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ACCELERATING DIGITAL EQUITY

County of Los Angeles Community Broadband Network Pilot Request for Comments Responses

In Los Angeles County, it is estimated that approximately 365,000 households lack broadband internet service. The disproportionate impacts are mostly located in lower income communities and among populations that are predominantly Black and Latinx. Several government initiatives are underway to address this crisis, yet digital inequities persist in both rural and urban areas. The County of Los Angeles (County) Board of Supervisors (Board) directed the County Internal Services Department to assess viable options for the County of Los Angeles to facilitate residential access to reliable broadband service in low-income communities where greater than 20% of the households lack internet service, based on data from the United States Census Bureau's American Community Survey.

- On August 31, 2021, the Board unanimously adopted a motion to assess options for the County of Los Angeles to facilitate residential access to reliable broadband service in low-income communities that lack affordable, high-speed internet service.
- On September 30, 2021, ISD submitted a report outlining options for the Board to consider, including the option to deploy Community Broadband Networks.
- On November 16, 2021, the Board unanimously approved a motion to advance the Community Broadband Networks by instructing ISD to coordinate implementation.
- On January 7, 2022, as part of the planning process, the County of Los Angeles released a Request for Comments (RFC) seeking input from market participants to inform the solicitation requirements, network structure, technical specifications, evaluation metrics, and any other topics that will be instructive to facilitating a competitive solicitation.

Below are the comments from the RFC. Please be advised of the following updates since the RFC:

- On March 21, 2022, the County released a Request for Statement of Qualifications for the Installation and Operation of Community Wireless Networks to Deliver Residential Broadband Services.
- On July 13, 2022, the County released an addendum to the RFSQ to clarify and rename it to: "Request for Statement of Qualifications for the Installation and Operation of Community Broadband Networks to Deliver Residential Broadband Services."

For more information about the County's efforts to Accelerate Digital Equity, please see here.

Summary of Comments to RFC-IS-220107	
Acton Agua Dulce Democratic Club	Please help us access an open and accessible broadband network. We are in a rural part of LA County and our internet access is not dependable or equitable. Please!
Acton Aqua Dulce Democratic Club	We pay extremely high prices to have our internet here that does not give us what we pay for. We need to have access to monies to provide services for our children who cannot attend school and elderly and I'll who cannot even call a hospital or use their cell phone internet. We pay for 5 G and we don't even get 3GB download and less than 1GB upload.
Acton & Agua Dulce Democratic Club	The RFP should include specific and explicit provisions for how the MSP will engage with our rural communities, both in terms of ensuring we have access to this vital public resource and how we will be included in the decision-making and deployment processes. Rural communities have infrastructure challenges that are different from urban communities, and we must have a seat at the table to ensure that our residents, workers, and students have reliable wireless access, which is not the case currently. Our high school students sit in their cars at McDonald's and the public library to attempt to attend classes and do homework. This is appalling in Los Angeles County!!
Acton & Agua Dulce Democratic Club	Suggested comment "the RFP should include specific and explicit provisions for how the MSP will engage with our community's unhoused and rural residents in Antelope Valley, both in terms of ensuring they have access to this vital public resource and how they will be included in the decision-making and deployment processes."
Acton Resident	The RFP should include specific and explicit provisions for how the MSP will engage with our community's unhoused and rural residents in Antelope Valley and actually hear their input and concerns, both in terms of ensuring they have access to this vital public resource and how they will be included in the decision-making and deployment processes.
Acton Town Council	Please contact us to discuss further.
Alliance for a Better Community	Alliance for a Better Community is a Los Angeles non-profit organization that advocates for policies and programs to improve economic opportunities for Latinos. At ABC, we recognize that having access to a quality education is the most important tool in breaking generational poverty. I ask you to remember this point throughout my comments. As you know, the COVID 19 pandemic pulled the curtain back on many inequities that have been allowed to persist and on consequences of these inequities for the Latino community. Some of these inequities show that large parts of the community do not have access to basic, essential services that other communities take for granted. Access to an increasingly digital world must be urgently addressed. The digital divide was most starkly illustrated when K-12 schools were forced to physically close in mid-March, 2020. As education attempted to move to remote learning, it became clear that many Latino families in Los Angeles could not afford high-speed internet at home. Many of the parents we work with had to make the choice between paying for internet in order for their children to learn, or pay other bills.

	Even when families could afford it, high-speed internet was and is not available in many majority Latino communities throughout the county. In 2021, this was shocking. In 2022, it is negligent that families are still suffering from expensive and inadequate internet service. The consequences of this inequity call for systemic and long-term solutions. ABC is in support of creating digital equity and the RFP.
BizFed	BizFed continues to be opposed community wireless networks as it will seek to build an inferior and duplicative system for vulnerable communities that will only deepen the digital divide. A County-led public broadband infrastructure would cost billions and take years, if not decades, to design and build. Further, a publicly-owned broadband will have difficulty sustaining itself and may not evolve over time with the innovations necessary to meet future demands, ultimately creating a two-tier system of haves and have-nots. H Dear Members of the Board of Supervisors, On behalf of the Los Angeles County Business Federation (BizFed), a grassroots alliance of more than 215 diverse business groups mobilizing 410,000 employers with over 4 million employees in Los Angeles County, we wish to comment on Item#19 relating to 'Investments to Accelerate Digital Equity.' As we move through the COVID-19 pandemic, leading experts, advocates, and businesses have long touted research that clearly links increased broadband affordability and digital adoption to better economic, social and educational outcomes. Regarding the motion before you, we would like to share the following comments with you: **1. Establish the County's lead department (Support).** BizFed supports the recommendation of designating the Internal Services Department as the lead department responsible for ensuring the County's efforts on all broadband infrastructure and residential services initiatives. **2. Conduct a Countywide campaign on financial subsidy programs (Support).** While BizFed support's this section, it is important to identify a consistent funding stream, from beginning to end, that will support countywide campaign subsidy programs like the Federal Emergency Broadband Benefit. Establishing a fiscal framework will help maximize the outreach efforts and provide immediate impact to expanding access for low-income communities. **3. Expand and/or enter into new agreements with the County's existing broadband and/or carrier agreements for public access and use (Support).** Working with providers and taking advantage of existing infrastructure already available throughout the county will be the safest, most secure path to attain equitable access immediately. BizFed supports this section. Entering into an agreement with existing providers who have and continue to provide low-cost services before and during the pandemic have proven to also be the most knowledgeable in the industry. **4. Provide options for internet solutions, including cost estimates and timeline (Oppose).** BizFed is strongly opposed to this section as it will seek to build an inferior

	and duplicative system, via community wireless networks, for vulnerable communities that will only deepen the digital divide. A County-led public broadband infrastructure would cost billions and take years, if not decades, to design and build. Further, a publicly-owned broadband will have difficulty sustaining itself and may not evolve over time with the innovations necessary to meet future demands, ultimately creating a two-tier system of haves and have-nots. We strongly urge the Board to take these comments into consideration moving forward and thank you for your attention to this very important matter.
BizFed Institute	It's my belief that it will require more than one approach to address the digital divide and the Community Wireless Network is one of them.
Cellco Partnership d/b/a Verizon Wireless	We are suggesting that the County remove specific reference to the type of wireless technology in its Option B: Community Wireless Network. This change would provide the county with broader range of options in available wireless solutions.
Cisco	County of Los Angeles Internal Services Department Subject: County of Los Angeles Community Wireless Network Pilot At Cisco, we are acutely aware that availability of Internet connectivity for individuals or households can greatly affect the quality of education, healthcare, and economic opportunities they receive, as well as access to critical public services. The pandemic exacerbated the digital divide and brought this urgent problem to the forefront. Cisco and its public and private sector partners believe now is the time for the industry to get together to solve this complex challenge. After reviewing the subject RFC and the Internal Service Department's accompanying report and motion to advance, we have prepared this document in which we provide comment to the report, describe for the county Cisco's own commitment and community-focused resources aimed at bridging the digital divide, and outline the proposed Cisco technology solutions that can help the County achieve these shared goals. Cisco believes the County can achieve its Community Wireless Network vision by creating wireless infrastructure utilizing County-managed real estate assets without the need for Customer Premises Equipment (CPE) installed at the homes of the residents the network will serve. This is a huge cost and operational advantage, delivered by the Cisco Extended Wireless Connectivity for Students and Communities Solution. This proven strategy and deployment method provides a long-term, sustainable solution that can be rapidly deployed. Please do not hesitate to reach out with any questions you may have about Cisco's response. We welcome the opportunity to meet with the Internal Services Department and County stakeholders spearheading this initiative to discuss how Cisco can leverage its industry knowledge and capabilities to aid in planning and delivering successful outcomes in this important endeavor as you look toward procurement via a solicitation as the next phase of the process.
Coalition for Humane Immigrant Rights	Given these region's linguistically diverse populations, the Coalition for Humane Immigrant Rights (CHIRLA) highly recommends multilingual and culturally responsive outreach and use of ethnic media to ensure non-English dominant speakers in need to broadband services are reached and engaged.

Disability Community Resource Center	Will providers be responsible to provide customers with accessibility options? https://youtu.be/4qnIuXNJWyU
Enterprise Systems Solutions Corp. dba; LA Networks	Los Angeles County is in a great position to exploit existing network infrastructure to leverage existing investments in pushing wireless network services into these identified communities. At LA Networks we think an initiative like this can encompass attributes that can do more in the underserved community than just providing wireless internet access. LA Networks is a strong boutique internet networking company headquartered in Los Angeles. LA Networks is a Los Angeles County TESMA Contractor as well as a Cisco Gold Partner. LA Networks operates a Network Operations Center (NoC) in Los Angeles. We believe we can leverage adjacent attributes into a project like the Community Wireless Network Pilot: 1. Manage the County of Los Angeles Community Wireless Network, and staff the NoC with members of these same underserved communities. We have discussed how do we bring members of the underserved community into our NoC as trainees? This is a potential opportunity to do that. What benefit does this concept of staffing our NoC with members of this community do to bring value to our County? (Jobs Training Carreer Path.) LA Networks is not opposed to co-locating our NoC physically into this community. Could an initiative like this be the catalyst to create a technology zone? "Los Angeles County Digital Equity For Every Neighborhood Services Enterprise LA Co. D.E.F.E.N.S.E. During the 1st 5 years of this initiative a concerted effort is made to migrate our own NoC to serve this project at the County and other initiatives with the County. Morph our LA Networks NoC over a period of time into a Non-Profit that serves LA County and commercial organizations with citizens from the underserved community. This could be a path to a partial self funding this project combined with grants etcetera. LA Networks is the Host of the Cisco Systems Southern California Users Group. Cisco SCUG let's move it to the NoC that is supporting LA Co. Community Wireless. As a community outreach and training. Why not Brand this with technology with training certifications like the "Cisco Academy". We can use this same LA Networks NoC to support other initiatives associated with LA County initiatives. 2. LA Networks is able to provide NoC services to the County that can be consumed as a necessary component of the LA Co. Community Wireless Network Pilot, but also a value and additional services provided to County organizations that are currently evaluating this same technology. Exploit the existing LA Co. physical technology infrastructure to deliver bandwidth in to these communities, this could preempt the need to procure carrier based circuits. -LA Co. can leverage existing infrastructure as points of presence to connect the Community Wireless infrastructure to for internet connectivity where possible.

EveryoneOn	EveryoneOn, a nonprofit organization, working to foster digital equity nationally and in Los Angeles, applauds you for addressing the digital divide that affects more than three hundred thousand households, predominantly in underserved communities. As we have seen since the pandemic, there is an urgency to address the connectivity challenges faced by Los Angeles county residents, low-income households in particular. As one of the few organizations working on diverse digital inclusion initiatives in Los Angeles since 2013, we offer the following comments regarding the Community Wireless Network Pilot: 1. **Access** - Any community connectivity solution needs to provide residents access inside the home as access from other locations may present logistical problems or other barriers to participation. The pilot program should also ensure that communities such as RV parks, mobile home parks, public housing projects, and affordable housing complexes among other forms of housing have access to robust connectivity solutions. Additionally, providers should describe how the network can be built to support community based organizations, small businesses, and micro enterprises in the service areas. The opportunity to connect these entities could provide great potential to expand their operations and customer base by gaining access to the digital marketplace. 2. **Speeds** - The FCC's current definition of broadband (25/3) is no longer sufficient for any household, regardless of income and zip code, to operate and thrive in a digital society and economy. The pandemic demonstrated the need for higher speeds (minimum 100 mbps down) to support the growing digital needs of all. 3. **Affordability** - In order to foster digital equity in Los Angeles, high-speed internet needs to be accessible, reliable, and affordable for low and lower-middle income households. In a recent national report on Affordability & the Digital Divide that EveryoneOn conducted alongside Dr. John Horrigan, a digital divide researcher and expert, findings indicate that $25 per month is the comfort zone for most but not all low and lower middle-income households. Accordingly, it is imperative to ensure that high-speed internet service under any connectivity project the county rolls out is affordable and for a small percentage of households 100% subsidized. Current federal programs, like the Affordable Connectivity Program (ACP), can be leveraged so that cost of internet service isn't a barrier to adoption. 4. **Internet for all** - Regardless of income, zip code, and immigration status, it is essential for the diverse populations that make up the county and the economic growth of the LA region, that all households are eligible for high-speed internet service. EveryoneOn urges the board of supervisors and ISD to ensure community connectivity solutions are available to 100% of residents. To ensure this, any enrollment applications should eliminate questions that ask for applicants' social security numbers and taxpayer identification numbers that may present barriers to residents. 5. **Provider** - As there may be more than one qualified managed service provider willing to create a community-centered network in Los Angeles County, we recommend ISD consider a process whereby more than one managed service provider could be selected to establish community wireless networks in different areas of the county. There may be some MSP's better positioned to meet the needs of our rural areas and others better positioned to meet the needs of our underserved urban areas and some competition amongst providers in the build out and operation

	of such systems may be advantageous and instructive during this pilot phase of advancing digital equity across Los Angeles County. 6. **Outreach** - Given the multilingual nature of the Los Angeles County population, the RFP should include requirements for multilingual marketing of the network as well as customer support, ideally in partnership with trusted community partners. Providers should have a track record of working in diverse communities, and engage local organizations as outreach partners to garner community insights and buy-in on the project. Additionally, providers should, along with the county, host community meetings to introduce the project, garner support, and gain helpful insights on how to best generate awareness about the availability of the network About EveryoneOn Since 2012, EveryoneOn has helped connect more than 890,000 people, deployed thousands of computers, and delivered hundreds of hours of digital skills trainings to diverse communities. We employ a multi-prong approach: we built a national platform of low-cost internet offers; we conduct broadband adoption campaigns in diverse communities; and we deliver community-responsive digital skills trainings designed for low-income students, jobseekers, and older adults. In addition, we have focused our efforts on digital inclusion initiatives that leverage diverse partnerships and strategies that are scalable, effective, and community-responsive. We applaud the board of directors' attention to this issue and investments that will be made to accelerate digital equity for all and look forward to working with the county, ISD and provider on outreach for this effort.
Great Public Schools Now	Thank you to the LA County Board of Supervisors and Internal Services Department for creating space for public input on the Community Wireless Network pilot. Great Public Schools Now represents dozens of nonprofit organizations who continue witnessing barriers and resource deserts for high-need communities to access the internet. We believe that local communities must control the network's designed solution, and people should have a voice in how the network is operated in the future. Specifically, the RFP being issued by the County should include requirements for community engagement in the design and build. When community is not involved in design, solutions don't work. For example, federal subsidies like the Emergency Broadband Benefit (EBB) Program push applicants to depend on service providers for access to the subsidy. We would be remissed if we replicated this poorly designed process where a vital County resources goes underutilized. Our organizations remain steadfast, ready, and willing to support the County is engages in the RFP process. Please do not hesitate to reach out should you need additional context to our comments.
Huntington Park Resident	I am a resident of Huntington Park, and a member of Innovate Public Schools. Families in the South East LA cities do not have access to a dependable internet services. And we can no longer rely on the current internet providers to solve our access problems. We do not need more fee waivers, we need a public utility available to all. During the pandemic, my children had to access distance learning by spending all day at my neighbor's using - using their internet. Without the charity of my neighbor, they would not have had access to their education - a constitutional right in CA. The current way internet providers operate would have violated my daughter's

	constitutional right to an education! On behalf of all the low income households in SELA without access to a public internet service, I support the efforts LA Deal and others to ensure there is publicly owned internet infrastructure in my community. Not just those owned by private companies.
ICC Networking	ICC Networking is a technology vendor focused on delivering enterprise, military, and special circumstance technologies. We focus on bridging the digital divide on an international scale. To that end, we created an approach melding various connectivity technologies, software platforms, monetization, and sustainability models designed to connect and keep up with future requirements. ICCN employs a unique methodology to technology, deployment, support, and engagement that ensure success. 1. What is the long-term objective of the program and has that been defined in terms beyond connectivity? For example, economic impact, educational ascension, community engagement? 2. Are there other programs designed to interact with the communication network to help bridge the digital divide? 3. ICCN's approach to technology and as such we deploy a variety of standards to accomplish the stated goals. Is the county willing to allow us latitude to deploy different kinds of wireless technologies once the requirements for performance, resilience, and sustainability are met? 4. Is there a network operating center within the community, is one needed as a show of commitment to the community, or data center access? 5. What is the plan for access to city assets such as building, poles, fiber, and other items and will the city offer these resources at no-cost to the provider? 6. Is there any consideration for other items such as emergency services or communication options for those not within a residence? 7. Are there any limitations for engagement with any of the areas of coverage? Can public, private, non-profit organization be leveraged to engage, recruit, educate, and expand community involvement with the use of the city marketing asset and approval? 8. Does the city have a range of performance expectations or is it a fixed speed rating? 9. Will the city require integration into city systems? 10. What type of reporting will be required by the city? 11. Has the county defined the audience beyond the lack of connectivity? Percent of population that is young, old, handicap, etc. 12. Who is responsible for approval and validation of assigned residents? 13. Are other residents and services allowed on the network once connectivity is provided for the target audience? 14. Will the county select one partner or multiple providers each with a region and allow publicly available metrics to be monitored? Based on performance that is community/customer-driven, that provider is allowed to expand? 15. Will the county require content limitations and screening? Can the county share those standards and privacy expectations? 16. Is there a value to having customer and service support locally driven by training specialist within the community to ensure and increase in local involvement and economic growth?

Institute for Local Self Reliance	Last fall, The LA County Board of Supervisors voted unanimously to pass a motion presented by Supervisors Solis & Mitchell on Investments to Accelerate Digital Equity. That motion included instructions to the County's Internal Services Division (ISD) to create a municipal community wireless network that will offer free broadband to the County's least connected communities. The plan includes in-the-home equipment, local hiring provisions, and a budget for community-based "digital navigators" for technical assistance and digital literacy. We encourage Angelenos concerned about digital equity to comment on these ways the County can ensure the County Community Wireless Network RFP prioritizes equity and is built *with* the community: • Any community connectivity solution needs to provide access inside the home. People need access from their homes, not other locations, that may present logistical problems or other barriers to participation. This is a critical component of the Board motion authorizing the network and likely will be a requirement to qualify for funding from CASF, so should be explicit in the RFP. • The RFP should include questions regarding how the Network can be built to support small businesses in the service areas, in addition to residences. • Local communities need to control the network's designed solution, and people need to have a voice in how the network is operated in the future. The RFP should include requirements for community engagement in the design and build. • There should be multiple managed service providers willing to create a community-designed network. Their services need to be built for the network's users putting their changing needs first. Therefore, the RFP should be clear that multiple MSPs will be awarded contracts to service varying needs across the County. • The RFP should require details for investments into community-based resilience - local hiring, local workforce development, small business and economic development, and recovery solutions. • The RFP should advantage trusted independent and community broadband resources, not multinational legacy ISPS who have already had decades to bridge the broadband gaps the County is addressing with this Network. • The plan includes launching multi-faceted community partnership programs in collaboration with local CBOs delivering vital services to target communities to ensure the success of digital navigator programs outlined in the County's report. The RFP should be clear that these programs must include robust offline outreach and support components, not just online forms and tools. • To prioritize building trust, minimizing barriers, and make going online easy among the most digitally excluded communities, the RFP should include requirements for multilingual marketing of the Network (again in coordination and collaboration with community partners leading digital navigator efforts), community-based customer support, and minimal requirements for sign up and installation that is not exclusively online Some examples of ways this approach has been successful in other communities around the country: **• Pittsburgh, Pennsylvania** ◦ MetaMesh & Every1online ◦ A Pilot Project in Pittsburgh Solves the Problem of Low-Income Internet Access Programs ◦ Meta Mesh receives $1.4 million to bridge Pittsburgh's digital divide

	• **Providence, Rhode Island** ◦ ONE Neighborhood Connects ◦ Free Community Wi-Fi as a Health Imperative in One Providence, Rhode Island Neighborhood ◦ Broadband Access is a Health and Social Justice Issue — Episode 437 of the Community Broadband Bits Podcast • **San Rafael, California** ◦ Canal WiFi ◦ How San Rafael, California Built a Neighborhood Mesh Network That Turned into Something More ◦ Connecting A Neighborhood in Need in San Rafael, California – Community Broadband Bits Podcast Episode 427 Communities without access to broadband are harmed by fewer economic opportunities less access to healthcare services, and the threat of thousands of students not being able to participate in virtual classrooms as distance learning has become common amid the ongoing pandemic. The LA County Community Wireless Network is a viable digital inclusion solution that will allow people to connect their devices to the Internet from their homes. Tucson, Arizona provides a good example of another metro using this approach. By providing a wireless option, Angelenos who previously did not have access to high-speed Internet service would be able to improve virtually every aspect of their lives. Access to high-speed Internet services expands economic opportunity by making remote work an option, facilitating online job searches, even incubating home-grown entrepreneurs and helping local businesses be more efficient and competitive. For students, home broadband access is essential for distance learning as it allows students and work-from-home parents to be online simultaneously without having connectivity issues. Moreover, broadband is vital for families to be able to take advantage of telehealth services – which not only has the power to improve health outcomes, it also has the potential to drastically cut healthcare costs for both providers and patients. In particular, this solution should offer an opportunity to deploy needed access rapidly to those whose needs have not been met by existing ISPs and programs.
LAEDC	The LAEDC applauds the continued leadership of ISD and the Board of Supervisors to accelerate digital equity across Los Angeles County and we appreciate the opportunity to offer comments on the development of an RFP for the Managed Service Provider (MSP) role in the County's Community Wireless Network plans. We suggest the RFP be designed to ensure that digital equity for our unserved and underserved communities is prioritized in the proposals submitted and that community voice be required to be gathered as part of the planning and design of the network. We place a high priority on bringing truly high-speed Internet, at least 100 Mbps down and 20 Mbps up, into residences of all types in both our unserved and underserved communities. This would include RV parks, mobile home parks, public housing projects, and affordable housing complexes among other forms of housing. Former internet speed standards of 6/1, 10/1 and even the current FCC standard of 25/3 Mbps are obsolete today, especially for the densely populated households of our low-income communities where multiple members of the same household need

	broadband access to work and learn from home or access tele-health or social services or basic information available to others only through the internet. We also urge that responders be asked to describe how the network can be built to support small businesses and micro enterprises in the service areas. Many of our CBO partners have detailed the struggles for small businesses to get connected, as many are unable to afford the high cost of an enterprise-level broadband subscription, and our own work in communities like Lynwood and Willowbrook have revealed the same challenges for small business owners. The opportunity to connect these entities could provide great potential to expand their operations and customer base by gaining access to the digital marketplace, thereby contributing to both job and wealth creation in these communities. As there may well be more than one qualified Managed Service Provider willing and able to coordinate and manage implementation of a community-centered network in Los Angeles County, we recommend ISD consider a process whereby more than one managed service provider could be selected to establish community wireless networks in different areas of the county. There may be some MSP's better positioned to meet the needs of our rural areas and others better positioned to meet the needs of our underserved urban areas and some competition amongst providers in the build out and operation of such systems in either areas may be advantageous and instructive during this pilot phase of advancing digital equity across Los Angeles County. To the extent possible and reasonable, the RFP should require commitments for local hiring and procurement, and ideally investments in local workforce and economic development. Broadband availability has proven to be an economic multiplier, and the availability of affordable and reliable connectivity can help to encourage additional investments and job creation. Connecting our most disadvantaged communities will not only provide our residents more economic and societal opportunities, but it will also open the door for other types of innovative services within these areas as well. Given the multilingual nature of the Los Angeles County population, the RFP should include requirements for multilingual marketing of the network as well as customer support, ideally in partnership with trusted community partners. Potentially instructive examples of equity-oriented approaches in other communities can be found in cities like San Rafael, California; Pittsburgh, Pennsylvania and Providence, Rhode Island. Again, we appreciate the leadership of LA County stepping up to advance digital equity in such a direct way and stand ready to assist in any way we can on our own or through our role as co-conveners of the LA Digital Equity Action League with our partners at UNITELA.
LA-Tech.org	LA-Tech.org is a nonprofit coalition founded by the leaders of the Los Angeles area tech community to expand economic opportunity for LA's underserved communities. We do this by providing internships and job opportunities for young people who live in communities that have typically been under-invested in for generations. All of these economic opportunities are currently virtual and require that interns and employees have access to high speed reliable internet. Therefore, we strongly believe any community connectivity solution needs to provide access inside the home. People need access from their homes, otherwise they can't work in tech. This is a critical component of the Board motion authorizing the

	network and likely will be a requirement to qualify for funding from CASF, so should be explicit in the RFP. We also closely partner with community based organizations in the impacted communities. We believe that the RFP should require details for investments into community-based resilience - local hiring, local workforce development, small business and economic development, and recovery solutions. We believe the plan should also include launching multi-faceted community partnership programs in collaboration with local community based organizations delivering vital services to target communities to ensure the success of digital navigator programs outlined in the County's report. The RFP should be clear that these programs must include robust offline outreach and support components, not just online forms and tools. This has been vital in our work and we believe it is needed here as well
Los Angeles Community College District	The Los Angeles Community College District serves more students in the state of California than any other community college district. Most District students enrolled at one of its nine community colleges identify as Latinx or Black. A significant percentage of each campus's student population are low-income and are food and home insecure. Students enrolled in the District's community colleges are pursuing an associate's degree to transfer to a four year college, or they are seeking a certification that will provide them with upskilling or reskilling. All of the students enrolled in the District's colleges are there to achieve a better life. The connectivity at home is a direct factor in the success of the student be it by attending online classes, preparing homework assignment, or independent research. Lack of wifi connectivity and internet access have a significant negative impact on that mission. The LA Community wireless network effort could be of great benefit to our current and future students, allowing them more flexibility in attending courses (either online, or hybrid). LACCD has equipped many students with hot spots for wifi connectivity. The hotspots do not provide the most stable, reliable experience (it may be all right as a stop gap) but insufficient and not sustainable as a long term approach. Society has accelerated its reliance on the internet to pursue college education. During the pandemic, the disruption to the education system exacerbated long-standing inequities experienced by low-income students who, without access to quality broadband, suffered from a widening achievement gap, compounded by the need for devices, hotspots, digital literacy, and other non technical challenges. Improved internet access and reliable connectivity lends to higher academic achievement and the pursuit of a college degree, which improves their career earning potential and economic mobility and bolsters the economic impact to the community. Whilst there are many factors that support student success, access to internet is certainly a key ingredient.
Lumen Technologies	Lumen has great experience in Citizens Broadband Radio Service (CBRS) wireless technology. It was carved-out by the U.S. government to allow innovation in high-speed wireless networking without having to own vast amounts of the radio spectrum. Lumen deploys private CBRS wireless capabilities at unserved communities to give customers all the same benefits of 5G, but with local control—doing it locally on-premises, under tight control by the municipality and our company together. In the 5G world, the MNO has complete control. The municipality customer doesn't

	have a lot of insight as to what is going on in the 5G network. With CBRS, Lumen can deploy a private wireless network that operates at the same speed as 5G, but just in those communities of interest. If you have underserved/unserved communities, we can create the purpose-built antenna structure and we can do the switching. That enables us to break out and route the data any way you and anywhere you need it. Lumen is a MSP and can engage in a funded or co-funded pilot.
Nokia of America Corporation	Dear County of LA Team, It is our pleasure to submit the attached proposal in response to RFC-IS-220107 for County of LA Community Wireless Network Pilot. Nokia has a broad range of unrivalled innovations with 9 Nobel Prizes, 4 Turing Awards, 3 Emmys, 2 Grammys, 1 Oscar and 26000+ active patents from Bell Labs in every area of communication technology. With that core strength of fundamental research and development, we are happy to provide you a state-of-the-art technology package combining with the Citizens Broadband Radio Service (CBRS) Long Term Evolution (LTE) solution that can easily be upgraded to 5G (once the FCC rules for CBRS 5G). The hardware solution is complimented by both Nokia and our partners' service expertise on mission critical network deployments for Cities and Counties and other sectors across the world to help bridge the digital divide. The Nokia solution stands as a leading LTE equipment provider, and we are pleased to offer a customized unique solution to address the requirements of the County of LA RFC. Nokia is offering a solution built upon security, reliability, high availability, and 5G ready. The Nokia LTE solution can be used to facilitate broadband services with a technology standardized by 3GPP, while using bands as requested in the RFP. Nokia has proven itself as an expert on this application with our relevant references submitted as part of our response. Nokia has deployed more than 220+ private wireless networks worldwide across various industries. We hope with these credentials, Nokia provides enough confidence for the County to entrust us with such critical applications. Nokia is pleased to partner with Netsync for the Broadband Communications Services for the County of LA. Netsync is an Authorized Reseller and Partner in the Nokia Business Partner Program. They are certified on Nokia products and have completed multiple certifications for Nokia private wireless solutions. They also have the full support of the Nokia Professional Services teams. Netsync's dedicated team of highly skilled, certified, and seasoned engineers is available 24 hours a day, 7 days a week. Netsync understand the importance of cost-effective solutions and provide reduced pricing based on a best-value formula. Their strengths lie in large-scale deployments, and Netsync professionals involved in this response offer exceptional technical expertise, a firm understanding of the scope of work, and invaluable insight to ensure a swiftly and smoothly run project. The private cellular system that we are offering is completely scalable, reliable, easy to maintain and compliant to industry standards. The County will realize the positive effect of our solution in the life cycle reduction of Total Cost of Ownership. In addition, the solution is designed with RF experts specializing in LTE to provide the County the maximum bandwidth possible (both uplink and downlink) with none or limited interference. We believe that our response provide the County a complete flavor of next generation of technology, and with future roadmaps supported by relevant

	references. We hope and we are looking forward to being a long-term partner with the County with the engagement of this specific project.
NTT America, Inc.	NTT offers Global, customized private 5G network – ultra reliable, low latency and highly secure. Private 5G delivers speed, control, security and coverage to your organization. Flexible deployment options enable you to customize your own private 5G network onpremises, at the edge or in the cloud at scale, to drive innovation. We have some questions based on the info provided in RFC: • What is the minimum throughput (downlink and uplink) requirement per household? • What is the average throughput requirement (downlink and uplink) per household during busy hour? • What is the total data consumption per month that can be assumed per household? • Is the households total number 12,500 or 125K? Two different numbers were mentioned in slide 4! • Is the 25/3 Mbps BB speed represent the minimum DL/UL throughput requirements in Busy Hour or daily average? • Is the minimum speed required per household, regardless the number of tenants, or it is per tenant(pops)? • For how long are we obligated to meet the throughput requirements? Is it 2 years, 3 years,…! • Traffic usage growth forecast is needed and must be included in the capacity calculation to meet the DL/UL throughput within the contract timeframe. • Any specific used cases that require guaranteed service levels? • Does LA county have a reserved CBRS spectrum/BW allocated for this project? • Can you provide details on ability to use utility poles as distribution sites? o What is the average height of utility poles that can be used? o Would these utility poles have internet backhaul and DC power that can be used cellular base station sites? o Can you share the civil loading/space limitation on these poles? • Can you provide details on city buildings that can be used as distribution sites? o What is the average height of city buildings? o Would these buildings have internet backhaul and DC power that can be used as cellular base station sites installed on rooftop? o Can you provide locations of city buildings that can be used as distribution centers? o What is the maximum antenna height allowed above the roof levels? • Can you provide the details of locations for households for which broadband service is desired (e.g., kmz files) ? • Will the county guarantee outdoor CPEs installment per residence? Should we consider indoor or outdoor CPEs in our design? • What are the use-cases that households would access ? • Based on 125K households, how many total number of users per house approximately ? • Any justification on 50 distribution sites covering 12500 households? • What new tools does the LA county need to accelerate to reshape the internet, as this would help to do the estimate on the throughput required for it ? Here is a Smart City case study we would also like to share as well: https://services.global.ntt/en-us/about-us/case-studies/city-of-lasvegas

	We look forward to your response and an opportunity to conduct a technical workshop with you.
San Gabriel Valley Council of Governments	On behalf of the San Gabriel Valley Council of Governments (SGVCOG), we would like to offer feedback on the County's plan to pilot the creation of a Community Wireless Network. Please acknowledge that prior examples in other communities have found that the quality and speed of regional wireless networks is low. Prior examples have also found that the annual operations and maintenance of such systems to be high (in some instances even higher on an annual basis than the initial capital investment). The SGVCOG acknowledges that the County of Los Angeles is committed to closing the digital divide and working diligently to facilitate residential access to reliable broadband service in low-income communities. We appreciate your consideration and please do not hesitate to contact us if you have any questions.
Slalom	When developing the RFP, the County is going to get a lot of proposals from engineering firms offering a response that rushes to implementation. The County will also get responses from consultancies offering high-level "assessments" with little tangible/actionable outputs from that work. We encourage the County to look at this problem holistically and seek out a solution that provides an end-to-end partner that has the capability to the necessary strategic alignment, but also the quantifiable, data-driven context needed to ensure successful implementation of the pilot and subsequent initiatives. When evaluating vendors, we recommend these key considerations: 1) Is their proposal including a partnership strategy? 2) How does this vendor plan to engage the community on this journey? 3) What type of financial modeling will be provided (e.g. risk, funding, ROI, implementation cost)? 4) How does the vendor plan to align stakeholders and determine proper roles & responsibilities? 5) What type of data will be leveraged throughout the engagement for decision-making and program success? 6) What is driving the vendor's perspective? (i.e. do they bring enough diversity of thought and expertise to provide the best solution, or are they going to push THEIR solution) These are all key considerations and will ultimately impact the success of this critical effort.
SmartWAVE Technologies	Through our experience, we believe the best plan is a well defined plan that can leverage multiple technologies in serving the community, with a model that leads toward sustainability in supporting the system(s) deployed. We are attaching an overview of this approach that we believe can be molded to fit a number of different service models, promoting adoption, and providing for a "graduated" approach for offering connectivity based on service levels tied to investment spent, providing the best approach to enhance return on connectivity. **About Us** SmartWAVE Technologies (SmartWAVE) is a leading “wireless” centric systems integrator that provides the planning, design, installation and management of wireless networks, along with the unique applications that these networks support. We cater to the Smart City, Education, Healthcare and Enterprise markets, with an operating legacy of over 13 years. As a privately held organization, we have the ability

	to adjust more quickly and efficiently with market changes and the needs of our customers. SmartWAVE was founded in 2007 as a Firm primarily targeting wireless solutions to Municipal Governments. Since our founding we've expanded to include marquee customer relationships in Education, Healthcare and the Enterprise Markets. As these wireless networks have evolved, our skillsets and product offerings have evolved to include the ever-changing Internet of Things (IoT). If you are looking for the Expertise required to deploy the network and applications throughout your Enterprise, a Campus, a City, or even a Small Country, our resources have the experience, capabilities and passion for delivery. SmartWAVE is headquartered in Alpharetta Georgia, with additional warehouse office locations in San Jose California, Oakland California, McAllen Texas, Tucson Arizona, and Omaha Nebraska. **Why We are Uniquely Qualified** As you review this response, you will find that this document provides solutions using equipment from leading manufacturers, implemented through a leading wireless centric professional services firm. There is a wealth of information within this document, with extensive detail provided, which is why we felt we should sum up the highlights and advantages of our response in the following bullets: ***Experience + Execution + Process = Award Winning Networks*** Key Advantages in selecting SmartWAVE include: o **Ultimate Pilot Offering** – As you review our proposal, you'll see that we proposed a hybrid approach to fulfilling the needs in the RFC. We understand and realize that in serving wireless connectivity to communities, there is no "one silver bullet" solution that can meet the unique needs of every environment. We have proposed a solution architecture that leverages WiFi, FWA, and mmWAVE Terragraph technologies providing the ultimate flexibility in service offerings. After all, this is a Pilot, and why not use this opportunity to plan for the uniqueness that you will experience in a larger, broadscale deployment. o **Project Risk Mitigation** – We have been there and done that. Outdoor wireless project sizes range from 10 nodes to 3000+ nodes. Expectation setting is one of our key attributes. o **Proven Methodology** – As you will see later in this proposal, our methodology is proven in deploying similar outdoor WiFi networks since our founding in 2007 o **Proven Solution** – We have successfully designed and implemented Ruckus outdoor WiFi solutions for municipalities throughout the United States. In meeting our client's specific goals, these Access Points (APs) have been installed on Traffic Signals, Street Lights, Decorative Lights, Buildings, Towers and other city owned assets. We are currently serving over 1,000,000 unique clients devices from Digital Divide Program networks that we have deployed over the past few years. o **Focus** – Unlike others that may be responding, we are truly a Wireless "centric" company, focused on the full suite of wireless network services and application solutions o **History** - Proven history of successful wireless-based solutions improving public safety and public services, saving taxpayer dollars and enhancing the services to the community

	o **Experience** - Experienced with LTE, WiFi Mesh, Microwave, mmWave, Point to Point and Point to Multipoint Technologies, Mesh Technologies, Licensed and Unlicensed Networks. We take a hardware, software and technology agnostic approach to enhancing our client's networks. o **Partner** – In choosing SmartWAVE for this project, you have a Partner that can add value to all of your wireless projects, regardless of wireless technology o **Investment** - Investment in Toolset, Training and Proven Methodology. We've invested $50K/license for EDX so we can model outdoor wireless networks, in addition to the training for our Engineers to create our own "clutter data" required to use the tool. This commitment of expense alone is a key differentiator in our success with outdoor wireless networks versus our competition. o **Reputation** – The market recognizes us as a top Smart City Solutions Provider because of our experience in deploying projects similar to this one: https://smartcity.cioreview.com/vendor/2018/smartwave_technologies o **Award Winning and Market First** - Decades of proven experience designing and deploying complex outdoor wireless networks, with a Solid Resume, and capabilities, to include: - Wickedly Fast WiFi in San Jose, providing a Capital of the Silicon Valley Experience - An Advanced Telemedicine Network in Tucson with ER-Link - Wireless Video to enhance Community Redevelopment and Public Safety in South Central LA - Providing Internet Access to the un- and underserved areas in the Mississippi Delta - School District and City based Community Networks in the Omaha and Bay Areas Understanding our qualifications as it relates to the project, it is our hopes that, within this document, the Evaluation team will find the content, thoughtfulness, experience and same passion in this response as we exemplify in the services that we provide to our Smart City customers throughout the United States.
Sonic Telecom	Will an electronic shape-file map of the areas to be covered by the wireless system be available to carriers, for the purposes of network planning? Determining where municipal coverage will reach would assist in determining which neighborhoods should not be deployed with fiber-to-the-home. Thank you.
T-Mobile USA	The T-Mobile proposed solution is not only scalable, it will be deployed quickly enabling 300k plus residents to be connected in Q1/Q2 2022. Our program also includes a device and Unlimited LTE data for all participants. Thank you for your consideration! Dear Los Angeles County Team, T-Mobile is excited that The County of Los Angeles has taken on the endeavor to help close the digital divide in a substantive and decisive manner. Technology has changed almost every aspect of our lives. One of the biggest impacts has been how we communicate with each other. Gone are the days when communication was mainly through home phones, fax, and paper mail. Today, we text, chat, email, video chat, and so much more. Implementing the T-Mobile Connected Community Tablet Program across LA County at a deeply discounted cost will enable, connecting students to education, residents to jobs, and community members to one another will all be made possible through access to the internet via a Samsung Tablet. T-Mobile believes empowering residents by offering access to the internet should not be limited to a physical address.

	T-Mobile uniquely benefits County residents wherever they may be-beyond the confines of their home, school, workplace. All with best-in-class value, in addition to nation and worldwide connectivity in a mobile society. T-Mobile is committed to ensuring the success of this program. This commitment includes ensuring that devices are available, distribution networks are supported, and additional resources are available to all participants. T-Mobile has partnered with several national organizations providing digital and financial digital literacy training supporting our end user communities. T-Mobile is committed to working with organizations in Los Angeles County to provide local digital literacy resources to residents within the program. The T-Mobile team is grateful for this opportunity to partner with the County in support of all residents in Los Angeles County receiving and staying connected. T-Mobile has partnered with several national organizations providing digital and financial digital literacy training supporting our end user communities. T-Mobile is committed to working with organizations in Los Angeles County to provide local digital literacy resources to residents within the program. The T-Mobile team is grateful for this opportunity to partner with the County in support of all residents in Los Angeles County receiving and staying connected. Thank you for your consideration.
UNITE-LA	To the Los Angeles County Internal Services Department and the Los Angeles County Board of Supervisors, UNITE-LA appreciates the opportunity to provide public comment into the design of the RFP for a Managed Service Provider for the County's Community Wireless Network pilots. As a co-convener of the Los Angeles Digital Equity Action League consortium – the California Public Utilities Commission's designated regional broadband consortium for the Los Angeles region – we have been working closely with under and unconnected communities throughout the region to identify opportunities to deploy broadband infrastructure to those communities. In some cases, the communities we are working with have already done the work to explore different options. However, their explorations haven't resulted in culturally-appropriate, affordable and high-quality options. The selected Managed Service Provider (MSP) for the County's Community Wireless Network (CWN) should be required to get community voice and community buy-in for the design and execution of the CWN. The MSP should also be required to regularly report out to the community on the status of the CWN. Additionally, many of Los Angeles County's underserved communities live in under-resourced and low-income areas. The County should require that the respondents to the RFP be encouraged to provide the most competitive prices to households and businesses. One way MSPs can provide competitive prices is by receiving California Advanced Services Fund (CASF) grants to deploy infrastructure in communities experiencing less than 25/3 Mbps. There should be an effort by respondents to obtain or leverage other funds, public and private, that blend financing to develop and execute CWNs. Another way the County could approach the RFP process to ensure competitive prices and identify best practices is by selecting more than one MSP for different communities. Lastly, UNITE-LA urges the County to use the CWN pilot project as an opportunity to future proof broadband infrastructure in communities that could most benefit from

	highest-quality options. MSPs should be required to submit proposals that would provide 100 Mbps down and 20 Mbps up.
United Parents and Students	Any community connectivity solution needs to provide access inside the home. People need access from their homes, not other locations, that may present logistical problems or other barriers to participation. As we live in the digital-age, having access to reliable, high-speed internet is no longer a luxury, but a necessity and should be recognized as a public utility. In-home connectivity has been a longstanding issue for many low-income communities. This issue has been greatly exacerbated by the ongoing COVID-19 pandemic which forced schools to remote learning and left many jobless. We saw students forced to sit outside local coffee shops, or other businesses that offered Wifi services, during a time when the local health recommendation was to stay at home. Individuals who lost jobs do not have the same access to various online platforms that many employers use to seek candidates. Now, more than ever, it is imperative that we rise to the challenge and provide equitable, high-speed connectivity to people in their homes. To prioritize building trust, minimizing barriers, and making going online easy among the most digitally excluded communities, the RFP should include requirements for multilingual marketing of the Network, community-based customer support, and minimal requirements for sign up and installation that is not exclusively online. These requirements would further support the integration of these communities onto broadband services while addressing language and education barriers that have historically safeguarded internet access. The RFP should be clear that these programs must include robust offline outreach and support components, not just online forms and tools which would be counterintuitive to the audience the County is attempting to reach.
World Wide Technology	World Wide Technology appreciates the opportunity to comment on the County's RFC. We believe that CBRS/unlicensed 5GHz could be very useful to the County in its operations. However, due to limitations inherent in CBRS/unlicensed 5GHz, it is not the best fit for providing reliable, high-speed broadband to constituents in the areas most in need. Specifically, it would be very difficult to achieve the emerging Federal standard speeds of 100Mb/sec down and 25Mb/sec up using CBRS/unlicensed 5GHz. Moreover, as the technology landscape is changing quickly, we expect the bandwidth requirements to change at the same or greater pace. User Experience is one of the most important aspects of successfully providing high-speed broadband. Using existing carriers like AT&T, Frontier, and cable companies would provide the County the easiest and most rapid way to begin to close the Digital Divide by providing those constituents in need with reliable, low latency, high-speed broadband service. What steps do we recommend the County take now? We suggest the following: 1. Engage and coordinate with Los Angeles Unified School District (LAUSD). LAUSD is already well under way in beginning the process to provide high-speed broadband to students most in need. Engaging LAUSD will help ensure no duplication in service provisioning and help save the County money. Also, we suggest meeting with the Carriers LAUSD is using as we believe they will provide valuable lessons learned from receiving orders and deploying services to students' homes. WWT would be happy to help the County negotiate business terms with the carriers that would allow the County to utilize its grant and capital dollars as effectively as possible.

	2. Engage with the carriers and use the County's economic might to negotiate the best possible rates for broadband (wired and cellular), end-user devices, and end-user training. Allow constituents to choose the provider(s) and devices of their choice. 3. Utilize grants and other capital funds to subsidize carrier build out of high-speed, fiber-based broadband in areas of need and utilize non-fiber carrier infrastructure where fiber is not available until fiber build out is complete. 4. Define and implement end-user adoption services. 5. Create new, easy to use, secure, digitally based services (where possible) that constituents may require. Survey constituents and stakeholders to determine what services are most desired/needed to help prioritize services/application build-out. Engage User Experience experts to help define a common interface for all digitally based County services/applications that provides the very best user experience. WWT is partnering with Intel on Digital Divide issues, and our team is happy to assist the County to move forward swiftly to close the Digital Divide. WWT is committed to the CBRS/Private Wireless (pLTE) space. WWT has practices for both Service Provider and Enterprise/SLED customers. The practice teams have experience in the planning, designing and along with our ecosystem of partners, deploying CBRS/ pLTE systems. These systems range from indoor use cases to large outdoor designs that cover counties. We believe that there is significant value in using CBRS/ pLTE in support of Smart City/ Smart Region and County Operational systems and would be happy to host a Smart Region Workshop with County Leadership and stakeholders. Thank you for the opportunity to comment and help make our County a better place to live and work. We look forward to a continued discussion.