homes, with 110 of those homes passed due to the stormwater improvement and an additional 40 homes passed with a county-only trench. Since the engineering plans for the stormwater project were not available for this assessment, assumptions had to be made. The main assumptions are that the conduit will utilize the same trench as the stormwater installation and that there will be a connection between the two joint trenches and then an extension to Gages Lake Road.

Cost: In this hypothetical example, the total estimated cost of installing conduit using a hybrid joint trench design is **$99,165**. The estimate does not include budget for placing fiber in the conduit. Additionally, the estimate includes a 10% contingency. The total cost of the Wildwood Area Stormwater Improvement project is estimated to be $3,703,122—installing conduit would raise the total project cost by approximately 3%. If the County were to lay conduit separately (without utilizing a hybrid joint trenching model) in the right-of-way, the estimated cost for this project area would be **$232,156**. This illustrates that utilizing a planned excavation project to install conduit can result in cost savings of 57%.

Hybrid Joint Trenching Example for Wildwood Area Stormwater Infrastructure Improvement Project



Notes: The Pink Dashed Line is the proposed Storm Sewer Running Line. The Highlighted Yellow Line is the proposed Joint Trench. The Red Solid Line is the proposed County-Only Trench.

Implementation Example: Installing conduit during a planned excavation project could result in potential overall cost savings of 57%

Limitations

- Relying entirely on public infrastructure improvement projects to expand conduit infrastructure will limit the amount of conduit that can be installed in the county. Since public infrastructure does not need to be replaced frequently (lifespan of pipes can range from 30 to 50+ years) and the scope of public infrastructure projects can vary from a few hundred to a few thousand feet of open road/public way construction, expanding broadband infrastructure through this method will be a slow process. If the county aims to substantially expand conduit or broadband infrastructure countywide it will likely need to utilize a hybrid approach.
- Executing on the joint trenching approach to install conduit will require cooperation between different government departments which may result in delayed project timelines, as government departments won't have incentives to expedite the process.

Cost Breakdowns

Table A provides a breakdown of the estimated cost for installing conduit during the Wildwood Area Stormwater Infrastructure Improvement Project, utilizing a Hybrid Joint Trenching model. **Table B** provides a breakdown of the estimated cost for installing conduit separately from the stormwater project. The estimated cost in Table B assumes that the project will be done underground using directional boring in the right-of-way and that the conduit would not be installed in the streets. Additionally, the cost is an assumption not knowing the underground utilities in the area.

Table A: Conduit Installation using Hybrid Joint Trenching Model

Line	Work Description	UOM	Unit Rate - Labor	Unit Rate - Materials	Combined Unit Rate	QTY	Extended
1	Conduit Placement - Joint Trench	LF	$ 2.00	$ 3.00	$ 5.00	4,747	$ 23,735.00
2	Conduit Placement	LF	$ 17.00	$ 3.00	$ 20.00	2,167	$ 43,340.00
3	Handhole Placement	EA	$ 1,800.00	$ 1,200.00	$ 3,000.00	8	$ 23,742.00
4	Tracerwire Placement - Pulling	LF	$ 0.84	$ 0.16	$ 1.00	6,914	$ 6,914.00
5	Restoration - Asphalt	SF	$ 18.00	$ 2.00	$ 20.00	150	$ 3,000.00
6	Restoration - Concrete	SF	$ 25.00	$ 5.00	$ 30.00	150	$ 4,500.00
7	Restoration - Softscape	SF	$ 1.00	$ 0.25	$ 1.25	1,084	$ 1,354.38
8	Test Station/Marker Post Placement	EA	$ 150.00	$ 50.00	$ 200.00	8	$ 1,582.80
9	Maintenance	LF	$ 0.20	$ -	$ 0.20	6,914	$ 1,382.80
10	Permits/Fees/Engineering	LF	$ 2.00	$ -	$ 2.00	2,167	$ 4,334.00
11	Budget Contingency (10%)	LS	10%				$ 9,015.00
						Total	$ 99,164.97
						Per Foot	$ 14.34

Table B: Conduit Installation separate from Stormwater Improvement Project

Line	Work Description	UOM	Unit Rate - Labor	Unit Rate - Materials	Combined Unit Rate	QTY	Extended
1	Conduit Placement - Joint Trench	LF	$ 2.00	$ 3.00	$ 5.00	0	$ -
2	Conduit Placement	LF	$ 17.00	$ 3.00	$ 20.00	6,914	$ 138,280.00
3	Handhole Placement	EA	$ 1,800.00	$ 1,200.00	$ 3,000.00	8	$ 23,742.00
4	Tracerwire Placement - Pulling	LF	$ 0.84	$ 0.16	$ 1.00	6,914	$ 6,914.00
5	Restoration - Asphalt	SF	$ 18.00	$ 2.00	$ 20.00	750	$ 15,000.00
6	Restoration - Concrete	SF	$ 25.00	$ 5.00	$ 30.00	200	$ 6,000.00
7	Restoration - Softscape	SF	$ 1.00	$ 0.25	$ 1.25	3,457	$ 4,321.25
8	Test Station/Marker Post Placement	EA	$ 150.00	$ 50.00	$ 200.00	8	$ 1,582.80
9	Maintenance	LF	$ 0.20	$ -	$ 0.20	6,914	$ 1,382.80
10	Permits/Fees/Engineering	LF	$ 2.00	$ -	$ 2.00	6,914	$ 13,828.00
11	Budget Contingency (10%)	LS	10%				$ 21,105.09
						Total	$ 232,155.94
						Per Foot	$ 33.58

Pilot Public Wi-Fi Hotspots

STRATEGY 3 Increase free, public internet access in high-need areas

Project Description

To expand free Wi-Fi access in areas that face low broadband adoption, **the County can pilot a program that equips public buildings, community anchor institutions (CAIs) and parks with Wi-Fi hotspots.** To implement the program, the County can run a granting process that provides funding to local government offices and/or CAIs to install hotspots that provide free outdoor Wi-Fi access. Hotspots can be mounted on the roof or sides of a building and connected to the site's existing internet connection via sleds. On average, the hotspots can provide a Wi-Fi signal over a 300 feet range. To be able to install hotspots, buildings must have an existing internet connection. Important considerations when executing a public Wi-Fi pilot include:

- **Line-of-Sight:** Obstructions between the Wi-Fi hotspot and the end user's device can impede the Wi-Fi signal. Hence, as part of the planning process it will be important to scope and identify appropriate locations that minimizes obstructions.
- **Maintenance:** The organization hosting the hotspots will be responsible for maintenance which can cost at maximum $1000 per year per site and resolving any technical problems that may arise.
- **Awareness:** To increase awareness about the program, the County can release a map of all hotspot locations. Additionally, the host organization can place signs at hotspot locations, informing the public of its availability.
- **Bandwidth Control:** After a certain period of operation, the host organization will have better insight into the amount and type of users of the public Wi-Fi network, at which point it can consider purchasing software to control the bandwidth consumed per user, if necessary.
- **Network Security:** Ahead of hotspot installation**,** the County and its partners should ensure network security best practices are in place.

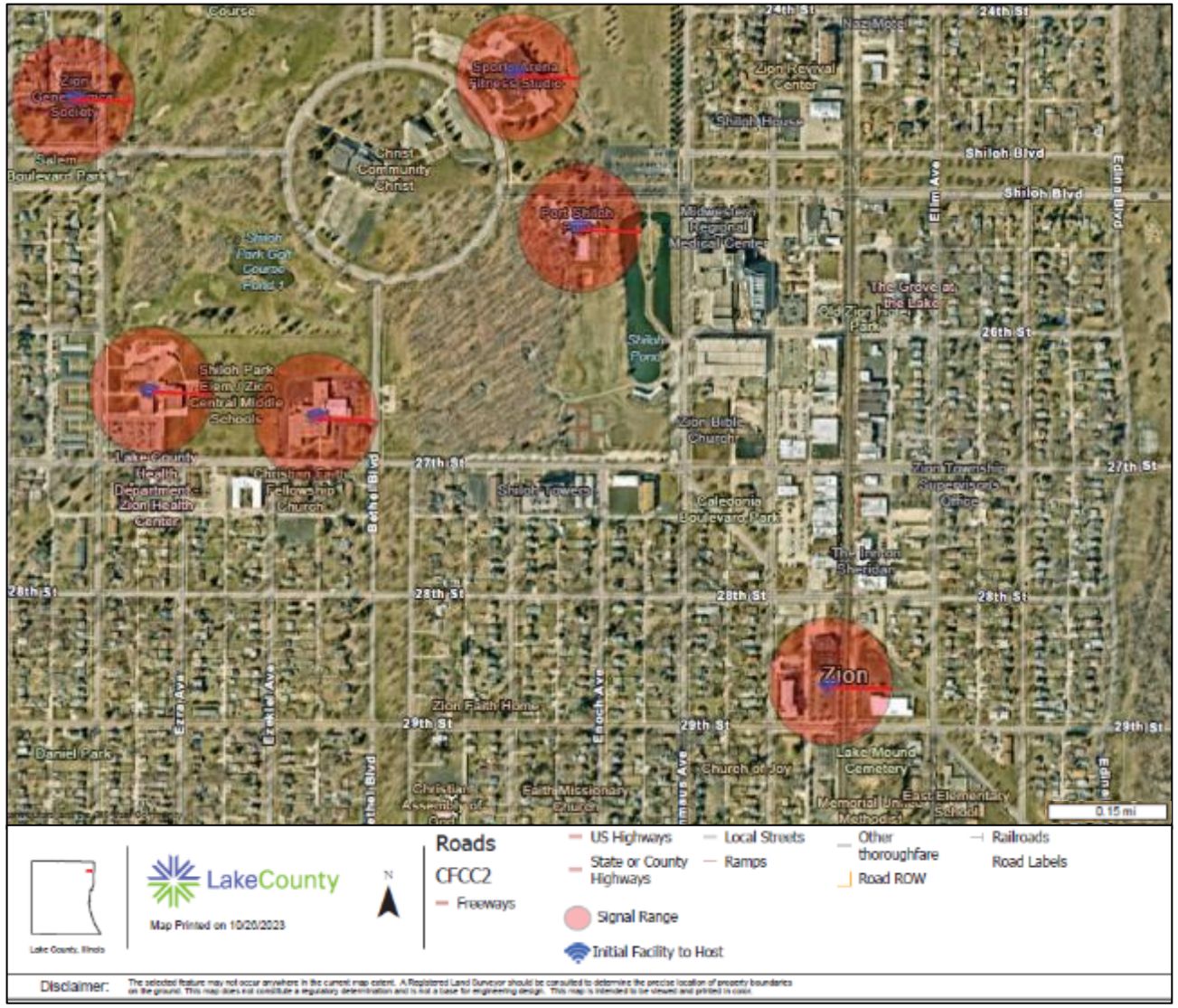
For the pilot project, the County can prioritize providing grants to organizations in six identified high-need areas that are facing low broadband adoption rates and other key digital equity challenges. **These pilot areas include:** Waukegan, North Chicago, Zion, Grayslake, Round Lake, and Fox Lake. The following pages provide detail on potential sites that may be suitable for public Wi-Fi hotspots. In the second phase of the project, the County can expand this grant process to eligible entities countywide. The County may consider issuing a **Request for Proposals (RFP)** to award funding to eligible entities that have the greatest need and are serving disadvantaged communities. The County can score proposals based on equity criteria. The County can also consider running the grant process through the Digital Equity Fund.

Impact

Rationale	Approximately 19,400 households lack a broadband subscription of any kind in Lake County.[1] Expanding access to free public Wi-Fi in communities with low broadband adoption rates could help disconnected residents access the internet. Additionally, public Wi-Fi will make outdoor spaces more digitally connected.
Potential Risks	• Wi-Fi infrastructure and equipment may be subject to damage. • Lack of awareness about the initiative might result in low utilization of the hotspots by the public • Outdoor Wi-Fi may not be utilized during the winter season.
KPIs	# of free public Wi-Fi hotspots operating in Lake County
Estimated Cost	The total cost for equipment and installation is estimated to be $10,000 per site, however, costs may change based on the specific equipment needs of the site. The cost assumes that each site will likely require at least two hotspots to provide a reliable connection and does not include maintenance fees, which can cost at maximum $1,000 per year per site.
Potential Partners	Local Governments, Local Park Districts, Community Anchor Institutions, County Departments, Libraries, Schools,
Long-Term Funding	Digital Equity Capacity Building Grant Program, Digital Equity Act Competitive Grant, National Leadership Grants for Libraries, Housing and Urban Development (HUD) Public Housing Operating Fund, HUD Neighborhood Networks (Multifamily Housing), USDA Community Connect, FCC E-Rate

[1] US Census ACS 2017-2021

Implementation Example: Zion Public Wi-Fi Hotspot Locations

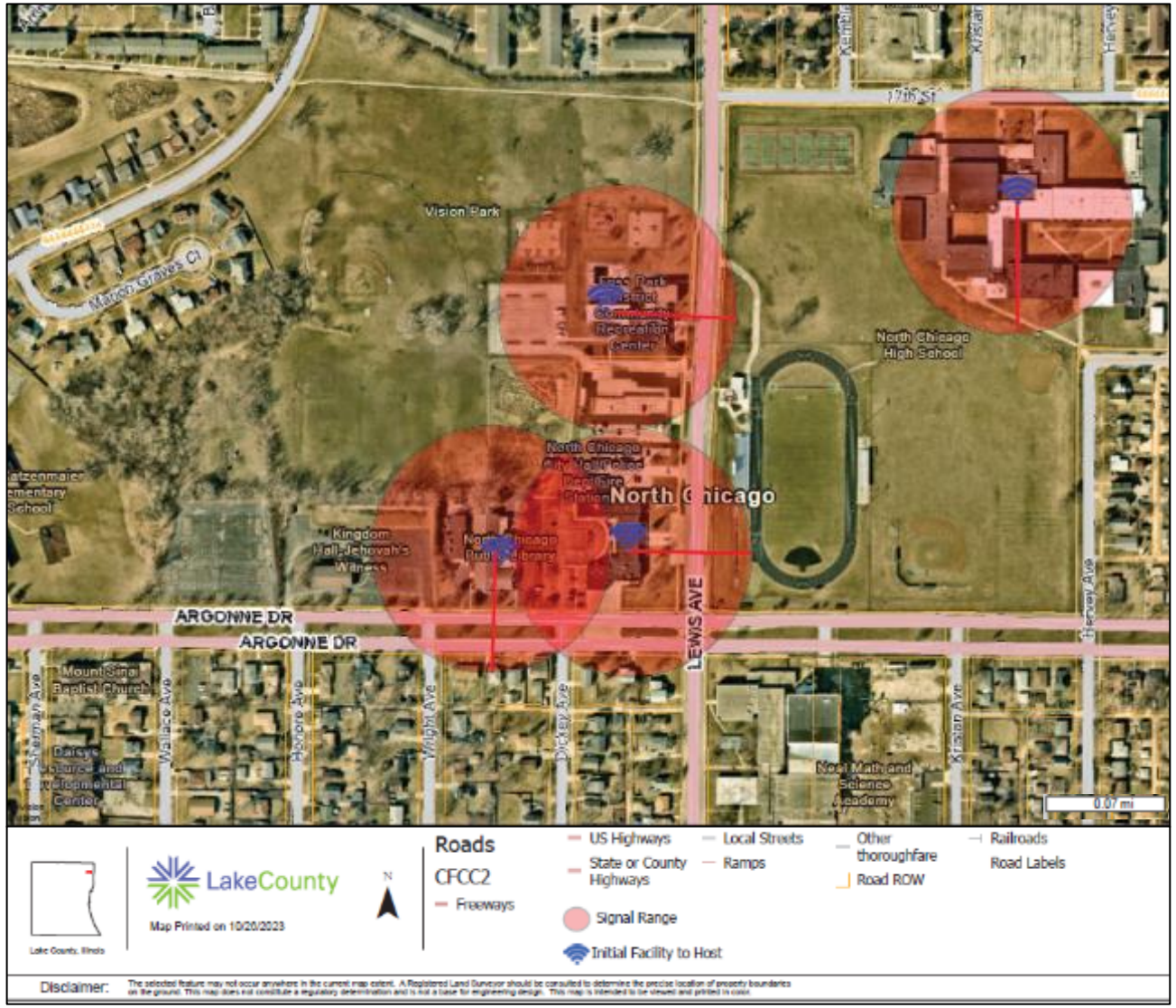


Overview: The Zion pilot area includes public buildings located near Shiloh Park and Zion's downtown corridor that runs along Sheridan Road and contains numerous restaurants, businesses, and parks. In census tracts adjacent to Shiloh Park, less than 85% of households have a broadband subscription of any kind and less than 56% have a broadband subscription such as cable, fiber or DSL.[1] Additionally, the Sheridan downtown corridor, has been included in redevelopment planning efforts as part of Zion's Comprehensive Plan. Equipping the corridor and its surrounding area with public Wi-Fi hotspots could complement existing or planned redevelopment initiatives.

Location	Est. Cost[2]
Zion Benton Library	$10,000
Zion Central Middle School	$10,000
Zion Park District Sports Arena and Fitness Studio	$10,000
Zion City Hall	$10,000
Shiloh Park Middle School	$10,000
Port Shiloh Pool and Volleyball Court Building	$10,000
Total	**$60,000**

[1] US Census ACS 2017-2021; [2] The total cost for equipment and installation is estimated to be $10,000 per site, however costs may change based on the specific equipment needs of the site. The total cost estimate includes the hotspot equipment, infrastructure to connect the hotspot to the site's internet connection and installation. The cost assumes that each site will require at least 2 hotspots. The cost does not include maintenance fees, which can cost a up to $1,000 per year per site.

Implementation Example: North Chicago Public Wi-Fi Hotspot Locations

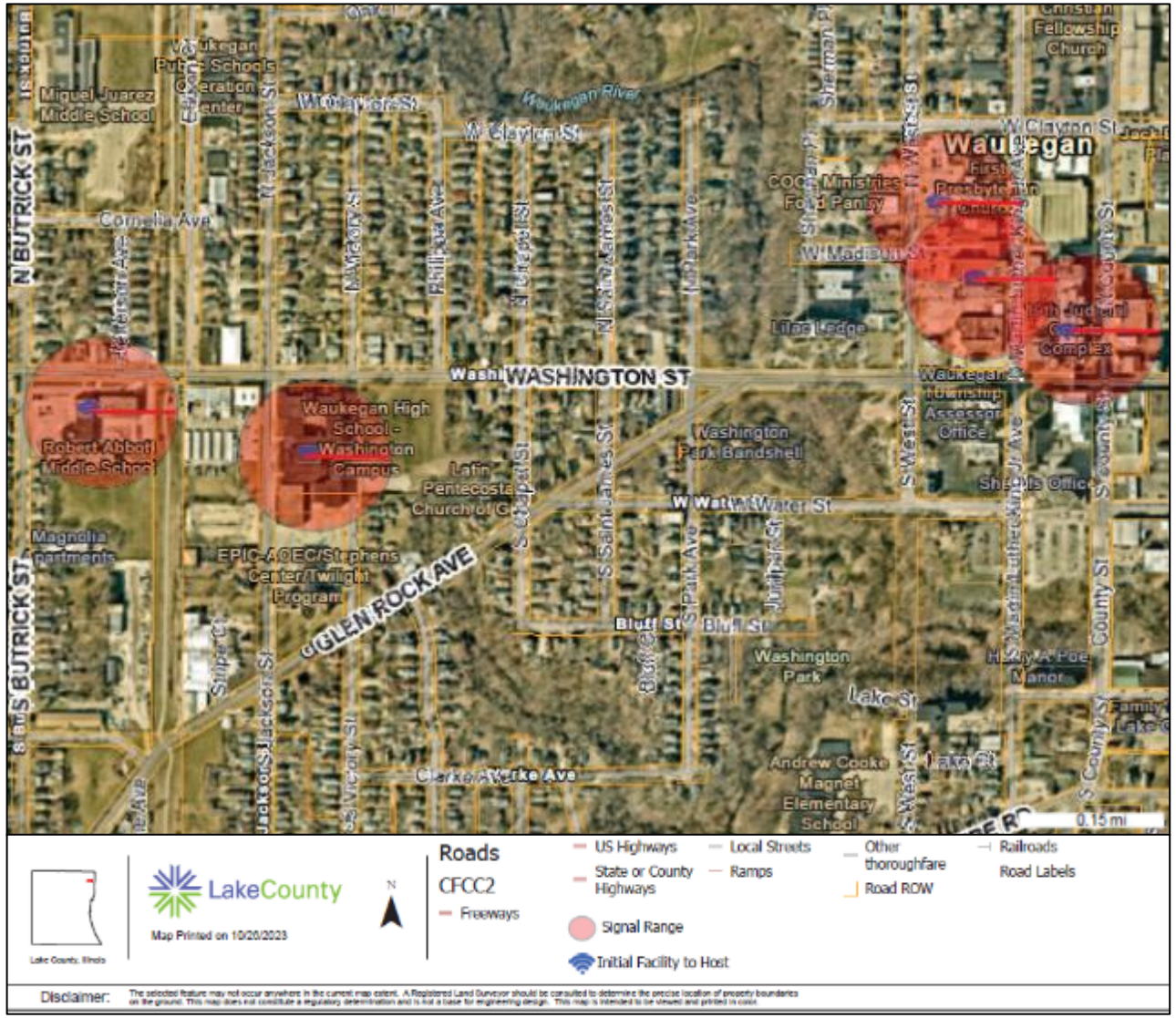


Overview: The North Chicago pilot area includes public buildings clustered near Lewis Avenue and Argonne Drive. Installing Wi-Fi hotspots on buildings that are in close proximity to one another can create a larger range or "mesh" of public Wi-Fi access for residents and visitors. In census tracts near the North Chicago pilot area, less than 85% of households have a broadband subscription of any kind and less than 65% have a broadband subscription such as fiber, cable or DSL.[1]

Location	Est. Cost[2]
Foss Park District and Community Recreation Center	$10,000
North Chicago Public Library	$10,000
North Chicago City Hall	$10,000
North Chicago High School	$10,000
Total	**$40,000**

[1] US Census ACS 2017-2021; [2] The total cost for equipment and installation is estimated to be $10,000 per site, however costs may change based on the specific equipment needs of the site. The total cost estimate includes the hotspot equipment, infrastructure to connect the hotspot to the site's internet connection and installation. The cost assumes that each site will require at least 2 hotspots. The cost does not include maintenance fees, which can cost a up to $1,000 per year per site.

Implementation Example: Waukegan Public Wi-Fi Hotspot Locations

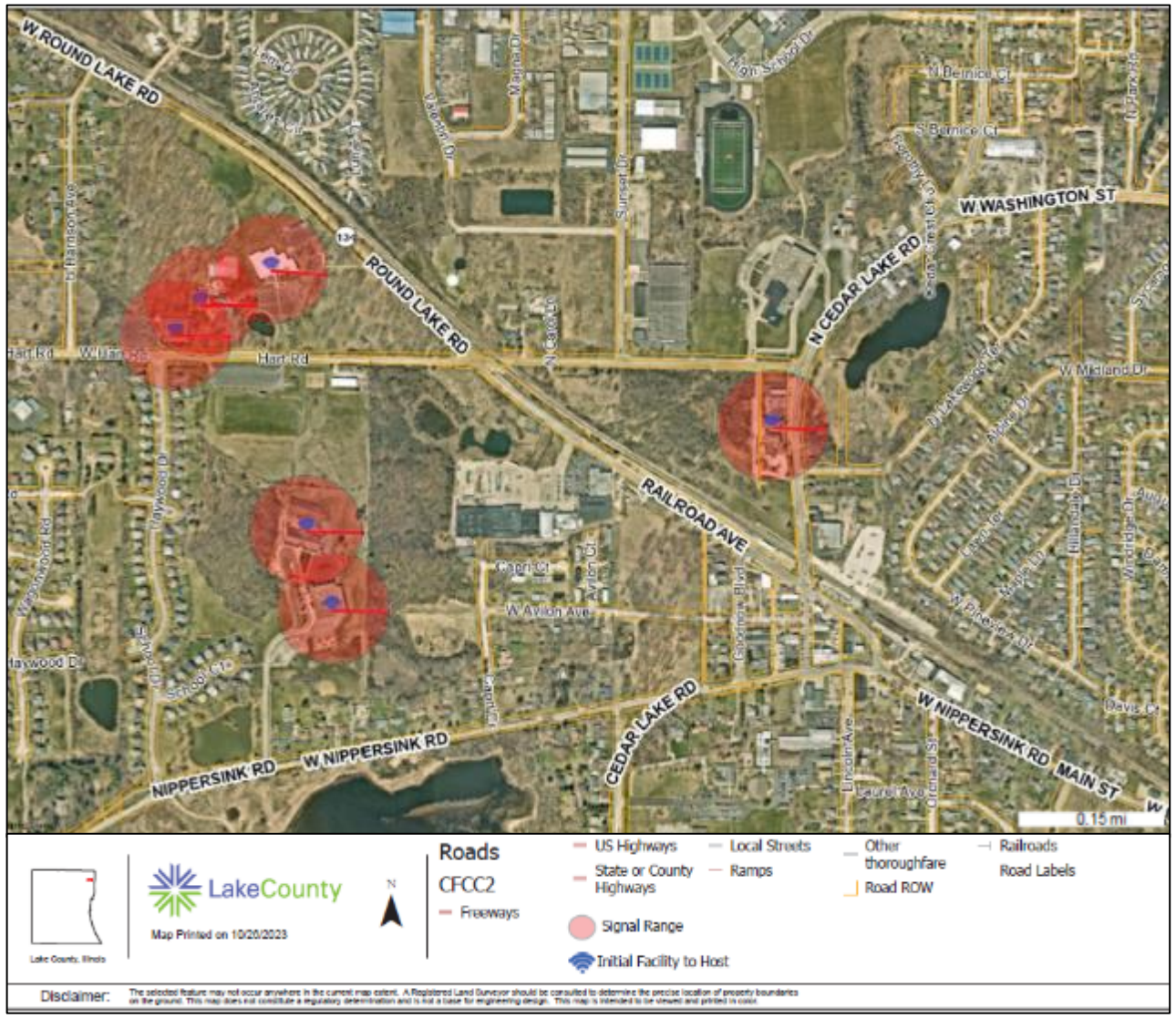


Overview: The Waukegan pilot area includes public buildings located near the Washington Street Corridor, a one-mile commercial corridor that contains city parks, a major bike path, multiple public school, and businesses. In 2014, the Corridor was identified by The Chicago Metropolitan Agency for Planning (CMAP) as having high-potential for future revitalization. Equipping the Corridor and its surrounding area with public Wi-Fi hotspots could complement existing or planned redevelopment initiatives. In census tracts near the Waukegan pilot area, less than 75% of households have a broadband subscription of any kind and less than 60% have a broadband subscription such as fiber, cable or DSL.[1]

Location	Est. Cost[2]
Lake County Court House	$10,000
Waukegan City Hall	$10,000
Robert Abbott Middle School	$10,000
Waukegan High School	$10,000
Waukegan Police Department	$10,000
Total	**$50,000**

[1] US Census ACS 2017-2021; [2] The total cost for equipment and installation is estimated to be $10,000 per site, however costs may change based on the specific equipment needs of the site. The total cost estimate includes the hotspot equipment, infrastructure to connect the hotspot to the site's internet connection and installation. The cost assumes that each site will require at least 2 hotspots. The cost does not include maintenance fees, which can cost a up to $1,000 per year per site.

Implementation Example: Round Lake Public Wi-Fi Hotspot Locations

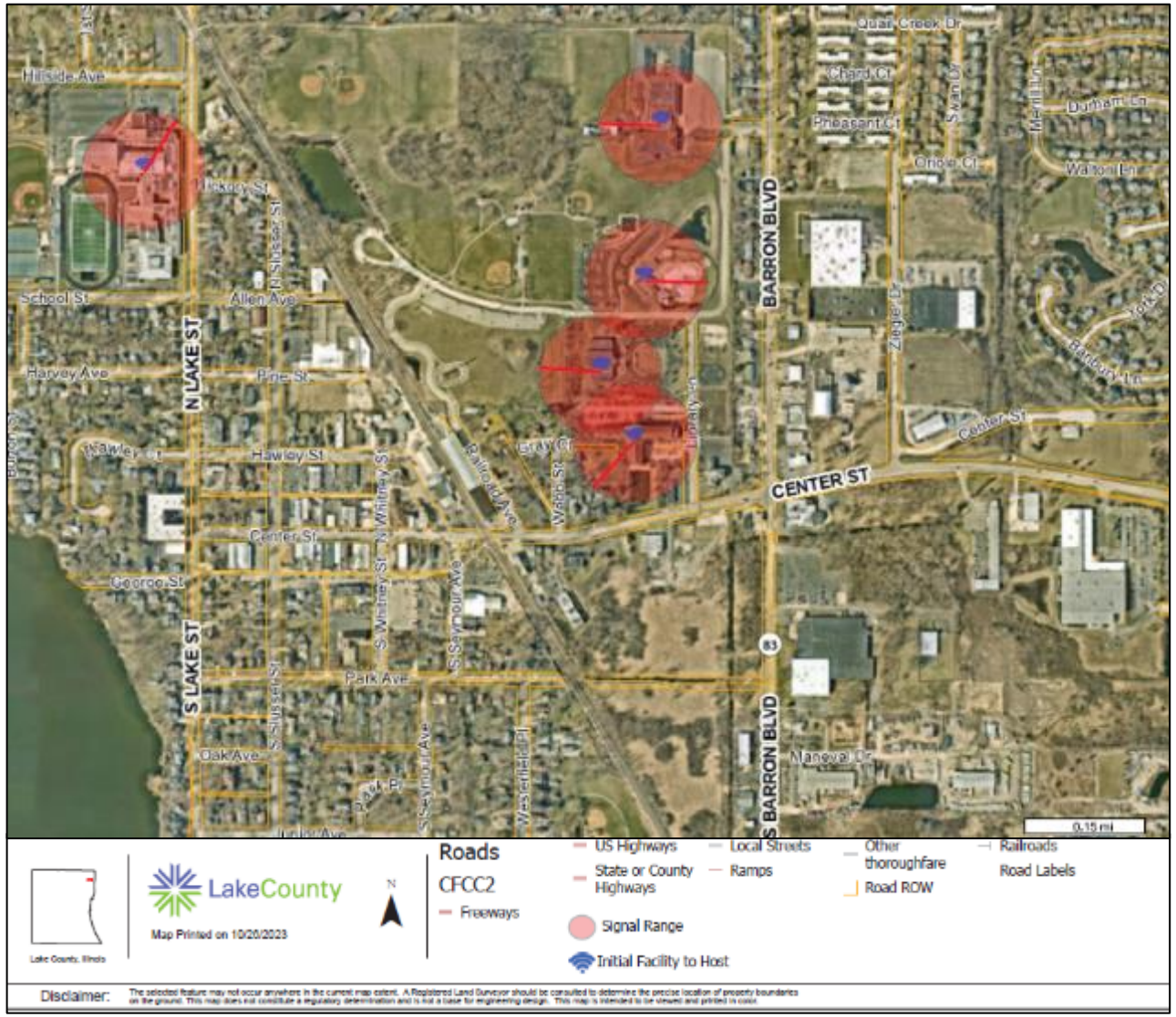


Overview: The Round Lake pilot area includes public buildings located near the intersection of Hart Road and IL Route 134. The buildings are surrounded by open space as they are adjacent to two parks, Hart's Woods and Hart's Hill. The Round Lake pilot area is located within a census tract where less than 90% of households have a broadband subscription of any kind and less than 75% have a broadband subscription such as fiber, cable or DSL.[1] Moreover, near the southern boundary of Round Lake and Round Lake Park there is a high concentration of unserved and underserved residential locations that lack access to high-speed broadband infrastructure.

Location	Est. Cost[2]
Round Lake Area Public Library	$10,000
Round Lake Area Parks District Aquatic Center	$10,000
Robert W. Rolek Community Center	$10,000
Early Education Center	$10,000
Village Elementary School	$10,000
Round Lake Village Hall	$10,000
Total	**$60,000**

[1] US Census ACS 2017-2021; [2] The total cost for equipment and installation is estimated to be $10,000 per site, however costs may change based on the specific equipment needs of the site. The total cost estimate includes the hotspot equipment, infrastructure to connect the hotspot to the site's internet connection and installation. The cost assumes that each site will require at least 2 hotspots. The cost does not include maintenance fees, which can cost a up to $1,000 per year per site.

Implementation Example: Grayslake Public Wi-Fi Hotspot Locations

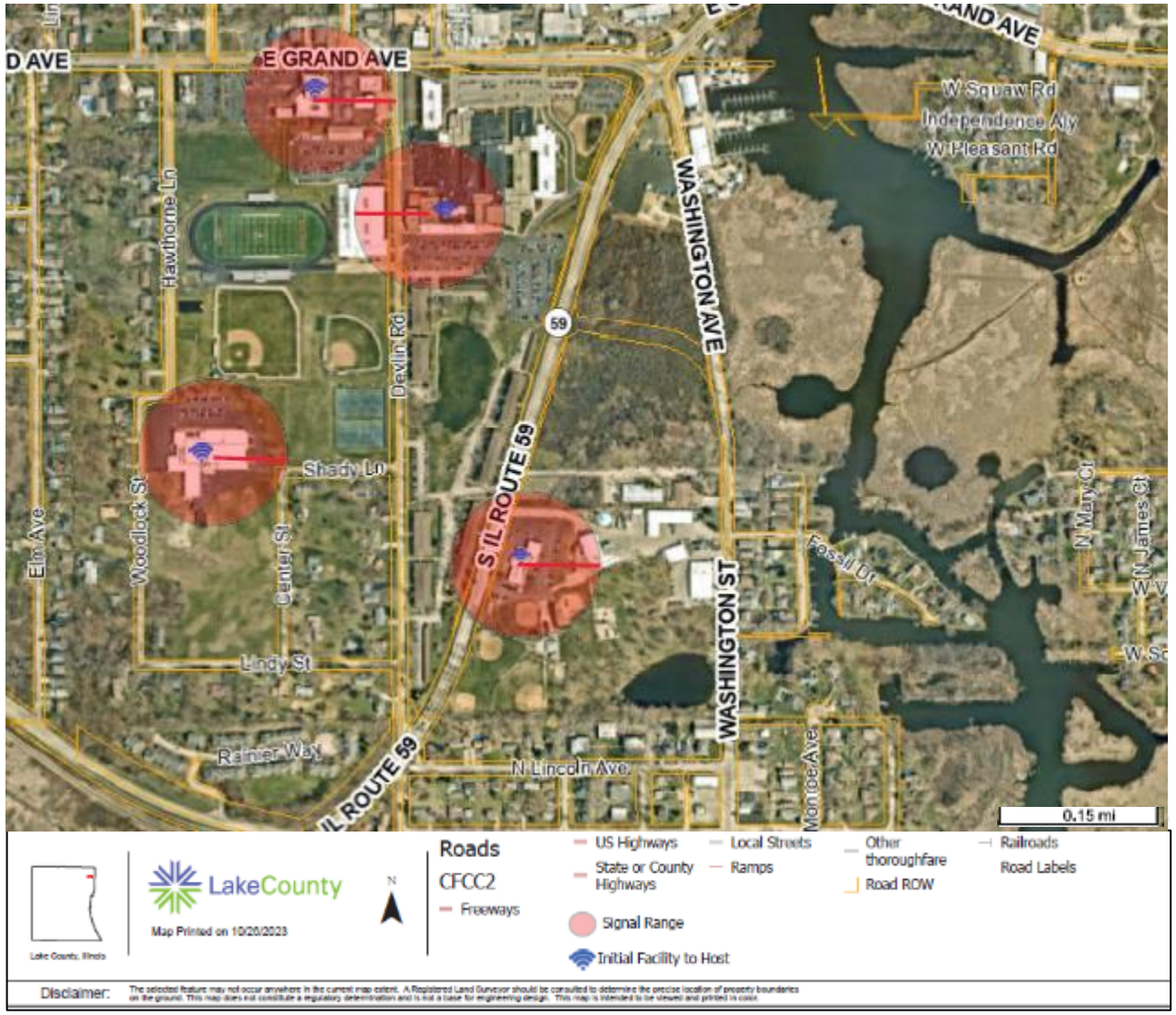


Overview: The Grayslake pilot area includes public buildings located near Central Park and Grayslake's downtown core that is centered around Center Street and contains numerous restaurants and small businesses. Additionally, Central Park has large playgrounds, athletic fields, walking trails, and plenty of open space. In census tracts near the Grayslake pilot area, less than 90% of households have a broadband subscription of any kind and less than 80% have a broadband subscription such as cable, fiber or DSL.[1] While there are households in this area that have not adopted broadband, the bigger challenge is lack of access to high-speed broadband infrastructure—near the southwestern boundary of Grayslake there is a high concentration of residential locations that are considered unserved or underserved by broadband.

Location	Est. Cost[2]
Grayslake Area Public Library	$10,000
Grayslake Senior Center	$10,000
Grayslake Aquatic Center	$10,000
Grayslake Middle School	$10,000
Grayslake Central High School	$10,000
Total	**$50,000**

[1] US Census ACS 2017-2021; [2] The total cost for equipment and installation is estimated to be $10,000 per site, however costs may change based on the specific equipment needs of the site. The total cost estimate includes the hotspot equipment, infrastructure to connect the hotspot to the site's internet connection and installation. The cost assumes that each site will require at least 2 hotspots. The cost does not include maintenance fees, which can cost a up to $1,000 per year per site.

Implementation Example: Fox Lake Public Wi-Fi Hotspot Locations



Overview: The Fox Lake pilot area includes public buildings located near the intersection of Grand Ave and Devlin Road. The pilot area is located within a census tract where less than 82% of households have a broadband subscription of any kind and less than 68% have a broadband subscription such as fiber, cable or DSL.[1]

Location	Est. Cost[2]
Fox Lake District Library	$10,000
Fox Lake Police Department/ Veteran's Park	$10,000
Stanton Public School	$10,000
Grant Community Highschool	$10,000
Total	**$40,000**

Federal E-Rate Program

E-Rate is a program by the Federal Communications that provides discounts for telecommunications, internet access, and internet connections to eligible schools and libraries. Discounts can range from 20% to 90% and depend on the poverty level of the schools and libraries. Based on data from the USAC, 412 schools and libraries are enrolled in receiving E-Rate benefits in Lake County.

[1] US Census ACS 2017-2021; [2] The total cost for equipment and installation is estimated to be $10,000 per site, however costs may change based on the specific equipment needs of the site. The total cost estimate includes the hotspot equipment, infrastructure to connect the hotspot to the site's internet connection and installation. The cost assumes that each site will require at least 2 hotspots. The cost does not include maintenance fees, which can cost a up to $1,000 per year per site.

Pilot Public Wi-Fi Hotspots

Case Studies

San Mateo County, CA – Public Wi-Fi

San Mateo County launched the SMC Public Wi-Fi program in 2014 to provide unserved and underserved communities free access to public Wi-Fi in parks and various outdoor and indoor public locations. In 2021, the County expanded the Wi-Fi network by installing a 100 Wi-Fi access points atop streetlight poles. Additionally, the County partnered with organizations including Stanford University and Kaiser Permanente to install access points in locations that had clear line of sight. The County has developed an interactive map that shows the locations of all public Wi-Fi access points countywide.

Milwaukee, WI – Hotspots at Public Parks

In 2021, Milwaukee began a project to provide free public Wi-Fi at 8 public parks. The City's Wi-Fi network will be available to the public from 5 a.m. to 9 p.m. in underserved communities across the city. The project is expected to cost upwards of $100,000 and will be funded using CARES Act funds. The City plans to expand public Wi-Fi access to additional parks by leveraging additional grant funding.

San Francisco, CA - #SFWiFi

In 2013, the City Department of Technology in partnership with Ruckus Wireless implemented a free open Wi-Fi network along three miles of Market Street. The expansion was supported by a $700,000 donation from Ruckus Wireless. To provide Wi-Fi along Market Street, the City and Ruckus Wireless installed outdoor access points on traffic poles with existing gigabit fiber backbone connections. In 2014, the City received a $600,000 grant from Google to expand the network to 32 public parks.

Local Spotlight: Connect Lake County Fixed Wireless Proof of Concept

Connect Lake County (CLC) is an initiative of the Waukegan Community Broadband Taskforce, which formed in 2020 in response to the "growing recognition of digital inequalities in Waukegan." In 2022, CLC ran a CBRS Fixed Wireless proof-of-concept study to understand the potential of using CRBS fixed wireless technology to provide internet access to unserved residents in Waukegan. The study found that CBRS Fixed Wireless technology can be used to selectively fill bandwidth gaps for households in low-income neighborhoods or to provide Wi-Fi access in public areas. The cost of the antenna mounting equipment used in the study was $25,000 for one site.

Implementation Roadmap

Estimated Timeline	Medium term (1-3 years)

Phase 1: Planning

1.1 Establish the desired scope and level of funding for a pilot Wi-Fi hotspot project.

1.2 Partner with local governments and community anchor institutions to identify potential pilot locations in high-need areas.

1.3 Engage with vendors to select equipment and obtain cost estimates for purchasing and installing hotspots.

1.4 Develop a grant process to award funding to pilot locations.

Phase 2: Implementation

2.1 Award funding to local government and community partners for hotspots.

2.2 Publish a map that provides the locations of all public Wi-Fi hotpots in the county and their operating hours.

2.3 Promote the availability of Wi-Fi hotspots on county websites and social media platforms.

Phase 3: Evaluation and Iteration

3.1 Create a mechanism to track number of public Wi-Fi users

3.2 Engage with partners to evaluate the success of the pilot project

3.3 Depending on the success of the initial pilot, consider expanding the grant program to entities countywide.

Device Distribution Campaign

STRATEGY 4 Increase access to affordable internet and digital devices

Project Description

Findings from the current state assessment and stakeholder and community engagement revealed that affordability is a significant barrier to device ownership for low-income families and individuals in Lake County. Areas of the county with high percentages of low-income predominately include North Chicago, Zion and Waukegan. These areas also correspond to areas with high concentrations of racial minorities and non-native English speakers. To increase device ownership, the County can coordinate with partner organizations to expand affordable device distribution, specifically targeting low-income families. Potential strategies the County may implement include:

1. **Establish partnerships to expand device donation and distribution:** Through a partnership with PCs for People, Illinois established the **Connect Illinois Computer Equity Network** that receives, refurbishes and redistributes devices to those in need. The County can either leverage this existing partnership to expand free or low-cost device distribution within Lake County or enter into an agreement of its own with a refurbishment partner (ex. PCs for People). To support the initiative, the County can act as a coordinator, encouraging businesses and residents to donate their devices to the refurbishment partner—who would then be responsible for refurbishing and redistributing the devices for free or at a low cost to Lake Count residents in need. As part of its coordination efforts, the County can host device donation drives or distribution events at public buildings or community anchor institutions. Additionally, the County can enact a policy where County Departments donate retired or surplus devices to a refurbishment partner and in exchange the partner distributes an agreed upon number of devices for free within Lake County—this has previously been done by municipalities via a no-cost agreement with a refurbishment partner. The County may also consider purchasing new laptops through bulk purchase agreements and utilizing community anchor institutions to directly distribute them to residents.
2. **Raise awareness about existing device distribution and lending programs:** There are numerous organizations across Lake County that are directly distributing devices or facilitating device distribution, including school districts, College of Lake County, libraries, Mano a Mano, Job Centers of Lake County, Boys and Girls Club, and more. The county can leverage its website and social media channels to advertise these existing programs as well as collaborate with community anchor institutions to disseminate information about the programs to residents.

Impact

Rationale	Close to 35,800 households in Lake County do not own a laptop or desktop.[1]
Potential Risks	• If device distribution is not targeted effectively the program may not benefit the most venerable populations. • Stringent rules for government devices may prevent agencies from donating retired or surplus devices.
KPIs	# of households that own a desktop or laptop
Estimated Cost	A partnership where the County donates surplus or retired government devices to a non-profit, who then refurbishes and distributes the devices, will likely come at no cost to the County. If the County decides to purchases laptops to directly distribute to residents, the cost will range from $250-$400 per laptop (the County can negotiate prices if it enters into a bulk purchase agreement with a supplier). Assuming a cost of $350 per laptop, the County can purchase and distribute a 1,000 laptops for $350,000 in Year One.
Potential Partners	Nonprofits, Lake County Libraries, Community Anchor Institutions, Lake County Housing Authority, Internet Service Providers, Educational Institutions and Lake County Departments
Long-Term Funding	Digital Equity Capacity Building Grant Program, Digital Equity Act Competitive Grant, National Leadership Grants for Libraries, Illinois Secretary of State Grants

[1] US Census ACS 2017-2021

Stakeholder Insights

"Access to digital devices allow[s] people to complete classes and become employed "

Device Distribution Campaign

Case Studies

Chicago, CHI Device Donation Campaign

Chicago has partnered with PCs for People and Compudopt on a month-long campaign that encourages businesses and residents to donate retired devices for families in need. To donate, interested residents and businesses can complete an interest form, after which a representative from a partner organizations will coordinate to schedule a pick-up. The donated devices will be refurbished and redistributed for free or at a low-cost to Chicago residents. The City will leverage the Chicago Digital Equity Coalition to hold community distribution events, giveaways and more.

City of Detroit

In 2021, the City of Detroit entered into a partnership with nonprofit human-IT to help close the digital divide by distributing 1000 laptops to low-income families. As part of the initiative the City is encouraging business and induvial do donate used, unwanted or obsolete electronics. The goal of the initiative was to collect 500,000 pounds of used technology and redistribute 1,000 refurbished laptops. In 2022, the City expanded upon this initiative by donating 500 decommissioned government devices that will be wiped clean and refurbished by human-IT. Families in need of a computer, sign up on a waitlist, then human-I-T delivers a computer. The City is also encouraging businesses to leverage the partnership with human-I-T to donate technology that is not being used.

Philadelphia, PHLDonateTech

The City of Philadelphia has partnered with device refurbishment companies including DoneWithIt and Retievr to support the city with recycling and refurbishing donated devices. Individuals and businesses are able to donate their devices by scheduling pick-ups or mailing devices to partner companies. Additionally, if individuals and businesses would like to support the initiative but do not have devices to donate, they have the option of donating money to PHLDonateTech through the Philadelphia City Fund.

Montgomery County, Maryland

Montgomery County received two federal grants through the Emergency Connectivity Fund, totaling $15.9M, to purchase and distribute 40,000 computers. Through the Montgomery Connects Initiative, the County prioritized device distribution to socioeconomically disadvantaged individuals and households. In fact, 85% of recipients had annual income so of less than $50,000 and 77% of recipients were Black and Latino. Additionally, Montgomery Connects also provided in-person ACP enrollment support at computer distribution events, enrolling over 1,000 families in ACP.

Baltimore County, Maryland

As part of it's Digital Equity Initiative, Baltimore County entered into an agreement with PCs for People under which the county will donate surplus or retired devices to PCs for People (with hard drives removed). PCs for People will refurbish the donated government devices and distribute them to families, individuals and nonprofits. Additionally, PCs for People will sustainably recycle all non-reusable electronic waste with zero-landfill impact.

Coordinating Device Distribution with Digital Literacy

Lake County can consider pairing device distribution programming with digital literacy education to incentivize participation in digital literacy programming via programs like "Tech Goes Home." For more detail on digital literacy strategies see Page 48.

Device Distribution Campaign

Implementation Roadmap	
Estimated Timeline	**Medium-Term (1-3 years)**
Phase 1: Planning	
1.1 Define the County's scope and intended level of involvement in expanding device distribution in Lake County.	
1.2 Engage relevant agencies to assess the feasibility of donating retired or surplus government devices.	
1.3 Engage with Connect Illinois Computer Equity Network and other potential refurbishment partners to identify a mechanism for device donation and redistribution.	
1.4 Select refurbishment partner and establish an agreement.	
1.5 Engage Broadband and Digital Equity Coalition to determine need for County directly purchasing devices and distributing via CAIs.	
Phase 2: Implementation	
2.1 Utilize marketing, social media platforms, and outreach materials to encourage residents and businesses to donate devices.	
2.2 Establish process to donate government devices.	
2.3 Hold device donation and distribution events in collaboration with community anchor institutions and nonprofit partners.	
Phase 3: Evaluation and Iteration	
3.1 Establish process to regularly track and report on progress.	
3.2 Iterate on project based on feedback and success of initial implementation.	

Digital Equity Act (DEA) Funding Opportunities

The federal Digital Equity Act provides $2.75 billion to establish grant programs that promote digital equity and inclusion. The Digital Equity Capacity Building and Digital Equity Competitive grant programs are expected open in 2024. The State of Illinois is also planning to release its Digital Equity Plan in January 2024. We anticipate that Lake County will be eligible to apply for and receive DE funding – and can use this Plan as a guide for prioritizing strategies for continued funding.

ACP Outreach and Enrollment Campaign

STRATEGY 4 Increase access to affordable internet and digital devices

Project Description

The Affordable Connectivity Program (ACP) is a program administered by the Federal Communications Commission (FCC) that provides $30/month discount towards internet service for eligible households and a one-time stipend of up to $100 to purchase a qualifying digital device. Households are eligible for ACP if their income is below 200% of the Federal Poverty Guidelines or if a member of the household receives benefits from one or more of the identified federal assistance programs. According to data from the Benton Institute, **approximately 57,000* eligible Lake County households are not enrolled in the ACP program**. While there are local organizations such as Connect Lake County and Lake County Housing Authority (LCHA), that are conducting ACP outreach and enrollment efforts, the County currently lacks a coordinated countywide response to increasing ACP enrollment. To fill this gap, the County can engage local organizations and partners to conduct a countywide ACP outreach and enrollment campaign. Key activities and initiatives as part of the campaign may include:

- **Marketing:** The County can advertise ACP on government websites and social media platforms, pursue a direct mail campaign, run advertisements through television, radio channels and online websites, and/or distribute flyers at community anchor institutions.
- **Develop an ACP Outreach Toolkit**: The County can leverage outreach resources from the FCC to create a toolkit of flyers, fact sheets, infographics and enrollment instructions in multiple languages. The County can advertise the toolkit on its website as a resource that can be leveraged by partner organizations.
- **Coordinate with relevant County Departments:** The County can assist County Departments that serve ACP eligible households (ex. LCHA, federal assistance program administers, schools) with providing ACP information and enrollment support to eligible residents.
- **ACP enrollment events:** The County can leverage local organizations with ACP enrollment experience (ex. Connect Lake County, LCHA) to host in-person ACP enrollment efforts in target areas of the county.
- **ACP Call Center:** The County can leverage 211 or digital navigators to provide over-the-phone enrollment assistance to eligible applicants.

Target Areas: The County should target ACP efforts to areas with high concentrations of unenrolled ACP eligible households. These areas include Waukegan, Arlington Heights, Zion, Wheeling, Beech Park, Buffalo Groove and Zion (all have more than 800 eligible unenrolled households).

** ACP Enrollment is based on data from April 2023 and was derived from the Benton Institute ACP Tool*

Impact

Rationale	Affordability is a major barrier to broadband adoption in Lake County. Currently the ACP program is the largest broadband benefit program available to residents. However, only 20% of eligible Lake County households are enrolled.
Potential Risks	ACP program funding is expected to be depleted by early 2024, if Congress does not take action to increase funding.
KPIs	• # of eligible households enrolled in ACP • # of households with a broadband subscription
Estimated Cost	Conducting a countywide ACP outreach campaign is estimated to cost $500,000 in Year One.
Potential Partners	Nonprofits, Educational Institutions, Public Libraries, Community Anchor Institutions, ISPs, LCHA, Connect Lake County, Lake County Departments
Long-Term Funding	Digital Equity Capacity Building Grant Program, Digital Equity Act Competitive Grant, FCC National Competitive Outreach Grant Program, FCC ACP Navigator Pilot Program Outreach Grants, FCC Your Home Your Internet Outreach Grants

Local Spotlight: Waukegan ACP Outreach

Connect Lake County has led recent ACP outreach and enrollment efforts in Waukegan. They have also hired Digital Navigators to assists eligible households with ACP enrollment. Digital Navigators work directly with organizations and residents to provide support with enrolling and applying for ACP benefits.

ACP Outreach and Enrollment Campaign

Case Studies

New Orleans, Louisiana

The City of New Orleans received a $370,950 grant from FCC's Affordable Connectivity Program to support awareness, outreach and assistance efforts to encourage eligible households to enroll in ACP. According to data from FCC, of the 85,000 eligible households in Orleans Parish, just under 40,000 have enrolled in the program (ACP enrollment rate of ~47%). As part of its ACP outreach efforts, the City of New Orleans has engaged multiple local partner organizations that will assist eligible low-income households with enrollment.

Riverside County, California

Riverside County, through its RivcoConnect project, has been conducting a countywide ACP outreach campaign. The County entered into a $3.5 million contract with a non-profit who will conduct ACP outreach efforts over the span of 3 years. As of June 2023 the County had used the following strategies as part of its campaign 1) ran television and radio advertisements in English and Spanish that provided information on ACP, 2) placed ACP advertisements on billboards and bus shelters, 3) leveraged county social media platforms to target residents that were already online btu struggled with cost of subscriptions, 4) targeted ACP eligible households with direct mail 5) established an ACP call center 6) held in-person community events. After 6 months from the start of the campaign, Riverside County had increased ACP enrollment by over 18,300 households. The increase was primarily driven by the ACP call center, in-person enrollment events and online web application portal.

Detroit, Michigan

As of March 2023, Detroit had an ACP enrollment rate of 59%, which is one of the highest rates of any metro area. *Connect313*, a partnership between the City of Detroit, Rocket Mortgage, Microsoft and United Way, has been leading ACP outreach efforts across the city. Connect313 utilizes numerous channels to raise ACP awareness and enrollment including; 1) television and radio advertisement campaigns in multiple languages that target communities with high numbers of eligible households, 2) call centers that provide application assistance over the phone, 3) network of "community ambassadors", who are local residents that work from community centers to provide ACP and digital equity assistance to residents, 4) "Tech Hubs" hosted at community centers that provide in-person ACP enrollment support.

Implementation Roadmap

Estimated Timeline	**Short-term (6-12 months)** Given that ACP funding may expire the county will need to expedite outreach and awareness efforts.

Phase 1: Planning

1.1 Engage partners to detail an ACP outreach campaign strategy and workplan.

1.2 Align on funding for ACP outreach and enrollment activities.

1.3 Develop ACP marketing materials in multiple languages to create an outreach toolkit that is published on the County website and accessible to partner organizations.

Phase 2: Implementation

2.1 Launch information ACP advertisements across multiple platforms.

2.2 Host in-person ACP enrollment events by partnering with community organizations.

2.3 Collaborate with partner organizations to raise awareness and provide ACP enrollment support at public libraries, schools, and other CAIs.

2.4 Collaborate with organizations serving ACP eligible households to better target outreach efforts and provide enrollment support.

Phase 3: Evaluation and Iteration

3.1 Regularly evaluate success of campaign and monitor ACP enrollment rates

3.2 Track the success of different marketing and enrollment strategies and expand outreach accordingly.

Stakeholder Insights

"The challenge with ACP is getting people to sign-up… and stay signed-up"

Expand Digital Navigators

STRATEGY 5 Improve digital literacy and training opportunities

Project Description

Digital Navigators are a proven, replicable model for improving digital literacy and technical skills, device access, and internet adoption. Lake County can help to build-out a larger network of digital navigators to provide a range of support services to residents, particularly in low-adoption areas. According to National Digital Inclusion Alliance (NDIA), "navigators can be volunteers, cross-trained existing staff, or dedicated new hires who offer guidance on connectivity, devices, and digital skills." Digital navigators are typically embedded in organizations such as libraries, health clinics, social service agencies, and community-based organizations and non-profits where they serve as trusted resources to help individuals get online and access critical services such as: healthcare, food support, disability benefits, rent, education and employment, childcare resources, other government benefits, ACP enrollment, and more.

Digital Navigators are formally and informally deployed in existing organizations across the county. Connect Lake County has hired digital navigators to reach community members and increase ACP outreach and enrollment, through efforts such as partnerships with local school districts, libraries, and housing authorities. Many Lake County libraries offer some digital navigation services or "tech help desk hours" (ex. "Tech Time" at Grayslake Library), but services vary by library. Many community organizations also provide tech support as part of the suite of social service supports offered (ex. Mano a Mano). Additionally, in September, the Illinois Broadband Lab launched a statewide cohort of Digital Navigator Fellows to support local-level digital equity programs. Five navigators have been hired and five are planned. Northeast region coordinators are based at Chicago State University and in the City of Chicago, with none currently placed in Lake County.

Digital navigators can be strategically used to build further capacity for community-based organizations and coordinate digital equity efforts across the county. Navigators could be hired as full-time or part-time staff and either be hired directly by community organizations with the support of County-funding through an RFP process– or hired by the County directly, managed by the Digital Equity Manager, and deployed at different organizations and locations. In the short-term Digital Navigators can fulfill staffing needs for ACP outreach and enrollment or device distribution events – and in the longer term have the potential to serve as "one-stop-shops" for providing a larger suite of digital inclusion wraparound services. This project can also be used as a workforce development tool. The County may consider hiring part-time student digital navigator support through a partnership with the College of Lake County's Computer Information Technology program that could also provide students with credit.

Impact

Rationale	Digital Navigators are formally and informally deployed in existing organizations across the county but could be strengthened with additional funding and navigator resources and coordination.
Potential Risks	• Uncertainty around the state's expansion plans for the digital navigator model could lead to duplication of efforts • A decentralized model may lead to differentiated quality of digital navigation services across locations
KPIs	# of residents served by digital navigators
Estimated Cost	The cost of a part-time Digital Navigator is estimated at $50,000 per year. The Digital Equity Fund could also be used to solicit grant applications for (an) organization(s) to support the hiring, training, and deployment of these digital navigators at community organizations, via county funding.
Potential Partners	Connect Lake County, Lake County Libraries, College of Lake County, Lake County Housing Authority, additional community organizations and nonprofits
Long-Term Funding	Digital Equity Capacity Building Grant Program, Digital Equity Act Competitive Grant, National Leadership Grants for Libraries, FCC ACP Navigator Pilot Program Outreach Grants

Expand Digital Navigators

Case Studies

Philadelphia, PA – Digital Navigator Program

With a combination of philanthropic and public funds of $253,000, Philadelphia funded five CBOs across the city to stand-up Digital Navigator Helplines to help individuals find and apply for affordable internet connectivity, obtain low-cost or free computers, complete simple online tasks, and connect to digital literacy training. The five helplines staffed eight part-time or student digital navigators who fielded 727 calls from unique residents from June 2020 to May 2021.

Portland, OR – Community Digital Navigator Pilot Program

Portland's Community Digital Navigator Pilot Program is designed to help community-based organizations that are looking to start up digital navigator services. Their City's Digital Inclusion Fund (DI Fund) pilot funding year is focused on experimenting with digital navigators and the training of existing or new staff to be capable of executing this role. Portland Community College has a digital navigation program to specifically help other students access affordable home internet service, devices, or digital skills training.

Mecklenburg County, NC – Digital Charlotte

Utilizing ARPA and philanthropic donations, Digital Charlotte set up a network of digital navigators through the City's 311 hotline to help community members within Mecklenburg County access affordable broadband and technology, solve basic tech problems, and learn digital skills. Year One of the program cost $236,000.

Larimer County, CO – Digital Navigators

The Loveland Public Library System, received a grant from the State of Colorado for $423,182 to fund a cohort of 10 AmeriCorps digital navigators that will help residents with a range of tasks such as emailing, accessing public services online, online education assistance and more. Additionally, the digital navigators will also help eligible households enroll for the ACP program. The AmeriCorps digital navigators will be placed across 7 public libraries in the county and will have a one-year service term. Additionally, the county has started a "Digital Roots for Job Seekers Campaign" that aims to support jobseekers with digital skills development. Digital navigators will support this program as well.

Implementation Roadmap

Estimated Timeline	**Medium-Term (1-3 years)**

Phase 1: Planning

1.1 Reach out to higher education institutions to determine capacity to supply digital navigators as paid interns

1.2 Coordinate with nonprofits and community anchor institutions (for instance, through the County Coalition) to determine how digital navigators could be integrated or expanded in their work

1.3 Create a job posting and/or an application for community organizations to apply for funding for digital navigators (could be integrated into Round 1 of a Digital Equity Fund grant program)

Phase 2: Implementation

2.1 Hire/place digital navigators in dispersed community organizations

Phase 3: Evaluation and Iteration

3.1 Evaluate impact of digital navigators and residents served

3.2 Determine whether program should be expanded to other locations

Stakeholder Insights

"Digital literacy efforts targeting seniors and the Spanish-speaking community would make my life easier"

Coordinate Digital Literacy Programming

STRATEGY 5 Improve digital literacy and training opportunities

Project Description

Digital literacy is the ability to use digital skills to seek out information an participate in a digital society. Improvement in digital literacy is shown to improve economic mobility and employment outcomes. Across Lake County, digital literacy programs currently exist within schools, libraries (ex. Waukegan Public Library adult computer classes), the College of Lake County, Job Centers of Lake County, and other community and workforce development organizations. Lake County can take on a more involved role by supporting an increase in cross-county digital literacy and training programs to meet the county's diverse needs:

- **Developing recommended curriculums for digital literacy**: Working with a newly established Coalition, Lake County may consider convening school districts and higher education institutions to develop cross-county digital literacy training standards and incorporate into existing programs and curriculums. For adult learners, the County can work in partnership with local libraries to streamline digital literacy course offerings. These offerings may include: foundational computer skills, using mobile devices, Microsoft Office, resume building, online job searching, privacy and security, managing finances online, and more.
- In partnership with device distribution programs, **pilot and fund a "Tech Goes Home" model** for digital literacy: Tech Goes Home is a proven program model that pairs digital literacy training with a free/low-cost device and sometimes a temporary free or reduced-cost internet plan. Lake County can apply this model to existing digital literacy programs by coordinating with coalition partners to identify support needed for supplementing programs with digital devices. Additionally, the County can consider **establishing a new countywide digital literacy program that is funded by the County** and managed by a nonprofit partner.
- Provide workforce development support by **promoting career pathways in technology** at job training centers and educational institutions: Jobs in telecommunications provide transferrable skills, livable wages, and often do not require advanced degrees. One of the goals of the BEAD program is to support the development of an equity-driven telecommunications workforce. The County may consider providing funding to support increased marketing and/or availability of local technology degree or certification programs (such as College of Lake County's Industrial Technology Program) or encouraging the establishment of a new dedicated telecommunications job training program in coordination with workforce development organizations.

Impact

Rationale	Digital literacy is an individual's ability to utilize online information to live, learn, and work in a digital society. Stakeholders have expressed the importance for increased digital literacy support across the county.
Potential Risks	• Lack of buy-in from partner organizations • High operational costs of an ongoing Tech Goes Home program
KPIs	# of students enrolled in technology degrees or certification programs at county education institutions
Estimated Cost	Local government funding commitments toward digital literacy programs vary widely. The County may consider dedicating an initial $500,000 for funding digital literacy program expansions at community organizations and/or for piloting a "Tech Goes Home" model to pair device access and digital literacy. Dedicating funds for digital literacy efforts will help develop a robust ecosystem of community stakeholders working to close the digital divide.
Potential Partners	Libraries, College of Lake County, Job Centers of Lake County, school districts, community organizations
Long-Term Funding	Digital Equity Capacity Building Grant Program, Digital Equity Act Competitive Grant, National Leadership Grants for Libraries, Illinois Secretary of State Grants, Building Pathways to Infrastructure Jobs Grant Program, Department of Education Adult Education Basic Grants to States

Coordinate Digital Literacy Programming

Case Studies

Seattle, WA – Technology Matching Fund for Digital Literacy

In 2020, Seattle, contributed $345,000 to 15 community partners to promote internet access and support digital literacy training programs. Each grantee received between $12,500 and $25,000. Some of these programs focus on building digital and language skills to increase program participants' employability, helping them to seek and find a living-wage job.

Kansas City, MO – KC Does Tech

The KC Goes Tech program launched in July 2022 and provided microgrants of $2,000 to 10 organizations to support grantees to provide digital literacy training services. KC Goes Tech is meant to support an ecosystem of partner organizations to deliver digital literacy services and provide technical assistance to training partners.

Chattanooga, TN – Tech Goes Home Chattanooga

Tech Goes Home Chattanooga is a program of a nonprofit partner of the City of Chattanooga and Hamilton County. The program is partially government funded and has also secured private donations. Participants complete 15 hours of digital literacy training and then have the option to purchase a Chromebook or tablet for $50. The program reported that $500,000 of funding allows them to serve 2,500 individuals, purchase 1,660 devices, and facilitate 120 courses.

Minneapolis and Saint Paul, Minnesota - TechHire

The MSP TechHire program supports residents with launching a career in tech by providing accelerated training for high-demand jobs and certification courses. MSP TechHire has partnered with tech training organizations and programs including Software Guild, Hack the Gap, Prime Digital Academy and more. Additionally, the City of Saint Paul funds a limited number of scholarships that provide training opportunities to Saint Paul residents. To be eligible, applicants must meet a list of criteria including being members of an underrepresented community and having a household income below a certain threshold.

Implementation Roadmap

Estimated Timeline	Medium-Term (1-3 years)

Phase 1: Planning

1.1 Engage with digital literacy programming partners to identify funding needs for tech goes home model

1.2 Develop standards and curriculum for digital literacy training programs

1.3 Identify funding sources

Phase 2: Implementation

2.1 Implement device distribution paired with digital literacy training through participating organizations

2.2 Engage with job centers and educational institutions to provide scholarships for technical degrees and certifications

2.3 Recruit donors or nonprofit organizations to identify potential long-term funding

Phase 3: Evaluation and Iteration

3.1 Evaluate success of tech goes home model and make modifications to program design

Stakeholder Insights

"[Lack of] digital skills are barriers to getting a job.... people without digital skills lose out."

Hire a Digital Equity Manager and a Broadband Coordinator

STRATEGY 6 Create a governing structure for the coordination of county digital equity activities

Project Description

The County does not currently have any staff dedicated to broadband and digital inclusion. The County should hire one to two dedicated, full-time resources, each with a three-year term, to drive the implementation of the Broadband and Digital Equity Action Plan. The **Digital Equity Manager** would be responsible for the overall implementation of digital equity projects, coordinating the Coalition, overseeing the allocation of ARPA funds, and seeking out additional grant opportunities. The role would be housed within the Administration Office and would be responsible for providing regular updates from the Coalition to the County's Special Committee on Broadband. **Given the importance and immediacy of this work, the County should strive to identify an individual for this role to begin in early 2024.**

Core responsibilities of the Digital Equity Manager position include:

- Planning County Digital Equity Coalition meetings; reporting out to the Special Committee on Broadband
- Convening and engaging additional local stakeholders (government, business, public, institutional)
- Working closely with Coalition members, Special Committee members, county departments, cities, and community organizations, and other stakeholders during implementation of projects
- Maintaining the new Lake County Digital Equity Resource Website
- Overseeing the disbursement of ARPA grant dollars for digital equity projects, and monitoring grantee performance to ensure compliance with federal guidelines
- Assisting with coordination of a countywide ACP outreach campaign
- Representing the County on regional digital inclusion events (e.g., National Digital Inclusion Alliance)
- Overseeing relevant state and federal legislation and funding opportunities (e.g., BEAD, DEA)
- Leading grant applications and for additional funding

To support this work, **the County can also consider hiring a dedicated Broadband Coordinator to further support Plan implementation.** This role could be housed within Administration but would work closely with the Division of Transportation and Public Works. Core responsibilities could include;

- Coordinating with internet service providers (ISPs) and other private sector entities
- Serving as the county's primary point-of-contact for state and federal broadband agencies
- Cross-department coordination to oversee the implementation of a county Dig Once policy
- Representing the county in discussions on regional or state fiber network expansions
- Tracking relevant state and federal legislation and funding opportunities (e.g., BEAD, DEA)
- Continuously evaluating opportunities to improve the availability of future-proof broadband infrastructure

Impact

Rationale	The County does not currently have staff dedicated to broadband coordination and digital inclusion. Dedicated points of contact will help coordinate funding, activities, and stakeholders to drive the Plan forward.
Potential Risks	The Digital Equity Manager and Broadband Coordinator could each be hired for a three-year term, in line with the ARPA funding period. This creates risk for the long-term oversight of digital inclusion activities.
KPIs	# of projects implemented
Estimated Cost	Salary and benefits for a full-time Digital Equity Manager is estimated at approximately $115,000, benchmarked against compensation for existing Lake County program management roles, as well as cities and counties with similar positions. Salary and benefits for a full-time Broadband Coordinator is estimated at $85,000, benchmarked against cities and counties with similar positions.
Potential Partners	N/A
Long-Term Funding	County Operating Funds

Hire a Digital Equity Manager and a Broadband Coordinator

Case Studies

Cook County, IL – Digital Equity Director

In 2022, Cook County hired their first Digital Equity Director to lead county broadband and digital equity and investment efforts through the American Rescue Plan Act and the Infrastructure Investment and Jobs Act. The Digital Equity Director is responsible for creating the Cook County Digital Equity Plan (released in 2023). The Digital Equity Director sits in the Office of the President. The position overview can be found here.

Chicago, IL – Digital Inclusion Director

This position sits within the Mayor's Office as a minimum 2-year appointment. The Digital Inclusion Director's responsibilities include: (1) development of knowledge about Chicago's access to broadband; (2) convening stakeholders to identify and align assets; (3) identifying opportunities and best practices to improve digital equity and inclusion; and (4) using data to track, analyze and evaluate impacts over time, and disseminating outcomes. This individual acts as a project manager for driving forward the Chicago Connected program. The City also partnered with the University of Chicago to seek a Digital Equity Intern.

Los Angeles County, CA – Digital Equity Director

In 2023, Los Angeles County hired a Digital Equity Director to direct digital equity activities across each of the county's 88 municipalities and unincorporated areas. The Digital Equity Director reports to the County's Director of Internal Services.

San Antonio, TX – Digital Inclusion Team

Established in 2021, the two-person Digital Inclusion team is responsible for the City of San Antonio's overall digital inclusion strategy. The team coordinates and collaborates with internal and external stakeholders on initiatives and projects that involve a focus on digital infrastructure, access to devices and digital literacy. The team includes a Digital Inclusion Administrator and a Digital Inclusion Coordinator.

Implementation Roadmap

Estimated Timeline	**Short-term (6-12 months)** Hiring a Digital Equity Manager and Broadband Coordinator should be a key first step in implementation the Plan.

Phase 1: Planning and Hiring

1.1 Develop job descriptions and post positions

1.2 Identify and interview individual who meet qualifications

1.3 Appoint individuals to position (early 2024)

Phase 2: Oversight

2.1 Individuals takes ownership and manages the implementation of the Plan projects and county broadband activities

2.2 Individuals convenes and oversees regular Coalition meetings

Phase 3: Evaluation and Potential Internship Program

3.1 Evaluate performance in Year One and determine whether additional support staff is needed to enhance capacity

3.2 Work with College of Lake County to identify candidates for Digital Equity interns to support the Digital Equity Manager

Create a County-led Broadband and Digital Equity Coalition

STRATEGY 6 Create a governing structure for the coordination of county digital equity activities

Project Description

Lake County can be a convener of broadband and digital equity efforts. To facilitate this convenor role, Lake County should seek to **assemble partners for a Broadband and Digital Equity Coalition**. This Coalition would ultimately be composed of government, private, and nonprofit entities interested in addressing digital equity issues in Lake County. The Coalition would meet regularly to discuss potential broadband and digital equity projects and assign coalition members to implement projects. A diverse Coalition will help to make sure that Lake County's work to close the digital divide is community-driven and has local credibility. Initial coalition membership could be based on engaged individuals/organizations from this planning effort.

Impact	
Rationale	The Coalition will allow the County to convene relevant stakeholders and help drive digital inclusion strategies forward.
Potential Risks	Potential for County criticism around the management of the coalition and inclusion/exclusion of different voices
KPIs	# of projects implemented by the coalition
Estimated Cost	Staff time and minimal ongoing costs for Coalition meetings (office supplies, food, etc.)
Potential Partners	Lake County Departments, Nonprofits, Local Governments, Local Elected Officials, Health Providers, Workforce Agencies, Local Businesses and Business Organizations
Long-Term Funding	N/A

Create a County-led Broadband and Digital Equity Coalition

Case Studies

Kansas City, MO – Coalition for Digital Inclusion

Kansas City's Coalition for Digital Inclusion is a collaborative group of nonprofits, individuals, government entities, and businesses that meets monthly. The Kansas City Coalition is driven by a 4-person steering council and is composed of over 200 individual members representing dozens of entities. Steering committee members include PCs for People – Kansas City, the Kansas City Public Library, Urban Tec, and KC Digital Drive.

Franklin County, OH – Digital Equity Coalition

As a response to the COVID-19 Pandemic, the Mid-Ohio Regional Planning Council, Columbus Metropolitan Library, the Columbus Foundation, and other organizations founded the Franklin County Digital Equity Coalition. Currently, the group consists of 30 plus stakeholders from the Franklin County region. The coalition is coordinated by Smart Columbus and has a steering committee to drive planning. Additionally, the coalition has several advisory groups providing support on ACP adoption strategies, device donation purchasing and distribution, and digital life skills investments.

Chicago, IL – Digital Equity Coalition

As a result of Chicago's newly released Digital Equity Plan, the City created an ongoing Digital Equity Coalition. This coalition includes organizations and individuals that are impacted by the digital divide or are directly involved in addressing it. The coalition is meant to ensure the implementation of Chicago's Digital Equity Plan.

Implementation Roadmap

Estimated Timeline	**Short-term (6-12 months)** As the driver of the plan's strategies, the County should prioritize the short-term creation of the Coalition

Phase 1: Building the Coalition

1.1 Recruit digital equity coalition members

Phase 2: Design Coalition Projects

2.1 Convene regular Coalition meetings and create goals for the Coalition

2.2 Identify and implement potential projects based on membership input

Phase 3: Evaluate Coalition Impact

3.1 Assign Coalition projects KPIs and evaluate the impact of these projects

Stakeholder Insights

"[We] need to convene organizations to ensure they are addressing actual needs…want to see the County doing it right… things need to be a grassroots approach"

Launch a County Digital Equity Resource Website

STRATEGY 6 Create a governing structure for the coordination of county digital equity activities

Project Description

Lake County organizations and residents lack a place to find out what digital equity resources exist in their area. Many organizations and residents are aware of their local libraries as a digital equity resource but may not be aware of the resources at those libraries or at other organizations. Lake County can address that lack of awareness by providing a one-stop resource that will show organizations and residents where to go for various types of digital equity subjects. These subjects may range from digital literacy classes, device distribution programs, workforce opportunities, and other similar programs. Lake County could create this resource by:

- **Creating a County-run digital equity resources site:** This site could exist either directly on the County's webpage or as a separate link. The Lake County Digital Equity Manager or Broadband Coordinator would be responsible for identifying all of Lake County's digital equity assets (such as what programs are available at a particular library) and working with County IT to build out the website. The site could also include a mapping/search function that allows county residents to navigate towards resources in their area or that are most relevant to them.

- **Integrating with 211 and promoting knowledge of the site:** Many Lake County residents who need digital equity resources may have difficulty utilizing the site or locating it. Lake County can address this by working with its existing 211 partner so that when residents call 211 they can be directed to the best-suited resource (Lake County 211 does have some digital equity assets listed on its site already). Similarly, Lake County should promote the site to nonprofits and other service providers so that resident-facing staff are aware of the site.

Impact

Rationale	Promote awareness of available digital equity resources to that Lake County residents
Potential Risks	• Site would need to be continuously updated or it may become unusable • Site needs to be created in a user-friendly fashion and promoted
KPIs	# of digital equity assets/resources listed on the site
Estimated Cost	• Estimated cost to host and maintain site: $1,000 per year • Web design services: $5,000 • Additional cost considerations will include staff time utilized to create and update site.
Potential Partners	Digital Equity Coalition partners, nonprofits, service providers, ISPs, and any organization that needs digital equity resources for itself or its clients
Long-Term Funding	Internal County funds

Pairing Digital and Physical Resources

Lake County may benefit from having a physical brochure with a selection of some of the assets listed on the website. Stakeholder organizations have indicated that they are interested in physical copies of information for clients and residents.

Launch a County Digital Equity Resource Website

Case Studies

Detroit, MI – Connect 313.org

Connect 313.org was created in partnership with United Way, the City of Detroit, and the Knight Foundation. The Connect313 platform is hosted external to the City of Detroit's website and among other functions, provides a living inventory of digital equity support resources for residents and non-profit organizations. Program types included STEM programs, connectivity and devices, digital literacy and skilling. Some other sections of the website include (1) a community blog to gather and post stories about initiatives underway and (2) of Connect 313 Neighborhood Tech Hubs, which are designate public spaces where city residents can access computer hardware, internet technology, digital literacy programming, and knowledgeable staff.

Chicago, IL – Resource Hub

The City of Chicago has a Resource Hub on its Digital Equity site. This hub has information and flyers (in multiple languages) about ACP sign-up, IT help desks, and more. The hub has also started creating an Internet and Computer Resource map showing where various digital resources exist in the city. Organizations can add themselves to that map.

Seattle-King County, WA

The Workforce Development Council, a non-profit grant-making organization, hosts a digital equity asset map of Seattle-King County on its website. The goals of the map are two-fold: (1) help community members locate programs that provide digital skills training, access to affordable devices, and technical support; and 2) Advocate for digital inclusion and identify service gaps. Individuals can search for classes offered, devices, and digital navigation support by location. The also post annual report dashboard that summarize performance metrics across projects.

Implementation Roadmap

Estimated Timeline	**Short-term (6-12 months)** Website go-live could occur relatively quickly, and could host the County's final Broadband and Digital Equity Action Plan

Phase 1: Planning

1.1 Have Digital Equity Manager or Broadband Coordinator identify Lake County digital equity assets

1.2 Create and review mockup version of website

Phase 2: Implementation

2.1 Have website "go-live"

2.2 Promote website with nonprofits and other service providers

Phase 3: Evaluation and Iteration

3.1 Review usage of site

3.2 Update website as needed with new digital equity assets

Stakeholder Insights

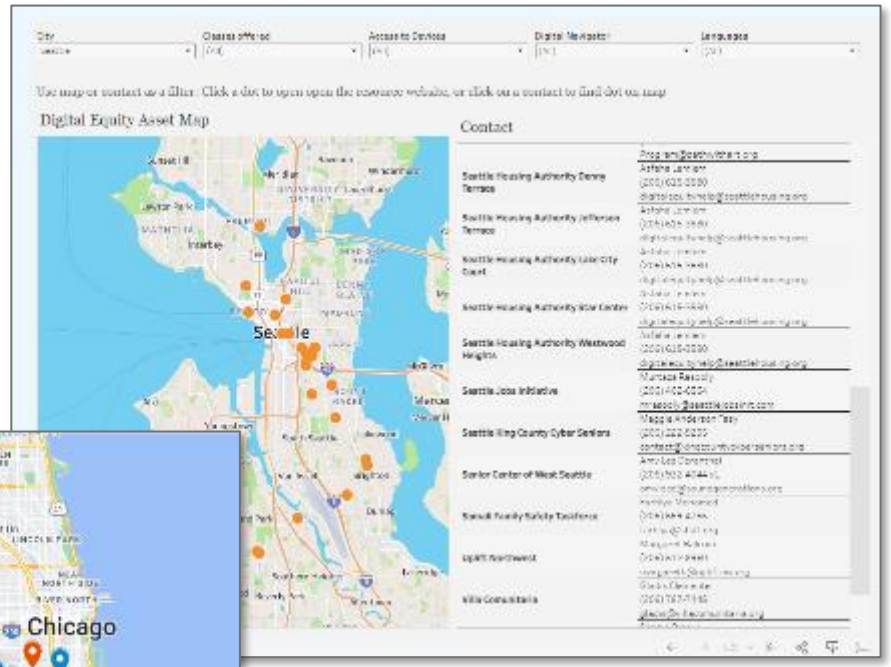
"Digital inclusion is awareness of information…we miss out on information if you don't have digital access….there are internet programs out there, but [people] wouldn't know how to look for it"

Launch a County Digital Equity Resource Website

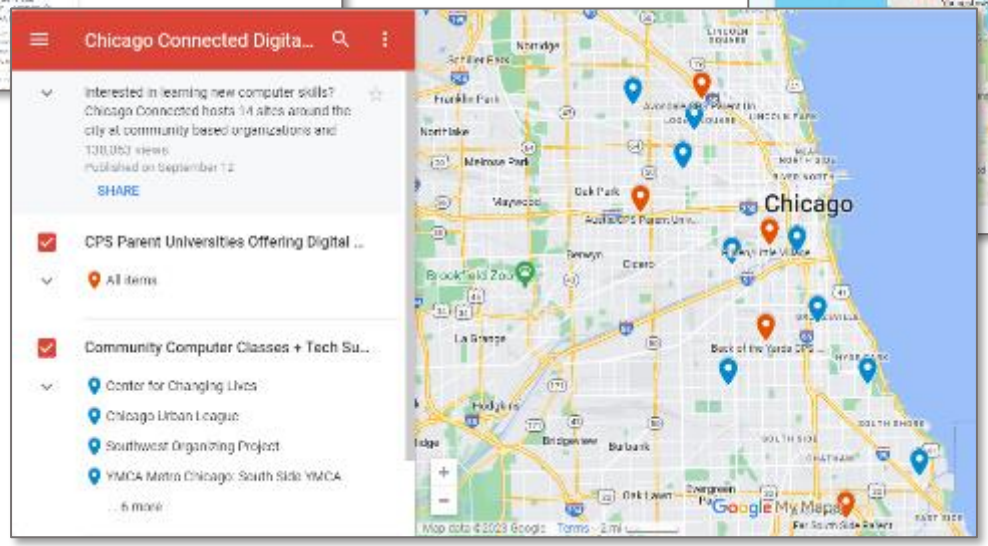
Sample Digital Equity Resource Sites

Franklin County, OH

King County, WA



Chicago, IL



Establish a Digital Equity Fund

STRATEGY 7 Establish a funding mechanism to support long-term project sustainability

Project Description

Beyond American Rescue Plan Act (ARPA), there is currently no dedicated funding source to sustain the County's Broadband and Digital Equity efforts and build the capacity of local partner organizations to address evolving digital inclusion challenges. **Creating a centralized fund will enable the County to make strategic investment decisions that balance the long-term funding of core programs with incentivizing new projects.** This fund could also provide a mechanism to attract external funding and develop a portfolio of organizations and projects that the County can sustain. Initial funding rounds using County-obligated ARPA funds can help demonstrate the County's "skin in the game" in solving digital inclusion challenges to generate further buy-in through future state/federal and philanthropic grant opportunities.

A Digital Equity Fund and Grant Program represents a critical opportunity to direct funding to communities, build the capacity of a wide ecosystem of local digital equity partners, and centralize future investments to sustain digital inclusion efforts. Leveraging its existing ARPA allocation,[1] Lake County establish a Digital Equity Fund to pool public and philanthropic funding and serve as a granting program. This funding can be flexibly used to invest in countywide or community projects – via a County-run grant application process – aligned with broadband and digital equity goals. The County could provide this funding to local partner organizations to administer projects. In the absence of a long-term dedicated funding source for digital equity, a portion of funds may also be applied to cover ongoing program operation and maintenance costs. Project types funded can be matched to specific investment objectives (e.g., improving tech career pathways for BIPOC students, funding digital navigators housed in nonprofit organizations, hosting device distribution events) and target local partner organizations that are serving population groups more likely to experience low internet adoption (e.g., low-income, disability, racial or ethnic minority, seniors, immigrants, etc.). The County would likely need to rely on an individual (e.g., a Digital Equity Manager) or other nonprofit entity to track funding opportunities from public and philanthropic sources and lead the administration of the fund and grants.

[1]*Note: In utilizing ARPA funding, Lake County could also consider obligating funding for the administration of the Digital Equity Fund to a partner nonprofit entity (via formal RFP and contracting process) by 12/31/2024 to ensure compliance with federal guidelines. ARPA funding must be expended by the County and any subgrantee organizations by the deadline of 12/31/2026.*

Impact

Rationale	The County does not currently have a dedicated funding source to sustain digital inclusion efforts beyond ARPA funds.
Potential Risks	• Dedicated time/staff role for overseeing and administering the fund • Risk of ineffective fund use by subrecipients (staggering grant fund payments and setting uniform reporting guidelines can help mitigate these risks)
KPIs	• # of organizations and projects receiving funding • $ of funding granted to community organizations
Estimated Cost	Cities and counties spend a wide range of funds annually on their digital equity funds and grant programs. The County can dedicate a portion its ARPA money as funding for digital equity grants – estimated $750,000 per year, over three years. Excludes the cost of staff time for fund administration. Depending on fund goals, parameters, and obligation considerations, the County may also be able to incorporate the projected costs for Digital Navigators, Digital Device Programs, and Digital Literacy programs into grant funding rounds.
Potential Partners	External fund administrator (community partner)
Long-Term Funding	Public grants and philanthropic grant programs

Establish a Digital Equity Fund

Case Studies

King County, WA – Digital Equity Grants

Using ARPA funds, King County provided $2 million in digital equity grants to organizations that promote digital equity, internet access, device access, and digital literacy support. Eligible grant uses included: (1) Establishing or enhancing a community technology lab equipped with computers, printers, and Wi-Fi; (2) Lending libraries or loan-to-own programs for new or refurbished laptops, notebooks, tablets, or other internet-enabled devices, including cell phones and mobile hotspots; (3) Providing culturally appropriate and responsive courses to improve digital literacy and skills; and (4) Staffing for technical assistance and training; administration and other costs. Grants ranged from $25,000 to $100,000

Baltimore, MD – Digital Equity Fund

Managed by the Baltimore Civic Fund, the Digital Equity Fund is an initiative to support the creation of community-led digital inclusion plans and provide funding for communities to bring those plans to life. The City allocated $1 million in ARPA funding for the current grant cycle. The fund provides three types of grants to Baltimore-based non-profit organizations working in close partnership with communities: (1) education and outreach grants ($5-$10k), Planning grants (up to $50k); and 3) implementation grants.

Portland, OR – Digital Inclusion Fund

Managed by the City, the Digital Inclusion Fund (Community Digital Navigator Pilot Grant Program and Small Business Digital Navigator Pilot Grant Program) is focused on building capacity in community-based organizations that are already providing Digital Navigator services to residents or looking to start training existing or new staff to be a navigator.

Colorado Springs, CO – Digital Equity Grant Program

The City of Colorado Springs awarded nearly $800,000 in digital equity grants to seven non-profits to help bridge the digital divide in the community. The City's Office of Innovation oversaw the distribution of the grants from the City's American Rescue Plan Act funds. The three focus areas for grant funding included (1) access to connected devices, (2) digital skills training and (3) technical support. The final programs were chosen by an evaluation committee with diverse local experts.

Implementation Roadmap

Estimated Timeline	**Medium-Term (1-3 years)** Initial grant funding should utilize ARPA funds ahead of the 2024 obligation and 2026 expenditure deadlines.

Phase 1: Fund Set-Up

1.1 Designate fund administrator

1.2 Approve County funding level commitment

1.3 Finalize fund design and grant program guidelines/selection criteria

Phase 2: Award Funding

2.1 Develop and open first round grant application

2.2 Evaluate projects and make selections

2.3 Award project funding

Phase 3: Evaluation

3.1 Track project performance and iterate grant program guidelines

3.2 ARPA reporting and compliance requirements

3.2 Leverage first round funding to apply for additional grants

Cost Estimates

Project Name*	Year One Implementation Cost (2024)	Annual Cost (Years Two and Three)	Three-Year Cost (Through 2026)	Cost Estimate Notes and Assumptions
Support the BEAD Process	$0	$0	$0	Excludes the cost of staff time.
Implement a Dig Once Policy	$0	$300,000[1]	$600,000[1]	Costs in Year 1 are $0 for policy development and implementation. Excludes the cost of staff time. The primary goal of a Dig Once Policy is to support internal and external coordination on infrastructure projects, reduce duplicative right-of-way disruptions, optimize infrastructure installation (either in partnership with providers or via public-owned infrastructure), and achieve cost savings. If the County decides to install its own conduit during future projects, it is estimated to increase the total cost of the project by approximately ~3%, per engineering estimates. In 2023, the average cost of a Lake County Public Works project (per the County's Capital Improvement Program) is $3.4M (source). If the County pilots the installation of conduit at three projects per year, total cost for Years 2 and 3 is estimated at $600,000. Pilot joint trenching projects can be assessed on their capacity to support a future middle-mile network for County government buildings.
Public Wi-Fi Pilot	$300,000	$500,000	$1.3 million	Assumes pilot program at 30 locations in Year 1, followed by a larger countywide expansion to 50 sites each in Years 2 and 3. Based on engineering estimates, the cost of purchasing and installing Wi-Fi hotspots is expected to be $10,000 per location (see Strategy 3-1). However, costs may change depending on the specific equipment needs of the site. Additionally, the cost does not include a budget for maintenance (estimated at a maximum of $1,000 per year) which would be assumed by the local unit of government or community anchor institutions hosting the hotspot(s).
ACP Outreach Campaign	$500,000	$0 to $500,000[2] in Y2	$500,000 to $1 million[2] (through 2025)	ACP Outreach Grants administered by the FCC provide a benchmark for determining the appropriate funding amount for an ACP Outreach Campaign. For example, the City of New Orleans received approximately $400,000 in ACP outreach funding and it has approximately 45,000 unenrolled households, compared to 57,000 unenrolled households in Lake County. Additionally, a 2022 contract between Riverside County, CA and non-profit California Emergency Technology Fund includes a breakdown of the cost of different ACP outreach activities and provides additional validation for the cost estimate of $500,000. Costs assume a campaign in both 2024 and 2025 (dependent on program continuation by Congress).
Device Distribution Program[3]	$350,000	$525,000	$1.4 million	Based on estimates from similar device distribution initiatives by counties and cities, the estimated cost of purchasing a Chromebook can range from $250 to $400. Assuming a cost of $350 per Chromebook, the County (or a community partner via County funding) can aim to purchase 1,000 devices for $350,000 in Year 1 of the program and expand to 1,500 devices for $525,000 in Years 2 and 3. Additionally, if the County intends to donate surplus or retired government devices, it could enter into an agreement with a refurbishment partner that would likely come at no upfront cost (ex. The City of Detroit agreement with HumanIT).
Digital Navigators	$500,000	$750,000	$2 million	The cost of a part-time Digital Navigator is estimated at $50,000 per year. Illinois Broadband Lab Digital Navigators fellows are hired via the AmeriCorps program at $30,000/year. The $50,000 estimate is benchmarked against local Digital Navigator salaries at Lake County community organizations and similar city and county job postings (ex. Hennepin County, MN). The County could dedicate $500,000 in Year 1 for the deployment of 10 digital navigators across multiple communities, with expansion to 15 navigators in Year 2 and Year 3 – either hired as County staff and deployed across community organizations, or through an RFP process to select community partner(s) to hire, train, and host and/or administer the Digital Navigators program.

Cost Estimates

Project Name*	Year One Implementation Cost (2024)	Annual Cost (Years Two and Three)	Three-Year Cost (Through 2026)	Cost Estimate Notes and Assumptions
Digital Literacy Program Coordination[3]	$500,000	$1 million	$2.5 million	City and county funding commitments toward digital literacy programming vary widely. The County may consider dedicating an initial $500,000 for funding digital literacy program expansions at community organizations (via a grant process) and/or for piloting a "Tech Goes Home" model to pair device access and digital literacy. Dedicating funds for digital literacy efforts will help empower a robust ecosystem of community stakeholders committed to closing the digital divide.
Broadband and Digital Equity Coalition	$0	$0	$0	Excludes the cost of staff time and meeting logistics.
Digital Equity Manager	Up to $115,000	Up to $120,000 in Y2 Up to $125,000 in Y3	Up to $360,000	Includes annual salary and insurance contribution, and accounts for annual inflation increase. Benchmarked in line with FY2023 employee total compensation package for existing County Program Manager roles, as well as other local government job postings and publicly available salaries. For example, Baltimore County, MD recently released a job posting for a Digital Equity Manager for a salary range of $92,000 to $126,000.
Broadband Coordinator	Up to $85,000	Up to $90,000 in Y2 Up to $95,000 in Y3	Up to $270,000	Includes annual salary and insurance contribution, and accounts for annual inflation increase. Benchmarked against other local government job postings and publicly available salaries. For example, London County, VA listed a job for a Broadband and Cable Affairs Program Manager with a salary range of $84,000 to $151,000. Two Wisconsin counties also recently created new Broadband Coordinator roles: Green County with a salary range of $47,000 to $59,000, and Marathon County with a salary of $75,000.
Digital Equity Asset Inventory Website	$6,000	$1,000	$8,000	External professional web design services are estimated at $6,000. The cost to host and maintain the digital equity website is estimated at $1,000 per year. The site would be maintained by Communications and the Digital Equity Manager. Estimate does not include the cost of staff time.
Digital Equity Fund	$750,000	$750,000	$2.25 million	Estimated costs are for additional digital equity grants to empower communality organizations across Lake County. Cities and counties spend a wide range of funds annually on their digital equity funds and grant programs. Regions of similar size have utilized anywhere from $100,000 to $2M of funds annually, including many utilizing ARPA funds, with grant sizes ranging from $5,000 to over $100,000. Examples include King County, WA, Baltimore, MD, and Portland, OR. Excludes the cost of staff time for fund administration.
Administrative Support	$100,000	$100,000	$300,000	Annual bucket for administrative support and overhead costs for planning, budgeting, hiring, development/scoping, assessing impact, and related activities for Plan projects, estimated at approximately ~3% over three years.
Total Estimates	**$3.2 million**	**$4.1 to $4.6 million**	**$11.5 to $12.0 million**	**All costs represent high-level estimates and are based on research and case studies. Funding allocations are subject to change.**

[1] Conduit joint trenching costs subject to vary. [2] Dependent on program continuation by Congress. [3] Projects that could also be incorporated into the Digital Equity Fund via grants to community organizations subrecipients, utilizing ARPA funding.

Example Funding Opportunities

There are many state and federal grants that can be leveraged by the County and its partners to support broadband and digital equity initiatives. As part of the Broadband and Digital Equity Action Plan process, the County established a comprehensive inventory of eligible funding sources. The table below provides a snapshot of the most relevant and/or largest funding opportunities available to the County. Supporting the long-term sustainability of the actions proposed in the Plan may require additional funding sources. The County should engage partners to ensure that all possible funding sources are utilized. **A comprehensive funding catalogue has been provided to Lake County (Appendix B).**

Opportunity Name	Funds Available	Description	Timeline	Relevant Strategies	Explanation
BEAD / Connect IL Round 4	~1 billion funds to Illinois	Program designed to expand access to unserved (under 25/3 Mbps) and underserved locations (under 100/20 Mbps). If there are remaining funds potentially community anchor institutions	Illinois released plan September/October 2023. Pending NTIA review.	• Expand the availability of high-speed fiber infrastructure	Lake County should support applications by local ISPs to access these funds. Lake County could also model its own program after Connect IL Round 4 to address areas not covered by the program
Digital Equity Act (DEA) Grant Program	~$1.5 million in planning to Illinois Funding pending for capacity grant program $1.25 billion for competitive grant program	DEA provides $2.75 billion for three grant programs. The State DEA planning grant provides funds for states to develop their digital equity plans. The State Digital Equity Capacity Program will support those plans The Competitive Program will fund annual grant programs related to digital equity for five years	Competitive program and capacity program estimated to launch in 2024	• Promote initiatives to remove barriers to internet affordability and device access • Promote initiatives to increase digital literacy and participation in the digital economy	Lake County should prepare to apply for a competitive grant or work with community organizations who are interested Lake County should monitor how the state plans to use its capacity grant funds
Affordable Connectivity Program	$14.2 billion federal total $7.4 million of funds allocated for two outreach programs	ACP provides funds to eligible households towards paying for internet services ACP outreach programs fund entities to encourage ACP signup	Ongoing	• Promote initiatives to remove barriers to internet affordability and device access • Promote initiatives to increase digital literacy and participation in the digital economy	Lake County can support enrollment in ACP

Example Funding Opportunities

Opportunity Name	Funds Available	Description	Timeline	Relevant Strategies	Explanation
Federal E-Rate	$4.46 billion annual cap	The E-Rate program provides schools and libraries with funding for telecommunications and internet access	Rolling	• Enact policies to streamline and coordinate broadband infrastructure deployment • Expand the availability of high-speed fiber infrastructure • Explore community Wi-Fi projects to increase free, public internet access	Lake County can work with RAILs and the Regional Office of Education to support Lake County schools and libraries not already apart of the program in applying for E-Rate funds
CDBG	$300 million for CDBG Section 108 in 2023	CDBG funds can be utilized for broadband and digital inclusion projects. Section 108 allows for low-cost/long-term project financing. Section 108 can be used to create more “connected” communities”	Section 108 is open year round	• Expand the availability of high-speed fiber infrastructure • Explore community Wi-Fi projects to increase free, public internet access	Lake County could integrate broadband and digital inclusion into existing CDBG projects and utilize CDBG/Section 108 for financing capital projects
Connect Illinois Previous Rounds	$400 million in previous rounds	Connect Illinois provided funds to providers throughout the state to expand internet access in areas lacking access	Closed	• Expand the availability of high-speed fiber infrastructure	Lake County can learn from successful Connect Illinois applications to make Lake County-based applications more successful
Illinois DECK	$1 million	The Digital Equity Capacity Kickstarter program represents an integral and strategic component of the State of Illinois’s Connect Illinois vision and commitment to broadband access, adoption, and use – all through the lens of digital equity and inclusion	Closed	• Promote initiatives to remove barriers to internet affordability and device access • Promote initiatives to increase digital literacy and participation in the digital economy	Lake County should monitor future Illinois Digital Equity grant opportunities

Example Funding Opportunities

Opportunity Name	Funds Available	Description	Timeline	Relevant Strategies	Explanation
Philanthropic	N/A	Lake County has a network of community foundations such as the Lake County Community Foundation and the Steans Foundation that are addressing digital equity in the region. Lake County should work with those foundations to fund future projects	N/A	• All projects	Lake County can maximize outside philanthropic investment in the Digital Equity Fund and in other projects
Private Sector	N/A	Local ISPs and private businesses can be encouraged to support digital equity projects. In particular, private businesses could support the funding of device recycling program .	N/A	• All projects	Private businesses can be encouraged to fund digital equity programs. to help support programs that may create their future workforce

Sources

Project	Source Name	Link
Support the BEAD Process	BEAD Notice of Funding Opportunity	https://broadbandusa.ntia.doc.gov/sites/default/files/2022-05/BEAD%20NOFO.pdf
	Connect Illinois Initial Proposal Volume I	https://dceo.illinois.gov/content/dam/soi/en/web/dceo/connectillinois/documents/il-bead-initial-proposal-vol-1.pdf
	Connect Illinois Initial Proposal Volume II	https://dceo.illinois.gov/content/dam/soi/en/web/dceo/connectillinois/documents/il-bead-initial-proposal-vol-2.pdf
	Broadband Equity Access and Deployment Program	https://broadbandusa.ntia.doc.gov/funding-programs/broadband-equity-access-and-deployment-bead-program
	AT&T Launches Fiber in Vanderburgh County, Indiana	https://about.att.com/story/2022/vanderburgh-county-fiber.html#:~:text=Under%20that%20agreement%2C%20Vanderburgh%20County,unincorporated%20parts%20of%20the%20county.
	Illinois Broadband Map	https://gis.connectednation.org/portal/apps/webappviewer/index.html?id=caedfe7ce8924660a4ce62de6a75a7fd
	FCC Broadband Data Collection	https://www.fcc.gov/BroadbandData
Implement a Dig Once Policy	BroadbandNow Research: Dig Once	https://broadbandnow.com/report/dig-once-digital-divide
	Dig Once Best Practices Overview	https://www.duraline.com/globalassets/us/news/dig-once/dig-once-best-practices-4-29.pdf?v=499832
	Technical Guide to Dig Once Policies	https://www.ctcnet.us/wp-content/uploads/2017/05/CTC-White-Paper-Dig-Once-20170414.pdf
	US Government Accountability Office: Planning and Flexibility Are Key to Effectively Deploying Broadband Conduit through Federal Highway Projects	https://www.gao.gov/assets/gao-12-687r.pdf
	Minnesota Local Government Models for Expanding Fiber Internet Access	https://ilsr.org/wp-content/uploads/downloads/2014/09/all_hands_on_deck_mn.pdf
	Dakota Networks Capital Improvements Projects.	https://www.co.dakota.mn.us/Government/IT/Pages/c-net.aspx
	Wildwood Area Stormwater Infrastructure Improvement	https://content.govdelivery.com/accounts/ILLAKE/bulletins/36977f3
	Lewis County Dig Once Pilot	https://app.leg.wa.gov/ReportsToTheLegislature/Home/GetPDF?fileName=CommerceReports%20LGD%202022%20Dig-Once%20Pilot_FINAL_40be6716-07bd-4780-bf03-b5618d481cbf.pdf
	Illinois Dig Once Act	https://www.ilga.gov/legislation/publicacts/fulltext.asp?Name=103-0378
	Dig Once to Save on Infrastructure Costs	https://crcmich.org/dennis-dig-once
	One Touch Make Ready	https://nextcenturycities.org/wp-content/uploads/Pole-Attachment-Paper-.pdf
	Update on Implementing Recommended Actions to Expand Broadband in Santa Cruz County	https://sccounty01.co.santa-cruz.ca.us/bds/Govstream/BDSvData/non_legacy/agendas/2014/20140128/PDF/059.pdf
	Lancaster County Conduit Expansion	https://www.klkntv.com/board-of-commissioners-to-expand-broadband-access-to-rural-lancaster-county/

Sources

Project	Source Name	Link
Public Wi-Fi Hotspots	2016 City of Zion Comprehensive Plan Update	https://www.cityofzion.com/departments/economic_development/2016_final_zion_comp_plan.pdf
	City and County of San Francisco Connectivity Plan 2015	https://sfgov.org/lafco/sites/default/files/FileCenter/Documents/52279-3%20City%20and%20County%20of%20San%20Francisco%20%28February%202015%29%20Connectivity%20Plan.pdf
	2014 City of Waukegan Washington Street Commercial Corridor Plan	https://waukeganil.gov/DocumentCenter/View/1386/CMAP_Washington-Corridor-Plan_FINAL?bidId=
	Connect Lake County	https://connectlc.org/#content
	ConnectWaukegan Fixed Wireless Proof of Concept	https://connectwaukegan.org/wp-content/uploads/2022/10/Connect-Waukegan-Fixed-Wireless-Proof-of-Concept-Final-10-5-22.pdf\
	City Unveils Open-Access Wireless Internet in Ten Milwaukee Parks	https://city.milwaukee.gov/mayorbarrett/News/2021-News/City-Unveils-Open-Access-Wireless-Internet-in-Ten-Milwaukee-Parks
	Ruckus Wireless Teams With San Francisco to Deliver Free High-Speed Outdoor Public Wi-Fi Access to Millions of Residents and Visitors	https://www.prnewswire.com/news-releases/ruckus-wireless-teams-with-san-francisco-to-deliver-free-high-speed-outdoor-public-wi-fi-access-to-millions-of-residents-and-visitors-236064951.html
	FCC E-Rate Program	https://www.fcc.gov/consumers/guides/universal-service-program-schools-and-libraries-e-rate
	E-Rate Entity Search Tool	https://opendata.usac.org/E-rate/E-Rate-Entity-Search-Tool/59r2-zbdq
	San Mateo County Digital Equity Portal	https://www.smcgov.org/smc-digital-equity-portal
	San Diego Public Wi-Fi	https://www.sandiego.gov/sdaccess
Device Distribution Campaign	Connect Illinois Computer Equity Network	khttps://dceo.illinois.gov/connectillinois/pcsforpeople.html
	CHI Device Donation Campaign	https://www.chicago.gov/city/en/sites/device-donation/home.html
	PHLDonateTech: providing computers to families in need	https://www.phila.gov/2020-12-07-phldonatetech-providing-computers-to-families-and-residents-in-need/
	Baltimore County Donates Used Electronics To Needy Families	https://towson.patch.com/g/towson-md/n/149711/baltimore-county-donates-used-electronics-needy-families
	Mayor, human-IT launch new effort to help close Detroit's Digital Divide, reduce e-waste, create jobs	https://detroitmi.gov/news/mayor-human-it-launch-new-effort-help-close-detroits-digital-divide-reduce-e-waste-create-jobs
	City donates 500 decommissioned computers to be refurbished and provided to Detroit families	https://detroitmi.gov/news/city-donates-500-decommissioned-computers-be-refurbished-and-provided-detroit-families#:~:text=The%20donation%20of%20more%20than,delivered%20in%20the%20coming%20weeks.
	FY23-28 CIP Amendments: Digital Equity - Montgomery Connects (P341700)	https://www.montgomerycountymd.gov/council/Resources/Files/agenda/cm/2023/20230216/20230216_ECON3.pdf
	Portland Digital Divide Response and TechKit Overview	https://www.portland.gov/united/techkit
	The Digital Equity Act Planning Grant Notice of Funding Opportunity	https://broadbandusa.ntia.doc.gov/sites/default/files/2022-05/DE%20PLANNING%20GRANT%20NOFO.pdf

Sources

Project	Source Name	Link
ACP Outreach and Enrollment Campaign	FCC Affordable Connectivity Program	https://www.fcc.gov/acp
	Riverside County Broadband Stakeholder Engagement Report	https://rivco.org/sites/g/files/aldnop116/files/2023-08/StakeholderEngagementV7.pdf
	ACP in the 313: Closing Detroit's Digital Divide	https://www.newamerica.org/oti/blog/acp-in-the-313-closing-detroits-digital-divide/
	Connect Lake County Digital Navigator	https://connectlc.org/#content
	City of New Orleans Awarded $370,000 for ACP Outreach	https://nola.gov/next/mayors-office/news/articles/march-2023/2023-03-17-affordable-connectivity-program/
	Riverside County Information Technology Submittal to The Board of Supervisors	https://rivco.org/sites/g/files/aldnop116/files/About%20the%20County/Budget%20and%20Financial%20Information/ARPA/CETF%20Form%2011%20and%20Fully%20Executed%20Agreement_0.pdf
Expand Digital Navigators	NDIA, The Digital Navigator Model	Digital Navigator Model - National Digital Inclusion Alliance
	Digital US, The Digital Navigator Playbook	Digital Navigator Playbook – Digital US
	Drexel University Student Work Study Digital Navigator Representative Job Description	Drexel Community Scholar - Digital Navigator .pdf - Google Drive
	City of Philadelphia Digital Navigator Report	DigitalNavigatorReport.pdf (phila.gov)
	Illinois Launches Digital Navigator Program	https://broadband.uillinois.edu/2023/09/19/illinois-launches-statewide-digital-navigator-program/
	Hennepin County, MN Digital Navigator Job Posting	digital-navigator | Job Details tab | Career Pages (governmentjobs.com)
Coordinate Digital Literacy Programming	Pittsburgh Digital Literacy Collaborative Case Studies	https://dceo.illinois.gov/connectillinois/federal-broadband.html
	Tech Goes Home	https://www.techgoeshome.org/impact
	Measuring the Impact of Digital Literacy	https://nextcenturycities.org/wp-content/uploads/2021/05/Measuring-the-Impact-of-Digital-Literacy-Revised.pdf
	Tech Goes Home Impacts	https://www.techgoeshome.org/impact
	Saint Paul Tech for All	https://www.stpaul.gov/departments/mayors-office/tech-all
Create a Broadband and Digital Equity Coalition	Franklin County Digital Equity Coalition	https://franklincountydigitalequity.org/
	City of Chicago Digital Equity Coalition	https://www.chicago.gov/city/en/sites/digital-equity-council/home.html
	Kansas City Collation for Digital Inclusion	https://digitalinclusionkc.org/

Sources

Project	Source Name	Link
Hire a Digital Equity Manager and Broadband Coordinator	Brookings, “Bridging the digital divide through digital equity offices”	https://www.brookings.edu/articles/bridging-the-digital-divide-through-digital-equity-offices/
	Lake County Total Compensation Report FY2023	https://www.lakecountyil.gov/DocumentCenter/View/43836/2023-Employee-Compensation-Report
	Los Angeles County, CA Director of Digital Equity Posting	https://wbcpinc.com/wp-content/uploads/2023/02/WBCP_LA_DDE_R2.pdf
	Baltimore County, MD Digital Equity Manager Job Posting	https://www.governmentjobs.com/careers/baltimorecounty/jobs/3824097/digital-equity-manager-non-merit
	Hillsboro, OR Broadband Manager Job Posting	https://www.governmentjobs.com/careers/hillsboro/classspecs/1253027
	Loudoun County, VA Broadband and Cable Affairs Program Manager	https://www.jobapscloud.com/LDN/sup/bulpreview.asp?R1=23&R2=134&R3=4036
	Broadband Administration Jobs Abound Across the US	https://www.lightreading.com/broadband/broadband-administration-jobs-abound-across-us
	San Antonio Digital Inclusion Team	https://www.sanantonio.gov/Innovation/Our-Teams/Digital-Inclusion
	“Marathon County to hire part-time broadband coordinator"	https://www.centralwinews.com/recordreview/2023/07/04/county-to-hire-part-time-broadband-coordinator/?destination=star-news
Launch a County Digital Equity Resource Website	City of Chicago Digital Resource Hub	https://www.chicago.gov/city/en/sites/digital-equity-council/home/resource-hub.html
	Detroit Connect 313	https://connect313.org/
	King County Digital Equity Asset Map	https://www.seakingwdc.org/digital-equity-asset-map
Establish a Digital Equity Fund	Philadelphia City Fund	https://philacityfund.org/programs/phldonatetech/
	Portland ARPA Digital Divide Grant Program Request for Applications	https://www.portland.gov/oct/digital-equity-strategic-initiatives/digital-divide-resp/documents/tech-kit-grant-application/download
	Baltimore Digital Equity Fund	https://www.baltimorecivicfund.org/digital-equity-fund
	King County Digital Equity Grants	https://kingcounty.gov/en/legacy/depts/executive/performance-strategy-budget/covid-19-relief-grants/digital-equity
	Colorado Springs Digital Equity Grant Program	Digital Equity Grant Program | City of Colorado Springs

LAKE COUNTY

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