Connecting the Digital Deserts: Some Promising Early Solutions

August 4, 2020

The Campaign for GRADE-LEVEL READING

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Connecting the Digital Deserts: Some Promising Early Solutions

GLR #LearningTuesdays webinar

Lisa Guernsey

August 4, 2020

NEW AMERICA

Online Learning Only Works if Students Have Home Internet Access. Some Don't.

BLOG POST

By **Sabia Prescott**

March 31, 2020

While some states are settling into the second full week of online learning, important questions remain about not only the best methods and tools for remote instruction, but

- **As many as 12 million children in the United States don’t have Internet access at home.**
- **17 percent of students do not have broadband at home.**
- **Not all teachers have high-speed Internet access at home either.**

NEW AMERICA

Like Comment Share

4 · 2 Comments

Closing the Home Learning and Homework Gap

Open Technology Insittute webinar on June 25, 2020

New America

Claire Park
Program Associate
Open Technology Institute

Community and Municipal Broadband Networks for Achieving Digital Equity

August 2020

Claire Park

Program Associate, New America's Open Technology Institute

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Current State of Broadband

- As many as 16 million school-aged youth do not have internet access or devices for online learning.
- More than 900 communities, of which more than 560 are served by some form of municipal network
- Community-driven broadband networks can pressure incumbent providers to improve quality of service, and lower costs.

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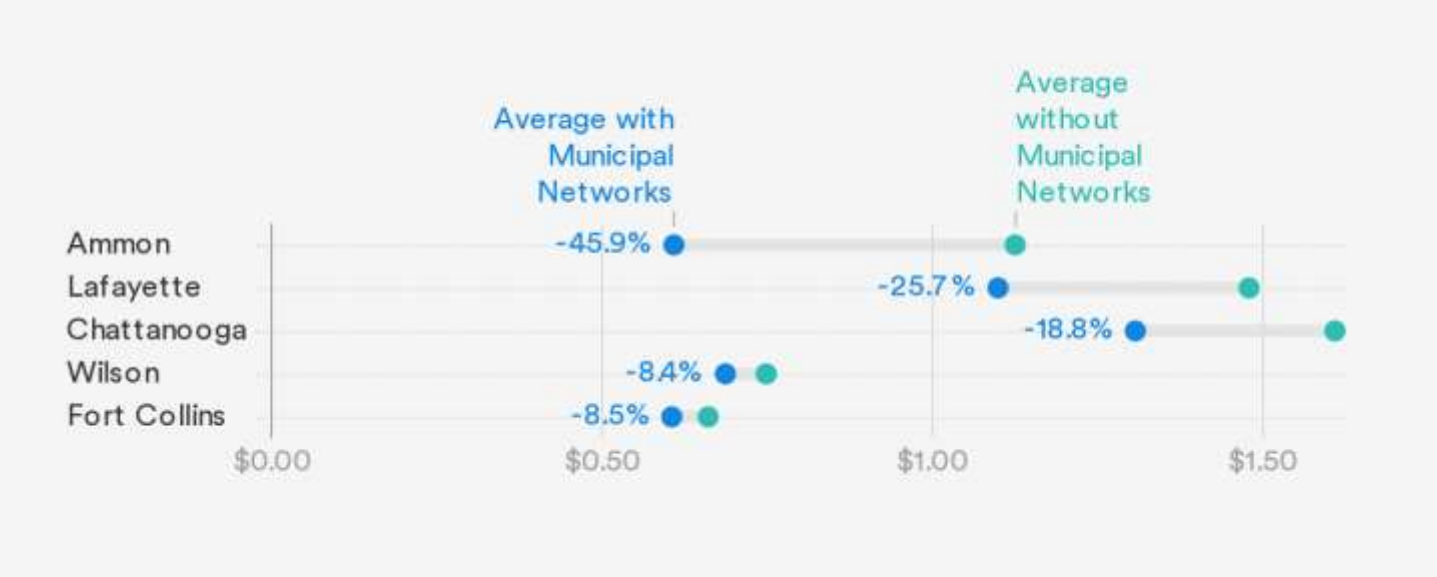
Exemplary Municipal Networks

Affordable, high speed internet for local residents, by local residents

Municipal Networks Bring Down a City's Average Cost



See https://www.newamerica.org/oti/reports/cost-connectivity-2020/ for more analysis

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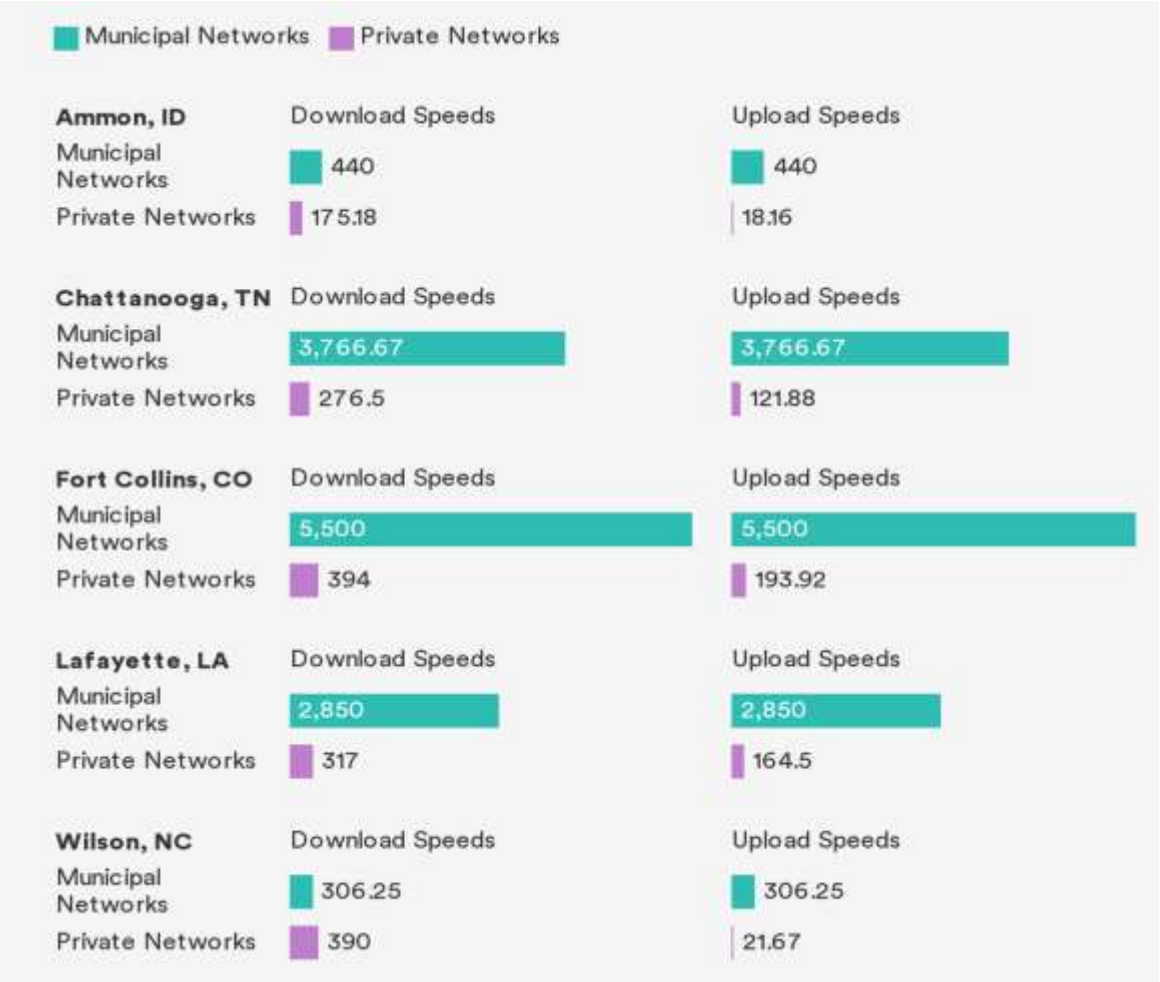

Average advertised speeds for municipal networks are faster than private networks

NEW AMERICA

See https://www.newamerica.org/oti/reports/cost-connectivity-2020/ for more analysis

Next Steps and Key Tools

- Remove state legislative barriers to municipal broadband.
- Require pricing transparency:
  – key aspect of recent success of E-Rate
- Examine RFPs and budget proposals from other successful cities
- https://www.newamerica.org/oti/reports/community-broadband/

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NEW
AMERICA

Chicago Connected

Hal Woods
Chief of Policy
Kids First Chicago

CHICAGO

Tuesday, August 4th

Chicago families have pointed out the critical need for digital equity

COVID19 has made it apparent that internet access isn't only now essential, but that it always has been.

"I received one Chromebook but I have three school aged children at home. I'm also a college student and would normally go to the library to use their computers but I can't do that now. We're all in the house trying to share one Chromebook and a cellphone. It's really hard to be both a parent and a teacher without the things I need to do it."

– Olivia O., Englewood Parent

"While my family has internet at home, it is not as fast and stable as it should be, and our kids struggle to use the online platforms for taking tests. For the many families in Austin who don't have reliable internet at home, it must be even more difficult to try to conduct remote learning."

– Rena R., Austin Parent

Data on internet access in Chicago confirms what families are saying – we have an inequity

*1 in 5 children in Chicago lack internet access**

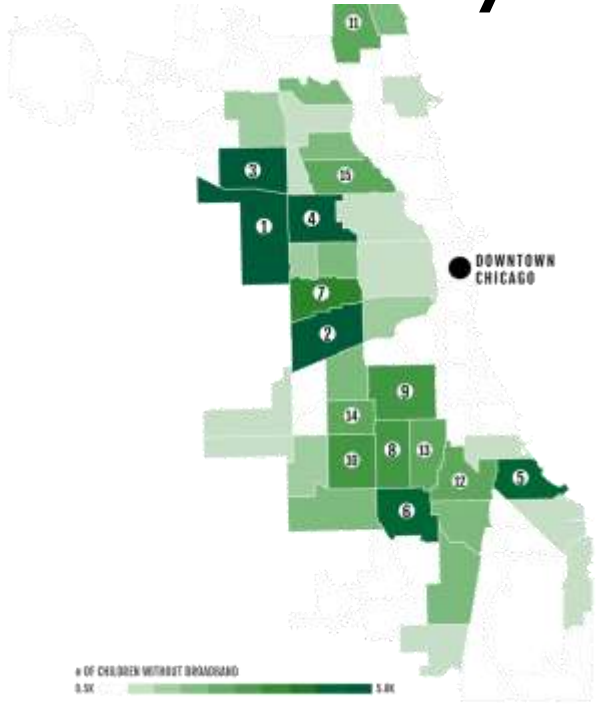
- **100,000 kids across 60,000 households**
- **Mostly African American/Latinx neighborhoods**
  - Just over **1 in 3 households in Austin**
  - Nearly **1 in 3 households in Humboldt Park**
  - Nearly **1 in 2 households in West Englewood**

The immediate COVID need for internet access will help build permanent infrastructure to bridge the Digital Divide

- **Even post-COVID, internet access is a critical issue to promoting educational outcomes and righting broader inequities (poverty, housing access, food access)**
- Research indicates that **internet access can improve students' GPAs and can improve standardized test scores**
- Internet access will help with engaging children in summer school and reducing summer crime

* "Digital Equity in Education", Kids First Chicago & Metropolitan Planning Council, April 2020 (students 18 and under)
** CPS Data for Google Meet and Platform Access from April 26 - May 2

Areas with the highest concentration of students without access to broadband are predominately on the South & West sides



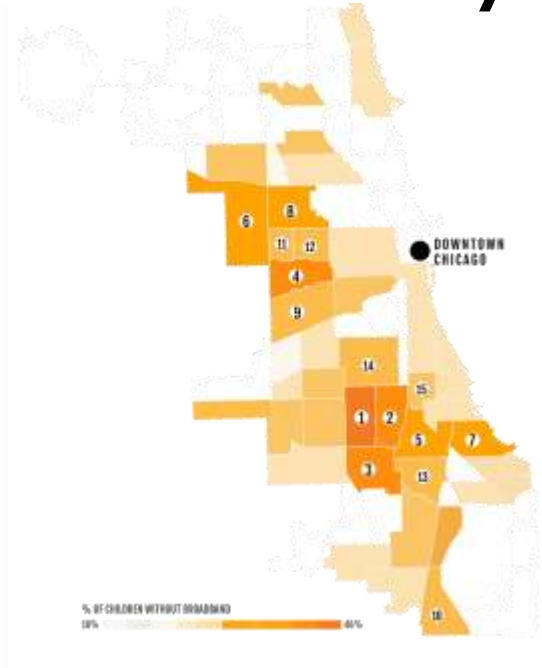
of Students

15 Most Affected Community Areas

1.	AUSTIN	WEST SIDE	7,801
2.	SOUTH LAWNDALE	WEST SIDE	6,624
3.	BELMONT CRAGIN	NORTH/NORTHWEST SIDE	5,218
4.	HUMBOLDT PARK	WEST SIDE	5,195
5.	SOUTH SHORE	SOUTH SIDE	3,994
6.	AUBURN GRESHAM	FAR SOUTHWEST SIDE	3,744
7.	NORTH LAWNDALE	WEST SIDE	3,550
8.	WEST ENGLEWOOD	SOUTHWEST SIDE	3,089
9.	NEW CITY	SOUTHWEST SIDE	2,992
10.	CHICAGO LAWN	SOUTHWEST SIDE	2,769
11.	WEST RIDGE	FAR NORTH SIDE	2,609
12.	GREATER GRAND CROSSING	SOUTH SIDE	2,539
13.	ENGLEWOOD	SOUTHWEST SIDE	2,392
14.	GAGE PARK	SOUTHWEST SIDE	2,366
15.	LOGAN SQUARE	NORTH/NORTHWEST SIDE	2,327

* See **US Census Bureau**, 2019, 2014-2018 American Community Survey 5-year estimates

Areas with the highest concentration of students without access to broadband are predominately on the South & West sides



% of Students

15 Most Affected Community Areas

1.	WEST ENGLEWOOD	SOUTHWEST SIDE	46%
2.	ENGLEWOOD	SOUTHWEST SIDE	38%
3.	AUBURN GRESHAM	FAR SOUTHWEST SIDE	38%
4.	NORTH LAWNDALE	WEST SIDE	37%
5.	GREATER GRAND CROSSING	SOUTH SIDE	34%
6.	AUSTIN	WEST SIDE	34%
7.	SOUTH SHORE	SOUTH SIDE	33%
8.	HUMBOLDT PARK	WEST SIDE	32%
9.	SOUTH LAWNDALE	WEST SIDE	31%
10.	RIVERDALE	FAR SOUTH SIDE	31%
11.	WEST GARFIELD PARK	WEST SIDE	31%
12.	EAST GARFIELD PARK	WEST SIDE	30%
13.	CHATHAM	FAR SOUTH SIDE	29%
14.	NEW CITY	SOUTHWEST SIDE	27%
15.	WASHINGTON PARK	SOUTH SIDE	26%

* See **US Census Bureau**, 2019, 2014-2018 American Community Survey 5-year estimates

Providing families with internet access will help build permanent infrastructure to bridge the Digital Divide

We have an opportunity:

- To engage children in summer school
- To be prepared for a new normal for learning in the fall
- To connect entire families that have been cut off from more than just their children's educations

- COVID has made it evident how important internet access is to ensuring positive educational outcomes
  - Research indicates that internet access can improve students' GPAs and can improve standardized test scores
- The internet is equally as important in righting broader inequities (workforce development, poverty, housing access, food access, healthcare)

CHICAGO CONNECTED

- **One of the largest and longest city-run internet accessibility program in the country (100,000+ students, 60,000+ households)***
  - Focus on high-speed, fixed-line, household internet access (wireline ensures reliability, consistency of speed, and can most quickly connect Chicagoans)
  - Includes a WiFi "hotspot" component focused on students in temporary living situations and the small percentage of homes where wired-service cannot be used
- **Student household eligibility based on six equity factors**:**
  1. ***Economic circumstances*** indicating that the cost of internet will likely be a challenge (e.g., Medicaid, eligibility for free meals, homelessness, UIC's researched-based Community Hardship Index)
  2. ***Student-level factors*** indicating students who are most likely to be disadvantaged academically (Diverse Learning, English Language Learning)

*See **Appendix Comparable Programs** for similar internet connection programs from other US cities
See **Appendix Eligibility for specific details on eligibility determination for the Chicago Connected program

Chicago Connected is a tight collaboration between a number of critical partners

Entity	Responsibilities
Chicago Public Schools	Co-project manager, responsible for identifying the students/household populations, marketing the program to households, and conducting ongoing management of program once operationalized
City of Chicago	Co-project manager, charged with managing the scope of the program, developing the budget, securing funding, and co-drafting legal agreements
Kids First Chicago	Tertiary project manager, tasked with facilitating conversations between CPS/City and the ISPs/CBOs/community at large. Potential lead for CBO engagement, accountability, and support
United Way of Metro Chicago	Fiscal agent, responsible for entering into legal agreements with each party, managing flow of funds, coordinating ongoing program management once operationalized
Children First Fund (CFF)	Fiscal agent, responsible for entering into agreements with each of the CBOs and managing flow of funds between select parties
Internet Service Providers (ISPs)	Service providers, tasked with delivering internet services to residents at low, subsidized costs (includes Comcast, AT&T, RCN, and WOW! as the four largest providers of broadband in the City
Community-Based Organizations (CBOs)	Local neighborhood organizations, responsible for community outreach, marketing the program, helping households connect to the internet, and training families on digital literacy (26 CBOs in total)
Philanthropic Organizations	Providing seed funding for the program alongside the City and CPS (to date includes Citadel, Crown Family Philanthropies, Pritzker Traubert Foundation, Chicago Community COVID-19 Response Fund, and a personal commitment from Barack and Michelle Obama, among others)

Chicago Connected relies on high quality internet service with minimal barriers from providers

- **Service at recommended speeds to allow for remote learning**
  - 25 Mbps download/3 Mbps upload, high-speed broadband per FCC
    - Regular/random speed checks and outage reports from ISPs
    - Regular audits/customer service surveys by CBOs
  - ISP providers and CBOs provide digital literacy training to families
- **No additional fees (no installation, equipment fees, taxes, etc.)**
  - ISPs not to upsell adjacent services or apply separate fees to Chicago Connected households
- **Reduction in barriers to participation**
  - No contract, background and/or credit check requirements
  - ISPs will not pursue or restrict participation based on past debts from prior subscription
  - Leveraging existing ISP-CBO relationships to reach eligible families
  - Ongoing customer service support including digital literacy
- **Lowest available pricing**
  - Household connection cost of $120 / year ($10 / month) from inception to at least 6/30/2021 for broadband

Community Based Organizations (CBOs) will form a critical backbone for this effort in the most disconnected communities

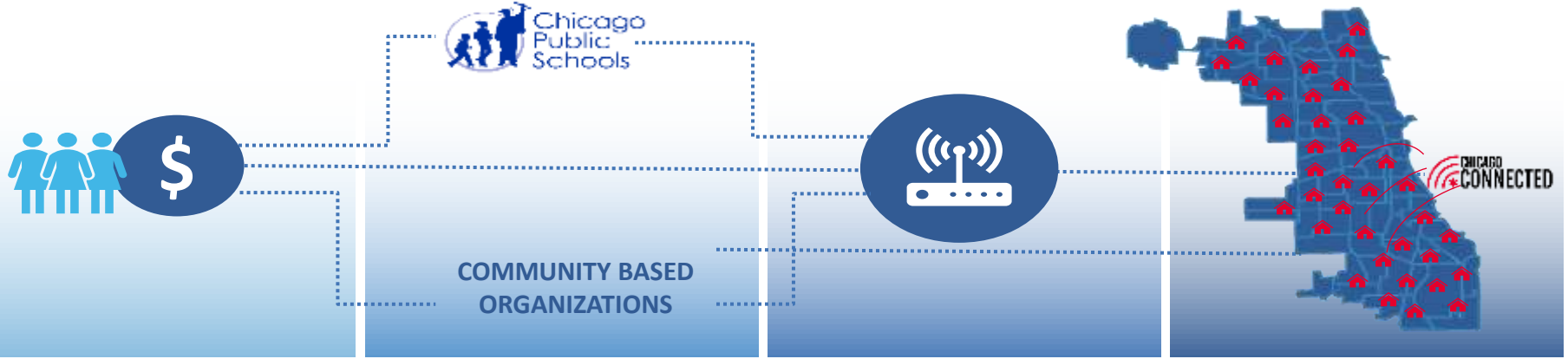
- **Not every neighborhood will have a CBO partner***
  - Partnerships will be focused on areas with the greatest need
- **Trusted in their communities, CBOs will lead the following:**
  - Act as a liaison between Chicago Connected and their neighborhoods
  - Engage eligible households to raise awareness and connect families
  - Support newly-connected households with troubleshooting and digital literacy
  - Connect families to resources for workforce development and other online tools
- **Payment will depend upon meeting key success metrics, including:**
  - # of households contacted
  - # of households signed up
  - # troubleshooting calls/contacts
  - # engagement/marketing outreach opportunities held
  - # attendees of digital literacy sessions

*See **Appendix CBO Target Communities & Selection** for more information on CBO target communities

The United Way and Children First Fund will serve as Fiscal Agents

- **Fiscal agent responsibilities include:**
  - Entering into contracts with CBOs and ISPs
  - Entering into grant agreements with the philanthropic organizations and City
  - Monitoring the ISP and CBO performance under set contracts
  - Ensuring ISPs and CBOs are paid on a timely basis for rendered services
  - Ensuring timely, comprehensive reports to the project management team
  - Maintaining accurate, up-to-date accounting

High-Level Project Architecture captures the coordination of these various partners and connection of households to the internet



01

Funders support the project through United Way and Children First Fund (CFF), who will both act as fiscal agents for the program. United Way and CFF disburses funds to three key project players: (1) Chicago Public Schools (CPS), (2) Community Based Organizations (CBOs), and (3) Internet Service Providers (ISPs).

02

CPS identifies CPS families who qualify and connects them to services provided by the ISPs.

CBOs help identify and connect hard-to-reach families. CBOs also provide additional digital literacy support to local families.

03

ISPs are responsible for providing free internet service to qualifying households for a minimum of one year—and potentially up to four.

ISPs will also provide digital literacy and marketing support for the program.

04

Households are connected to high-quality broadband internet. The City, and Chicago Public Schools continue to partner with United Way and Kids First Chicago to support and maintain the program alongside CBOs and ISPs.

Iowa West Foundation

Matthew Henkes
Vice President
Grants and Initiatives

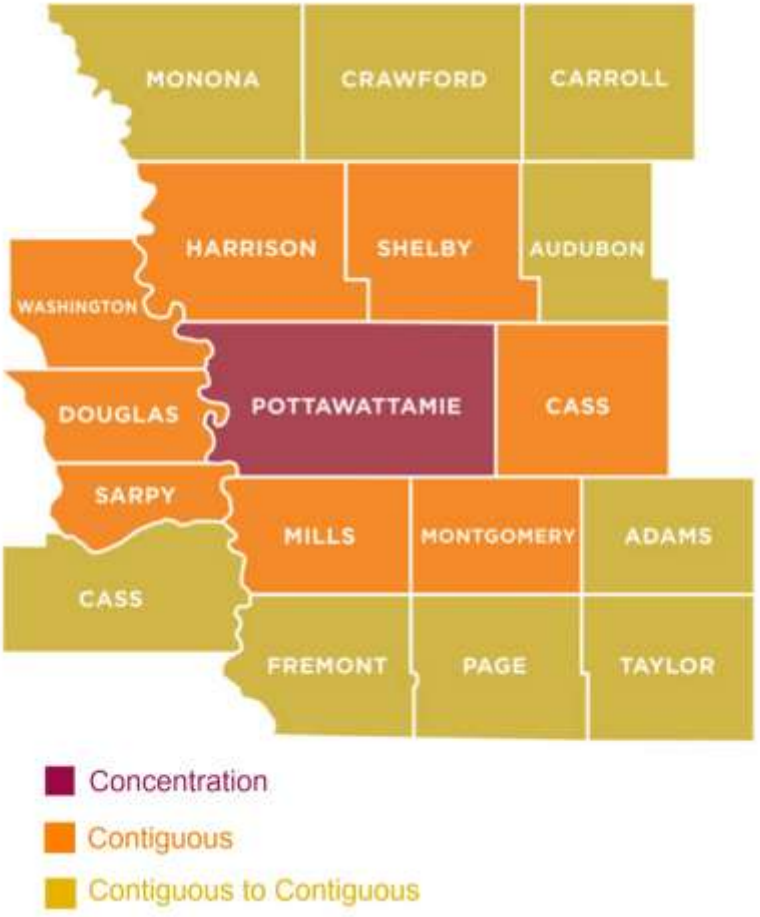

IOWA WEST
FOUNDATION
BLink
Bluffs Community Wifi

Our Vision: A community where families choose to live and businesses choose to locate because of the quality of life and standard of living

Foundation Initiatives

- Community Input
- Collaboration with multiple partners, creating opportunities to leverage funds
- Systems-focused
- Invests for impact on a larger, longer-term scale

Pottawattamie County and Council Bluffs are primary funding areas



BLink

Mission

To provide access to high-quality free public Wi-Fi wherever technically and financially feasible.

- Motivation: Google-sponsored 1:1 Chromebooks for Students of District
- Seven Phases (plus one)
- 28-E Agreement City and Schools
- Funders at the table
- COVID-19 Accelerated Completion

BLink

Outcomes

- To provide reliable free community Wi-Fi to the citizens, visitors, and students in the coverage areas
- To reach the doorsteps of nearly every home and business in Council Bluffs at project completion over the next five years
- To cover more than 20 square miles, providing Wi-Fi access to more than 40,000 people, demonstrating the vision for community-wide access and growth
- To attract young professionals, families and new businesses
- To be the largest free and open public WiFi network in the country at project completion

BLink

Timeline

- 2009 - City of Council Bluffs offered limited public Wi-Fi
- 2014 – CB Wi-Fi Consortium Organized
- 2016 BLink launched
- 2020 BLink completed

BLink

Impact of COVID-19

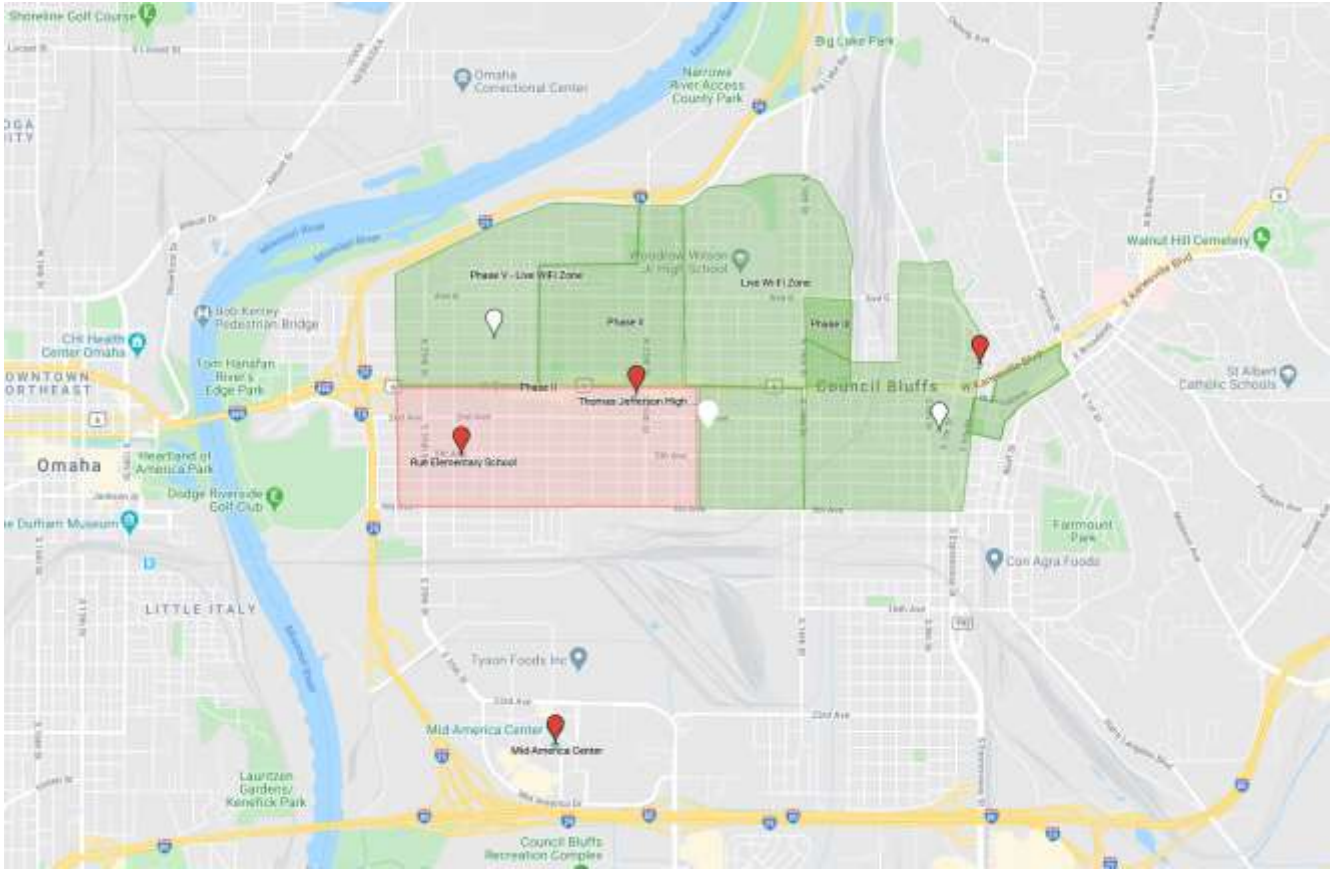
Network traffic is busy but is not overwhelming system resources.

January - March 2020

Average monthly client total (unique users) = 15,800 per month
Average number of monthly STUDENT sessions = 7,600
Total monthly network traffic = 36.96 Tb

March - Present 2020

Average monthly client total (unique users) = 21,070 per month
Average number of monthly STUDENT sessions = 14,000
Total monthly network traffic = 45.38 Tb


Phase V - Live Wi-Fi Zone
Live Wi-Fi Zone
Phase II
Phase III
Phase II
Thomas Jefferson High
Rue Elementary School
Council Bluffs
Omaha
LITTLE ITALY
Mid America Center
Mid America Center
Tyson Foods Inc
Con Agra Foods
Fairmount Park
Walnut Hill Cemetery
St Albert Catholic Schools
Big Lake Park
Narrows River Access County Park
Omaha Correctional Center
Shoreline Golf Course
Bob Kerrey Pedestrian Bridge
Tom Hanafan River's Edge Park
Dodge Riverside Golf Club
Heartland of America Park
Lauritzen Gardens/ Kenefick Park
Council Bluffs Recreation Complex

BLink

Impact of COVID-19: Network traffic is busy but is not overwhelming system resources.

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Common Sense Media

Amina Fazlullah
Digital Equity Counsel

Questions & Discussion

Upcoming GLR Learning Tuesdays Webinars:

PARTNER WEBINAR

Leveraging the Power of Data and Relationships: Reducing Chronic Absence in Rural Settings

Tuesday, August 11, 3 p.m. ET/12 p.m. PT

PARTNER WEBINAR

Afterschool Opportunities: An Antidote to Learning Loss During COVID-19

Tuesday, August 18, 3 p.m. ET/12 p.m. PT

Please stand by…Webinar will begin momentarily

GLR Learning Tuesdays

The Campaign for GRADE-LEVEL READING