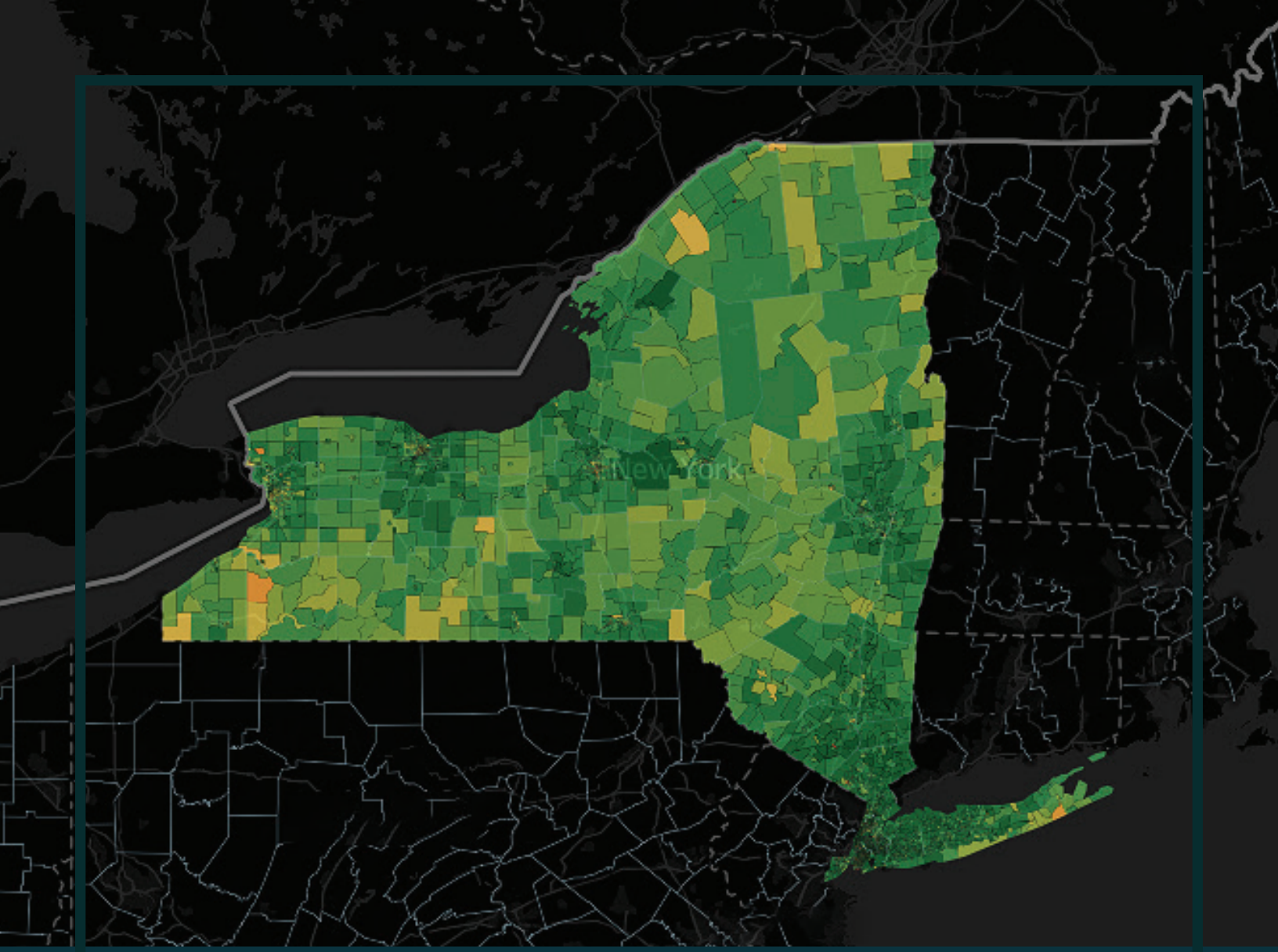

The New York State
DIGITAL EQUITY PORTAL

Final Report
December 2021

CT NY | ILR | NYS ED .gov | New York State Library | JR O JOHN R. OISHEI FOUNDATION

Table of Contents

3 Introduction and Background

4 Digital Equity Framing

7 Future Paths

This report was drafted by Community Tech NY (CTNY). CTNY believes that building community networks builds community power and that everyone deserves the right to make their own decisions about how they live their digital lives.

The development of the NYS Digital Equity Portal was undertaken by Cornell University's School of Industrial and Labor Relations (ILR), with technical leadership from Dr. Russell Weaver, Director of Research, ILR Buffalo Co-Lab. The ILR School is focused on work, employment and labor, and is dedicated to generating and disseminating knowledge that improves the lives of workers and transforms the future of work.

The NYS Digital Equity Portal is an expansion of the Western New York Digital Divide portal, an online resource created with the support of The John R. Oishei Foundation in late 2020/ early 2021. The portal is supported in part with federal Coronavirus Aid, Relief, and Economic Security (CARES) Act funds allocated to the New York State Library by the Institute of Museum and Library Services (IMLS).

The NYS Digital Equity Portal can be accessed through Cornell's website (https://blogs.cornell.edu/nysdigitalequity).

Introduction and Background

Community Tech NY (CTNY) and our partner the School of Industrial and Labor Relations at Cornell University are pleased to present our report on the development of the New York State Digital Equity Portal. This online portal is an interactive geographic data resource for New York State communities seeking to understand digital needs and create plans to advance digital equity. As detailed below, the development of this portal draws on digital equity scholarship and the focus groups with digital equity practitioners to create a critical and needed resource that provides a clear and user-friendly interface for accessing key data on the indicators of meaningful broadband adoption. Beyond simple access to the internet, the New York State Digital Equity Portal maps data on cost, speed, devices, income, and race across multiple different geographies.

This portal is an expansion of the Western New York Digital Divide portal, an online resource created with the support of the John R. Oishei foundation in late 2020/ early 2021 that focused exclusively on the eight county Western New York region plus Monroe County. That portal drew on the Census Bureau's 5-year American Community Survey estimates related to broadband adoption, service availability and uptake; as well as the Federal Communications Commission's Form 477 broadband availability and subscription data. Users could analyze race and income data as well as connection type in Western New York at the county and municipal level. The NYS Digital Equity Portal expands the original portal to the entire state, while

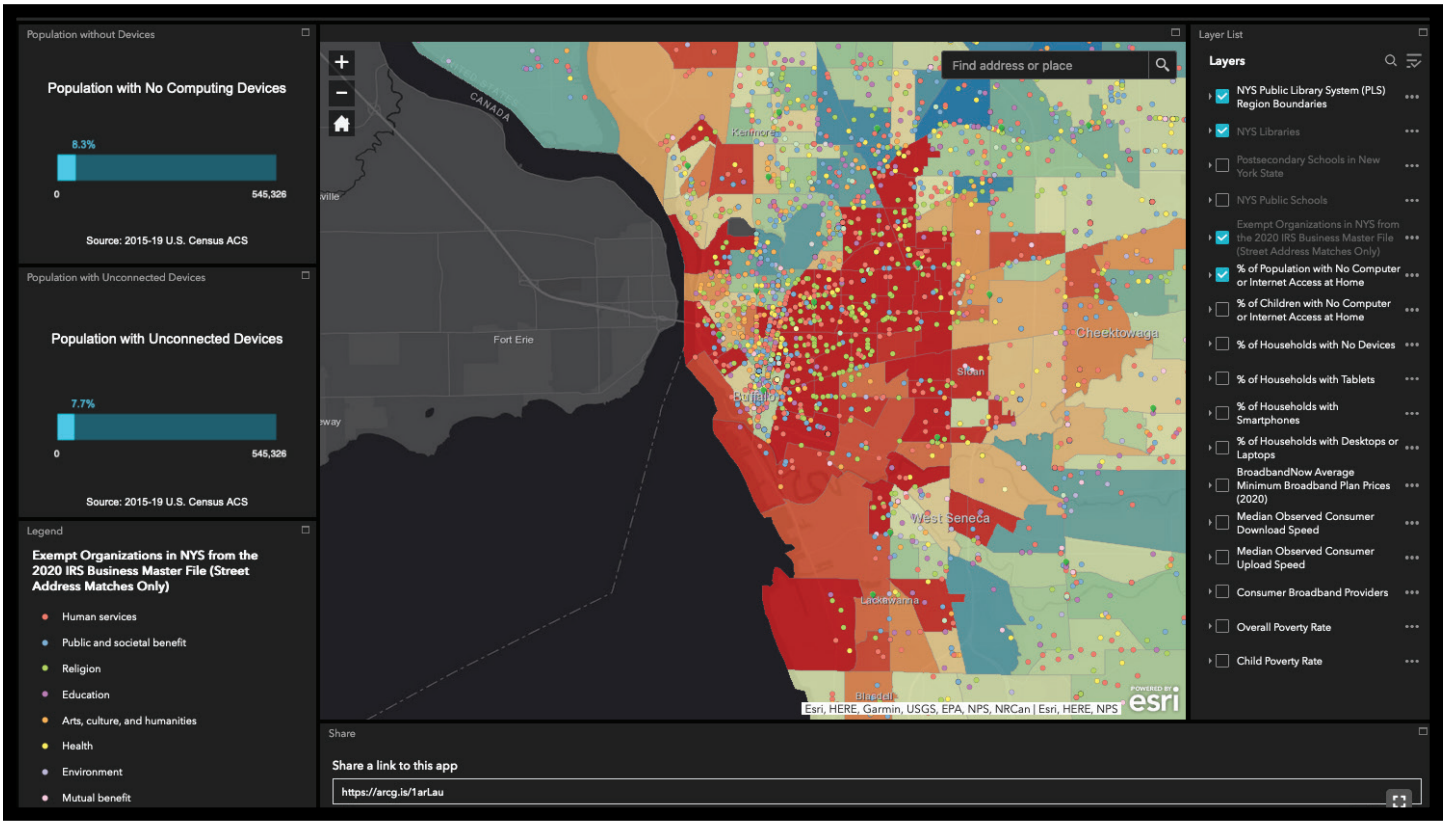

Image: Screenshot from the NYS Digital Equity Portal, depicting all tax-exempt organizations within Erie County, NY.

offering users more metrics informed by digital equity scholarship, including devices, cost, speed, and statistics on the lack of connectivity for children. Users can analyze the data based on multiple different geographies such as congressional, NYS Senate, and NYS assembly districts, as well as zip code and New York public library system. As a critical first step to begin mapping digital equity ecosystems, the portal also includes a data layer that identifies all of the non-profit/tax exempt organizations within a specific geography.

The NYS Digital Equity Portal is supported in part with federal Coronavirus Aid, Relief, and Economic Security (CARES) Act funds allocated to the New York State Library by the Institute of Museum and Library Services (IMLS).

In this report, we present our digital equity framing and conclude with a discussion of future paths the portal can take.

Digital Equity Framing

2021 is a landmark year for digital equity, with an unprecedented level of funding being directed to communities by the federal government to address connectivity challenges. The $1.9 trillion American Rescue Plan includes a number of provisions that will "cover the cost of broadband service and devices, broadband infrastructure deployment, broadband mapping and broadband adoption."[1] In addition, the Infrastructure Investment and Jobs Act was passed by the U.S. Senate in August under the Biden Administration. The infrastructure package includes funding to make the Emergency Broadband Benefit permanent, in addition to approximately $65 billion for state broadband grants, digital equity funding, and tribal and middle mile connectivity programs.[2] And New York State lawmakers have earmarked $15 million of the ARPA allocation for a State Digital Inclusion Fund, with allocation of those funds still pending.

Making programmatic decisions on the allocation of this funding requires a baseline of accurate and readily accessible data that document gaps in digital equity. Numerous sources[3,4,5], have noted the inadequacy of current broadband maps and the data they rely upon, especially the Federal Communications Commissions Form 477. Form 477 data is self-reported by ISPs and it is often improperly filled out and out of date by the time it is available on the FCC's website. Moreover, this data only presents the maximum **advertised** download/upload speeds and whether the ISPs do provide or **could** provide service. Finally, the form 477 overstates availability because if one customer in the Census block has broadband service, then the entire block is counted as having service. As broadband policy expert Gigi Sohn, former Advisor to FCC Chairman Tom Wheeler, explains in her call for a rural broadband research agenda: "The FCC relies on data collected from broadband

1 https://www.digitalinclusion.org/blog/2021/03/25/digital-equity-stimulus-funding/

2 https://www.digitalinclusion.org/blog/2021/08/10/infrastructure-bill/

3 https://www.theverge.com/2018/9/24/17882842/us-internet-broadband-map-isp-fcc-wireless-competition

4 https://ilsr.org/when-you-cant-trust-the-data-flaws-in-the-federal-communications-commissions-broadband-forms/

5 https://blogs.microsoft.com/on-the-issues/2019/04/08/its-time-for-a-new-approach-for-mapping-broadband-data-to-better-serve-americans

providers that measure whether that provider ***could***, not does, provide service within a census block. If the provider could provide service to just one home in a census block, all the homes in that block are considered 'served'"[6]. This is in part why the estimates of the population without access to broadband range from the tens of millions to the hundreds of millions[7,8].

However, access to broadband in and of itself is a limited measure of the digital divide. Scholarship on meaningful broadband adoption underscores that understanding this issue requires a holistic definition and approach to digital equity beyond simple access, as not all broadband access is the same. As Horrigan points out in Measuring the Gap, there are multiple reasons for non-adoption, with factors such as cost, quality, and devices all playing a major role in broadband adoption. Rhinesmith and Reisdorf argue that "gradations in what internet users can do with their access vary with regards to their socio-demographic background and offline resources, what kinds of devices they can afford and maintain, where they can access the internet...and other factors, such as digital skills or attitudes toward technologies in general"[9].

As the New York State Library's Achieving Digital Equity in New York State: An Outline for Collaborative Change makes clear, there are five elements required for digital inclusion activities:

1. Affordable, robust broadband internet service;
2. Internet-enabled devices that meet the needs of the user;
3. Access to digital fluency training;
4. Quality technical support; and
5. Applications and online content designed to enable and encourage self-sufficiency, participation, and collaboration

These five activities are drawn from the vision of New York's Digital Equity practitioners shared at the Digital Equity summits and critically, these activities do not take place in vacuum. Given that the problem of the digital divide is often described as stubborn, pernicious, complex, and cross-sectoral, the solutions to addressing it should be equally multidimensional. The Outline for Collaborative Change highlights the role of digital equity ecosystems, a concept that Rhinesmith and Kennedy define as "the interactions between individuals, populations, communities, and their larger socio-technical environments that all play a role in shaping the digital inclusion work in local communities to promote more equitable access to technology and social and racial justice"[10]. In a similar vein, Gangadharan and Byrum describe it as "an ecology of support — institutions, organizations, and even informal groups that serve to welcome new users into broadband worlds; share social norms, practices, and processes related to using these technologies"[11].

6 Sohn, G. Mapping, Impact and Adoption: A Research Agenda for Effective Rural Broadband Policy. Benton Institute for Broadband & Society. January 28, 2021.

7 https://www.digitalinclusion.org/measuring-the-gap/

8 https://blogs.microsoft.com/on-the-issues/2019/04/08/its-time-for-a-new-approach-for-mapping-broadband-data-to-better-serve-americans/

9 https://www.cogitatiopress.com/socialinclusion/article/view/3184

10 https://www.benton.org/sites/default/files/growinghealthy_ecosystems.pdf

11 https://ijoc.org/index.php/ijoc/article/view/1836

STORIES FROM NEW YORK STATE:

Bronx, NY: Danny Peralta is the Executive Managing Director of THE POINT Community Development Corporation, a non-profit organization dedicated to youth development and the cultural and economic revitalization of the Hunts Point section of the South Bronx. Since 2017, THE POINT has offered a free wireless Wifi mesh network for the Hunts Point community that is resilient, community-owned, built, and managed by local residents and businesses. Such a service is vital in The Bronx, which has the highest percentage of residents without home broadband in New York City, at almost 38%.

For an organization that pre-pandemic would host in-person Community Conversations, the loss of person to person events was acutely felt. As Danny put it, "Although shifting to virtual meetings meant that people are finding us in new ways and has opened up new opportunities such as bringing in outside experts and doing breakout sessions, the folks joining us online as the one who already have good connections. We're missing a certain segment of the population, which are people we're trying to serve."

Even for homes that have access, Danny noted connectivity is neither affordable nor reliable for most residents. "Dropped meetings means that we lose momentum and we're always playing a game of catch up. Meetings take longer and we're not able to seamlessly provide necessary services such as live translation."

Since the pandemic, the use of the Hunts Point Community Network tripled, mostly by people connecting via their cell phones. Looking to the future, Danny said that increased broadband access would have a huge impact on the community. "Free broadband access would help small businesses rebound after COVID. Families who are already paying for internet access would be able to save part of their paycheck for rent and food-- even if it's not a huge amount of money it would make a difference."

Saranac Lake, NY: Zachary Randolph is the Chief Clinical Officer at St. Joseph's Addiction Treatment and Recovery Center located in Saranac Lake, NY which is in the Adirondack State Park. St. Joseph's serves five rural counties in New York's North Country. With the advent of Tele-Health, St. Josephs has had the opportunity to connect with patients who would otherwise be unable to come to their facilities due to lack of transportation, fear of becoming ill from COVID, and other barriers.

As Mr. Randolph says, "The antidote to addiction is connectivity" and increasing the connectivity requires affordable quality broadband. ***We do not view broadband as a convenience, we view it as the difference between life and death.*** We are finally able to engage with people in crisis [through tele-health], but the infrastructure is not there, the access to broadband is not there."

"There have been instances where we have a connection through the internet with a person who is in crisis, and we are engaging with that person in therapy. While we are in the middle of a crisis we have had the call and video drop. It is a harrowing experience and we are sitting on the edge of our seats as we try and back in touch with that person."

Future Paths

As we look to a future with increased funding for broadband infrastructure we see two key avenues through which the NYS Digital Equity Portal can play a key role for digital equity advocates, as well as organizations and policy makers at all levels.

The first avenue is by deepening the impact of the portal for local communities. To do this, we are launching the portal with sustained and ongoing outreach and training so that local stakeholders understand how to draw data from the portal. At the same time we want to ensure that users have a means to share back their own data, stories, and experiences about the digital divide. The portal can be used to facilitate the sharing of data stories at the community level by capturing information that is outside of the realm of national datasets. As the stories in the callout boxes demonstrate, the impact of the digital divide is far beyond simple access to the internet, with the COVID-19 pandemic vividly demonstrating that the internet today is a lifeline for many, particularly the most vulnerable.

Another route for deepening local impact is to create the ability to conduct comparative analysis between different geographies. This will enable users to understand how key metrics about the digital digital in their community (e.g. broadband and device access, racial/ economic impact) compare to metrics in other areas. Users can answer questions such as:

- How does broadband access in my zip code compare to another zip code?
- How many households in my community have no computing devices and how does that compare to the county and/or New York State?
- What is the minimum monthly price for broadband service and how much is this cost as a fraction of median household income?
- What does the digital divide data reveal about the demographic breakdown between cost burdened and unburdened tracts?

Our vision for deepening local impact can also be scaled to the state and national levels. We envision the New York State Digital Equity Portal serving as a means to capture and share the impact on the return on investment for broadband infrastructure. The portal can be used to track the distribution of new infrastructure funding and generate stories of how communities are using this funding to build digital equity. As we track these data stories over time, we can monitor how this new investment undoes the harms of digital redlining across the state. The added benefit to tracking data over time is that this portal serves as an ongoing and dynamic resource for users.

The NYS Digital Equity Portal lives at the intersection of local lived experiences and large scale national datasets and it is ideally positioned from this vantage point to track and share the stories of communities building infrastructure for equity.