CONNECTING COMMUNITIES COUNTYWIDE

Delivering Broadband as a Civil Right in Los Angeles

Internet Action Team
Policy Blueprint

COMMITTEE
FOR GREATER LA

Connecting Communities Countywide

Delivering Broadband as a Civil Right in Los Angeles

Following the release of its report No Going Back LA, the Committee for Greater Los Angeles, working to advance systems change and dismantle the institutions and policies that have perpetuated institutional racism, formed the Internet Action Team to chart a bold path forward to deliver world class broadband to all Los Angeles residents and businesses for generations to come. Connecting Communities Countywide is the result of this year-long planning effort.

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The COVID-19 pandemic revealed broadband internet service as an essential utility for accessing education, receiving healthcare, and participating in the economy. Until every resident in Los Angeles can access, afford, and adopt reliable, high-speed internet, some will always be left behind. Until the neighborhood in which you live or work no longer determines the quality or terms of internet service that are available to you, the differences in our levels of connectivity will exacerbate systemic inequalities in our communities.

The Internet Action Team of the Committee for Greater LA presents Connecting Communities Countywide as a vision and a roadmap for delivering the systemic changes to the broadband service marketplace that are essential to correct a history of infrastructure deployment driven more by income and density than need, and to ensure a more equitable future for Los Angeles. It is designed to complement – and hopefully to help prioritize – the work of elected officials, government agencies, civic institutions, internet service providers (ISPs), community-based organizations, and business leaders who have begun to seek to recalibrate the social and economic factors that have created inequitable broadband infrastructure and terms of service over the last thirty years.

This policy blueprint focuses on both a near-term outcome of universal broadband adoption in Los Angeles by leveraging mostly existing infrastructure, new complementary subsidy programs, and quick-win, market-shaping infrastructure investments, as well as a longer-term outcome of ensuring that everyone in the county is connected to fiber-based broadband services with terms of service and levels of affordability that lead the world and provide access to health, government benefits, education and the broader digital economy. Specifically, Connecting Communities Countywide organizes these recommendations around three primary objectives:

1 UNIVERSAL ADOPTION

Ensure that all residents in LA county are connected to broadband service of at least 100/20 Mbps for no more than $30 per month by 2027, enabling service at no cost to low-income residents, after government subsidies. We believe that this goal can be achieved through the widespread adoption of the new Affordable Connectivity Program, which provides $30-per-month discounts to eligible households for home broadband service, complemented by a growing set of new internet service offerings in the county, if government agencies, community-based organizations, and ISPs work together to ensure no household is left behind.

2 A FIBER FUTURE

Eliminate disparities in broadband accessibility, ensuring that every resident, regardless of location, income, or identity, has the means to access, afford, and adopt fiber-based broadband service with multi-gigabit-symmetric speeds by 2040. We believe that to achieve this objective, governments across the county, from the Board of Supervisors and County Departments, to the City of Los Angeles and its Departments, to smaller municipalities and civic institutions, would benefit from working together to establish a new, mission-driven agency – an Internet Infrastructure Agency – to help orchestrate the deployment of new funding sources and manage other critical aspects of the broadband ecosystem, working in close collaboration with ISPs and community-based digital inclusion organizations.

3 SUSTAINED ADVOCACY

Elevate and grow a vibrant ecosystem of community advocates from across the county focused on aligned, active, and sustainable broadband equity advocacy to end the digital divide. We believe that the communities who have been left out of high-quality internet access should be at the center of shaping how new infrastructure and services are developed in their neighborhoods, and that Los Angeles needs to create a stronger platform for organizing, advocacy, and action among these communities to hold government and ISPs accountable.

A Blueprint for Bold Systems Change

The Committee for Greater Los Angeles (CGLA) is a cross-sectoral group of civic leaders in Los Angeles county, formed in response to the COVID-19 pandemic to prioritize the recovery of LA's most marginalized communities. We believe that our region's recovery efforts can serve as an opportunity to advance systems change and dismantle the institutions and policies that have perpetuated institutional racism. To best meet this opportunity, CGLA formed multiple Action Teams to investigate and propose remedies for three issue areas: housing and homelessness, the Black experience, nonprofits, and internet access. This document represents the work of the Internet Action Team (IAT), which is comprised of leaders from the government, civic, philanthropic, tech, economic development, education, and health sectors, including academics, practitioners, and business and community leaders.

Members of the IAT met throughout the span of more than fifteen meetings that began in the spring of 2021 to share their perspectives, concerns, and proposed solutions around broadband equity in the county. The IAT also consulted with and invited community organizations who are on the front line of the digital divide, as well as experts in broadband equity and other intersectional issues, to attend meetings, review draft concepts, and give their input on the contents of this paper. Members of the Broadband Equity Partnership, led by HR&A Advisors, Inc. and CTC Technology and Energy, provided research and facilitation support for the IAT's work.

1 All datapoints in this section from USC and CETF Statewide Survey on Broadband Adoption 2021
2 USC News: California surpasses 90% internet connectivity, but low-income households still lack access
3 See Figure 1.

Over the course of our work, we found that, in response to an overnight need for remote education, remote work, remote healthcare, remote social services, and more, California and Los Angeles have made progress in closing the digital divide: the "proportion of Californians connecting to the Internet through a home computing device" has risen from 78% to 85% since 2019.[1] These improvements in connectivity have enabled more digitally-centric ways of living and working. There was a 154% nationwide increase in telehealth between March 2020 and March 2021, and more than 50% of Californians say they intend to work from home at least part time even after the public health crises fades.

However, this progress has been ad hoc, not strategic. Without any government agency vested with clear responsibility and resources for ensuring equitable broadband service throughout the county, and with private ISPs responsible for assuming the financial risk of investing in broadband networks and services, nearly two million Los Angeles county residents remain unconnected or underconnected to fast, reliable, and affordable broadband. Nearly one in three households earning less than $40,000 per year "have no Internet connection or only have access through a smartphone" – an issue that affects communities of color and undocumented residents more than others.[2] Moreover, for those with connectivity, the large majority have at most two options for providers and only one option for the fiber-based service that is essential for the highest speeds and new economic opportunities. There is room for improvement, as the majority of Angelenos do not have access to fiber internet from any provider, at any price.[3]

> Now is the time for bold action to ensure broader access to unleash the potential of all Los Angeles residents and businesses. With unprecedented funds from State and Federal coffers, a groundswell of community energy and public focus, and plans for billions of dollars in private investment nationally, Los Angeles must not miss this unique opportunity to act in a coordinated manner to deliver more equitable terms of service for all Angelenos.

Connecting Communities Countywide is designed by the Committee for Greater LA to provide a blueprint for the ways in which leaders in the County and its diverse municipalities, communities, civic institutions, and businesses can work together to realize three key objectives around which this report is organized:

PART 1 Understanding and Closing the Digital Divide in LA County

Understanding and Closing the Digital Divide in LA County provides a summary of data regarding broadband inequities in the county, describes the limitations of those data, frames recent actions by government, and plots key actions to achieve Objective #1, universal adoption.

PART 2 Organizing Government to Deliver Broadband Equity

Organizing Government to Deliver Broadband Equity describes the duties that governments and relevant agencies in the county must assume to ensure universal access to fast, reliable, and affordable broadband service for all Angelenos. It prescribes the creation of a new countywide "Internet Infrastructure Agency" to achieve Objective #2, a fiber future.

PART 3 Elevating Community Voices and Actions to Close the Digital Divide

Elevating Community Voices and Actions to Close the Digital Divide recognizes the imperative of centering the experiences of those residents who have the greatest challenges in accessing, affording, or adopting broadband service in developing and delivering the solutions required for broadband equity. It prescribes means of organizing community power to this effect and describes the IAT's commitment to this work – Objective #3, sustained advocacy.

Connecting Communities Countywide is not an Internet Master Plan for the county, nor does it provide specific recommendations for how local governments should invest in fiber infrastructure, wireless networks, potential subsidy programs, or digital literacy training. Instead, it is a policy blueprint that focuses on the question of who decides what those investments should be, now and in the future, and the systems that inform those decisions. This is the question that grounded our work as the Internet Action Team of the Committee for Greater Los Angeles.

We hope that readers of this work gain a relatively clear understanding of the complex issues that create the digital divide in LA county, and rally around *Connecting Communities Countywide* and its objectives as fundamental to closing that divide. Our collective work is just getting started.

A Collective and Sustained Effort

There is no silver bullet for closing the digital divide in Los Angeles, no single actor who can achieve the three objectives outlined in this report. Governments will need to work together, jointly embracing an imperative to safeguard the public interest through broadband equity.

ISPs will need to recognize current differences in services between neighborhoods and find new ways to improve their infrastructure and service offerings for all communities, including affordability and adoption services across language barriers and household status. Civic leaders, community-based organizations, academics, and others will increasingly need to document inequities in broadband availability, affordability, or adoption, holding public and private leaders accountable and offering new community-based solutions that invest in less affluent communities. While individual consumers have a role to play when it comes to digital literacy and advocacy, the majority of the structural, contributing factors to broadband inequity lie on the supply side of the equation, with the builders, managers, and providers of broadband service; demand side solutions are included when they reshape the economics of service delivery.

Across three objectives – universal adoption, a fiber future, and sustained advocacy – the IAT sees a wide range of actions across sectors that can help ensure everyone in the county adopts broadband service by 2027 and that everyone has high quality, fiber-based service at affordable prices by 2040. While the actions listed below are distributed across those more essential to the 2027 goal or the 2040 goal, many are required for both goals.

COUNTY GOVERNMENT	ACHIEVING UNIVERSAL ADOPTION BY 2027	ACHIEVING EQUITABLE BROADBAND BY 2040
	• Facilitate widespread adoption of the Affordable Connectivity Program • Deliver free Community Broadband Network (CBN) access to 12,500 households by 2023, then expand to 100,000 households by 2027 • Develop bulk purchasing programs to serve households who are more difficult to serve through the ACP or CBN approaches • Engage the CPUC-designated Regional Broadband Consortium, LA DEAL, to facilitate successful applications for grant funding through state programs	• Work with other local governments to establish an Internet Infrastructure Agency responsible for delivering broadband equity countywide • Develop countywide data systems and maps to track access, affordability and adoption metrics for every household and business in the county • Develop a countywide fiber master plan and associated deployment policies, securing new public funding and directing new fiber deployments to ensure universal coverage

	ACHIEVING UNIVERSAL ADOPTION BY 2027	ACHIEVING EQUITABLE BROADBAND BY 2040
MUNICIPAL GOVERNMENT	• Serve as integral partners in countywide efforts to promote adoption of subsidized services • Participate in infrastructure sharing agreements with other public-interest entities and commit to expand locally-owned fiber networks. • Collect and share data on broadband access, affordability, and adoption • Build locally-based broadband equity constituencies and planning capacities, including with Councils of Governments, LA DEAL, and other regional municipal actors	• Work with other local governments and the County to establish an Internet Infrastructure Agency responsible for delivering broadband equity countywide • Make infrastructure and real estate assets relevant to internet infrastructure deployment available to coordinated, county-wide efforts to deliver new fiber and wireless infrastructure • Share best practices in connecting communities in need or working with private partners countywide
ISPS	• Improve the quality of low-cost and federally-subsidized service plans and make them simple and transparent for consumers, ensuring every household has easy access regardless of language, living arrangement, or household status • Deploy or coordinate with Digital Navigators in connecting consumers to ISP services • Ensure all information and customer service resources are language-accessible	• Expand fiber infrastructure deployments where it does not currently exist, including through shared-risk models with the County, with open-access operating models • Deliver equitable pricing plans, including ensuring that low-income or less "competitive" neighborhoods no longer pay more than others for comparable high-quality services • Make necessary data regarding infrastructure availability, pricing, and adoption available to public and to policy makers • Commit to providing service to the most unconnected communities in the county.
CIVIC LEADERS	• Elevate universal adoption as a pressing goal to current and potential elected officials • Facilitate public relations campaign for household-based data collection and service adoption efforts • Advocate for and support the entry of challenger ISPs to promote consumer choice and more affordable prices	• Organize, inform, and fund a base of community advocates into an aligned, active, and sustainable broadband equity advocacy organization, including to shape a new Internet Infrastructure Agency • Sustain attention and advocacy at the local, state, and national level to adopt digital equity policies • Promote a supportive media environment for consistent attention to digital equity issues
IAT	Continue to advocate for the implementation of this policy blueprint and related executive and legislative actions that are required to achieve universal adoption – in County and municipal governments, with ISPs, and in the State Legislature.	• Fund the California Community Foundation's Digital Equity Initiative (DEI) to serve as the backbone advocacy organization for LA county • Help align civic, community, and business interests to facilitate the creation of a new countywide Internet Infrastructure Agency and shape its bold agenda

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CHAPTER 1

Understanding and Closing the Digital Divide in Los Angeles

IAT Objective #1. UNIVERSAL ADOPTION: Ensure that all residents in LA county are connected to broadband service of at least 100/20 Mbps for no more than $30 per month by 2027, enabling service at no cost to low-income residents, after government subsidies.

Components of Broadband Access

The digital divide is the gap between those who have affordable access, skills, and support to effectively engage online and those who do not.4 The digital divide prevents equal participation and opportunity in all parts of modern-day life and disproportionately affects people of color, low-income residents, and older adults.5,6 There are at least three primary components of the digital divide:

I Availability:

The availability of broadband infrastructure is foundational. Different types of infrastructure – including wireline services and wireless services – differ in quality of access; the standards for these services, including speed and reliability, have changed over time and will continue to change for generations to come. Existing wireline infrastructure in the county and emerging wireless technologies can enable speeds of 100 megabits-per-second (Mbps) download speeds and 20 Mbps upload speeds (100/20 Mbps) or greater, which is sufficiently high quality for most residential purposes in the early 2020s. However, fiber optic cables today represent the only internet access infrastructure that can guarantee the highest quality performance. According to the National Telecommunications and Information Administration (NTIA), only end-to-end fiber will ensure that broadband can "easily scale speeds over time to … meet the evolving connectivity needs of households and businesses" and "support the deployment of 5G, successor wireless technologies, and other advanced services." Once a fiber optic network has been deployed effectively, the marginal costs of higher speeds are minimal. Los Angeles is currently well behind other global cities in the capacity of its internet access infrastructure: a seminal study on the cost of connectivity around the world found that average advertised speeds in Los Angeles were 100 to 160 Mbps while those speeds were 750 to 1,450 Mbps in Hong Kong, 300 to 1,096 Mbps in Lafayette, LA, 250 to 975 Mbps in Chattanooga, TN, and 200 to 305 Mbps in New York, to name but a few. Self-reported data from service providers showcase that only 35.8% of LA county households have fiber service.[7]

4 NDIA Digital Equity Definitions
5 Pew Research Center Home broadband adoption, computer ownership vary by race, ethnicity in the U.S.
6 Pew Research Center 34% of lower-income home broadband users have had trouble paying for their service amid COVID-19
7 CPUC EOY 2020 Resident Fixed Broadband Deployment by ISP

2 Affordability:

Even when high-quality, future-ready infrastructure is available to a home or business, the price of the service is often too expensive. Lack of affordability was the primary contributing factor of the digital divide in LA county in 2021.*8* The Federal Communications Commission (FCC) has established the benchmark for affordable broadband to not exceed 2% of disposable household income.*9* Pricing in Los Angeles is not the highest among big cities in the United States, but the high cost of service is nonetheless cited by residents as the primary barrier to broadband adoption. On the global landscape, LA's average cost of connectivity is meaningfully more expensive. When considered as a function of speed, $1 in Los Angeles buys an average of less than 5 Mbps, whereas $1 buys more than 17 Mbps in Paris, 15 Mbps in Seoul, 13 Mbps in Chattanooga or Lafayette, and 10 Mbps in Tokyo or Hong Kong.

3 Adoption:

For some individuals or households, access and affordability of broadband service are insufficient to close the digital divide: computers and other internet devices are additional requirements, as is comfort with the skills required to use those devices and navigate the Internet. Adoption may be characterized as narrowly as having a subscription to broadband service – as it is defined according to the US Census – or it may consider digital skills more broadly. Unlike availability and affordability, issues of adoption are more population-based than infrastructure-based, although sometimes lower-quality infrastructure deters families from adopting home broadband.

While each of these components of the digital divide is essential to understand and to address, Connecting Communities Countywide focuses on broadband equity as the foundational element of and precursor to closing the digital divide. Broadband equity is achieved when all people and communities can access and use affordable, high-speed, reliable internet that meets their long-term needs – a condition that enables universal adoption of broadband service. While the IAT recognizes that additional, complementary changes will be necessary in the other systems that have shaped the digital divide, we believe broadband equity is a goal best achieved through a well-orchestrated, county-wide approach. In contrast, we believe that other initiatives designed to foster the effective use of the internet and digitally-based services, from education to healthcare, may be best developed by the organizations that work directly in those specific industry sectors and communities. For example, while education systems require all students to be online, have appropriate devices, and be able to use appropriate software programs, school districts and other educational institutions should not have the added responsibility to provide internet access itself to their students.

8 CETF Statewide Survey on Broadband Adoption 2021
9 FCC Lifeline

How We Understand the Digital Divide

According to the CPUC, nearly half of LA county neighborhoods only have a single ISP.[10] The market dominance of two ISPs in LA county, and resulting lack of competition for customers, is a feature of the broadband marketplace that has exacerbated persistent regional differences in availability, quality and affordability of services. These companies have primarily improved their infrastructure where 1) they can achieve high returns on their investment capital, or 2) they have been directed or subsidized to invest by government – these large, fixed-cost investments require both high prices and high "take rates" (the percentage of households in neighborhood that subscribe to that provider's service) for investors to support them. This income-driven approach also prioritizes service in denser areas, leading to cities frequently being better served than rural areas, as is the case in Los Angeles, in which residents and businesses in the Antelope Valley, for example, lack the fiber infrastructure necessary for high-quality service.[11]

Fiber's deployment in LA county has followed the same trend. Most neighborhoods in LA are serviced by one or no ISPs for fiber-to-the-home (FTTH) services with fiber infrastructure and deployment being concentrated in high-income neighborhoods.[12] Only 28% of Census blocks in the county have ISPs offering FTTH service – the highest standard of quality – and fewer than 0.02% of Census blocks have competing FTTH service offerings (Figure 1).

FIGURE 1 *Fiber-to-the-Home (FTTH) availability in LA county[13]*

Number of ISPs Providing FTTH by Census Block	
0	
1	
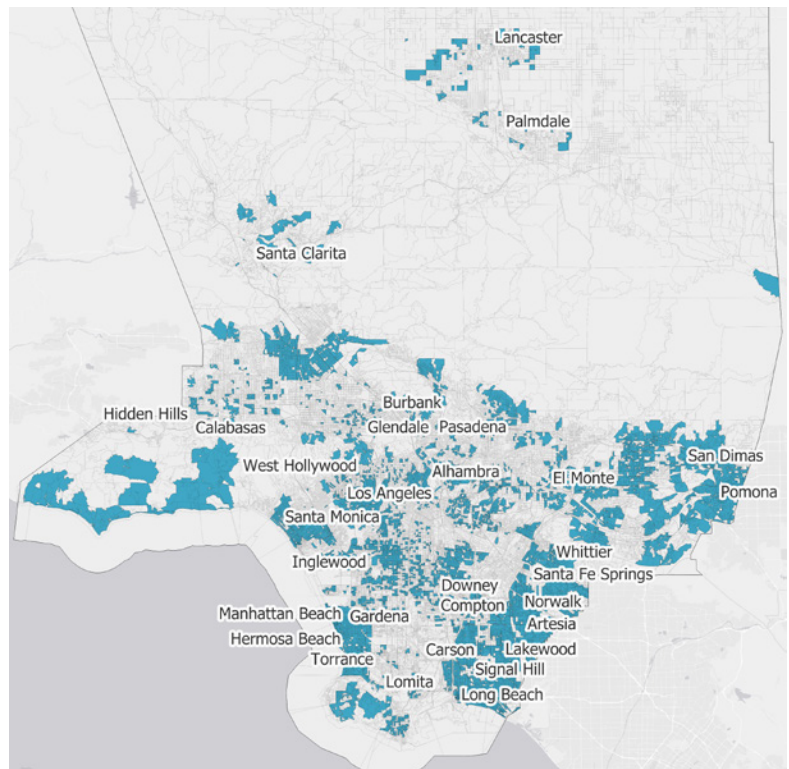
10 CPUC Interactive Broadband Map
11 "Rural and Urban America Divided by Broadband Access", Brookings, July 18, 2016.
12 "Who Gets Access to Fast Broadband? Evidence from Los Angeles County", USC Annenberg, September, 2019.
13 Source: HR&A analysis of data from the California Public Utilities Commission, December 2020.

Using data that AT&T reported to the FCC, UC Berkeley's Haas Institute for a Fair and Inclusive Society found that AT&T's FTTH deployment is disproportionately focused on high-income communities, leaving low-income communities in the slow lane.[14] Simply put, ISPs mainly invest in neighborhoods where they can be assured they will profit – a dynamic that is fundamentally different from other infrastructure networks that safeguard the public interest, from roads to water and power. In Los Angeles, neighborhood-based ISP monopolies provide slower services, sometimes at even higher prices. Even when households have access to broadband internet service, they often choose not to adopt home-based broadband, citing the high cost of service as the primary reason.

FIGURE 2   *2021 Survey Conducted by USC and CETF*

	All Reasons*	Main Reasons
Too expensive	68%	38%
Privacy/security concerns	55%	11%
Not comfortable using PC/Internet	53%	2%
No computer	50%	14%
Not available where I live	34%	7%
Can connect from another place	26%	5%
Smartphone is enough	16%	6%

14 California Community Foundation report: Digital Redlining 101

Inequities in availability and affordability – which lead to inequities in adoption – are dimensions of the causes of the digital divide that are measurable. Overall, approximately 20% of LA county residents are unconnected to high-speed internet or only connected through mobile devices ("underconnected")[15] and 50% of households in the lowest income quintile are unconnected or underconnected.[16] Among low-income residents in California, the most-reported reason for not adopting broadband is because the cost of the service is too high. The most underconnected neighborhoods often correlate to neighborhoods that were "redlined" for housing investment in the mid-20th Century, leading to the term "digital redlining" which describes how Los Angeles county's low-income communities and communities of color have been systemically disadvantaged from accessing affordable, reliable, and high-speed internet.[17]

The digital divide can also be understood in terms of how these connectivity-related inputs are determinants of economic, educational, health, and social outcomes for individuals and families. For example, in the education sphere, severe shortfalls in both equipment and broadband access dramatically limit access to education for low-income residents and communities of color.[18] In the wake of the pandemic, access to the internet and a laptop have become essential school supplies for students to access classes, complete assignments, and succeed academically. Yet one in three LAUSD students does not have access to affordable, high-speed broadband internet at home.[19] While there have been initiatives to connect students to devices and broadband subsidy programs, internet access barriers persist, especially for students that come from low-income households.

The COVID-19 pandemic has also illuminated the impact of the digital divide on the health and well-being of vulnerable communities. Overloaded patient care facilities and the need to minimize contagion have limited in-person medical care, and telehealth availability has expanded to many for the first time, allowing vulnerable groups such as the elderly to receive quick, vital treatment from the comfort of their homes. Nationwide, there has been a 154% increase in telehealth use between March 2020 and 2021.[20] Meanwhile, a lack of secure internet access at home has been attributed to many cases of mishandled telehealth leading to patient illness.[8] For example, some patients lacking broadband access are unable to meet via video chat and rely instead on photo sharing to describe their symptoms, which can lead to a misdiagnosis. An emerging body of research clearly connects connectivity to COVID-19 mortality rates, identifying lack of broadband access as a "co-morbidity factor" alongside education, income, and ability to work from home.[21] Furthermore, since the beginning of the COVID-19 pandemic, registrations for vaccines and PCR exams have primarily been administered online, preventing those without broadband access from accessing these services.

As, of course, many jobs require online applications as remote work opportunities continue and expand, it will be vital to ensure that every Angeleno has access to broadband that will allow them to pursue and maintain critical jobs. Moreover, the internet has become the primary form of communicating with government and accessing critical government information and services such as driver's license renewal applications, applying for affordable housing, and applying to public school programs.

15 *2021 Survey conducted by USC and the California Emerging Technology Fund; 2020 USC Annenberg and Price analysis of U.S. Census data from households with school-aged kids in L.A. County; Public Policy Institute of California 2019 Statewide Survey.*

16 *2021 Survey conducted by USC and the California Emerging Technology Fund*

17 *California Community Foundation report: Digital Redlining 101*

18 *No Going Back: Policies for an Equitable and Inclusive Los Angeles (September 2020)*

19 *USC Report on Distance Learning, "COVID-19 and the Distance Learning Gap" (April 19, 2020)*

20 *Presentation by Dr. NanaEfua Afoh-Manin for the IAT, August 10, 2021.*

21 *"The Impact of Internet Access on COVID-19 Mortality in the United States", Tufts University, June 22, 2022, and "Assessment of Structural Barriers and Racial Group Disparities of COVID-19 Mortality With Spatial Analysis", Jama Network, March 4, 2022.*

An Essential Utility?

It has become abundantly clear that access to the internet is an essential part of everyday life and a requirement to partic-ipate in modern society. Despite several government entities recognizing the importance of internet access to participate in everyday life, broadband is not yet classified as a regulated utility to ensure that, one way or another, everyone has fair, reasonable, and affordable access. But honoring broadband as a public good, essential to civic and social life, necessitates governmental responsibility.

A recent study from Consumer Reports found that 80% of people believe that broadband is as important as water and electricity.

Congress recognized this perspective, with its recent passing of the Coronavirus Aid, Relief, and Economic Security (CARES) Act, which includes internet access as a utility: "the term 'covered utility payment' means payment for a service for the distribution of electricity, gas, water, transportation, telephone, or internet". None-theless, the FCC, the government entity with the most power over the terms of internet service in the United States, has not regulated the industry or its pricing to "ensure broadband affordability, prevent bill shock, require networks to be resilient, and prevent carriers from decommissioning older networks without replacing them."[22]

Broadband is also a different type of utility in that there is no scarcity of internet "supply." Rather, there are primarily artifi-cial constraints to its transmission based on the configuration of networks. Water utilities manage pricing and policies of use as informed by the supply and distribution of existing water re-sources. Electric utilities similarly require power generation in addition to its distribution. Californians are all too familiar with challenges on the production side of these utilities, as well as limitations in power grids that cause blackouts or brownouts when demand is too high. However, when it comes to inter-net, there is no "production" challenge – indeed, global inter-net traffic is rising exponentially. Instead, limitations in access to that traffic are determined by how broadband networks are built and operated: sometimes speeds are limited by the transmission medium (fiber optic cables, which transmit data nearly at the speed of light through ultra-pure glass, coaxi-al cables, which transmit data more slowly through copper, and different bands of wireless spectrum, which are limited by spectrum availability and various types of signal interference), and sometimes whether a resident gets a "drip" or a flow-ing "stream" is determined by the configuration of network equipment and how much an ISP "oversubscribes" a network in a given neighborhood. When it comes to water and power, rates to consumers have a direct, regulated relationship to the cost of building and managing the infrastructure of generating and transmitting supply, enabling government officials to link the two more equitably. Without such regulation on internet data transmission linking pricing policies to network quali-ty, government must develop and use other powerful tools, including the direct investment of capital and subsidies, to complement the primarily customer income-driven infrastruc-ture investments of ISPs and their investors.

While the IAT believes that broadband should be classified as an essential utility with economic regulation to ensure that every provider provides quality services to every resident in Los Angeles, we remain primarily focused on actions that local and regional governments and institutions can take to create necessary systems that would complement utility clas-sification and ensure power rests in the public interest in LA. Currently, broadband providers significantly vary the cost of internet plans in different neighborhoods. In some cases, ISPs charge lower-income neighborhoods higher rates than they do in wealthier neighborhoods.
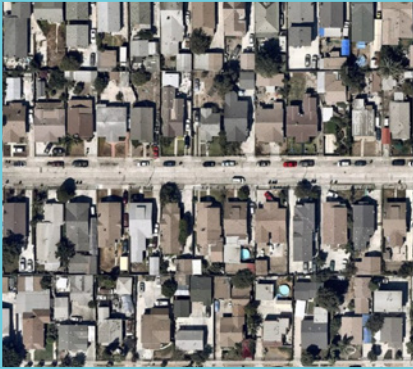
22 *"We Already Knew Broadband Should Be A Public Utility. The Pandemic Made It Obvious."* Public Knowledge, March 15, 2021.

For example, while a Spectrum plan up to 200 Mbps appears to have constant pricing in different neighborhoods, the company's website lists their 400 Mbps plan at $70 per month for a household in South Central LA (for a period of 12 months) but only $40 per month for a household in Mar Vista (for an even longer period of 24 months) (see Figure 3).[23] Ensuring that broadband is classified as a utility could put an end to inequitable ISP pricing, including the practice of offering discounted promotional pricing to attract customers in some neighborhoods, but not all.

The IAT believes that ISPs should be required to provide broadband at an adequate standard of at least 100/20 Mbps within the next five years for a price of $30 per month or less to ensure that anyone can access crucial resources online. Cable infrastructure currently allows for 100/20 speed with minimal equipment upgrades, which can begin to meet the great majority of residential consumers while the cable industry experiences investments in the next several years to eventually provide higher speeds to all Angelenos.

FIGURE 3 — Differences in Service Pricing by Neighborhood

LOCATION IMAGE	STREET ADDRESS	MEDIAN HOUSEHOLD INCOME (CENSUS TRACT)	AT&T	SPECTRUM	VERIZON
	W. 87th Street, Los Angeles, CA 90003	$40,286	No service.	• 200 Mbps: $50 for 12mos • 400 Mbps: $70 for 12mos • 1 Gig: $90 for 12mos	No service.
	Keeshen Drive, Los Angeles, CA 90066	$100,679	No service.	• 200 Mbps: $50 for 24mos • 400 Mbps: $40 for 24mos • 1 Gig: $80 for 24mos	• 300 Mbps: $40 • 500 Mbps: $65 • 1 Gig: $90

23 This data was found on each company's website on February 24, 2022, based on entering residential addresses and comparing advertised prices. The rates listed may be promotional, and may be subject to rise once the 12 or 24-month term is complete. As listed, this means that rates in the more affluent census tract are lower and/or guaranteed for longer than rates in the lower-income census tract.

The Data that Inform Policymaking

One of the challenges that contributes to the digital divide is that policymakers lack sufficient data to inform policymaking. There is a lack of publicly available data systems and policy requirements that mandate transparency in reporting, resulting in great difficulty in analyzing datasets to inform policymakers. The present landscape of information asymmetry benefits incumbent infrastructure owners and ISPs. These companies lack any incentive to, of their own accord, standardize data or make it more transparent because that data may benefit their competitors. The lack of granular, accurate data further reinforces structural barriers to digital equity by preventing policymakers from making informed decisions – an issue that has caused new legislation regarding data collection to be introduced in Sacramento.

> Existing data sources are incomplete, inaccurate or even misleading. It is therefore important to consider who collects, owns, and shares data regarding broadband access, affordability, and adoption in LA county:

Internet Service Providers

Internet Service Providers collect, own, and generally do not share raw versions of the most critical data to inform policymaking: the location of broadband infrastructure and equipment that determine access, the real prices that residents and businesses pay for service, the speed and reliability of that service, and the adoption of that service by address or, in the case of mobile broadband, at individual levels. Although ISPs are required to report certain data to the FCC, the FCC Form 477 system allows an ISP to claim an entire Census block (which can comprise hundreds of households) as being serviced even if only one customer in the Census block is actually served ("served" means the ISP could activate service at that address within 10 business days).[24] The data submitted to the FCC is also not granular enough to showcase other service issues that affect those who are hardest to reach such as those living in accessory dwelling units (ADUs) that are not serviced by ISPs. Furthermore, the FCC does not verify the service data provided by ISPs, and communities across the country are currently in the process of working to verify these data themselves to maximize the funds that they can receive from the Bipartisan Infrastructure Law. In October 2021, Senator Anna Caballero's SB-28 was signed by Governor Newsom, requiring ISPs operating in the state to provide location-level data to the CPUC. (That data remains available only to the CPUC.) In February 2022, assembly member Holden introduced AB-2748 which would help prevent ISP's that have been granted a state franchise from denying service to any group of residential subscribers based on the income of the residents in the local area in which the group resides. AB-2748 died in committee; advocates are working with legislators to introduce a similar bill in the next legislative session.

24 *Form 477 Reporting*

Government Agencies

Government Agencies collect and variably make available data primarily regarding broadband adoption and less-than-accurate data regarding infrastructure availability. The Federal Government collects data through the US Census Bureau and the FCC. The CPUC is increasing its quality of data collection and analysis. The state also recently passed SB-28, a bill written by Senator Caballero that enables the state to request granular data from these companies, like specific connection locations, and provides the CPUC with customer service review.25 LA county collects data via an LA County Office of Education survey and a hotspot locator. No government agency has a single, consolidated data source regarding broadband access, affordability, or adoption for the residents of LA county.

Nonprofits and Community-Based Organizations

Nonprofits and Community-Based Organizations have often filled gaps in government data regarding the digital divide, working to understand the lived experiences of their communities more granularly. USC and the California Emerging Technology Fund conduct a statewide survey in California that currently provides the most rich data in the State and national organizations like New America produce reports like the Cost of Connectivity Survey. Amidst the pandemic, organizations like the Partnership for LA Schools have produced surveys that provide more detailed and qualitative information regarding the populations they serve.26 Among the imperatives of these nongovernmental data collection initiatives is the fact that government data typically excludes marginalized populations that are at risk of being unconnected or underconnected such as the homeless population, Native Americans, undocumented immigrants, and residents living in ADUs.27 These data initiatives carried out by non-profits and CBOs made great strides in addressing some of the most immediate data gaps amidst the pandemic; however, many of these data initiatives are not data systems but rather one-time efforts.

25 SB-28
26 PLA Parent Study
27 USC Equity Research Institute analysis of the 2018 5-year American Community Survey

Current Efforts to Close the Digital Divide in LA County

Over the last year, the State of California, including the Governor and the State Legislature, the LA County Board of Supervisors, several County agencies, as well as several municipal governments in the county have taken action to study, plan for, and begin to implement primarily "quick-win" actions to address the digital divide.

INVESTMENTS TO ACCELERATE DIGITAL EQUITY

Most recently, the LA County Board of Supervisors passed a motion regarding "Investments to Accelerate Digital Equity," designating the LA Internal Services Department as the lead County department on broadband issues and creating four specific broadband initiatives that are currently underway:

- Develop a pilot Community Broadband Network in neighborhoods most in need, with free service to eligible residents

- Conduct a countywide campaign on financial broadband subsidy programs

- Expand and/or enter into new agreements with the County's existing broadband and/or carrier agreements for public access and use

- Study the feasibility of a municipal fiber network

This work, which the IAT applauds, complements the early work of the Los Angeles Digital Equity Action League (LA DEAL), a "collaborative community-driven process" created by LAEDC and UniteLA. Recently designated by the California Public Utilities Commission (CPUC) as the Regional Broadband Consortium for LA County, LA DEAL serves as the convener of multiple stakeholders including CBOs, ISPs, municipal agencies, elected officials and staff from across the county's 88 cities, and County staff.

While both LA DEAL and the County's movement to get organized and begin to take action are, in and of themselves, not sufficient in terms of resources, structures, and commitments to realize Connecting Communities Countywide objectives in this blueprint, they do begin to position the County to attract support from State and Federal funding.

The passage of SB-156 in 2021 has opened a door for California to address some of the inequitable aspects of the current system by investing $6 billion to expand publicly-owned broadband infrastructure and enhance internet access for unserved and underserved communities. This law, complemented by Executive Order N-73-20 and the Broadband for All Action Plan, represents the most ambitious state-level initiative in the nation. How these state-level actions will translate to improved access, affordability, and adoption remains to be seen. As the State of California works to implement the policies established by these bills, and looks to the next round of federal funding for broadband infrastructure – California is positioned to expect hundreds of millions of dollars in allocation from the federal Broadband Equity, Access, and Deployment (BEAD) program as soon as 2024 - the County has the opportunity to continue to position itself as a key player by solidifying broadband management roles and initiatives that can tap into funding.

Municipalities in LA County Making Progress

At the local level, several municipalities in the county have made strides in addressing the broadband needs of their communities. Municipal initiatives range from infrastructure construction, fiber pilots in affordable housing, and partnerships with ISPs. While some municipalities have been able to successfully begin to address the broadband needs of their communities, most do not have the capacity. Moreover, a countywide approach is particularly necessary since there are various neighborhoods in LA county that remain unincorporated.[28] The following chart includes a few municipal network initiatives active in the county. It is worth noting that these initiatives also illustrate the disparities between underserved areas of the county and smaller communities with particular business interests and industries (especially film production, media, and tech) that demand higher service levels, as well as higher household incomes. Over the last several months, under the strong leadership of the Board of Supervisors, LA County has begun to structure partnerships with the ISP industry to develop its own, County-controlled Community Broadband Networks to address this issue in several under-connected communities in the county, from South LA to the Antelope Valley.

FIGURE 4:   *Select Municipal ISPs in LA County*

MUNICIPAL ISP	SERVICES PROVIDED	HIGHLIGHTS & TAKEAWAYS
Culver City Municipal Fiber Network Culver City Municipal Fiber Network originated from a network backbone completed in 2018 to service businesses. The network launched a partnership with ISP Ting in 2021. The network is now housed under the City's Information Technology Department.	• Fiber to businesses via "Culver Connect". • Ting services (developed in partnership with the city) offers broadband services to ~300 affordable housing units for free • Other residents can get Ting gigabit symmetrical hook-up for $89/mo; $139 for businesse	The City's existing fiber backbone allowed Ting to propose a compelling investment for both parties involved.
City of Pasadena fiber network Pasadena completed the construction of a fiber optic network in 1999, as part of infrastructure improvements with economic development potential. The network is housed under the City's Office of Information Technology.	• 50 miles of fiber to support business and transportation operations (no residential service provided). • Up to 10Gbps service. Fiber services in municipal facilities and electric utility substations. • Lease fiber and conduit to carriers. • Pasadena public facilities offer free wi-fi but not yet in outdoor spaces, which the City is currently working to provide.	The Pasadena fiber network is currently not offering residential services and there is no known formal avenue to develop one. Developers have been coordinating with the City to build out or upgrade infrastructure in areas where the City's fiber could incentivize businesses to locate there.

MUNICIPAL ISP	SERVICES PROVIDED	HIGHLIGHTS & TAKEAWAYS
One Burbank The City of Burbank first began leasing dark fiber in 1997 and then began managing its own services in 2011. Initial coverage was designed to provide services to Burbank Water and Power (BWP) department's electrical facilities and would allow the linkage of the media district, the airport and downtown. The network continues to be housed under BWP.	Dark fiber, Dedicated Internet Access (DIA), Virtual Private LAN Services (VPLS), Wave Lambda, and Communication Transport Services (CTS) to local media enterprises, anchor institutions and municipal buildings in partnership with telecom companies (Cisco, CENIC).	One Burbank is managed through BWP's existing management structure and the capabilities of existing in-house personnel. There is currently no residential service program, but One Burbank promotes economic development by providing business customers with very high-speed communications and Internet access at competitive prices.
Santa Monica City Net City Net stems from a 1998 Telecommunications Master Plan effort to cut costs around expensively leased infrastructure from private providers. City Net is housed in the Information Systems Department. Santa Mon\ica City Council approved funding for the Digital Inclusion Affordable Housing Pilot in 2015.	• Dark fiber and services of 100 Mbps to 10 Gbps to area businesses. • Free Wi-Fi to the public in many areas • Fiber-to-the-home to a number of low-income housing units in a pilot project. • The city owns the broadband infrastructure, operates its own ISP, residential, commercial, institutional.	Santa Monica City Net has funded the expansion of public infrastructure and other public amenities. Free Wi-Fi, public safety video cameras, and real-time parking info are just a few niceties that enhance the quality of life in Santa Monica.

These infrastructure-based municipal efforts are complemented by several adoption-related efforts, fueled by federal subsidies for subscribers. In response to stark inequities surfaced by COVID-19, many CBOs and local nonprofit organizations, often without a prior focus on digital equity, have reoriented their programs and advocacy to include efforts to close the digital divide. Many have pivoted to provide programming and service efforts towards connecting more people – by helping navigate low-cost offers for service, providing devices, and facilitating digital literacy programs and other efforts (including organizations such as Shared Harvest, Partnership for LA Schools, and Parent Organization Network). EveryoneOn, a member of LA DEAL, has been a leader nationwide and locally on the adoption of broadband subsidies. Since 2012, they have been hosting broadband enrollment events with nonprofits at libraries, churches, and other community spaces. They have since expanded these efforts by offering capacity building or "train the trainer" workshops to other community organizations to equip them with the resources and training needed to successfully enroll their constituents in broadband subsidy programs. They are one of several local organizations providing similar services in a model that is particularly successful since the participating organizations are trusted organizations within their communities that can tap into their constituent networks and have a wider reach of residents to successfully connect.

From Understanding to Action:
Next Steps

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The IAT recognizes that the road-map for digital equity will be different for different communities across the county; however, a county-wide, systems-level approach will be necessary. Closing the digital divide will require our civic leaders, the County, municipal governments, and other public authorities to step up to implement solutions that meet the needs of communities, including by developing strong partnerships with ISPs and digital inclusion organizations. Government officials and offices must be equipped to understand the challenge and intervene to reshape market dynamics and provide direct services where necessary.

This chapter has described existing broadband equity gaps and the need for accessible, reliable, affordable high-speed broadband in Los Angeles. Efforts across the county must be aligned to the goal of delivering broadband service of at least 100/20 Mbps for a cost of $30 per month or less by 2027 rendering it free to households who enroll in the Affordable Connectivity Program, at least while funds from the Bipartisan Infrastructure Law are available. The following initiatives are some immediate milestones that should be supported to ensure that this gets accomplished by 2027:

1 Facilitate widespread adoption of the Affordable Connectivity Program

The Affordable Connectivity Program (ACP) is an FCC benefit program that provides a discount of up to $30 per month toward internet service for eligible households, which includes households with income less than 200% of Federal Poverty Guidelines, as well as households who participate in a range of other assistance programs, from Medicaid to SNAP or WIC. Programs led by CBOs have helped many eligible families enroll in ACP, and this work should be expanded, including with meaningful roles for more CBOs across the county, working in a coordinated manner. Supporting such adoption programs is the most immediate and necessary action that can be taken to connect families for whom cost is the main barrier.[29] Furthermore, it is crucial to simultaneously promote transparency around the quality and true cost of low-cost plans, including by tracking the quality of service being delivered through ACP-subsidized service, and publishing a score, or letter grade, for each of the available plans – an effort that the FCC is seeking to develop nationally via a "broadband nutrition label", but which LA could customize to the needs of its diverse communities.

2 Deliver free Community Broadband Network (CBN) access to 12,500 households by 2023, then expand to 100,000 households by 2025

The County has begun to make strides in developing new infrastructure and service offerings that can provide another free or low-cost option in certain neighborhoods by approving and beginning implementation of a Community Broadband Network pilot. In October 2021, the LA County Board of Supervisors approved a strategic plan to implement a pilot that would serve 12,500 low-income households by the end of 2023. The County released its Request for Statement of Qualifications in March and anticipates selecting a shortlist of qualified vendors to compete for work orders this year. Lessons learned from the pilot program should enable the program to be adjusted and expanded to serve at least 100,000 households by 2025. Focusing these efforts on CBN investments that serve residents less likely to participate in ACP -for example due to immigration status or complications with ADU service addresses - should be a priority, as should community-based workforce development and digital literacy efforts.

29 *Recent Federal efforts to improve adoption among the ACP program include partnerships with 20 ISPs to either increase speeds or decrease prices to provide more ACP-eligible plans. "FACT SHEET: President Biden and Vice President Harris Reduce High-Speed Internet Costs for Millions of Americans", May 9, 2022*

3 **Develop bulk purchasing programs to serve residents who are more difficult to serve through the ACP or CBN approaches.**

To fully close the broadband access gap among those who might not be able to benefit from ACP or the CBN, including for unhoused populations, there needs to be an alternative option for a low-cost plan that is not dependent on federal subsidies and is potentially a safer option for undocumented/mixed-status households that would prefer a "trusted" partner and plan. The County can negotiate agreements, including via bulk purchasing, to ensure plans remain at low costs and quality speeds; streamlining eligibility (ideally, making verification automatic) should be a goal of the process. Students Connected, a pilot program led by Partnership for LA Schools, has connected more than 400 families to free broadband service (50 Mbps download, 5 Mbps upload) and may serve as a model for potential purchasing programs that are geared towards households without public school children. *30*

4 **Develop new county-wide access, affordability, and adoption data systems / maps to understand levels of service and adoption challenges for every resident in the county and to advocate for more funding from State and Federal sources and shape solution planning**

Broadband planning and policy cannot continue to rely on data that is publicly acknowledged to be insufficient, potentially misleading, and overly dependent on ISPs. A new countywide government entity – discussed in the following chapter - should develop a coordinated approach to collecting official data depicting levels of access, affordability, and adoption countywide, including the barriers that may be preventing universal adoption. The data must be granular enough for local governments to identify which addresses are not being serviced or are being refused services (e.g., due to ADU status). This data should then be combined with existing datasets to create a public data portal to inform local connectivity efforts (incorporating appropriate security considerations). This broadband data portal can then become the shared, gold standard for evidence to support broadband efforts, informing plans, policies, strategies, and requests for State and Federal funding. The IAT believes that a new collaboration among local governments in the county, working closely with ISPs, CBOs, and the CPUC, is best equipped to provide an accurate and complete picture of the state of broadband equity in LA, and the County should dedicate ongoing resources to this purpose. As the Federal Communications Commission releases new broadband data maps nationally, this locally-generated data may be used compare with those maps to ensure that Los Angeles receives the State and Federal funding that it deserves.

CHAPTER 2

Organizing Government to Deliver Broadband Equity

IAT Objective #2. FIBER FUTURE: Eliminate disparities in broadband plans available to LA residents, ensuring that everyone, regardless of location, income, or identity, has the means to access, afford, and adopt fiber-based broadband service with multi-gigabit-symmetric speeds by 2040.

Context: Government's Role and Capacity to Deliver Broadband Equity

Broadband equity is achieved when all people and communities are able to access and use affordable, high-speed, reliable internet that meets their long-term needs.[31]

Recognizing the urgency of closing the digital divide, as well as the failure to reach equitable outcomes by relying on private markets, County and municipal agencies have begun to evaluate their options to address broadband access and invest in adoption and bulk purchasing programs, new infrastructure initiatives, and other measures to achieve universal adoption. This role is a relatively new one for government actors.

While the most expansive adoption programs to date have been led by school districts that needed to get students online during the pandemic, LA County has begun working on infrastructure improvement plans to provide residents and businesses with new broadband in the next several years, including a Community Broadband Networks plan and an effort to evaluate options to deliver fiber-to-the-premise (FTTP) countywide, both of which would complement its large-scale subsidy adoption program and a bulk purchasing program. This work also incorporates digital equity into other long-term strategic initiatives, such as its Anti-Racism, Diversity, and Inclusion Initiative. Other local governments and government consortia throughout LA county are also exploring creative ways to leverage existing publicly-owned assets and programs to help bridge the digital divide.

These are no small tasks. As the most populous county in the United States, Los Angeles includes more than one million residents who live in diverse unincorporated areas, making the County government their only government partner to address an inequitable market for broadband service. And for those living in one of the county's 88 municipalities that may lack the resources to develop and manage their own broad-

band infrastructure, municipal leaders and residents may need to partner with the County to help address the issue, just as they may already do for police officers, parks management, and fire fighters, including ensuring that they benefit from new infrastructure investments from the State.

Current internet service offerings among municipalities differ drastically in terms of who they serve, at what cost, and at what speed. To realize a future in which everyone in the county has access to high-quality, affordable, and reliable broadband, anywhere they are, the IAT believes that Los Angeles needs a new public agency with a mandate to ensure equal access across city and district boundaries – including that every household and business in the county can access fiber-based broadband service.

31 Definition from National Digital Inclusion Alliance.

The Need for a New Institutional Structure for Broadband Access in LA County

Meeting these ambitious but necessary goals will require a new institutional structure to manage the broadband access ecosystem. This work should draw upon best practices in both broadband ecosystem management, and lessons from institutional structures for countywide governance in Los Angeles.[32] Following research of such models and discussions with a diverse array of cross-sectoral leaders, the IAT proposes the creation of a dedicated Internet Infrastructure Agency for Los Angeles county, capable of assuming lead responsibility for the four core capacities required of county-wide government, and cross-jurisdictional collaboration, to ensure equal access to broadband and equitable terms of service. This new Agency must be responsible for a range of items – specific to the delivery, management, and governance of broadband infrastructure and service provision – to ensure comprehensive oversight, efficient collaboration, and effective intervention. Specifically, the countywide Internet Infrastructure Agency must have responsibility, powers, and accountability across four core capacities:

Infrastructure Governance and Management

Broadband service relies on infrastructure assets such as fiber optic cables, conduit, street poles, wireless transmission towers, wireless radios, building assets like data centers or rooms and rooftops, as well as – often critically – the bands of dedicated electromagnetic spectrum that enable wireless data transmission. These assets are owned by entities both public and private, and their use is often regulated by a municipality or the County, as is often the case with street poles, or by the State or Federal Government, whose regulations pre-empt local control – for example, the amount of money that a locality can charge an ISP for use of its street poles is currently regulated by the Federal Communications Commission.

In order to incentivize a robust, competitive broadband marketplace with fast speeds, reliable service, and competitive prices, an Internet Infrastructure Agency must have a clear understanding of the location, ownership, relevant regulations, and terms of use of each of these infrastructure elements. Further, it must also be empowered to monitor, direct, invest in, or regulate the use of this infrastructure, including to build, purchase, lease, or regulate any new broadband infrastructure deployed within its jurisdiction, correcting for the market pressures that have resulted in infrastructure upgrades being made predominantly when capital markets see opportunities for high returns on their investments. Often, this work includes permitting the deployment of broadband infrastructure or making government assets available for such deployments. While there are numerous means of delivering these functions, and such means are variously enabled or limited by State and Federal agencies, the fundamental premise that an Internet Infrastructure Agency must have a centralized understanding of this infrastructure and powers to oversee its development and use should be central to the design of such an Agency.

32 As of this report's writing, the organizational structure of the Los Angeles Homeless Services Authority (LAHSA) is being reevaluated to better provide and coordinate wrap-around services across the county – offering a helpful case study for organizational pitfalls and potential alternatives that could inform the broadband management entity's design.

Public-Private Partnerships, Procurement, and Permitting

Local governments already enter into myriad agreements with private businesses for the provision of broadband services. [33]In LA county, as in most places across the country, these agreements have been made piecemeal over the years and are almost exclusively agreements for government to enable commercial offers of broadband in communities, with the levels of service and at the prices determined by ISPs, who also own the broadband assets.

The current privately-run system of essential broadband services is not working for many residents of Los Angeles county. Current Federal and State investments in infrastructure, together with an emerging local consensus to demand more equitable outcomes for residents, suggest the present moment is unique. The current system leaves too many Angelenos behind, creating an appetite for a more muscular public policy that establishes a public role in guaranteeing fast, reliable, and affordable broadband, supported by critical government dollars, public opinion, and private partners.

This is not beyond LA's reach. The City of New York is currently implementing a model of public-private partnership in which government directs, funds, and owns the underlying broadband infrastructure, while private partners manage the complexities of the broadband business, to ends that equitably benefit all New Yorkers – a model that has been deployed to great effect elsewhere around the world and in smaller communities in the United States.[34] Critically, the recently funded State of California's Middle Mile Broadband Initiative has opted for a similar approach: public dollars are building a statewide middle-mile network, prioritizing the construction of new fiber lines; filling this void will enable local jurisdictions to provide high-speed broadband service to unserved and underserved communities.

Such public-private partnerships are complex and require significant new capacities in government to be effective. Whether in a shared-risk model, where public and private actors share the risks of designing, building, financing, operating or maintaining a network, or simply through purchasing services or permitting the deployment of new broadband infrastructure and equipment, a new countywide Internet Infrastructure Agency must organize relevant agencies at the County and municipal level and represent them in dealings with private industry to deliver equitable broadband service to the public.

Policy Development & Strategic Planning

Developing equitable broadband public policy begins with the collection and analysis of relevant data. Beyond existing sources of data from Federal and State government, LA County – and its subsidiary agencies, authorities, as well as local governments – can and must collect and share data from and with communities throughout the county. Data regarding broadband service availability (including the location, ownership, technical specifications, terms of use, and actual performance of broadband infrastructure assets) is foundational to any effort to equitably address broadband access. ISPs and private owners of broadband infrastructure have protected their data and successfully advocated to prevent legislative efforts that mandate more transparency.[35] Data regarding broadband affordability – including the costs and associated terms of service for those costs – will be essential for shaping pricing policy for public-private partnerships and more. Data regarding broadband adoption – including not only who is subscribing to different types of broadband services, but also who has the means to use them effectively – can inform other digital equity policies and programs. All of this data must be organized and made transparent so government decision makers can be well-informed, private partners can identify opportunities to fill gaps, and the public can hold both accountable.

Nonetheless, while data collection, analysis, and dissemination are foundational, the County and LA's local governments must also develop strategic plans, policies, and programs to deliver broadband equity, and continually refine those plans in response to shifting market conditions. The new countywide Internet Infrastructure Agency should collaborate with and amplify the existing work that the County, cities and COGs have already done in regards to this work, while also providing support to those that are just beginning to develop their local government's role in the internet service provision market.

33 These agreements range from procurements like government purchases of internet service to connect government agencies, to permitting functions by governments for ISPs to attach their wireless radio to street poles or buildings, to a full array of negotiated agreements that call for greater collaboration and shared risk between government and its private counterparts.
34 This approach is described further in the *NYC Internet Master Plan* and *Public Infrastructure/Private Service: A Shared-Risk Partnership Model for 21st Century Broadband Infrastructure.*
35 "*Where Net Neutrality Is Today and What Comes Next: 2021 in Review*", *EFF*.

Community Partnerships & Services

Broadband equity cannot be achieved solely by relying on the decision making of government and its industry partners. Lived experiences within communities must inform both macro policy and the details of how capital investments, public programs, and policies should be implemented. Throughout the pandemic, it has often been community-based organizations (CBOs) that have been on the front line working to connect the disconnected to enable remote learning, work, healthcare, and more. The County, its agencies, and local governments have a responsibility not only to ensure that these experiences are incorporated into broadband equity data systems and planning processes, but also to recognize how delivering new broadband investment and services can generate wealth in communities throughout the county.

Specifically, a countywide Internet Infrastructure Agency must ensure community voices are included. Capacity to deliver participatory planning processes will be essential, as well as partnering with CBOs for program development and delivery – from digital navigator programs to workforce development, and the creation of community-owned and -operated broadband networks, providing everything from fiscal sponsorship and funding to technical expertise.

Currently, City and County governments perform a wide range of broadband-related functions and services. Nonetheless, there is no central, coordinating body with sufficient institutional capacity, organizational efficiency, and the strategic directive from elected officials to accomplish ambitious equitable broadband goals – either within municipalities or unincorporated areas, let alone countywide. Specifically, with its responsibility over varied unincorporated areas and large geographic purview, the County's current capacities and structure do not enable the necessary functions of a countywide Internet Infrastructure Agency. According to interviews with current County leadership, the County is currently unable to effectively manage its use of State and Federal funds for broadband, its relationships with ISPs, or coordination with the 88 cities in the county, intra-county governmental bodies (e.g., LAUSD and Metro), and agencies and utilities operating within and across the county to provide accessible, affordable, and reliable broadband for all. This sentiment is corroborated by local governments, community-based organizations, and industry players. This is not to say that the County has no level of functionality in each core capacity, but these myriad responsibilities are scattered across departments, are insufficiently resourced, and lack coordination, the result of the piecemeal efforts described earlier. In short, the County needs to take part in leading, with its municipal government partners, a coordinated, centrally-directed, and purpose-built approach that can effectively address the equity question within its broadband infrastructure and adoption efforts.

The following chart illustrates this fractured County approach, providing a high-level overview of existing County broadband functions (new functions that are currently being developed within the County[36] are not represented here comprehensively).

FIGURE 5: *Broadband Services Currently Provided by LA County*[37]

	SERVICES	BOS	CEO	CIO	ISD	DPW	LACOE	WDACS	DCBA	LACDA	LAEDC	DRP	DPSS	DHS	OTHER	EXTERNAL
INFRASTRUCTURE MANAGEMENT	Owns & operates conduit					■										■
	Owns & operates middle or last-mile fiber															■
	Leases middle or last-mile fiber FROM others				■										■	■
	Leases middle or last-mile fiber TO others															
	Permits microtrenching					■										
	Owns & operates street/utility pole infrastructure					■										
	Owns & operates building infrastructure		■			■				■						
	Manages small cell permiting					■						■				■
	Leases public infrastructure assets				■											
	Develops & enforces in-building wiring standards					■										
	Manages incentives for building retrofits					■										
	Purchasing of devices (routers, laptops, hot spots, etc.)								■							■
	Delivery of devices (routers, laptops, hot spots, etc.)												■			
			■							■						
PUBLIC-PRIVATE PARTNERSHIPS	Administers telecommunication (sub)franchise agreements and master service agreements															
	Draft and releases RFP solicitations; partner selection; RFP solicitation					■										
	Manages bulk purchasing of internet subscriptions															
	Negotiates with Managed Service Provider					■										
	Oversees Managed Service Provider Service Delivery															
POLICY DEVELOPMENT & STRATEGIC PLANNING	Facilitates intergovernmental relationships with City, State, and Federal agencies		■			■								■		
	Provide strategic direction to increase and invest revenues from County assets into broadband	■													■	
	Proposes policies in support of strategic broadband initiatives					■					■					
	Advances cybersecurity policy					■								■		
	Conducts marketing & consumer outreach								■						■	
	Advances digital privacy policy			■												
	Collects data related to digital divide and performance			■							■					
	Applies and administers federal or state broadband grants			■												

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36 LA County Motion: *Utilizing Existing Infrastructure and Resources to Accelerate Digital Equity (Item #45g, Agenda Of August 31, 2021)*

37 Other" includes any of the following: other County departments (Parks and Recreation, Libraries, the Sheriff), CBOs, select cities, Southern California Edison, ISPs, and other telecommunication companies.

	SERVICES	BOS	CEO	CIO	ISD	DPW	LACOE	WDACS	DCBA	LACDA	LAEDC	DRP	DPSS	DHS	OTHER	EXTERNAL
COMMUNITY PARTNERSHIPS & SERVICES	Federal subsidy assistance														■	
	Partners with CBOs and other NGOs who provide digital literacy training									■						
	Direct subsidy provision				■								■		■	■
	Operates public WiFI					■									■	■
	Operates public computer center															
	Operates a commercial ISP															
	Operates an institutional ISP						■									
	Operates a residential ISP															
	Provides digital literacy training						■	■						■		
	Provides subscriber customer service															

The opportunity to fundamentally address the equity challenges of the County's broadband service delivery system have never been greater with the recent infusion of Federal dollars into broadband infrastructure projects.

Through the recent passage of SB-156, the American Rescue Plan Act (ARPA), and the Infrastructure Investment and Jobs Act (IIJA), California will have approximately $10 billion of new funding to spend on broadband-related projects.[38]

Critically, the County's five Supervisors have shown themselves to be aligned and motivated to address all elements of broadband availability, affordability, and adoption. They have recognized the importance of responding to the symptoms of digital inequity by providing immediate assistance in the short-term, while also making steps to replace broadband systems that perpetuate service inequities. As early as 2015, Supervisors Hilda Solis and Sheila Kuehl coauthored a motion requesting that the FCC do more to help close LA county's "ever-widening digital divide", particularly for seniors, low-income households, and those with disabilities.[39] Despite gains in connectivity since, the language of the motion, and its intent, still resonate urgently. To date, at least four County agencies have been tasked with overlapping planning and implementation responsibilities to resolve the digital divide, and while these efforts recognize the core equity issues at stake, and the scope and scale of any solution, there remain inconsistencies in language and approach that are unavoidable without a single recognized point of responsibility. A countywide Internet Infrastructure Agency would eliminate these inefficiencies, ensure all County efforts are aligned and accountable for specific outcomes, and – with a clear governance structure that includes municipal representation – ensure coordination with municipal efforts.

Simultaneously, actions both inside and outside of County government have contributed to a galvanized, but diffuse, approach to broadband. As COVID-19 also brought increased media attention to the digital divide, public knowledge and advocacy momentum have grown, bringing more public action and creating a historic opportunity for participatory planning to help craft a new system of broadband governance. More localities have started to implement their own solutions independently, which helps move the needle for their constituents but limits the potential for efficiencies of scale and coordinated networks, potentially furthering inequitable outcomes countywide. "One-off" initiatives developed in silos won't reliably and effectively dismantle the conditions that perpetuate the digital divide.

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38 Summary of IIJA, ARPA, and SB-156 funding for broadband.
39 Adopting Affordable Broadband Access for All (motion issued November 24, 2015)

Designing a New Approach

Los Angeles needs a new broadband agency commensurate with the goal of equitable broadband and the challenge of serving a county that is large, diverse, and complex. After considering the current conditions of broadband deployment and management in LA County, including discussions with broadband management entities at the municipal, County, and State levels, the IAT concludes that residents and businesses of LA county need a new public institution to implement broadband policy and programs in a way that addresses fundamental questions of equitable broadband service. Many, if not all, of the County's existing departments have some vested interest in broadband as a means of improving their constituents' services, and governmental entities such as LAUSD have already taken steps to take on broadband management to meet the specific needs of their constituents. But without an overarching management entity, empowered by the County and municipal partners, efforts to coordinate specific initiatives among all entities working across the county will inevitably fall short. From the perspective of equity in

community, this failure of coordination would have serious ramifications: this current, generational investment in broadband infrastructure from Federal and State governments would move forward without the strategic leadership needed to ensure equitable results, potentially perpetuating inequities for generations to come.

The primary goals of such a management entity must include equity. The implementation of a broadband strategy in Los Angeles county should ensure that anyone, regardless of location, income, or identity, has the means to access, afford, and adopt a high standard of broadband service, such that there are no meaningful differences between service quality, availability, and affordability throughout the county – in short, to achieve Objective #2 of Connecting Communities Countywide. Inevitably, regulatory standards of minimal viable performance, affordability, and data privacy will evolve over time – having an overarching coordinating entity to manage and adapt to these changes is fundamental.

Based on research on existing countywide management entities[40] and discussions with broadband stakeholders in County government, CBOs, educational institutions, and advocates, such an Agency should be grounded in the following Core Organizational Principles:

Focus on Broadband Equity:

A new entity should have a mission specific to delivering broadband equity in all communities throughout the county, with particular attention to historically unserved and underserved communities. This should include ensuring universal broadband adoption as well as facilitating access to the digital skills necessary to benefit from the use of the internet for education, healthcare, public services, employment, and economic development.

40 Such entities include: Los Angeles River Cooperation Committee (LARCC), Los Angeles Community Choice Energy (LACCE), LACDA, Metro, the Mountains Recreation and Conservation Authority (MRCA), the Los Angeles County Sanitation Districts, and lessons learned from the relative failure of the Los Angeles Homeless Services Authority (LAHSA).

Create Clear Accountability:

The leadership of this entity should be accountable to residents and businesses throughout the county, with clear responsibilities and powers commensurate to the entity's mission. It should use data to provide feedback and reporting on its reach into unserved and underserved communities. It must also have the authority, capacity, and incentives to facilitate partnerships with existing County agencies and local governments whose collaboration will be required for effective program delivery – from data collection to the use of fiber and street poles. It should be the go-to institutional partner for political powers to refer to and help rally a shared agenda around broadband.

Prioritize Collaboration:

To accomplish its mission, the entity will need to prioritize collaboration as a basic operating principle. Staff in this entity must work to coordinate, communicate, and strategically plan alongside multiple County agencies (e.g., Department of Public Works, Internal Services Department), municipal governments, CBOs, and industry partners. In turn, the entity must be the central convenor of all government action, capable of recognizing and helping mend the gaps that exist between municipalities and neighborhoods countywide, in part through collective advocacy for State/Federal funding. The entity must both ensure that community needs are effectively voiced and prevent political and private influence from having an outsized role.

Allow for Flexibility and Adaptability:

If COVID-19 taught government and policymakers anything, it was that a management entity must be capable of rapidly responding to changing circumstances to protect communities from potentially catastrophic disruptions to their health, education, and livelihoods. Across the nation, the public sector's inability to ensure internet access in our poorer communities has exemplified the critical nature of this need. To make good on the mission of LA County governments, this new entity must be capable of adapting quickly to the changing dynamics of the digital divide, so community needs can continue to be met as standards of access, adoption, and affordability change. When it comes to broadband equity, this work requires:

- Flexibility of private partnerships and procurements that continue to support the County's mandate of a universal standard of digital equity, delivered primarily through privileging of "future-proof" fiber and open access to publicly-owned infrastructure;

- Resources to fill new public roles in broadband management, with the recognition that it is not feasible to wholly predict the future government capacity and leadership necessary to secure an equitable internet future in Los Angeles in perpetuity – for example, once access, affordability, and adoption are universal, issues related to security, data privacy, network control, or other components of equitable internet service may require additional government focus and skillsets; and

- Potential to scale dynamically in response to industry and regulatory changes, including having flexibility in hiring and procurement. Civil service as currently constituted does not lend itself well to the changing talent needs of the broadband and digital equity landscape. As there is no preceding model of a Internet Infrastructure Agency in LA county, the new model will have to build its capacity and grow its credibility as it works – and change its internal structure to meet emerging needs.

- Build Capacity and Deliver Quickly: The pressing need for this organization requires that it start operating and demonstrating impact quickly, ideally as the primary entity to deploy State and Federal funds at the local level – and at minimum, as the clear owner of the infrastructure that will be deployed with these funds. Owning and managing assets fundamental to the services it provides will encourage accountability, streamline implementation, and, in the long-term, serve as a supportive revenue stream through the leasing of such assets to commercial service providers

Creating a New Institutional Structure for Broadband Access in LA County

The IAT believes that the residents and businesses of Los Angeles need a new *Internet Infrastructure Agency* to be responsible for delivering broadband equity countywide.

Established by ordinance from the LA County Board of Supervisors but governed in collaboration with municipal governments and community-based organizations, this Agency would combine government authority with organizational flexibility to craft neighborhood-based and regional strategies, meet the direct needs of the County's unincorporated areas, and complement (and coordinate) the broadband strategies of municipalities. It would be empowered to enter into partnerships with ISPs and, if necessary, build and manage its own broadband infrastructure. Akin to the Los Angeles County Metropolitan Transportation Authority (Metro)[41], the Agency would not be housed within County government directly, but be governed by representation from municipalities and the County, including members of the Board of Supervisors, municipal elected officials, and other departmental leaders, who in turn represent the geographies where the Agency is active. Elected officials would also be empowered to appoint further individuals from their jurisdictions to the board, representing CBOs or other community leaders, for example. The Agency itself could also operate as a partnership of "special districts" (as do the Los Angeles County Sanitation Districts) which, under California law, are governed by a board of local elected officials and the Chairperson of the Board of Supervisors.

The Agency would have the authority to issue bonds, to issue permits related to broadband infrastructure deployment – or facilitate permitting with local jurisdictions, to provide service in the unincorporated areas, to establish agreements with cities in LA county to provide services, and to form additional special districts for geographically targeted broadband initiatives, regardless of political boundaries within LA county. It would be funded through a variety of sources, including grants, operating and leasing revenues for Agency-controlled or -administered assets, the governments' General Funds, and potentially ballot measure initiatives. Because it can operate as a partnership among "special districts," the Agency could also tailor its services to a district's scale of need, with each district proportionally supporting the Agency's costs – including as supported by State and Federal programs.

Should the Agency need to use the powers of a local jurisdiction to accomplish a discrete project, it would be well-positioned to form a Joint Powers Agreement (JPA). A JPA can pool existing broadband infrastructure, services, funding, and shared revenues generated from leased fiber under a single organizational umbrella, and jointly exercise participating members' commonly held powers. A JPA can also incur debts and liabilities separate from its members, creating a way to pool risk. JPAs are often used for large-scale, multi-stakeholder public works projects, and they are already being adapted for broadband service provision in California (e.g., the Imperial Valley Telecommunications Authority).

41 *While the formation of Metro was enabled by State law, the IAT is not suggesting that State legislation is necessary to establish the Agency.*

Getting Started

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Los Angeles is at a critical juncture in the history of its internet infrastructure and the role of government to shape its use. Billions of dollars in State and Federal funding are beginning to flow, and Angelenos lack a government agency to ensure that the county receives its fair share or that those funds are used effectively to close the digital divide. Given the complexity of the issue, including rapidly evolving technology, industry, and policy landscapes, a new Internet Infrastructure Agency will necessarily evolve over time. What is most important now is to get started, creating a well-resourced agency that has clear powers and responsibilities, and the means to adapt in years to come. Specifically. The IAT believes that a new Internet Infrastructure Agency can be established by the LA County Board of Supervisors – with the participation and collaborative funding of municipal governments – to deliver the following priority services within the next year:

Data Collection and Management: Track the state of broadband infrastructure, access, affordability, and adoption for every household and neighborhood in the County, complementing Federal and State datasets with locally generated data, including inputs from CBOs and municipal governments throughout the county. Daylight relevant emerging data for the public to promote transparency and inform efforts, including the decisions of funders in State and Federal agencies.

Comprehensive Planning: Develop a consolidated Internet Master Plan that outlines clear policies, programs, and standards for broadband and digital equity services. The plan would reconcile the numerous existing planning efforts with various goals across the county, find efficiencies between them, and improve upon them by providing insights from the entity's data collection abilities.

Solicit, Generate and Direct Funding: Apply for and administer Federal, State, and local funds directed towards broadband infrastructure and digital equity. Ensure revenues generated from service provision or lease of infrastructure help sustain operating expenses. Evaluate and promote ways to ensure revenues from private broadband infrastructure deployment (e.g., through the use of utility poles or other government property) are re-invested in alignment with strategic regional goals. Provide guidance for how, whenever possible, County budget priorities and spending (i.e. within public health or economic development) may complement broadband initiatives.

Transaction Services: Facilitate public-private partnerships, partnerships among jurisdictions, procurement, and potentially permitting-related transaction services on behalf of government agencies who control relevant internet infrastructure assets or who have access to local, State, or Federal funds. Having centralized expertise in the Internet Infrastructure Agency would streamline existing activities to increase government purchasing power and would help address the information and human capital asymmetries that local governments and civic institutions face in their current dealings with ISPs. Such a transactions services offering would also help local government save costs through renegotiating existing agreements with ISPs or increase revenues by leasing fiber infrastructure to ISPs.

Community Partnerships: Assist partner CBOs, civic institutions, and ISPs to bridge gaps in affordability and adoption within their constituencies. This could include centrally managing a program for broadband subsidy adoption that can cover gaps across communities and uses (e.g., education, healthcare, unhoused communities). Ensure adoption strategies and efforts are informed by the most robust best practices available and are reflective of the county's context. The Agency must work to develop these community partnerships in every corner of the county, from the most urban to the most rural.

The future capacities of this central Agency will very likely be more varied; it may own new fiber or spectrum throughout the county or may even provide direct broadband services to residents and businesses. While those decisions need not be made now, the Internet Infrastructure Agency should be established in a manner that does not preclude the expansion of services, including but not limited to direct service provision and infrastructure ownership and management.

Next Steps for
Creating a New Countywide Internet Infrastructure Agency

Given the existing political momentum toward closing the digital divide, the moment is ripe for the County to set in motion the creation of a new Agency. In coordination with its existing broadband initiatives, the County should also task the Agency with developing a county-wide Internet Master Plan, that includes the deployment of fiber infrastructure and a supportive business model for its development and operations. While the formalization of a new structure may take months, the IAT recommends that in the meantime, local governments band together into a coalition of the willing, an Intergovernmental Coordinating Committee, with an express purpose of coordinating actions for securing and allocating funding from State and Federal resources to projects that advance broadband equity across the county. CBOs and advocates can engage by contributing to and supporting a public campaign aligned with the County's Master Plan.

CHAPTER 3

Elevating Community Voices and Actions to Close the Digital Divide

IAT Objective #3. SUSTAINED ADVOCACY: Build and promote an expansive base of community advocates from across the county into a sustainable advocacy force for broadband equity.

Context: The State of Digital Equity Advocacy in Los Angeles County

As of this report's writing, local advocacy efforts on digital equity issues in LA county consist of a constellation of initiatives often motivated by the acute shocks of COVID-19. As the pandemic forcibly shifted people's everyday lives to be even more online, the cracks in the broadband system became undeniable, with community organizations coming to the aid of those at risk of falling through. Organizations otherwise focused on education, employment, healthcare, or civic engagement rallied to meet the needs of their constituents, often without the technical knowledge, resources, or the organizational mission necessary to form an effectively strategic response to the digital divide. These organizations recognize the necessity of universal connectivity as a means to their missions' ends but aren't themselves equipped to adopt it as their primary motivation. For instance, Partnership for LA Schools, an advocacy and capacity building nonprofit for schools, educators, and families in LA Unified School District, launched its "Students Connected" program in response to many of its students lacking sufficient internet connections to participate in mandatory remote learning due to COVID-19. In 2021, the Partnership negotiated with an ISP to provide free internet (at 50 Mbps download and 5 Mbps uploads) to hundreds of families in Watts, South LA, and Boyle Heights. Shared Harvest Foundation, which prior to the pandemic focused on programs to reduce student debt, launched its myCovidMD initiative to help connect those in need with testing and telehealth services, with a focus on low-income communities.

Organizations that explicitly focus on the digital divide in LA are few, and those that do primarily focus on providing services and programs. For example, EveryoneOn has been a leader nationwide and locally on efforts to increase adoption of broadband subsidies, with actions such as hosting broadband enrollment events and training other community organizations to help their constituents enroll in subsidy programs. Human-IT, also active in LA, provides digital devices, literacy programs, connection assistance and tech support services to schools and low-income families. These organizations are, for the most part, not resourced for or driven by legislative or regulatory advocacy, nor do they have any focus on broadband infrastructure.

Sector-specific, localized, and smaller organizations in the county (e.g., SELA Collaborative, Alliance for a Better Community, Community Clinics Association of LA County, Destination Crenshaw, Pacoima Beautiful, Active SGV, CoCOAV, United Parents and Students, LA Voice) pull significant weight in their communities, and are vital to coordinated advocacy efforts, but do not (and arguably should not) have digital equity as their primary focus. This ecosystem of newly minted digital equity advocates – and more specifically, broadband equity advocates – need ongoing support and a platform to continue to engage in this work.

Organizations adjacent to government institutions play a valuable role by bringing together and providing prominent forums for community organizations to voice digital divide issues, but because of their government affiliations, aren't necessarily positioned to explicitly advocate for community goals – community voices have input more than direct power in these structures. The Los Angeles Digital Equity Action League (LA DEAL) is the California Public Utilities Commission (CPUC) approved and funded Regional Broadband Consortium for LA, granting it the responsibility of facilitating deployment of broadband services by assisting infrastructure project development.[42] By its design as a consortium whose membership must include incumbent ISPs, LA DEAL itself is limited in the way it can play a strong advocacy role on issues where community and ISP interests oppose one another. It is worth noting that LA DEAL's two lead organizations, LAEDC (whose President & CEO is an IAT Member) and Unite LA, have advocated for positions that incumbent ISPs oppose, but have done so under their own banners, and not LA DEAL's.

While County government has significant responsibilities over addressing the digital divide (as discussed in Chapters 1 and 2), the most consequential broadband policy decisions affecting Angelenos specifically have recently been happening at the state level. Because of this, much of the advocacy efforts for systemic changes have focused on the California Legislature and Governor's office in Sacramento, and the CPUC in San Francisco, which regulates ISPs. For example, the California Community Foundation (CCF), an IAT member, has started to resource and support influential community organizations and coalitions in LA – regardless of their prior engagement around digital equity issues – to engage in state-level advocacy campaigns and expand their expertise, portfolio, and organizing efforts to include both local and state-level policy change to advance digital equity for all Angelenos in need. Its Digital Equity Initiative (DEI) aims to fill a gap in the advocacy ecosystem by creating a cohort of base-building organizations across LA that are adopting digital equity as part of their broader equity agendas, and in turn, enlist additional influential CBOs to the cause. Current members of the DEI cohort include organizations focused on a variety of issues, including education (Great Public Schools Now), in-

terfaith community development (LA Voice), and healthcare (Insure the Uninsured Project). Since the cohort's formation, more than a dozen LA-based organizations, and nearly 20 more allied organizations from across the state, participated for the first time in the CPUC's public commenting process, with the help of toolkits, webinars, one-on-one technical assistance, and other guidance developed and deployed by DEI in partnership with cohort members. Their impact was decisive: when the CPUC issued its guidance for the first set of middle-mile projects, not only did it include two priority areas of LA that were not on the initial map, but the CPUC categorized those projects as elevated thanks to community input.

42 "*Decision Implementing the California Advanced Services Fund Rural and Urban Regional Broadband Consortia Grant Account Provisions*", issued October 31, 2018.

What the Digital Equity Advocacy Landscape Needs

Timing is of immense importance.

The limited window of opportunity made possible by widespread community interest, aligned political motivations, and devoted state and federal funding makes it all the more pressing to strengthen LA's existing digital equity advocacy landscape now, to empower a base capable of sustaining the push for progressive broadband policies over an indefinite time period. A lack of consistent engagement of the grasstops and the "long tail" of current and future municipal leaders on issues of digital equity create additional challenges. Maintaining relationships with and educating elected officials could be compromised as representative borders shift (the legislature and cities across LA county underwent redistricting in 2021) – without those relationships, elected officials may be more likely to opt into less engagement with advocates when planning for implementation – and be more vulnerable to accepting plans pre-written by incumbent ISPs. Without addressing these gaps, the ecosystem of digital equity advocacy efforts in Los Angeles is unlikely to be robust enough to sustainably challenge the well-established lobbying efforts of incumbent ISPs.

For decades, incumbent ISPs and their industry associations have led the broadband advocacy arms race in California and nationwide, regularly spending tens of millions of dollars to defend their stake in broadband infrastructure and the parameters around its deployment and use.[43] These efforts are a feature of their investment strategy – build proprietary infrastructure and maximize take rates in part through raising barriers to competition. With the scale to be able to simultaneously advocate at the state (via the Legislature and CPUC) and local levels (County Board of Supervisors and individual cities), ISPs often face few dissenting voices. Well-resourced, and engaged, community-driven efforts could create a more inclusive advocacy ecosystem by forming their own advocacy efforts, pooling data systems to bolster their cause, sharing lobbying resources, and partnering with other advocacy efforts (including initiatives in housing, education, healthcare, and civil rights, to name a few), and, whenever possible, showing up and making their voices heard to those with regulatory and policymaking power.

Advocacy efforts that challenge the status quo are also hindered by the same obstacles that perpetuate the digital divide.

Incomplete, misleading data obscures the scale and specificity of digital equity needs, making outreach difficult and limiting compelling evidence for the cause. A lack of clear institutional leadership or accountability structure for broadband in LA County, combined with the significant State and Federal regulatory powers, makes it more difficult for local efforts to effectively target consequential actors. And under the ongoing strain of COVID-19, the pressure for advocacy groups to respond to their constituents' imminent needs taxes their ability to dismantle long-term, structural issues.

43   *"How AT&T and Comcast are trying to kill California's net neutrality bill," Fast Company, June 19, 2018.*

Despite these obstacles and gaps, the digital equity advocacy ecosystem in LA county can be strengthened through the following tactics.

1   **Coordination of grassroots advocacy organizations in Los Angeles via a central digital equity "backbone" organization.** Given the constellation of disparate and semi-redundant efforts around digital equity in LA county, having a coordinated front stands to significantly increase advocacy's influence and impact. A backbone entity would be responsible for setting an agenda that accommodates and responds to a shared community voice on digital equity issues, helping solidify the network of organizations into a more powerful base of civically active community members, ready to act as a block. The backbone can also support and grow the network by serving as a reliable source of information, policy analysis, and technical trainings necessary to effectively engage in regulatory, policy and political advocacy work (e.g., through comments in CPUC hearings). On the network's behalf, the backbone would help fundraise and cultivate a "funders table," inclusive of funders supporting adjacent issues like healthcare, education, or technology. The backbone would also be responsible for budgetary support, coordination with other sympathetic advocacy bases, and representing the network to other organizations interested in joining. This is work that the Digital Equity Initiative has begun to organize in earnest in recent months.

2   **Active campaign to engage and educate public sector and civic leaders on digital equity issues in LA.** Targeting those who influence the influential is another vital step in building support for digital equity policies – especially as, in LA, many of these public-sector and grasstop leaders may themselves seek public office in the future. Public-sector and grasstop leaders who have the ear of legislators and elected officials are valuable partners – for both advocates and incumbent ISPs. Civic leaders should hear from peers, including groups like the IAT, with an informed perspective on the issue. The outcome of this grasstops campaign is a greater number of influential civic leaders, and greater overall alignment among those leaders, ready to show up in support of truly equitable broadband policies – via public hearings, op-eds, press conferences, and direct engagement of policymakers. This is the most immediate need in the ecosystem.

3   **Continuation of the work of LA DEAL as a "big tent" convenor finding common ground and advancing shared solutions.** Distinct from the backbone position, LA DEAL's position as the official regional broadband consortium means that they play a complex, and somewhat constrained, role in the digital equity advocacy ecosystem. LA DEAL's advocacy aim is to serve as the "big tent" under which community leaders can come together with the ISPs and local officials to discuss implementation of policies and move towards co-design of broadband programs and initiatives. That is a valuable role, which LA DEAL should continue playing parallel to the grassroots advocacy work, to implement broadband projects. LA DEAL's Public Policy committee can continue the policy education work it is doing and align with the "grasstops" engagement effort.

4   **A consistent and compelling media narrative around digital equity that reliably drives attention and accountability.** The fallout of COVID-19 has been a major driver in helping build the urgent case for digital equity efforts and improvements. But inevitably, given the generational timescale necessary to achieve all digital equity goals, COVID-19's newsworthiness will waver, and public attention spans for digital equity will follow. Advocates must hold media accountable for ongoing coverage of digital equity issues, which will help sustain public interest in (and support for) advocacy's causes. In turn, a robust media narrative helps spread advocacy's influence further and grows its network across sectors and alongside other significant public issues, such as racial equity, civil rights, and public resources.

Beyond Advocacy: Community-Based Services

Acknowledging that governments have the greatest power and potential for institutional capacity to reshape the broadband market, and advocacy efforts are essential to informing government action, nongovernmental civic leaders can also develop programs and services that generate greater community power through community-based investments and services that directly impact the digital divide. These include efforts to increase adoption by maximizing the impact of existing government programs and helping cultivate consumer power. Such efforts may seek to:

Promote and monitor subsidy programs: Rates of subsidy adoption among eligible Californians are dismally low.[44] Efforts to increase participation by assisting with consumer education, application processing, and outreach could help drastically improve the efficacy of existing subsidy programs, helping lower out-of-pocket costs for consumers and reducing strain on other necessary expenses such as food, housing, and childcare. When paired with sustained relationships with subscribers and even broadband speed monitoring systems, CBOs who support adoption of existing broadband services (through programs like the new Affordable Connectivity Program, which provides a $30 per month discount to eligible households) can ensure not only that those in need can be connected more quickly, but also that they are getting the quality of service they require.

Develop cooperative purchasing plans: Cooperative plans can help make high upfront acquisition costs more manageable for ISPs and help reduce risk exposure of all parties making the purchase. Cooperative purchasing plans are often used for other essential utilities through informal networks, perhaps most often in the energy sector. When it comes to aggregating demand to lower costs of broadband service, government and civic institutions have been the fiscal sponsors, negotiating bulk purchase arrangements for certain populations – for example, school students or residents of public housing. While some ISPs make bulk purchasing plans available through ad hoc negotiations with governments, if CBOs can facilitate the aggregation of purchasing power in LA's communities, it would make good business sense for ISPs to strike similar deals with cooperative purchasing organizations.

Create community-owned and -operated networks: Incumbent ISPs benefit from limited competition, and their offerings are often not tailored to a given locale unless financially incentivized to do so. Community-owned and -operated networks prioritize offering services that aren't strictly profit-motivated, increasing access and affordability for those otherwise left behind, and indirectly lowering costs by increasing competition in the marketplace. These networks are the primary means of creating and generating value from cooperative purchasing plans, and there are hundreds of such cooperative networks across the country tracked by MuniNetworks, a project of the Institute for Local Self Reliance. Developing and maintaining such networks is no easy task in dense urban settings but as new funding opportunities for open access fiber and new technologies for fixed wireless access become available, creating community-owned alternatives to ISPs is more possible than ever before. At least two such efforts are already underway in the county, one in rural Antelope Valley and another in urban South Los Angeles.

Develop community-based training and workforce development programs: The workers who install and maintain fiber networks, wireless radios, and other broadband networking equipment possess significant knowledge of the broadband industry and its limits. These jobs are often union jobs that pay a living wage, and there will be more of them created in the next few years as networks expand and are upgraded, including through the support of new government funding. As the challenge of broadband equity is not only an infrastructure challenge, but also a challenge of adoption, there will be an additional need for jobs supporting digital literacy training and adoption services – often called Digital Navigators – and funding from sources like the Digital Equity Act of 2021 may be made available for such purposes. The more of these jobs that go to LA's least well-served neighborhoods, the more community-based capacity there will be to shape investments and public policy regarding the digital divide in years to come.

44 A 2021 *study* by USC Annenberg found that only approximately 20% of eligible households in California participate in the *Emergency Broadband Benefit* program.

Forums for Action

2022 and 2023 stand to be immensely consequential for digital equity in California. While historic opportunities are being afforded by government, incumbent interests will not be effectively challenged without building the strength of challengers and CBOs. To achieve their ambitious goals, digital equity advocates in LA will need to advance their agendas in multiple forums: the Governor's office, Legislature, CPUC, the California Department of Technology, GoldenStateNet45, LA County, LA DEAL, and municipalities. Doing so will depend on a diversity of actions: depending on their position in the ecosystem, such advocates may be best positioned for convening, funding, building knowledge, advising government, creating data, or growing the ecosystem's membership. In the next year, opportunities to help shape broadband futures in LA county include: ⟶

45 *GoldenStateNet is the Third-Party Administrator for the State's Broadband Middle-Mile Network*

FIGURE 6: *Upcoming Advocacy Opportunities*

	OPPORTUNITY	HOW ADVOCATES CAN ENGAGE
COUNTY	Initiatives laid out in "Accelerating Investments to Close the Digital Divide" board motion, approved November 2021	Influence, and potentially assist with, ISD's countywide campaign promoting subsidy adoption
	Establishment of a new Internet Infrastructure Agency for closing the digital divide in LA county	Reach out to the County Board of Supervisors and other County and municipal government representatives to push for the creation of the Agency and to include CBO representation in its governance structure
	Selecting CBOs to implement the Digital Navigators program	• Influence the design and implementation of the Digital Navigators program • Serve as or engage directly with Digital Navigators
	Implementation of the Community Broadband Networks Pilot	• Influence the selection of particular service providers who are well-equipped to serve communities in need • Help advertise the pilot to encourage adoption • Coordinate with municipal actors local to the Pilot's focus area
STATES	SB-156 grant program and loan loss reserve fund for counties, cities, school districts and other local agencies	Craft priorities and proposals for grant programs in coordination with a backbone organization to maximize reach and mutual gains
	CPUC's administration of the last-mile grants program, including funding approved for LA county	Participate in public comments to the CPUC to shape approval of funding for LA county
	The Governor's Office and Legislature's oversight of SB-156's implementation, including submitting comments as the CA Dept. of Technology (CDT) and GoldenStateNet report progress	• Lobbying local elected officials, including Mayors, City Council Members, City Managers, State Assemblymembers and Senators • Preparing comments to the Legislature, CDT, and GoldenStateNet
	Statewide 5-Year Strategic Plan for Broadband Equity, Access, and Deployment Grants	Collect and present data to shape the development of this plan and subsequent grant programs and lobby for LA's fair share
	Statewide Digital Equity Plan and Digital Equity Capacity Grants	Collect and present data to shape the development of this plan and subsequent grant programs and lobby for LA's fair share
FEDERAL	Digital Equity Act's $1.25 billion in grant funding for local organizations to support digital inclusion	• Coordinate among organizations eligible for funding • Solicit priorities for grant proposals and secure funding (for 2025 implementation)
	California Broadband Council's comments to NTIA, FCC	Influence the direction, focus, and boldness of plans and comments advanced by the Council
	NTIA, FCC proceedings	Draft and submit comments to the NTIA and FCC, engage with the FCC Digital Discrimination Task Force

Next Steps for

Strengthening a Broadband Equity Advocacy Organization

The backbone advocacy organization can be a central plat-form for growing and strengthening the advocacy base. Thus far, the CCF DEI has played this role and developed valuable relationships with a growing cohort of CBOs to train and co-ordinate all members to act together. To help establish a base capable of sustained actions, the IAT plans to contribute $5 million ($2 million of which is a matching gift) to extend the DEI's work and role as the digital equity backbone, which is currently funded through 2023, until at least 2026. This will help strengthen CBO capacity to build and maintain digital equity as a core mission priority and deepen philanthropy's engagement in these domains.

Conclusion: A Call for Collaborative Action

LA county faces a historic opportunity to become a national leader in broadband equity and the provision of world-leading connectivity services to all residents and businesses. Now is the moment for bold, progressive action – energy and support are already there for many initiatives, but a unified push is necessary to guarantee everyone benefits from universal broadband efforts. The County, cities, civic institutions, and communities all need to do their part and work together to make the most of the moment.

To achieve universal broadband adoption countywide by 2027, all government, civic, and community actors will need to help increase adoption of the Affordable Connectivity Program and other broadband subsidies, and support initiatives that increase community control and market power for broadband provision, including Community Broadband Networks that increase consumer choice while enabling rapid infrastructure deployments. The County will need to lead efforts to consolidate and improve public data systems that can accurately demonstrate the wins and losses in the pursuit of universal connectivity, by initiating its own data collection process that collaborates with universities, research institutions, and CBOs to make their accounting as in-depth as possible. Such a resource will be indispensable for holding all parties accountable to success metrics determined collaboratively and codified by the County. Advocates and civic organizations should inform the County's methods for data collection and presentation.

To ensure that everyone, regardless of location, income, or identity, has the means to access, afford, and adopt fiber-based broadband service at top speeds, the County will need to lead the institutional and strategic response, forming an Internet Infrastructure Agency capable of achieving universal access in the unincorporated areas, and providing functions that complement existing County and municipal offerings. ISPs should commit to the same standards of connectivity as the County,

and pledge to establish partnerships and share the data necessary to do so. Cities should rally together to share knowledge and ideas, and work with the County to ensure future efforts are coordinated at every governance level to maximize funding from State and Federal sources. Convening organizations, such as LA DEAL, should use their platforms to engage the widest breadth of players in all efforts to design and implement the Internet Infrastructure Agency and a countywide Internet Master Plan and prevent smaller organizations from being overshadowed by dominant players. ISPs should connect with and lean on the backbone advocacy organization, to promote mutual learning that ensures advocacy efforts are aligned with on-the-ground realities, and that service providers may benefit from and join a supportive, organized base. With help from the County and local governments, CBOs and advocates – if properly engaged in the process – can rally a public relations campaign focused on building public awareness and support for countywide connectivity goals.

To build a strong and sustainable broadband equity advocacy organization, the Digital Equity Initiative should continue playing its backbone role to build, inform, and organize a diverse base of community advocates from across the county. The base can partake in public decision-making opportunities at the County, State, and Federal levels, and government actors can build relationships with the backbone and its base to stay informed and responsive to digital equity issues and reach every county resident. Ultimately, the organizations engaged through the Digital Equity Initiative may become vital allies in support and governance of a countywide Internet Infrastructure Agency, offering a critical throughline to the lived experience of the Angelenos most affected by the digital divide.

Now is the time to connect all of Los Angeles. With improved infrastructure and affordability, new capacities in government, and an expansive ecosystem of digital equity advocates, Los Angeles can lead the world in digital inclusion and reap the substantial economic, educational, health care, and civic life benefits that universal broadband enables for generations to come. The Committee for Greater LA and the Internet Action Team are committed to universal broadband as a civil right, and as a fundamental element of equitable societies. We are inspired by the potential of a more connected Los Angeles county, and all that it will do to uplift our communities and our businesses. If you wish to learn more, or get involved, please contact us