



With

MIKE LYNCH

*Broadband and Cable Director,
City of Boston*

Connecting Residents in Boston, MA

Officials in Boston, Massachusetts are working to ensure that every resident has access to reliable internet and the ability to successfully navigate digital technology. NCC sat down with Mike Lynch, the City's Broadband and Cable Director, to discuss the City's advancements in the wake of the COVID-19 pandemic.

Can you give a brief overview of Boston's broadband landscape?

Boston is fortunate to have a long-term cable provider. Comcast was first built in Boston around thirty-eight years ago. Around the year 2000, a company called RCN came as an

"The work is not done. Everybody discovered over the last six months that connectivity is a must have, and people who may not have been that interested or didn't see the immediate need are now pressed into understanding that we have a need for connectivity."

Mike Lynch
The City of Boston

overbuilder to compete. Then we had two providers. In the last four years, Verizon has come in. They are our incumbent local exchange carrier (ILC). They decided [that] they will indeed provide FIOs in Boston. Over the last couple of years they have decided to build out all of Boston. So, [the] net result [is] we ended up with three cable companies in Boston. One of them provides service to every part of the City. The other two are overbuilding the City.

Continue reading about Boston's connectivity story [here](#).

An Industry Perspective

TELE-INCLUSIVITY IN THE AGE OF COVID: A MESSAGE TO THE TELEHEALTH INDUSTRY

The global pandemic has ushered in a telehealth boom, with telehealth insurance claims rising 8,336% between April 2019 and April 2020. Without question, telehealth is now a lifeline for millions of Americans who want to stay safe and avoid exposure to COVID-19 during an in-person doctor's visit. But who has the opportunity to utilize telehealth, and, more importantly, *who is being left out?*

A recent study published in the Journal of American Medical Informatics Association (JAMIA) sheds light on this question and addresses the health disparities that we are all too familiar with in our healthcare system. The study of Mount Sinai patients during the height of the COVID-19 outbreak in NYC found that Black and Latino patients had lower odds of using telehealth versus either the ER or an office visit than either Whites or Asians - this remained true even after adjusting for age, comorbidities and preferred language.



*By April Mims,
Vice President of Public Policy at Hims & Hers*

Disparities in digital access, digital literacy, and telehealth awareness and education were all cited as potential reasons for the racial disparities in telehealth adoption. Notably, the authors acknowledge that these “racial differences in telehealth use should be interpreted within the context of persistent structural racism in the US.”

At Hims & Hers, a telehealth company whose mission is to break down barriers when it comes to accessibility and obtaining quality health and wellness care, we know that we cannot stand by idly as important segments of our community (people of color, the elderly, rural Americans, etc.) are deprived of the extraordinary benefits of telehealth. Benefits that include access to quality providers nationwide, zero transportation hassles, affordability and convenience.

Continue reading Hims & Hers' piece [here](#).

INSIGHTS FROM A POLICY EXPERT



Telehealth – Improving the Health and Economic Well-Being of Communities

By Craig Settles

Saved from a stroke by telehealth, Craig Settles is committed to pay it forward by uniting community broadband teams and healthcare stakeholders through telehealth initiatives.

Telehealth is more than video chat with your doctor. It means using intranets and Internet networks to observe, diagnose, initiate or otherwise medically intervene, administer, monitor, record, and/or report on the continuum of care so that residents can heal and stay healthy.

Telehealth increases broadband's economic development impact, and can add revenue streams for the network and/or the community. For example, 26% of economic development professionals in a national survey felt using telehealth to attract doctors and medical specialists would have a definitive impact on local economies.

In Next Century Cities' member city, Chattanooga, Tennessee, Radiologist Dr. Jim Busch took advantage of the city's gigabit public broadband network by bringing the city's radiologists under one organization, Diagnostic Radiology Consultants.

Radiologists connect through the network to other team members and the city's hospitals. Dr. Busch wrote software that, together with Chattanooga's network, allows the team to serve more hospitals and patients, grow and expand the business, and create another hook that draws individuals and businesses to town.

The radiologists and medical facilities save 40 hours per radiologist per year, which represents a sizable dollar savings. Dr. Busch says it is not uncommon for more than 10 radiologists to send multiple large files simultaneously. This results in business savings and better care for patients.

Broadband and telehealth can draw other healthcare professionals to your community. For example, "We have less than half of the psychiatric providers needed to meet the U.S. mental health demand," says Encounter Telehealth CEO Jennifer Amis. "In the rural areas we may have less than 20% of the providers needed."

Continue Reading Craig's piece [here](#).



AN ACADEMIC ANALYSIS

Inequality in broadband access jeopardizes the mental health & well-being of communities coping with COVID-19.

By Amber O'Brien

Amber O'Brien is earning her master's degree in Psychological Science at Texas Woman's University, researching biological and social factors of anxiety and depression with an emphasis on health inequities.

Mental health is threatened by the ongoing pandemic, and many may be facing anxiety and depression for the first time. According to the [World Health Organization](#), before the COVID-19 pandemic, approximately four percent of the population suffered from depression and anxiety. [Recent research](#) indicates that since the Covid-19 pandemic, there have been sharp increases in depression, now affecting 33.7% of the population while anxiety continues to affect 31.9%. With this drastic rise in anxiety and depression, access to mental health resources is critical to the well-being of citizens. Yet, many of the at-risk communities are the same ones who suffer from lack of access to resources due to inadequate broadband connectivity.

Equality in digital access cannot wait. The unfavorable conditions that COVID-19 is leaving in its wake—unemployment, loss of social connectedness, loss of health and even the loss of loved ones—are risk factors to mental health. Low socioeconomic status and health disparities can put a strain on psychological resources, putting individuals in certain communities at greater risk of developing depression and anxiety. Communities that were already suffering from inequities in health and economic resources may be at increased risk. When tele-health and tele-medicine programs have increasingly become the first step in obtaining care, the most disconnected populations have limited treatment options.

Not only are these unserved and underserved communities at higher risk for anxiety and depression, but they are also being denied access to critical and potentially life-saving mental health resources. Gaining access to mental health care was already a challenge for many, with barriers including cost, mental health literacy and geographic locations of service providers. Without adequate internet access, gaps in access to care has a disparate impact on the poor, seniors, remote populations, and people of color.

Continue reading Amber's piece [here](#).



NCC Members Are in the News

Charlotte, North Carolina. Though the City of Charlotte has a robust broadband infrastructure, residents in some of the City's most underserved neighborhoods face significant barriers to adoption. Statewide, 20% of homes have no internet subscription, many of which cannot afford the \$60 average monthly cost. ([Government Technology](#))

Chattanooga, Tennessee. More than 28,000 students will receive much-needed internet access as a result of a public-private partnership between Hamilton County Public Schools and local internet service provider, EPB. Families qualifying for the free and reduced lunch program, which account for at least two-thirds of the student population, will be eligible to apply for the program and receive a free router and 100 Mbps fiber internet without data caps. ([Smart Cities Dive](#))

Lexington, Kentucky. MetroNet has completed a citywide fiber optic network with 4.4 million feet of fiber laid across the City. The completion of the project makes Lexington the largest city in the United States with a complete fiber optic network offering gigabit speeds to residents and businesses. ([BusinessWire](#))

Tennessee. Governor Bill Lee announced the allocation of \$61 million in emergency broadband grants for the state of Tennessee. The money will fund 62 broadband projects across the State. Projects were selected after a public comment and submission period. Tennessee is home to seven NCC municipalities including **Chattanooga, Clarksville, Hendersonville, Jackson, Morristown, Thompson's Station, and Tullahoma.** ([Main Street Clarksville](#))

NCC is Advocating on Behalf of Members

NCC Urges the FCC to Protect Local Authority Over Pole Attachment Costs.

NCC filed comments in response to [NCTA's Petition for Declaratory Rulemaking](#), which would restrict pole owners' ability to charge new attaching entities for pole replacement costs and assign the FCC as the sole arbiter of "just and reasonable" fee structures. NCC is concerned about new regulatory barriers that could hinder local government decision-making and, therefore, urged the FCC to deny the request. Read the September 3rd filing in its entirety [here](#).

NCC files Section 230 Comments. On September 2, 2020, Next Century Cities filed comments urging the FCC request to deny the National Telecommunications and Information Administration's petition for a rulemaking to clarify the scope of Section 230 of the 1996 Communications Decency Act. The comments explain why it diverts time and resources away from the FCC's central concern to connect every American to broadband. The FCC filing can be accessed [here](#).



How State and Federal Entities Can Support Local Initiatives.

NCC's Executive Director participated in a timely panel discussion on narrowing the digital divide in the wake of the COVID-19 pandemic. During the conversation moderated by Lisa Youngers, Ochillo offered specific solutions that federal and state governments can employ to support local communities. Click [here](#) to view the PowerPoint presentation.

Digital Equity in Hawaii. NCC's Francella Ochillo sat down with Bytemarks Cafe's Burt Lum to discuss the importance of widespread broadband access and identifying digital equity goals that benefit Hawaiian residents. Listen to the full episode [here](#).

The Policy Note

BY LUKAS PIETRZAK



In Illinois, communities are coming together with the assistance of Governor J.B. Pritzker and the Benton Institute for Broadband and Society to close the digital divide. The Illinois Connected Communities grant program, announced in August of 2020, is supporting 28 communities and initiatives from across Illinois that serve a wide variety of residents and needs. The first 12 communities were announced by the Governor's office and are preparing to connect public housing communities, students, young professionals, and entire villages. This cohort will tackle connectivity issues ranging for access to adoption.

Across Illinois, 387,000 residents lack access to broadband internet, and over 2.5 Million do not have a subscription. These households are not only missing the ability to connect with family and friends during a pandemic, but they are unable to benefit from distance learning, telework, telehealth, and the many other internet-enabled services that power our society. In the age of COVID, residents in Illinois and in every state are realizing that bringing fast, affordable, and reliable broadband within reach for every household must be approached as a critical and time-sensitive service.

In **Champaign**, a town of 88,000 and a Next Century Cities member, the Public Housing Authority is preparing to utilize their funding and expert consultations to unlock additional broadband capacity for their residents. With over 6% of residents in their community disconnected, Champaign's leaders understand that closing the digital divide must be a top priority for their municipal government.

Continue reading this week's policy note [here](#).

REGISTER FOR THE 2020 INDIGENOUS CONNECTIVITY SUMMIT TODAY



Internet Society hosts their annual Indigenous Connectivity Summit to address the issues impacting access and adoption in Indigenous communities across the country. The convening brings together leaders and residents committed to connecting those communities.

The Indigenous Connectivity Summits have led to including, but not limited to, the following impacts to the community of partners and policy environment:

- In 2019, the Internet Society worked with the Nation of Hawai'i, the Hawaiian Chapter, University of Washington, MuralNet, and others to build a community network in the Native Hawaiian community of Pu'uuhonua o Waimanolo, Hawai'i. This new network, owned and operated by the community, now provides high-speed Internet access to all 90 residents. Children in the community no longer have to travel outside of their village to complete homework and new opportunities for economic and social development are available to residents.
- The Arctic Council's 2019 report, Improving Connectivity in the Arctic, referenced the 2018 Indigenous Connectivity Summit, and includes recommendations that reflect the discussions held there. This report provides the eight Arctic States and Indigenous organizations with a framework for enhancing connectivity in some of the most remote regions in the world.
- Representatives from the FCC, CRTC, and ISED have all participated in the Indigenous Connectivity Summits and as a result made updates to proposed rulemakings or reports based on conversations held with participants at the Summits.
- A representative of the Broadcasting and Telecommunications Legislative Review Panel attended the ICS to invite Indigenous delegates to provide written submissions in response to its review of the Canadian communications legislative framework. However, several participants complained about the short notice and questioned the Panel's efforts to be inclusive of Indigenous communities throughout Canada. As a result, the panel extended the deadline for submission.

For the first time, the Summit will be held in a virtual forum from October 5 - 9, 2020. [Register for this year's conference here.](#)

IN CASE YOU MISSED IT

Digital Equity Webinar Series. The New York State Library and State Education Department announced a series of webinars on digital equity. Educators, librarians, and other stakeholders will discuss in a webinar series intended to establish a shared understanding of how digital equity can improve broadband access and increase adoption. Register for the Thursday afternoon webinars [here](#).

Connecting Underserved Rural Communities. Through their recent article, Brian Whitacre and Roberto Gallardo shed light on the most disconnected communities across America. Whitacre and Gallardo make specific policy recommendations that will help connect residents. ([The Conversation](#))

Opening up the 5.9GHz Spectrum. New America's Michael Calabrese and Amir Nasr joined WifiForward for their Wi-Fi at Work webinar series to discuss why the FCC should open up the 5.9GHz spectrum. Watch the conversation in its entirety [here](#).



Mark del Bianco

NCC Hosts a Webinar to Discuss the Local Impact of the *City of Portland v. United States* Decision. On August 12, 2020, the U.S. Court of Appeals for the Ninth Circuit issued a decision in *City of Portland v. United States*. NCC member municipality, **Portland, OR**, petitioned for review of the 2018 Small Cell Order which limited local governments' ability to regulate telecommunications providers and prevented owners and operators of utility poles from discriminatorily denying or delaying broadband service providers access to poles. **Culver City, CA; Lincoln, NE; Los Angeles County, CA; San Francisco, CA; San Jose, CA; and Santa Monica, CA** were intervenors. The Court upheld all parts of the FCC's order relating to pole attachment rates and deployment on utility poles. Join NCC on Thursday, September 17th, at 3 p.m. ET, for a webinar featuring Mark del Bianco, a communications lawyer in **Montgomery County, MD**. In this monthly member meeting, local officials will have an opportunity to learn about the decision's impact on fees, tower spacing, equipment design, and concealment requirements. A government email address is required. Register [here](#).

MEMBER RESOURCE ALERT

In collaboration with Public Knowledge, NCC developed a series of fact sheets detailing the benefits of broadband. Check out this resource on telehealth in the age of COVID-19 featuring NCC member municipality **Carbondale, Illinois**.

TELEHEALTH IN THE AGE OF COVID-19



The COVID-19 pandemic has brought the value of telehealth to the forefront of national healthcare discussions. Our healthcare system's unprecedented response to this crisis continues to highlight the critical role broadband plays in providing healthcare and promoting public health to every corner of the country. For those receiving telehealth, access to affordable and reliable broadband is a matter of life and death.

High-speed connectivity continues to be an obstacle for medical professionals and patients in unserved and underserved areas across the country. An estimated seven percent of small rural healthcare providers and 42 million patients do not have affordable, reliable access to broadband. That is why policies that promote broadband access and adoption must be a priority for federal, state, and local policymakers.

SUCCESSFUL TELEHEALTH INITIATIVES DEPEND ON BROADBAND

Telehealth, providing healthcare services and information at a distance, is rapidly growing in importance. Even before the COVID-19 pandemic, healthcare professionals expected the practice to transform the field of medicine over the next decade. The number of hospitals utilizing telehealth has more than doubled over the last decade, providing savings for both patient and provider. The increasing presence and lowering costs will mean more communities, especially those without primary care and specialist physicians, will finally be able to close health gaps.

- **Telehealth helps ensure that every American can** survey found that two-thirds of Americans are watching video -- the same percentage that said they have a health issue.
- **Telehealth is also cheaper than traditional health** reduce in-hospital stays when their doctors are at home. By offering hospital-level care remotely, telehealth saves individuals as much as \$1,500 per visit.
- **Telehealth patients around \$114 per visit.** In one study, telehealth created a \$12 return for every dollar spent on providing services to medically underserved populations.

TELEHEALTH IN THE AGE OF COVID-19



LOCAL IMPACT OF FEDERAL FUNDING



In **Carbondale, Illinois**, the local government partnered with Southern Illinois University (SIU) to unleash the potential of the region's first gigabit network. Through federal funding and local support, Carbondale became home to one of the fastest networks in the region and SIU connected four critical access hospitals. Since the program launched in 2015, the initiative has continued to purchase tablets, lay network infrastructure, and expand telehealth services. In the era of COVID-19, the community is receiving another \$10,000 in technology that will expand these services even further during the crisis. Inadequate broadband infrastructure limits telehealth opportunities for those who need it the most: rural Americans, seniors, and communities with physician shortages. A commitment to expand broadband access is a priority for all.

TELEHEALTH IN THE AGE OF COVID-19



BROADBAND ENABLES PROVIDERS TO OFFER BETTER, MORE AFFORDABLE CARE IN MORE PLACES

The growth of telehealth has delivered some of the most innovative practices and technologies to patients in every part of our country. Our nation must expand broadband access and adoption to ensure that healthcare providers can use these important resources.

- **Electronic Health Records (EHRs)** allow for quick and secure transmission between providers, allowing physicians to see a patient's records and information before diagnosing -- but not in areas without reliable broadband. EHRs save time and money. The Federal Communications Commission has estimated that just implementing EHRs and remote monitoring could save \$700 billion over two decades.
- **Network-connected healthcare technology**, such as wireless sensors, monitoring devices, EKGs, and smart beds, allow for quicker and more efficient care. Doctors can see medical information in an instant and easily keep track of patients in both the hospital and at home. One caregiver, for instance, explains how her grandmother can remain independent through use of telemedicine visits and smart sensors that track whether Grandma Helen is taking medication or putting more weight on one side of her walker.

High speed broadband can fundamentally improve what "normal" healthcare looks like, but Americans need the government to expand broadband adoption so Americans can access it in the first place.

every zip code to eliminate travel for patients in rural areas who may not be able to travel because of distance can now speak to their needs. With increased mobility, telehealth could help patients stay living them to live at home and access more specialized services. Patients have new options to "send" their care to rural Americans the same treatment



Sourcing: Esomizer, US Chamber of Commerce, AHA, FCC



Opportunities for Members

Rural Digital Opportunity Fund Phase I Auction and Application Status. The Federal Communications Commission announced the status of the 505 short-form applications received for Auction 904. The bidding on Auction 904 will begin on **Thursday, Oct 29, 2020**, and will award up to \$16 billion over a ten-year period to service providers that commit to offer voice and broadband services to fixed locations in unserved high-cost census blocks. This Public Notice also provides important information regarding modification and resubmission of short-form applications and reminds applicants of certain procedures the FCC adopted for this auction.

U.S. Census Bureau Hosts Webinar on Release of 2019 American Community Survey Statistics. The Sept. 10th webinar, 2-3 p.m. ET, will show participants how to access new data and online resources from the 2019 [American Community Survey](#). Attendees will also learn about changes related to this release, and tips for comparing geographies and statistics over time. Register [here](#).

If you have stories to share, we would love to hear them! Please contact Brittany-Rae Gregory at brittany-rae@nextcenturycities.org.