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Subcommittee on Communications and Technology

Regarding

"Broadband Equity: Addressing Disparities in Access and Affordability"

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Chairmen Pallone and Doyle, ranking member Latta, and members of the Subcommittee:

Over the past two decades, Americans from coast to coast, and those living in our country's islands and territories, learned of the decisive role that high-quality Internet plays in accessing education, healthcare, public safety, job creation, and economic opportunity. Reliable and affordable broadband can bring a world of information and promise to our fingertips. Likewise, the lack thereof can have a generational impact on households and the communities in which they live.

Next Century Cities is uniquely focused on supporting local efforts to ensure that all residents have affordable, reliable, high-speed Internet access. We are a non-profit, nonpartisan organization born of the need to elevate community-level perspectives into broadband policymaking at every level of government. Our organization is made up of over 200 member municipalities in over 40 states, including cities, counties, towns, and villages. The mayors and other local officials in our network have unique expertise in expanding digital infrastructure and developing broadband adoption programs since many have had to confront those challenges on their own.

In areas where broadband is ubiquitous, residents have the ability to access information, start a business, and age in place. On Tribal lands and in rural areas, broadband determines whether residents have access to life-saving care. It enables students to find career opportunities in a global marketplace and powers the technology that improves the daily lives of people with disabilities. In addition to being a lifeline that keeps friends and families connected, broadband is fuel in the digital ecosystem that propels ambition far beyond what was possible in some of our hometowns. Being able to experience the benefits of broadband creates pathways for social change and shaping our democracy in ways that were once unimaginable.

On the flip side, there are too many communities where reliable and affordable broadband is scarce. They deliver on a different promise. Residents in unserved or underserved areas are, in part, limited by income or geography. Digital limitations on education, specialized healthcare, and innovation stunts the overall growth of their local economies. Instead of preparing their workforces for high-skilled jobs, these communities have to direct already limited resources into programs that support residents who have been displaced by a rapidly changing goods and services economy.

There is a vicious cycle of opportunity loss and economic starvation at play in communities on the wrong side of the digital divide. Among the most disparately impacted populations are Indigenous, Black, Brown, rural, and low-income residents. The racial overtones associated with identifying who is being left behind are backed statistics. In fact, Deutsche Bank's conclusion that "76% of Blacks and 62% of Hispanics could get shut out or be under-prepared for 86% of jobs in the US by 2045" has a direct impact on their ability to participate in a high-skilled

workforce and generate wealth.[1] That is why the digital divide cannot adequately be measured by the number of households that do not have, or are unable to adopt, broadband. Digital divide statistics often overlook the compound effect that not being able to get online has on a household and society writ large.

The onset of the COVID-19 pandemic exacerbated digital disparities that were already impossible to ignore. Rather than broadband access serving as a helpful tool, it immediately became a necessity as vital as electricity. Residents had to rely on home broadband connections, secure devices for each household member, and hone digital skills to earn a living, keep their businesses open, get COVID-19 updates, pay bills, renew a driver's license, or visit a doctor.

Even as some communities begin reopening and returning to physical spaces, scars from the pandemic will leave an indelible mark. In many instances, online services have eclipsed the need for in-person transactions. The pandemic accelerated the crawl of many industries to telework, which is expected to continue.[2] Meanwhile, the people who do not have reliable broadband access are locked out of those work from home opportunities. Many do not even have access to the online application.

The disparities caused by a long-term migration to online platforms will continue to function as a barrier for the millions of people across the country who still do not have reliable and affordable broadband. With limited alternatives, millions of low-income children are falling behind in school, rural residents remain as distant from telemedicine as in-person health clinics, and low-income defendants must traverse the legal system with severe limitations.[3]

Achieving universal broadband connectivity has become a priority for local governments nationwide just as it should be for Congress. Residents like the farmers in Orleans County, New York, for whom unreliable internet continues to interfere with production[4] and tenants in Kansas City, Missouri, who did not have the requisite internet access or device to respond in an eviction

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[1] Deutsche Bank, America's Racial Gap & Big Tech's Closing Window, Sept. 2020 at 1 (2020, https://www.dbresearch.com/PROD/RPS_EN-PROD/PROD0000000000511664/America%27s_Racial_Gap_%26_Big_Tech%27s_Closing_Window.PDF?undefined&realload=ZOpo~2aT7/419K5P7CTnqFFKa6sLub9BbhPuEE/qZieE3ItaqjaehaLEFJIrOhiyNiG1tp2~gwlI83Ow29Ae4w==.

[2] See Katherine Guyot and Isabel V. Sawhill, *Telecommuting will likely continue after the pandemic* (April 6, 2020), https://www.brookings.edu/blog/up-front/2020/04/06/telecommuting-will-likely-continue-long-after-the-pandemic/.

[3] See e.g. Brandon Paykamian, *Data Finds Students Falling Behind in Math During Pandemic* (Feb. 12, 2021), https://www.govtech.com/education/k-12/learning-platform-data-examines-math-learning-loss-during-pandemic.html?utm_term=READ%20MORE&utm_campaign=Election%20Tech%20Vendors%20File%20%245.3B%20in%20Defamation%20Lawsuits&utm_content=email&utm_source=Act-On%20Software&utm_medium=email; Angela Ufheil, *How Poor Broadband Access Is Hurting Colorado's Rural Communities During COVID-19* (Sept. 2020), https://www.5280.com/2020/09/how-poor-broadband-access-is-hurting-colorados-rural-communities-during-covid-19/; Alfred Ng, *Going to court online is supposed to be safer. For many, it's actually much worse* (July 23, 2020), https://www.cnet.com/news/why-virtual-courts-put-defendants-at-a-disadvantage/.

[4] See Orleans Digital Literacy Initiative, Summary of the Need and Desired Next Steps for the Community at 17 (2021), https://wnylrc.libguides.com/ld.php?content_id=61117423.

hearing[5] will continue to shoulder the impact until we find a way to implement this goal. They are living proof of why the chasm between the digital haves and have nots provokes fundamental questions about fairness.

Digital equity is at the core of this proceeding. Making it a Congressional priority brings us a step closer to ensuring that all residents, regardless of zip code, can meaningfully participate in a digital society. This is an imperative that must be revisited over and over again. Otherwise, the digital divide threatens to solidify into a larger rift among those who have the tools and services they need for daily life and those who do not.

Broadband Is Infrastructure in Resilient Communities.

The communities that were best able to weather the economic fallout from the pandemic recognized, long before COVID-19, that infrastructure is more than "buildings and highways, but it also encompasses broadband cables across the ocean floor and new technologies that have become vital to human progress."[6] Broadband is an indispensable tool for local officials working to fight poverty, create jobs, recover from disaster, boost civic engagement, or achieve more equitable outcomes for residents.

Cities, counties, towns, and villages of all shapes and sizes treat broadband as a critical piece of infrastructure. Just as municipalities rose to the challenge of providing electric and gas service when private providers did not serve their community, they are also filling in broadband gaps in areas with low economic returns. Yet, from a community-level perspective, widespread broadband access and high adoption rates generate long-term returns that cannot be recorded on a balance sheet.

Many communities across the U.S. own broadband assets for their internal city uses. In Virginia Beach, Virginia, for instance, local officials improved emergency response times by connecting fire stations to the City's fiber network which was originally used to connect other government buildings and educational facilities.[7] Smart technologies, like those found in street lights, also depend on its robust fiber connections while creating efficiencies.

Some communities have had no other choice but to launch municipal networks and have nonetheless found a way to set new benchmarks for high-speed and affordable service. In Fairlawn, Ohio, one of the community leaders' first decisions was to house the network in the City's Infrastructure Department, treating broadband as any other utility. The City of Wilson took

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[5] *See* Allison Kite, *KC Tenants disrupts eviction court, demands relief for tenants during COVID crisis* (July 30, 2020), https://www.kansascity.com/news/politics-government/article244580802.html.

[6] Siegel Family Endowment, Infrastructure: Building the World We Deserve How a new approach can create a more resilient, equitable, and prosperous society at 4 (2020), https://infrastructure.siegelendowment.org/wp-content/uploads/2020/10/Infrastructure-Building-the-World-We-Deserve.pdf.

[7] Stacy Parker, *Virginia Beach, Va., Bolsters its Broadband Network* (Feb. 19, 2016), https://www.govtech.com/dc/articles/virginia-beach-va-bolsters-its-broadband-network.html.

a similar approach, becoming the first Gigabit City in North Carolina after identifying a fiber-to-the-home network as critical infrastructure in furtherance of its economic development strategy.[8] Its network later expanded service into neighboring rural communities.[9]

Even without running their own services, cities across the country recognize that broadband networks are the 21st Century infrastructure that we need to create a more sustainable, inclusive, and equitable society. These sentiments ring true in Mayor Bill de Blasio's introductory remarks of New York City's Internet Master Plan and the introduction of the City of Seattle's broadband initiative.[10]

Some Tribal governments have also treated the Internet as essential infrastructure. Walter Haase, general manager of the Navajo Tribal Utility Authority, stated that "It's time for America to support the Navajo Nation and all Indigenous communities and invest in utility infrastructure."[11] Centralizing broadband is an effective way to ensure that robust connectivity can reach the threshold of every household and business.

Digital Redlining Is a Problem In Both Urban and Rural Communities.

In the 1930's, communities in major U.S. cities were rated for lending risk based on race, ethnicity, and income status.[12] The communities deemed "high lending risk" and discriminated against by lending institutions are disproportionately minority and low-income neighborhoods. They are among the same communities that persistently lack equitable fiber and digital tools access.

Well documented in places like Detroit, Michigan, digital redlining has put disenfranchised communities at a further disadvantage.[13] In March 2021, the City of Baltimore submitted a letter to the FCC signed by over 100 local officials nationwide urging it to investigate the practice of

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[8] *See* Greenlight Community Broadband, *History*, https://www.greenlightnc.com/about-us/history (last visited May 4, 2021).
[9] *Id.*
[10] New York City Interet Master Plan (Jan. 7, 2020), https://www1.nyc.gov/assets/cto/downloads/internet-master-plan/NYC_IMP_1.7.20_FINAL-2.pdf (Bill de Blasio wrote that "This digital divide, like so many other aspects of life in New York City, leaves a significant part of our population at a major disadvantage. The New York City Internet Master Plan lays out a new vision for the City's role in shaping this essential infrastructure, one that is oriented toward making broadband a truly universal service for all our citizens."); Seattle Information Technology, *Broadband*, https://www.seattle.gov/tech/initiatives/broadband (last visited May 4, 2021) ("Internet access is the infrastructure challenge of the early 21st century and access to the information and services it provides are responsible for economic growth, job creation, education, and a better quality of life. The City of Seattle is exploring all options that would increase the availability of competitive, affordable, and equal broadband internet access options that approach one gigabit of bandwidth across the city.")
[11] Sarah Oven, *Tribal officials outline infrastructure gap 'big as the Grand Canyon'* (April 22, 2021), https://www.kold.com/2021/04/22/tribal-officials-outline-infrastructure-gap-big-grand-canyon/.
[12] *See* Bruce Mitchell, *HOLC "Redlining" Maps: The Persistent Structure Of Segregation And Economic Inequality* (March 20, 2018), https://ncrc.org/holc/.
[13] *See* Urban Collaboratory, University of Michigan, Mapping Detroit's Digital Divide, https://www.urbanlab.umich.edu/project/mapping-detroits-digital-divide/ (last visited May 4, 2021).

digital redlining.[14] The letter highlighted the fact that digital redlining is present not only in urban communities, but in rural areas as well.[15] It is true.

Digital redlining is an issue in both urban and rural areas. In Champaign, Illinois, fiber broadband access is available but coverage ends almost completely outside of the downtown area, leaving only 0.5% of residents with access.[16] Fiber is extremely limited and isolated in the urban centers of Lancaster City and the Town of Ephrata, Pennsylvania. Drifting away from the city centers into Lancaster County, only 21.4% of residents do not have broadband subscriptions, and 0.5% are still limited to a dial-up connection.[17] This is an issue that can be corrected by empowering local leaders to hold providers accountable for serving an entire community.

Broadband Access and Affordability Strategies Require Municipal, Cooperatives, Mesh, and Other Nontraditional Network Models to Be Comprehensive.

Communities from Oregon, to Colorado, to Ohio, to North Carolina have leveraged public resources to expand Internet access in their communities. No two approaches are exactly the same, and each model allows communities to serve residents who have no other option. Public accountability is a key touchstone of municipal models, particularly when the people who design, build, and manage municipal networks are also community residents and use the service themselves.

Municipal broadband networks that serve residents directly offer some of the fastest speeds and highest quality connectivity in the nation while making prices readily transparent, selling service in symmetrical tiers, and maintaining affordability programs for low-income residents.[18] These services were built in communities that lacked sufficient private broadband coverage, and where local leaders and community activists came together to build Internet as essential infrastructure, akin to communities that provide water, gas, or electric service.

Though municipalities offer tremendous quantifiable benefits to their communities, local officials often characterize the impact in qualitative terms, focusing on the widespread social

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[14] Letter from City of Baltimore Councilmembers Zeke Cohen, Ryan Dorsey, and Kris Burnett (March 16, 2021), https://ewscripps.brightspotcdn.com/de/a3/2c8209e2418b9f701aac1011faaa/local-electeds-letter-to-fcc.pdf.

[15] Letter from City of Baltimore Councilmembers Zeke Cohen, Ryan Dorsey, and Kris Burnett (March 16, 2021), https://ewscripps.brightspotcdn.com/de/a3/2c8209e2418b9f701aac1011faaa/local-electeds-letter-to-fcc.pdf ("We also know that lack of access to high-speed internet isn't just a problem in urban communities; it also extends to rural communities. Although we've seen rising increases in connectivity levels, we continue to see Internet Service Providers put corporate wealth above the needs of communities who rely upon internet services as an essential utility when they refuse to build more infrastructure outside of the cities.").

[16] *See* Federal Communications Commission "Fixed Broadband Deployment" (Last visited May 5, 2021), https://broadbandmap.fcc.gov/#/area-summary?version=jun2020&type=county&geoid=17019&tech=f&speed=25_3&vlat=40.14035238018403&vlon=-88.19619699999998&vzoom=8.712469356498191.

[17] *See* US Census Bureau "2019: ACS 1-Year Estitmate" (Last visited May 5, 2021), https://data.census.gov/cedsci/map?q=broadband&g=0100000US.050000&tid=ACSST1Y2019.S2801&mode=customize&layer=VT_2019_050_00_PY_D1&cid=S2801_C01_001E.

[18] *See* Becky Chao and Claire Park, Cost of Connectivity, 33-37, 52-54 (2020), https://www.newamerica.org/oti/reports/cost-connectivity-2020/focus-on-the-united-states/.

benefits that local networks provide. EugNet, an open access network in Eugene, Oregon's downtown area, once measured their worth through return on investment, but the community has since realized widespread social benefits that they could not anticipate when they first constructed the network.[19]

Publicly owned WiFi and mesh networks also fill important gaps in communities that otherwise have no service at all, or must rely on spotty cell coverage or privacy invasive WiFi connection points. In San Rafael, California, where 39% of Canal neighborhood residents do not have broadband access at home and 57% of do not own a computer, the City partnered with a nonprofit organization to build a mesh network that provides free Internet access to residents.[20] This type of local problem-solving should be celebrated and recognized as a model.

Many local governments who have been forced to explore municipal broadband options have done so out of necessity. In Louisiana, City-Parish President, Joey Durel, who had a leadership role in launching one of the first municipally-owned companies providing Fiber-To-The-Home services in the country publicly stated, "I begged the private sector to do it so that we wouldn't have to." When there was little incentive for incumbent providers to expand service options, the City of Lafayette treated broadband as infrastructure which paved the way for LUS Fiber to introduce affordable, high-speed broadband for all of its residents and eventually in neighboring areas as well.

Municipalities understand the far-reaching consequences when residents do not have broadband access or are unable to afford it. Federal policy and resources should support local efforts to generate connectivity solutions for themselves, particularly in areas where there is little financial incentive for traditional providers to serve.

Communities That Remain Unserved or Underserved Will Remain At An Economic Disadvantage.

The disadvantages felt by communities who are disconnected today will persist long into the next decade. The Federal Reserve Bank of Philadelphia found a 27% point gap in the "labor force participation rate between workers with and without a computer with broadband in Philadelphia" and that "the unemployment rate is 7 points higher for workers without a computer with broadband at home."[21]

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[19] Matt Sayer, *Eugene's 'open-access' fiber optic network proving its worth* (June 4, 2018), https://www.registerguard.com/news/20180604/eugenes-open-access-fiber-optic-network-proving-its-worth.
[20] Canal Digital Access Equity Fund, https://donate.canalalliance.org/campaign/canal-digital-access-equity-fund/c294655 (last visited Feb. 10, 2021).
[21] Alvaro Sanchez and Adam Scavette, Broadband Access, Computer Use, and Labor Market Attachment in Philadelphia, 8 (2020), https://www.philadelphiafed.org/-/media/frbp/assets/community-development/reports/broadband-access-computer-use-and-labor-market-attachment-in-philadelphia.pdf.

In announcing a program that will provide free, high-speed Internet access to low-income students to Chicago Public School students for four years, Mayor Lori Lightfoot stated that:

> Reliable, high-speed internet is one of the most powerful equalizers when it comes to accessing information. It allows families to access digital remote learning and stay connected to family near and far, especially during COVID-19. It allows families to build career skills, apply for jobs, register to vote and stay up-to-date on current events. This program is a critical component of our STEP agenda and the efforts to end poverty and a part of our mission to drive improved academic outcomes at CPS.[22]

Investing in Digital Equity & Inclusion Programs Is Central to Increasing Broadband Adoption.

Cities are developing their own digital equity and inclusion programs to help to bring broadband within reach for the most under-resourced households. But digital equity and inclusion programs cannot be an afterthought. They are central components of broadband access and adoption strategies that require manpower and resources.

Efforts to get broadband into unserved and underserved communities is all for naught if residents do not have the digital skills to benefit from broadband access and contribute to a digital economy. For students, digital literacy can be easily integrated into education. However, seniors, residents with disabilities, and young people who are not in school require intentional outreach to ensure that everyone can access and create online. Households who are struggling with basic digital literacy are among those who face insurmountable barriers associated with affordability and access to devices.

Sound Broadband Policy Starts With Better Mapping, *Now.*

Without knowing who has broadband service and who does not, it is impossible to direct resources to the communities that need them most. Accurate information about broadband access and adoption is a critical touchstone for effective federal support programs.

Communities are exploring a myriad of ways to improve this information. Some have conducted detailed digital equity studies, carefully considering the intersectional impacts of historic

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[22] Press release Mayor's Office, Chicago Launches Groundbreaking Initiative to Bridge Digital Divide, Providing Free High-Speed Internet Access to Over 100,000 CPS Students (June 25, 2020), https://www.chicago.gov/city/en/depts/mayor/press_room/press_releases/2020/june/CPSInternetAccess.html.

inequalities on broadband access and adoption.[23] Residents under-resourced by education, healthcare, and economic opportunities face similar barriers to accessing online services.

Federal broadband maps are well known to overstate broadband deployment.[24] In addition to inaccurately capturing where infrastructure is and is not, bad mapping has a ripple effect on communities. Inaccurately identifying areas as "served" when they are not disadvantages local investment in essential infrastructure as critical as roads and bridges.

Federal funding programs targeted at addressing broadband deployment in areas that lack service base their award decisions on federal maps. Many states have adopted a similar methodology, relying on FCC data as a baseline for state maps and targeting funding at communities that are marked as unserved. This process has an exclusionary impact on local connectivity initiatives. Local leaders have challenged these maps, but are persistently positioned as responding to maps with their own data and speed tests, rather than being invited in as data collection partners.

Though Congress directed the FCC to adopt a new data collection methodology, that process has been slow and stringent.

Persistent gaps in information remain. Broadband speed demands are dynamic, but FCC speed classifications can hardly keep pace with advancements in technology and transitions in widespread usage. Although the pandemic has vastly increased household capacity needs over the last year, the latest Broadband Deployment Report concludes that the digital divide is shrinking, failing to account for persistent gaps between the minimum service threshold and the needs of households who have begun using multiple video conferencing platforms at the same time as children complete online schoolwork.[25]

At the same time, community leaders have vastly different projections about how much to increase the minimum speed. Local officials in states like California, Ohio, and Indiana agree that the current baseline is not enough to meet residents' daily needs. Most local governments that provide broadband service use fiber because of its superior performance and upgrade potential.

The FCC has declined to collect information about broadband pricing, which leaves enormous knowledge gaps that could otherwise inform local, state, and federal affordability initiatives. Many communities do not have a clear picture of what affordable price would best serve their

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[23] *See e.g.* Press Release, City of Cambridge, Digital Equity Study (April 20, 2021), https://www.cambridgema.gov/news/2021/04/cityofcambridgereleasescomprehensivedigitalequitystudy; City of Kansas City, Missouri, *Digital Equity Strategic Plan*, https://www.kcmo.gov/city-hall/departments/city-manager-s-office/digital-equity-strategic-plan (last visited May 4, 2021); Cook County, Digital Equity, https://www.cookcountyil.gov/code (last visited May 4, 2021).
[24] *See e.g.* Gov't. Accountability Office, Broadband Internet: FCC's Data Overstate Access on Tribal Lands (2018), https://www.gao.gov/assets/gao-18-630.pdf.
[25] *See generally Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, GN Docket No. 20-269, Fourteenth Broadband Deployment Report (2021), https://www.fcc.gov/document/fcc-annual-broadband-report-shows-digital-divide-rapidly-closing.

residents' needs because existing private provider prices are not transparent, affordability programs are under-utilized, and residents for whom affordability is the greatest challenge may not willingly disclose that information.

Communities that do have a clear picture of affordability recognize that some residents will never be able to afford a subscription at any rate. Even residents who do not qualify for affordability programs need consistent, transparent, and fair prices. Municipal networks address these two concurrent affordability concerns by selling service in symmetrical tiers, making price information publicly available on their websites, and in some cases offering programs for qualifying low-income households.[26]

This Is a Pivotal Moment.

Communities that are equipped with resources to address long-standing digital inequities are better able to address economic and social disparities on their own. In fact, it is the only way for them to tailor responses to the innumerable symptoms of the digital divide.

The need is expansive. The timeline is unforgiving. Local governments have made broadband equity a priority. More state governments are recognizing it as an imperative. Next Century Cities has asked President Joseph Biden and his administration[27] to make universal broadband a priority. We implore Congress to do the same.

Together, we can get broadband to every household by tapping into the genius and creativity that can be found in a variety of network models, including public-private partnerships, municipally owned, cooperatives, mesh, and others. All of these models can be strengthened by centering digital equity, a decision that could make the difference between having broadband nearby versus reliable and affordable connectivity piercing the threshold of a resident's front door.

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[26] *See e.g.* NextLight, *Residential*, https://mynextlight.com/residential/ (last visited May 4, 2021); Ketchikan Public Utility, *Residential High Speed Internet*, https://www.kputel.com/residential/internet/ (last visited May 4, 2021); The Community Agency, *Residential Internet*, https://tcaexpress.net/residential/internet/ (last visited May 4, 2021).
[27] *See* Next Century Cities, Next Century Cities Pens a Letter to President Biden and Vice President Harris Urging Leadership on a National Broadband Strategy (March 15, 2021), https://nextcenturycities.org/next-century-cities-pens-a-letter-to-president-biden-and-vice-president-harris-urging-leadership-a-national-broadband-strategy/.