

Cut Off From the Courthouse:

*How the Digital Divide
Impacts Access to Justice
and Civic Engagement*



Key Findings

- 1 Lack of adequate broadband access, devices, and digital literacy skills entrenches existing inequalities that civic institutions are working to eliminate.
- 2 Remote hearings should be optional. In the courts, remote hearings can be effective for ministerial legal hearings and some substantive civil hearings. For civic institutions, remote hearings can increase access, but they can also exclude residents contending with digital access and adoption barriers.
- 3 Deficiencies in public awareness of broadband affordability programs or community broadband services ensure that they remain underutilized. Trusted legal service providers, who work with residents eligible for broadband affordability programs, could be program ambassadors as they are an overlooked touchpoint for information.
- 4 Lack of trust in government affordability programs can be just as much of a barrier to broadband affordability programs as lack of information.
- 5 Mobile Internet service and devices are not sufficient for equitable access to courts, legal services, government proceedings, and public benefits.

Recommendations

- 1 Invest in adoption as well as access.** Greater access to affordable broadband service offerings and digital skills training must accompany the push for remote judicial and administrative proceedings, civic engagement, and government services. Investments in both access and adoption will help to ensure that residents can be heard, apply for government services, and stay informed about local emergencies.
- 2 Partner with community organizations.** Government partnerships with local community organizations may help overcome trust barriers that prevent some households from enrolling in broadband affordability and access programs.
- 3 Support the full range of service providers.** To promote awareness of broadband subsidy programs and digital literacy education initiatives, it is important to partner with and provide resources for public defenders, legal aid offices, and other legal service providers. These providers can serve as program ambassadors and promote broadband adoption in low-income communities. That support should go along with robust resources for libraries, schools, senior centers, and other community anchor institutions.
- 4 Streamline enrollment.** Enrolling in broadband subsidy programs should be as easy as possible. Streamlining the application process and establishing a single application for multiple programs will reduce burdens on some residents.
- 5 Support local solutions.** Broadband funding should support innovative municipal and community-based initiatives to expand access (e.g., municipal mesh networks and hotspot programs). They expand broadband access for communities who are underserved by traditional providers and may not be able to afford broadband even with the assistance of subsidy programs. Flexible funding programs and local best practices are two strategies that can empower communities to tackle persistent digital divides.

Contents

Executive Summary	4
<i>Key Findings</i>	5
<i>Recommendations</i>	6
Introduction	8
Courts and Legal Services	12
<i>Remote Legal Proceedings: Beneficial, Imperfect, and Here to Stay</i>	13
<i>Barriers to Meaningful Participation in Remote Court Proceedings</i>	16
Access and Affordability	17
Device Access and Digital Literacy Issues	18
<i>The Digital Divide as Barrier to the Attorney-Client Relationship</i>	20
Accessing Documents and Reaching Counsel	20
Digital Literacy	22
Civic Engagement	23
<i>Remote Civic Proceedings Expand Participation for Many</i>	24
<i>Barriers to Participation in Remote Proceedings Reinforce Underrepresentation</i>	26
Access and Affordability	27
Devices and Digital Literacy	29
Government Services and Broadband as a Government Service	31
<i>Government Services and Public Safety Information Have Moved Online</i>	32
<i>City Governments Lead in Providing Broadband as a Government Service</i>	33
Gonzales, California's Wi-Fi Hotspot Program	33
San Rafael's Mesh Network	34
<i>Access and Adoption Barriers Faced by Community Broadband and Community Partnerships</i>	36
Lack of Awareness and Trust	36
Device and Literacy Barriers	38
Findings and Recommendations	40

Introduction

A longtime legal aid lawyer and her client were frustrated that the judge could not see the client during a telephonic hearing to appeal the denial of a social security disability claim. It was simply impossible for the judge to understand the extent of the client’s intellectual and physical disabilities, and a voice over the line could not elicit the empathy that in-person participation might have.¹

Another lawyer drove eight hours to meet her clients—mostly rural farm workers in the Imperial Valley—to discuss foreclosure notices so that they wouldn’t lose their homes. The clients themselves could barely afford the full day off work or the tank of fuel it would take to travel to her office. The lack of broadband access and obstacles to adoption eliminated videoconferencing as an option in the rural regions where her clients live and work.²

And a local government official worried about the people who were no longer able to attend city council meetings once they moved online because they lacked broadband access, connected devices, or the skills to keep pace with events in their communities.³

These real-life examples illustrate why Internet connectivity is, in the words of late Congressman John Lewis, “the civil rights issue of the 21st century.”⁴ Gaps in Internet access and adoption are part of a larger issue: digital equity, or the “digital divide,” a term that has come to mean the “gap between people who can easily use or access technology and those who cannot.”⁵

Although the digital divide has been recognized and discussed for more than twenty years,⁶ the COVID-19 pandemic cast digital inequities in a new light. Renewed attention motivated federal, state, and local governments to redouble broadband access and adoption efforts. Healthcare, employment, and education have figured prominently as rationales for investing in affordable broadband. In comparison, significantly less attention has been paid to the digital divide's impact on access to justice, civic engagement, and the full range of services provided at federal, state, and local levels.

The digital divide is a civil rights divide. People deprived of affordable and reliable broadband service (i.e., high-speed Internet access), the skills to use Internet-capable devices, or both, are often unable to enforce their legal rights, defend themselves in court, participate in the political process, or receive government entitlements.

This report presents insights from interviews with 27 professionals who provide legal, civic, and government services. The interviewees work directly with the communities they serve and understand firsthand the digital divide's impact on residents. They include public defenders, staff attorneys at rural and urban legal aid associations, academics with practical and research insight into access to justice and technology issues, as well as a former judge. The interviews explored the many ways in which the digital divide manifests itself in their work and why related inequities are likely to persist. The analysis and recommendations contained herein showcase the less obvious ways that the digital divide injures a wide range of communities in the context of the legal system and civic participation.

The digital divide is largely a result of two distinct barriers. The **first barrier** relates to a household's access to high-speed digital infrastructure. For example, the high cost of deployment in sparsely populated areas and subpar speeds can interfere with baseline access. The **second barrier** relates to the inability to benefit from a broadband connection. The high cost of maintaining a subscription, not having the requisite equipment or digital literacy, or a lack of information about and trust in universal service programs prevent millions of households from making full, productive use of the Internet.

Barriers to broadband access and adoption are felt disproportionately by populations that are underrepresented in public and private decision-making roles. Factors such as disability status, age, low income, ethnicity, race, education level, and geography can reliably be used to pinpoint digital divides.⁷

By any account, millions of Americans experience the digital divide. According to the Federal Communications Commission's ("FCC") conservative estimate in 2019, twenty-one million Americans lack "access to broadband service, defined by the FCC as a download speed of 25 Mbps and upload speed of 3 Mbps."⁸ That same year, Microsoft estimated that the number is as high as 162 million people.⁹ These estimates do not account for those who may have access to broadband but find themselves on the wrong side of the digital divide due to other factors like affordability or digital literacy.¹⁰

Findings in this report reinforce the need for building public awareness of broadband affordability programs and digital resources, a vital step for narrowing the digital divide. Interviewees in public service and private sector roles emphasized that communities impacted by the digital divide are more likely to be receptive to outreach efforts by organizations that have built trust in those communities. Far too often, when the community-based organizations conducting outreach lack adequate support and eligible households lack awareness of their eligibility, the households in the greatest need suffer in silence.

Governments at all levels can help by supporting organizations that serve as key touchpoints with people who are eligible for, and in need of, affordability programs. In November 2021, Congress assigned grant funding in the Infrastructure Investment and Jobs Act ("**Infrastructure Act**") to provide the FCC with resources to support community outreach efforts.¹¹ The grant program includes funding for community organizations to promote and assist individuals in signing up for the Commission's new Internet affordability program.¹² In the meantime, it is critical that courts, legal service organizations, civic institutions, and city councils—among others—recognize that people do not have equal access to remote proceedings or government service platforms. Sensitivity to these issues will help reduce some of the resulting inequities.

The report is organized around three categories of remotely accessed venues or services, and how two sets of barriers—access/adoption and device availability/digital literacy—influence them:

1. Courts and Legal Services,
2. Civic Engagement, and
3. Government Services.

While imperfect, remote access to court and legal services has helped overcome some traditional barriers to accessing justice in person. At the same time, the stories in this report illustrate how those directly affected by the digital divide face a new set of access challenges that make justice elusive.

Specifically, **Part I** documents how the digital divide restricts access to the courts and legal service providers. Residents and service providers detail how digital inequities can hinder participation in remote court proceedings, communication with counsel, and preparation and understanding of filings. As this report reflects, the majority of our interviewees are legal service providers.

Part II shows how the digital divide restricts access to civic fora, such as remote town hall meetings and other virtual government functions. As with access to remote court proceedings and legal services, this report recognizes that the move to online platforms during the COVID-19 pandemic has had mixed results, expanding access for those who would have trouble attending in-person events while adding hurdles for those on the wrong side of the digital divide.

Finally, **Part III** shows how the digital divide restricts access to government services such as unemployment, social security, public safety alerts, and other community benefits. Also discussed are examples of municipalities that have expanded access to government services by implementing connectivity programs. The tangible benefits of these programs illustrate how widespread connectivity reinforces a supported, informed, and safe community. At the same time, realizing those benefits requires building relationships and working with trusted community organizations to connect hard-to-reach community members.

Courts and Legal Services

There is significant overlap between those who qualify for subsidized legal services and those in need of broadband service. For criminal matters, those represented by public defenders generally cannot afford legal services outside of what the state or federal government provides.¹³

The income criteria for qualifying for legal aid from the Legal Services Corporation is 125% of poverty guidelines¹⁴—10% less than the income limit for the federal Lifeline program, which subsidizes phone and broadband Internet access for low-income households.¹⁵ The Affordable Connectivity Program has raised this bar to 200% of the federal poverty limit to increase the number of eligible households that may fall just above Lifeline's cutoff.¹⁶ While the income thresholds are different, these assistance programs attempt to reach the same population, and for good reason. Many people facing legal issues cannot afford a fixed broadband subscription, let alone a lawyer.¹⁷

Our research into the digital divide's impact on remote legal proceedings and access to legal services surfaced two main drivers of inequality. The first relates to the provision of the network itself while the second relates to what happens at the edge of the network:

1. Access and Affordability. Communities who face logistical challenges accessing courts and legal services (oftentimes low-income residents, people living with disabilities, or those living in rural areas) also face barriers in accessing basic Internet connectivity. In some cases, the problem is lack of infrastructure. For others, the infrastructure is there, but individuals cannot afford the installation or service price.

2. Devices and Digital Literacy. Video hearings and remote client counseling are problematic for those who lack the tools or digital skills needed to effectively participate in government proceedings, including their own hearings.

The transition to remote legal proceedings, accelerated by the COVID-19 pandemic, is expected to remain a fixture of the modern judicial landscape. Remote proceedings can help parties overcome logistical, economic, and geographic barriers to venues where they can enforce their rights. But effective remote access to court proceedings and legal services requires sufficient bandwidth, device capability, and digital literacy to meaningfully appear and be heard.

Remote Legal Proceedings: Beneficial, Imperfect, and Here to Stay

Camille Pannu was a legal services attorney with clients spread throughout the rural Imperial Valley in southeastern California. Some days, her clients would drive six or eight hours to meet with her. She was often the only legal service provider within several hours' drive. Most of her clients lacked broadband access and cell service in vast swaths of rural California can be unreliable. Videoconferencing was simply not an option for her and her clients.

Many of Pannu's clients were agricultural workers who could not afford to take a day off work for a meeting. She frequently drove to them, knowing the grave consequences if her clients lacked counsel. One client nearly lost their family home after a single missed mortgage payment. The bank was set to take the home, until Pannu stepped in and stopped the foreclosure. Losing housing is devastating, and sometimes all someone needs to keep their home is a lawyer to clear a title or represent them in a foreclosure hearing. But if they are unable to meet with a lawyer, they are unable to access vital legal services.¹⁸

Judges, lawyers, and other courtroom professionals generally support remote proceedings, with some qualifications.¹⁹ For instance, Nathan Hecht, the chief justice of the Texas Supreme Court and co-chair of the National Center for State Courts pandemic rapid response team concluded that “[W]e’re going to be doing court business remotely forever[.]”²⁰ Chief Judge Kimberly Mueller of the federal Eastern District of California agreed, stating, “I’ve become persuaded that the videoconferencing by Zoom for the purposes of civil scheduling conferences, civil law in motion, and quite a bit of criminal pretrial work is a good enough equivalent to seeing someone in person.”²¹

Perhaps the foremost benefit of remote proceedings is their potential to increase access to legal counsel. Every legal service provider interviewed discussed the difficulty their clients experience in taking time to visit their offices, attend court hearings, visit a self-help legal center, or meet with a lawyer at a courthouse. There are various factors that can inhibit clients from physically appearing before a judge or in a lawyer's office, including inability to take time off work, inadequate transportation options, disability or age considerations making travel difficult, and geographic proximity to services.²²

Employment. As one public defender reported, some of his clients could not attend court hearings because they were afraid of losing their jobs.²³ For many, getting permission from their employer to take an entire day off work is prohibitive, even before factoring in the cost of gas and lost income.²⁴

Transportation. Lack of affordable transportation is another persistent barrier. One longtime public defender explained that his office had clients who walked a great distance to meet with their assigned attorneys.²⁵ Another public defender has clients who are as far away as a four- or five-hour drive.²⁶ A third public defender observed that “perfunctory court appearances can be extremely disruptive” to her clients who sometimes must take a full day off work to attend short administrative hearings like a status conference.²⁷

Mobility/Disability. Traveling can also be problematic for people with mobility impairments, such as seniors or people with disabilities. Travel creates additional barriers to attending court sessions or meeting with counsel. For some, this means coordinating special transportation or incurring extra costs for aides.²⁸

“Attorney Deserts.” Many rural residents live in “attorney deserts”—geographic areas where legal services are not readily available.²⁹ “It’s not feasible to deliver legal services to rural areas unless you have broadband,” said Pannu, the lone transactional legal aid attorney serving eight rural counties in California.³⁰ Geographical voids in broadband access and adoption directly impact rural residents’ ability to obtain and use legal services. These voids in broadband access coincide with voids in local legal assistance.

Remote opportunities to confer with counsel and attend court could, in theory, make participation possible for low-income residents who otherwise could not attend hearings or could attend only at great cost. For instance, a remote court option for a routine court proceeding would save litigants both travel and in-court wait time.³¹

However, the limitations of videoconferencing applications make remote hearings an imperfect substitute for in-person appearances or in-person consultation. For criminal proceedings in particular, these shortcomings can be unacceptably harmful. Even when a person has adequate bandwidth, a suitable device, and requisite digital skills, remote proceedings can impede that person’s ability to be heard and enforce their rights.

The practitioners and judge interviewed identified clear shortcomings in remote proceedings, such as the:

- inability of counsel to confer privately with their client during the proceeding,
- absence of the comfort and support a client ordinarily feels by having their lawyer standing by them, and
- difficulty connecting with the judge and jury when a screen is an intermediary in that connection.

Whatever their merits or defects, remote court proceedings are here to stay. In California, for example, state and federal courts have been authorized to continue holding certain proceedings remotely. And the Judicial Council of California has recommended that “California courts should expand and maximize remote access on a permanent basis for most proceedings and should not default to pre-pandemic levels of in-person operations.”³² Following this recommendation, the California legislature unanimously approved a bill that would permit courts to keep civil hearings remote until July 2023.³³ California Governor Gavin Newsom signed the bill into law in September 2021.³⁴

At the federal level, the CARES Act allowed the Judicial Conference—the administrative policy-making body for the federal courts—to respond to the pandemic by giving chief judges the discretion to hold certain criminal proceedings and all civil proceedings remotely through the use of videoconferencing or teleconferencing systems.³⁵ This authorization will end “30 days after the date on which the national emergency ends, or the date when the Judicial Conference finds that the federal courts are no longer materially affected, whichever is earlier.”³⁶

Courts and policymakers must recognize how the digital divide prevents equal access to remote proceedings if they hope to ensure the greatest possible benefits of remote participation. As Judge Jeremy Fogel, Executive Director of the Berkeley Judicial Institute, explained, “I think the solution . . . is not to get rid of remote proceedings but to strengthen the capability of broadband or add resources” so that people can effectively participate in remote proceedings.³⁷ An attorney representing homeless and senior clients agreed: “More access is better, while it may exacerbate inequities for the most vulnerable at some points, we can work to address that.”³⁸

Understanding both the potential benefits and inequities of remote proceedings helps policymakers better address underlying connectivity barriers. Because experts anticipate that many court functions will remain online after the pandemic ends,³⁹ insufficient bandwidth and lack of Internet access will remain grave impediments to justice.

Barriers to Meaningful Participation in Remote Court Proceedings

Sarah Reisman has spent years representing people who cannot afford their own representation and is currently the Directing Attorney of Litigation and Advocacy at Community Legal Aid SoCal which, among other things, helps clients enroll in and appeal denial of government benefits. That work demonstrates how it is often crucial for the administrative judge to see the clients:

A picture is worth a thousand words if you can see the disability—especially if the disability is developmental or something that’s cognitive or not apparent. The Administrative Law Judge being able to see that client, how they react and interact, [and] how they respond to questions, is very important.⁴⁰

Reisman knows how crucial it is that the judge see “how [the disability] has all manifested in [the client’s] body, how that impacts her mobility, impacts her ability to concentrate.”⁴¹ Even absent a visually apparent disability, individual prejudices disadvantage call-in litigants. Another attorney explained that those appearing by phone have “second-class status” in the virtual courtroom.⁴²

Having this “second-class status” in a virtual hearing can have serious consequences in federal proceedings. A 2017 U.S. Government Accountability Office report describes how an immigration judge was unable to identify a respondent’s cognitive disability over a video conference. However, at a subsequent in-person hearing, the respondent’s disability was “clearly evident.”⁴³ This disparity can significantly disadvantage litigants who may not have the capacity to understand the repercussions of appearing remotely.

Insufficient or unaffordable broadband service, unsuitable devices, or a lack of digital literacy can irreparably impair a party’s attendance or participation in a remote court proceeding. Participants without broadband access may fail to appear in a court proceeding or be unable to participate in court-ordered remediation. Lack of digital preparedness can also keep people from seeing or being seen at a remote proceeding, negatively impacting their ability to fully participate.

ACCESS AND AFFORDABILITY

Olivia Sideman, a Bay Area public defender, stated that there is no substitute for “the client hearing it himself—to hear their attorney arguing for them, fighting on their behalf, cross-examining the police officer.”⁴⁴ In her view, when a defendant

[W]hen a defendant cannot participate because of Internet access barriers, “it’s another way in which our clients’ rights are overlooked by the court, another way in which this entire system tramples on our clients’ rights

cannot participate because of Internet access barriers, “it’s another way in which our clients’ rights are overlooked by the court, another way in which this entire system tramples on our clients’

rights. I think you have a right to be present, to know what’s going on in your case.”⁴⁵ These sorts of experiences undermine faith in the justice system and civic institutions.

In some cases, missing a remote hearing can result in a default judgment against a party. In an eviction hearing, for instance, “the inability to connect to the call may not just be the loss of basic rights . . . it could also be the difference between housing and homelessness.”⁴⁶ Notably, courts have issued arrest warrants for failure to appear at remote hearings.⁴⁷

Digital inequities have also prevented criminal defendants from complying with court-ordered online remediation. For instance, online therapy sessions, alcohol or drug counseling meetings, or anger management classes are often imposed by courts. However, when a defendant cannot attend mandatory online meetings, they face potentially severe penalties. “If you don’t do your classes, you can end up back in jail,” Sideman explained. “So, if you’re supposed to do fifty-two domestic violence classes [some of which may need to be completed online]—you’ll get brought back into court over and over again if you’re not doing them, and ultimately, you’ll get brought into jail.”⁴⁸

When a client cannot participate in online remediation, they are disadvantaged from the start. Said Sideman: “It’s much more difficult for me to get the same outcomes for my clients who don’t have access to the Internet because I can’t tell the judge that my clients will do certain things.”⁴⁹

A client’s inability to access remote proceedings or remediation programs might be a consequence of geography or demographics. In rural areas, over seventeen percent of the population does not have access to broadband at home.⁵⁰ For some communities, “digital redlining”⁵¹ hinders broadband deployment. It is a result of intentional or de facto broadband investment strategies where a provider chooses not to serve an area or focuses exclusively on nearby areas with higher returns on investment.⁵²

Digital redlining often occurs on the same socio-economic lines as historic redlining, which was the “deliberate practice, carried out by both the government and the private sector, of denying loans and investment to communities of color.” It “further entrench[es] discriminatory practices against already marginalized groups”⁵³ and historically targeted low-income communities.

Similarly, low-income households often lack the services, devices, or resources necessary to access the legal system remotely. Twenty-seven percent of households who earn less than \$30,000 a year say they have a smartphone but no broadband at home.⁵⁴ Thirteen percent of households in this bracket have neither.⁵⁵ Either way, the consequence is the same. Being on the wrong side of the digital divide prejudices clients at every stage of their involvement with the legal system.

There are new efforts at the federal level to identify and remediate digital redlining. The Infrastructure Act tasks the FCC with creating rules to facilitate equal access to broadband by preventing digital discrimination on the basis of income level, race, ethnicity, color, religion, or national origin.⁵⁶ The agency is also required to identify and take necessary steps to eliminate digital discrimination.⁵⁷ Congress has given the Commission broad authority to determine the contributing factors. Accordingly, the FCC has an unprecedented opportunity to strike at the root causes of both intentional and unintentional digital redlining.

Additionally, the FCC is responsible for developing model policies and best practices that state and local governments can adopt to prevent broadband service providers from engaging in certain discriminatory practices.⁵⁸ For its part, the California Public Utilities Commission launched an investigation of digital redlining at the state level in 2021.⁵⁹ Resulting policies could serve as an additional model for states seeking similar remedies.

DEVICE ACCESS AND DIGITAL LITERACY ISSUES

Several interviewees said their clients are simply unfamiliar with computers.⁶⁰ Sometimes, it is necessary to train clients how to use videoconferencing software so that they can attend remote court proceedings.⁶¹ “For the most part,” public defender Olivia Sideman explained, “my clients can’t log onto BlueJeans; they don’t have the tools or resources to do it, and they don’t know how.”⁶² Some clients face especially steep learning curves, struggling with basic operations such as downloading and opening applications.⁶³

Remote court and administrative proceedings are often arranged on the assumption that all participants will appear via videoconference. A party appearing instead only by telephone is disadvantaged compared to video participants in the proceeding. Video participants have the advantage of seeing a “gallery” of all participants, giving them access to visual cues and reactions that a telephonic participant is not privy to. It is crucial for litigants in a videoconferencing hearing to see the judge and gauge their reaction. Inability to do so can lead to mistakes, and ultimately prejudice the judge against them.⁶⁴ Inadvertently talking over others can irk judges. It is also difficult to gauge when a court is sympathetic to a line of argument without visual cues.

Even litigants who can use video on their phone are disadvantaged when shaky video from a handheld device impairs their ability to both convey and receive information.⁶⁵ As one attorney pointed out, “the experience of appearing by phone is significantly different than appearing from a larger or more stable screen” and plainly insufficient.⁶⁶

A party appearing instead only by telephone is disadvantaged compared to video participants in the proceeding.

Seeing a party is also important for a judge to build empathy and understanding for them. “In most cases

it’s a real disadvantage if you can’t be seen,” according to Judge Fogel, who has served in municipal, state, and federal courts.⁶⁷ “Fairly or unfairly, we intuitively judge veracity based on nonverbal communication,” so when a judge cannot see facial cues and body language, it is more difficult to tell whether somebody is reliable.⁶⁸ For both the court and the litigant, not being seen is an “inferior experience.”⁶⁹

The Digital Divide as Barrier to the Attorney-Client Relationship

Olivia Sideman has been a public defender in the City of Oakland for four years. She represents indigent clients who are unable to pay for a lawyer. Some are homeless or marginally housed. There is a stark difference in the level of representation she can provide to clients who have access to email and phones compared to those who she has no consistent way to reach.

Simply put, Sideman cannot obtain the same outcomes for her un- or less-connected clients as for those who have reliable Internet and phone access. In some cases, she needs the client's consent to appear on their behalf, accept a plea deal, or enroll them in a diversion program to avoid jail time. Sideman is unable to counsel clients about these options if she cannot get in touch with them.⁷⁰ Her clients' lack of digital literacy is also a barrier to effective representation. Sideman said that it is not easy to teach these skills, and the fewer skills people have, the harder it is to teach them. She noted that if there was a way to help her clients get access to the Internet, she would. "If information was given to us, we would use it."⁷¹

The digital divide diminishes legal service providers' ability to serve their clients by creating barriers to attorney-client communication. The lack of digital literacy and devices also drains the resources of legal service providers. Furthermore, legal service providers could serve clients and the public more broadly and in new ways if they were confident people could access online resources.

ACCESSING DOCUMENTS AND REACHING COUNSEL

A range of issues hamper an attorney's ability to properly communicate with their client. Candis Mitchell, a longtime public defender, told us that it is essential that their clients **see** the documents they are reviewing. For instance, when explaining complicated federal sentencing guidelines to a client while counseling them on what to expect if they agree to a plea deal or choose to go to trial, her office uses charts to explain the process.⁷² Clients need to be able to see and process the information in those charts to make better informed choices about what to do.

Sending documents back and forth is an ongoing challenge since those without home broadband access must go outside the home to email or fax documents, compromising their ability to communicate securely, privately, and with dignity.⁷³ Olivia Sideman reported, “I don’t really want to be emailing these [sensitive] documents to a Kinko’s or to somebody’s boss” when a client doesn’t have their own email address because it can undermine confidentiality, jeopardize their employment, or embarrass them.⁷⁴

Sideman further explained, “I have cases where the case would be dismissed by now but I can’t reach the client to get them to agree to [let me] appear on their behalf. . . . I legally have an obligation to run [a plea deal or a deal to enroll in a diversionary program] by my client.”⁷⁵ Another attorney stated that, in the case of a current client who lost her phone, “We’ve potentially totally lost touch with a client who has time-sensitive legal needs that we can’t address because of the technology barriers.”⁷⁶

Additionally, clients often have limited cell phone plans, introducing an implicit, if not explicit, desire to keep conversations as brief as possible.⁷⁷ As one public defender recognized, her clients’ reliance on data plans to access the Internet meant that her thoroughness in reviewing documents with her clients over Zoom cost her clients money needed for food, transportation, and other life necessities.⁷⁸

At various points during the pandemic, COVID-19 restrictions at local libraries have interfered with reliable access to digital communications.⁷⁹ A 2020 report by the Public Library Association found that, among all services libraries make

“I don’t really want to be emailing these [sensitive] documents to a Kinko’s or to somebody’s boss” when a client doesn’t have their own email address because it can undermine confidentiality, jeopardize their employment, or embarrass them.”

available for their patrons, printing, copying, and faxing services are amongst the most ubiquitous nationwide.⁸⁰ These are also essential services for receiving and transmitting legal

correspondence. Fortunately, some libraries facilitate online legal assistance or consultation programs,⁸¹ a crucial resource for those who are unable to travel or do not have the digital access and skills required to navigate the virtual process on their own.

DIGITAL LITERACY

Attorneys and other providers stressed that lack of digital literacy was a particularly common hurdle in communicating with clients and assisting with court appearances. Kaelan Orozco, a former legal services attorney in Southern California, confirmed that some of her clients had to come into her office to attend a virtual court hearing. That was true even if they had broadband access because some simply did not know how to use the technology.⁸²

During the pandemic, videoconferencing has been necessary to meet with clients.⁸³ Client representation suffers when the client cannot access adequate broadband or suitable devices, or when they lack the requisite digital skills to use them. “It’s hard to develop a relationship with a client when they don’t even know what you look like,” one attorney observed.⁸⁴

Carmen Sanchez, a social worker in the San Francisco Public Defender’s Office, observed how clients who had recently been released from long prison sentences struggle with learning how to use the technology necessary for meeting the conditions of their parole or reengaging with society. It is a “whole new world” for them, Sanchez explained, describing how recently released clients struggle to manage basic tasks like pay bills because “everything’s online now.”⁸⁵

Spending time teaching clients basic digital skills detracts from time that could be spent advocating on a client’s behalf.⁸⁶ Digital unpreparedness can strain the already limited resources of organizations providing legal services.

Spending time teaching clients basic digital skills detracts from time that could be spent advocating on a client’s behalf

Sanchez stated that she finds herself performing tasks online for her clients because it is easier than training them. This is the case

whether the client is using a smartphone or a personal computer.⁸⁷ When the main goal is to provide someone with much-needed legal counsel, the time it takes to practice navigating a digital device comes at a premium.

The migration of legal proceedings and legal services to online platforms can benefit low-income people and others for whom in-court appearances or in-person client meetings pose a range of logistical and economic challenges. That benefit presupposes a stable Internet connection as well as the equipment and know-how to use it, which is rarely the case among low-income or rural defendants. As remote legal services become fixtures of the post-pandemic world, broadband policies must evolve to put those services in reach of all who need them.

Civic Engagement

The pandemic shifted many public meetings from in-person to remote proceedings, including city council meetings, legislative hearings, and agency proceedings. The interviews and research conducted for this report revealed that the shift to virtual options generally increases participation. However, as with remote access to court proceedings and services, those who are on the wrong side of the digital divide were unable to receive the full benefit of remote participation in hearings, meetings, and public debates that shape democracy.

Remote town halls and other civic proceedings threaten to chill civic engagement for people who lack broadband, connected devices, and digital literacy skills necessary to access the Internet. This section explores how the digital divide undermines equitable civic participation. It first discusses the ways in which remote access expands participation for those who have difficulty attending in-person meetings and hearings. It then examines the barriers to participation posed by lack of broadband access, awareness of and trust in affordability, equipment, and skills training programs necessary to participate in civic proceedings.

Remote Civic Proceedings Expand Participation for Many

As Peter Estes, a community organizer with Senior and Disability Action (“SDA”), explained, although remote hearings allow for greater participation for some of SDA’s constituents, others are alienated from online civic life because they lack the broadband access, technology, or wherewithal to participate in remote meetings.⁸⁸ SDA, a community organizing nonprofit, also provides support services to San Franciscans who are older or have disabilities. Before the COVID-19 pandemic, many of the people SDA serves had trouble attending government meetings or hearings. Meetings migrated online during the pandemic, enabling many SDA members who previously faced hurdles attending in-person meetings to participate remotely.

As the organization’s leaders explained in a 2021 op-ed, when civic functions were in person, their members struggled to travel to meetings due to their age or disability. Their “ability to participate depended on whether [they] felt well enough to attend a meeting that could go on for hours before getting to the agenda item that would deeply impact [thei]r lives.”⁸⁹ But when the pandemic hit and civic meetings went online, the organization found its constituents could participate more directly, and more often, in the democratic process.

According to SDA, “The reason so many voices could be included in those meetings is that people were able to participate safely from wherever they were—wherever they had access to the Internet or a phone.”⁹⁰ Seniors who could not easily leave the house and people with limited mobility were able to participate in government proceedings as fully as their fellow community members. Still, not all of SDA’s constituents could benefit from remote participation. Those who lacked broadband access or digital literacy were unable to participate equally in virtual proceedings.

Reports from around the country echo the SDA organizers' experience. Remote access greatly expands civic participation in many instances. The City of Boston, Massachusetts, for instance, saw the number of attendees at some public conversations, rallies, and meetings increase three- to four-fold after

After the City of Gonzales, California, distributed Wi-Fi hotspots to all residents who wanted them, they noticed increased participation in city council meetings.

going online.⁹¹ After the City of Gonzales, California, distributed Wi-Fi hotspots to all residents who wanted them, they noticed

increased participation in city council meetings.⁹² The Town of Andover, Kansas, saw a fifty percent increase in city council meeting attendance after moving online.⁹³ One Connecticut municipal utility commissioner with limited mobility was able to continue serving on the board during the pandemic only because of virtual options, stating that its "Town Hall is not designed for somebody in a wheelchair."⁹⁴

Given the benefits of remote attendance, some government officials have pushed to expand remote access to government proceedings. In California, current law, including legislation enacted in response to the pandemic, allows city councils and local agencies, boards, and commissions to convene via "teleconference" (defined to encompass both conference calls and videoconferences) to conduct the people's business while there is a state of emergency in place and a governing body has proclaimed that social distancing is required for public health.⁹⁵

California Assembly Bill 339, proposed in 2021, would have gone further to **require** that public meetings in jurisdictions with populations exceeding 250,000 retain a remote option until the end of 2023.⁹⁶ The bill proposed both that public meetings currently being made available over the Internet would continue in this form, and that the public would be offered either a telephonic or Internet-based option to attend hearings and comment on proposed legislation.⁹⁷ Governor Newsom disagreed and vetoed A.B. 339, warning that it would "set a precedent of tying public access requirements to the population of jurisdictions" as well as limit flexibility and increase costs for local jurisdictions trying to manage their meetings.⁹⁸

Even opponents of A.B. 339 recognized the importance of remote testimony. As one Los Angeles councilmember who opposed the bill recounted, "At L.A. Metro, I have heard from more bus riders and more passengers as a result of remote testimony than I ever did at all those meetings where people had to come in from all corners of the county. . . . We heard wrenching testimony from actual renters and what their fears were, not just advocates for renters."⁹⁹

Barriers to Participation in Remote Proceedings Reinforce Underrepresentation

Jeremy Haile was Chief of Staff to a member of the Berkeley City Council when the pandemic set in. Haile told us that City Council “[m]eetings affect everything from whether your road is paved to whether the chief of police is going to keep her job, to whether affordable housing is going to be built.”¹⁰⁰

Once city council meetings transitioned to videoconferencing, Haile noticed something or rather, the absence of something. Although the council used Zoom, members of the public could participate via audio only. When meetings were in person, members of Berkeley’s homeless population would show up to city council meetings and speak to issues affecting their community. But very few of them logged into virtual meetings. From time to time, a constituent would say, during a remote meeting, “I don’t usually have a phone or computer, but I was able to borrow one now. This is hurting my ability to participate.”¹⁰¹

Haile worries that the people attending city council meetings during the pandemic, via phone or videoconference, are not a representative cross-section of the city. The participants skew more white, more affluent, and more educated than pre-pandemic attendees. Residents who are already disadvantaged by digital inequities are also unable to fully participate in their local government. “It is unfortunate when all the input the council is getting tends to be from a certain echelon of the community and certain people’s voices aren’t heard,” Haile explained.

“I imagine a lot of members of the public tried to log in for the first time and couldn’t figure it out and gave up . . . And I think that this is particularly an issue for older people who aren’t as skilled with tech as young people, or for people with disabilities. I know for a fact there were several instances where people had disabilities that made them unable to participate via Zoom when they could have come to an in-person meeting,” Haile said.¹⁰²

Although remote options benefit many, those on the wrong side of the digital divide do not have access to the same benefits. According to Peter Estes of SDA, although remote proceedings expanded access for some of the seniors and people with disabilities his organization represents, “there are definitely members

“I know for a fact there were several instances where people had disabilities that made them unable to participate via Zoom when they could have come to an in-person meeting.”

who would normally be showing up to city hall in person but who are unable to navigate the public phone line or would love to use city hall’s video interface” but are “unable to

navigate the system or don’t have the technological knowledge to do so.”¹⁰³ Ted Mermin, Director of the California Low-Income Consumer Coalition, reiterated that the lack of access to broadband has been a “significant hurdle” for many “low-income consumers [seeking] the opportunity to speak directly” or even just listen to legislators and staff during the pandemic.¹⁰⁴ Mermin also observed that broadband was vital for participation in regulatory hearings and meetings convened by unions and other government-adjacent civic institutions.¹⁰⁵

Civic participation increasingly requires access to reliable broadband or telephone service and technologies. Expanding access to government functions through remote proceedings should not disadvantage those lacking broadband connectivity, adequate devices, or digital literacy. Without thoughtful broadband programs and intentional policy interventions, the digital divide can easily decrease access to social and political institutions for populations that do not have alternative fora where they can be heard.

ACCESS AND AFFORDABILITY

Factors such as digital redlining and high deployment costs contribute to the lack of infrastructure in urban, suburban, and rural areas. Although the economics of broadband deployment favor urban or suburban areas with higher population densities, low-income households and households in marginalized urban communities have lower adoption rates and slower, less reliable infrastructure.¹⁰⁶

The demographics of the digital divide in Los Angeles, California, where the city council opposed telephonic or videoconferenced public meetings, illustrate the problem. According to Los Angeles Mayor Eric Garcetti, “[i]n Los Angeles, Black and Latino households are only one-third as likely as White households to have Internet, with seniors four times less likely to be connected.”¹⁰⁷ In the historically Black Watts neighborhood, “[o]ver 30% of households lack a broadband subscription.”¹⁰⁸ Broadband subscription rates in parts of Central Los Angeles County—including Watts—were among the lowest in the state.¹⁰⁹

A 2019 study that examined fiber deployment in Los Angeles concluded that broadband providers are underinvesting in areas with a large number of low-income Black residents relative to comparable socioeconomic regions.¹¹⁰ This evidence of digital redlining speaks to a national trend where communities of color are at the greatest risk of not having their needs met to participate in civil life. As noted above, the Los Angeles City Council voted in 2021 to unanimously oppose the passage of A.B. 339, a proposal that would have required their public meetings to be remote until the end of 2023.¹¹¹ Unfortunately, the outcome of that vote was somewhat academic for the households and neighborhoods that do not have reliable and affordable broadband access and therefore could participate in only a limited fashion, if at all.

Rural California communities are also greatly affected by the lack of broadband infrastructure. Only about a third of households in rural California subscribe to Internet service, compared with seventy-eight percent in urban areas.¹¹² “Because broadband infrastructure can cost more to build in rural areas with fewer customers, it can lead to higher prices for customers[.]”¹¹³

Broadband deployment in high-cost areas suffers from patchy data and political gridlock. Rural deployment funding programs frequently prevent recipients from building in areas that the FCC’s Form 477 data show already have sufficient Internet service, despite that data’s acknowledged inaccuracy.¹¹⁴ The Infrastructure Act assigns new federal funding to support broadband deployment through state governments that have a more precise view of connectivity in areas distorted by faulty maps. Further, states like Georgia, Pennsylvania, and Maine, among many others, are launching new initiatives to collect speed and coverage data, filling the gaps in existing federal maps.¹¹⁵

This evidence of digital redlining speaks to a national trend where communities of color are at the greatest risk of not having their needs met to participate in civil life.



Still, the lack of adequate private investment and indirect prohibitions on competition in rural areas compound the problem of broadband affordability. Broadband obstacles at the local, state, and federal level have an interrelated impact on civic participation. Providing state and local governments with greater autonomy to invest federal broadband funding could improve access and adoption in highly disconnected areas.

Marisol Aguilar, director of California Rural Legal Assistance, Inc.’s community equity initiative, has seen firsthand what lack of access means in rural areas. She works with residents to advocate in their communities on a broad range of issues, from lack of clean water to transportation access. During the pandemic,

many of the public agency meetings she attended moved online. This was helpful because she could sometimes project the meeting on a screen for an interested community. Holding remote meetings in this way increased participation.

But where community members couldn't attend meetings because of lack of access, Aguilar saw something else: a lack of oversight. She was "surprised how many companies took advantage of . . . not having any community residents present during the proceedings." Access to civic proceedings as city council and boards of supervisors meetings moved online was thus a "huge issue" for Aguilar.¹¹⁶

Affordability continues to be a dispositive factor in whether a household remains on the wrong side of the digital divide, has access to government programs, and can engage in its own community. A 2021 survey by the California Emerging Technology Fund and the University of Southern California found that by far, the most common reason people give for not having Internet access is affordability.¹¹⁷ Some families cannot afford service even with the discounts offered by Internet service providers to low-income households.¹¹⁸ Nearly twenty-four percent of low-income Californians do not have broadband, according to a study by the Public Policy Institute of California.¹¹⁹

This means that a large swath of the population would not be able to enjoy the democratizing benefits of remote hearings that require a broadband connection to attend. The digital divide thus threatens to cut off from the political process people who are directly affected by it.

DEVICES AND DIGITAL LITERACY

Lack of digital literacy obstructs full civic participation. Even when broadband service is affordable and accessible, some people do not know how to use their computer or telephone to join a city council meeting or watch a legislative hearing. As the city of San Jose recognized, digital literacy programs "ensure that all residents are aware of the quality programs and services offered by the City and its partners."¹²⁰ One consumer rights advocate noted that people on their phones, or people without experience participating in video hearings, could not participate equally in remote hearings.¹²¹ A member of the Santa Monica Planning Commission remarked, "People who want to be heard on an issue shouldn't have to jump through a different and confusing set of technological hoops every time as officials scramble to improve access."¹²²

Congress recently acknowledged that digital literacy and device availability can impede broadband adoption as much as lack of infrastructure or affordable service. The Infrastructure Act provides \$600 million for a State Digital Equity Capacity Grant Program.¹²³ That program allows states to develop and fund digital equity plans to improve digital literacy and expand device access.¹²⁴ To meaningfully provide access to needed services and facilitate civic participation, states' digital equity plans must identify obstructions to digital equity, set measurable objectives and assess how they impact other social outcomes, and discuss the state's plans to collaborate with state-based organizations.

* * *

Remote options can encourage and increase participation in civic life for some people. However, the digital divide presents a significant hurdle for many low-income residents.¹²⁵ The shift toward remote options will make broadband access and digital literacy prerequisites for civic participation at all levels—from city council meetings to sessions and hearings of state and federal legislatures and regulatory agencies.

Government Services and Broadband as a Government Service

Internet access is increasingly necessary for efficient application for and receipt of critical government benefits. States and municipalities have designed web portals for unemployment benefits and housing assistance. Even receiving public safety information during emergencies may depend on access to Internet-based applications and messaging services. But, as with legal assistance, those most in need of these services face significant barriers in receiving them. Recognizing this problem, local governments are increasingly envisioning broadband as necessary civic infrastructure.

Even when municipalities and community organizations partner to provide free broadband service, access barriers persist. Informing residents of access and affordability programs and overcoming hesitation or suspicion about applying for them remain significant challenges. Publicizing these programs and fostering trust so that people will use them are essential to those programs' success. In addition to affordable broadband, residents must have access to the skills and devices necessary to reach the services and information that local and state governments provide. Without considering both access and adoption challenges, key groups may be unable to take advantage of programs that are designed to help them get online.

Government Services and Public Safety Information Have Moved Online

Broadband access plays a critical role in connecting residents with essential services and public safety information.

Government assistance and services. For seniors and people with disabilities, remote access can make it easier to obtain social security and unemployment benefits, enroll in Medicare, or contest the denial of health-related benefits.¹²⁶ When agencies at every level of government have transitioned select programs online and restricted in-person access, being able to obtain information online may be the only option.

For instance, a legal aid attorney helped clients navigate the school lunch assistance application process, which had gone completely online after the pandemic hit.¹²⁷ And during the pandemic-fueled unemployment crisis, Californians needed access to the website of the state's Employment Development Department ("**EDD**") to learn of and apply for unemployment benefits because EDD could not be reached through its overwhelmed phone lines. Local news broadcasters recommended that those in need of unemployment benefits log onto websites like YouTube, Facebook, and Reddit for unofficial support services.¹²⁸ Of course, these online sources require Internet access.

Public Safety Information. As Catherine Sandoval and Patrick Lanthier observe in their article about the digital divide and public safety, "[p]ublic safety is not just about first-responder access to communications networks. The ability to use the Internet to send and receive information, warnings, and encourage appropriate action depends on access to functional networks and devices to receive that information. Leadership drives or mitigates the digital divide."¹²⁹

Without digital infrastructure, communities are subject to "information gaps" that inevitably amplify risks from natural disasters and other hazards.¹³⁰ "Adoption or access gaps affect the [w]hole [c]ommunity, not just the person or family unconnected or underconnected to the Internet or without network access."¹³¹ For instance, "[w]hen those excluded from communications networks live in a dam's flood plain, high wildfire danger zone, or other vulnerable area, community vulnerability increases along with disaster response challenges."¹³²

City Governments Lead in Providing Broadband as a Government Service

For municipalities nationwide, COVID-19 revealed the widespread need for ubiquitous broadband to provide essential services and narrow information gaps. And in some cases, addressing that need required looking beyond commercial Internet service providers. To that end, the California cities of Gonzales and San Rafael both implemented innovative programs to help residents access government benefits and critical information.

GONZALES, CALIFORNIA'S WI-FI HOTSPOT PROGRAM

As unemployment insurance applications, educational opportunities, and other municipal benefits went online, Rene Mendez, the City Manager of Gonzales, California, realized that Internet access would be essential. Mendez thus set about deploying 2,000 Wi-Fi hotspots¹³³ to the 10,000 residents of Gonzales. Fortuitously, the hotspot-deployment effort took place right at the beginning of the COVID-19 epidemic.

Mendez observed that, thanks to the hotspots, “folks who were not likely [Internet] users pre-COVID now use and connect” to the Internet.¹³⁴ Residents who require rental assistance from the City or state can now easily apply, and even city council meetings have seen a higher viewing rate.¹³⁵ Before distributing hotspots, “young people without Wi-Fi would sit outside chambers to do homework.”¹³⁶

Before distributing hotspots, “young people without Wi-Fi would sit outside chambers to do homework.”

The City had a “mentality of being responsive to community needs,” said Carmen Gil, Gonzales’s Director of Community Outreach

and Strategic Relationships.¹³⁷ Throughout the pandemic, residents could pick up a preactivated hotspot. Mendez reiterated that making the activation process as simple as possible was vital to adoption. “Folks would have been completely lost if we hadn’t taken steps to make the hotspots ready to go.”¹³⁸

The effort to distribute thousands of hotspots and provide broadband to every resident was not without challenges. Without centralized data about digital literacy, oftentimes city officials are uncertain how to ensure those who lack the digital skills to make full use of Internet-delivered services are not left behind. To

Encouraging volunteer involvement in the process has reaped a secondary benefit of strengthening community ties

that end, the City of Gonzales enlisted a brigade of teenagers who were ready and willing to help their neighbors on the other side of the digital divide

connect.¹³⁹ In the absence of demographic information about who needs training, community members fill an important role as trusted liaisons residents can approach for support. Encouraging volunteer involvement in the process has reaped a secondary benefit of strengthening community ties.

SAN RAFAEL'S MESH NETWORK

San Rafael, a city of about 60,000 residents north of San Francisco, also envisioned broadband access as an essential bridge to government services and other benefits. Although San Rafael's Canal neighborhood is a historically underserved community, the pandemic put a spotlight on the particular difficulties faced by students: "We still had a bunch of kids . . . doing their homework on smartphones, relying on data plans and Internet at Starbucks. The crisis exacerbated [the digital divide] and highlighted it in a way that made it so clear in everyone's minds."¹⁴⁰ The City decided to tackle broadband access and affordability in the Canal neighborhood by partnering with Canal Alliance, a local nonprofit with strong community ties, to build its own wireless mesh network.¹⁴¹

Rebecca Woodbury, one of the city officials responsible for implementing the project, shared that ensuring that residents would have access to emergency information during power outages—for instance, if their television or radios weren't working or if cell towers were down—was a primary motivating factor.¹⁴² They are building resiliency into the system, making sure they have backup generators so that a core of the mesh network will continue to function even in a power outage.¹⁴³ Networks that are resilient by design can protect residents from the threat of communications outages during emergencies.¹⁴⁴

Air Gallegos, Director of Education and Career at Canal Alliance, mentioned additional motivations for establishing the network, such as education and connecting community members with social services.¹⁴⁵ And Lucia Martel-Dow, Canal Alliance's then-Director of Immigration and Social Services, observed that the mesh network would help connect the significant number of immigrants in the community with immigration services and family back home through Internet-based applications that don't require users to spend costly voice minutes or data. Martel-Dow recalled clients coming into the office, before the mesh network was set up, just to access the Internet.¹⁴⁶

Of course, challenges persist. For one, the City must promote the network in a community where about seventy-five percent of the population speaks a language other than English at home.¹⁴⁷ Clients also found some websites, such as the one used to access benefits, extremely complicated. Thus, Canal Alliance staff and volunteers spent a lot of time helping clients navigate government websites. As a result, the mesh network has increased the need for digital literacy support.¹⁴⁸ These needs will only grow more acute as more services move online.

Further, network resiliency in the face of power brownouts or natural disasters requires additional infrastructure. For example, during California's wildfire-related rolling brownouts in 2019, local officials in San Rafael had to tape posters to the

Networks that are resilient by design can protect residents from the threat of communications outages during emergencies

walls of government buildings to distribute emergency information. Putting resilient technologies and procedures in place to keep the

network operating ensures that residents will have immediate access to critical emergency response information instead of relying on word of mouth or location-specific signage for direction.

Access and Adoption Barriers Faced by Community Broadband and Community Partnerships

Governments—whether local, state, or federal—often face barriers to providing affordable broadband even when affordability or access programs exist. Aside from infrastructure and affordability barriers, lack of information and trust can prevent individuals and households from enrolling in affordability and connectivity programs designed specifically for them. Digital literacy and device availability are no less an issue when communities self-provision.

LACK OF AWARENESS AND TRUST

Millions of eligible residents nationwide do not know about affordability programs. Uniformly, interviewees mentioned that their clients were entirely, or mostly, unaware of federal or state broadband affordability programs. Very few of the legal service providers interviewed understood how those programs worked and did not actively promote them to their clients.

Of the fifteen legal or community service providers interviewed, only five were generally aware of at least one affordability program such as the Emergency Broadband Benefit Program (“EBBP”), state or federal Lifeline programs, or provider low-income plans. Of those five, only two worked to promote awareness of those programs among their clients. Several other providers said they would if they had the information themselves. One public defender estimated that “maybe one percent” of public defenders are aware of broadband subsidy programs.¹⁴⁹

Uniformly, interviewees mentioned that their clients were entirely, or mostly, unaware of federal or state broadband affordability programs.

Given that information, it is not surprising that two-thirds of unconnected and “smartphone only” households are unaware of the subsidy

programs available in California.¹⁵⁰ “The offers can be difficult to access, especially for those who do not speak English.”¹⁵¹ Further, some people may not trust information coming from the government or may have negative perceptions about subsidy programs and how they access program benefits. A 2020 report by the Greenlining Institute on the digital divide in California concluded that Cal LifeLine and other affordability programs “are poorly marketed, have limited eligibility, and often provide families with slow, second-class service.”¹⁵²

One survey found that two-thirds of households who qualify for subsidies based on income were unaware of the affordable plans for low-income households and that the enrollment process is difficult,¹⁵³ particularly for non-English speakers.¹⁵⁴ At present, fewer than twenty percent of people eligible for the largest federal subsidy program, Lifeline, are actually enrolled.¹⁵⁵ Interviews with government officials, community organizers, and legal providers confirmed that, as a whole, they had little actionable knowledge of broadband affordability programs. These programs must do more to ensure that people in a position to inform potential subscribers are equipped with the knowledge and resources to do so.

Even when information about affordability programs is available, potential beneficiaries may be reluctant to enroll. In the Greenlining Report, an Oakland resident reported: "I got issues with LifeLine, I got issues with a lot of programs that are associated with, quote, 'those who are marginalized, those who are

"Crappy but cheap things. That's what our most vulnerable people get."

poor.' . . . Some of the services that are offered are delivered in a way that is rather demeaning

to people."¹⁵⁶ Rene Mendez, City Manager for the City of Gonzales, similarly noted that municipal staff and volunteers "had to jump the hurdle of building trust" to convince some residents to take a hotspot home with them.¹⁵⁷ In fact, some people initially returned the hotspots because they didn't believe the city employees who distributed them with a promise that they were completely free-of-charge.

Some of the subsidy programs are "stigmatized by the nature of their design," said one interviewee from San Rafael.¹⁵⁸ Some take the fact that these programs are designed for low-income households as evidence of undesirability or inferiority. Rebecca Woodbury, San Rafael's former Director of Digital Services & Open Government, summed it up quite plainly: "Crappy but cheap things. That's what our most vulnerable people get."¹⁵⁹

When a service is perceived as second class, people will be reluctant to sign up. "Anything that's offered to any member of the community, if it is clearly signaling 'lesser,' it's not going to be pursued, it's not going to be wanted."¹⁶⁰ An attorney who runs a nonprofit serving unhoused and older individuals similarly observed that her clients sometimes don't trust the people selling Lifeline phones, who may "look like they're not employed by anyone, collect personal information, and require a mailing address. They usually don't look official which makes it hard for clients to trust them with personal information," she explained.¹⁶¹

An onerous or document-intensive sign-up process can also deter people with limited resources who nevertheless need assistance. Even the EBBP had many “barriers to registration for folks who’ve been underserved traditionally or have disabilities.”¹⁶²

The Infrastructure Act replaced the EBBP, a temporary emergency program with a new longer-term broadband affordability program, the Affordable Connectivity Program (“**ACP**”). The ACP contains many of the same features but implements several changes, notably reducing the benefit amount from \$50 to \$30.¹⁶³ The new program also now requires participating broadband providers to work with “[s]tate agencies, public interest groups, and non-profit organizations” to create public awareness campaigns on broadband and the ACP.¹⁶⁴ The FCC’s rules

implementing the program gave providers flexibility in how they meet this requirement and encouraged them “to explore ways to support the outreach efforts of local organizations.”¹⁶⁵

Ensuring that cities are able to provide trusted community partners with the resources and information they need to assist with the sign-up process is essential for widespread participation in any broadband subsidy program.

Woodbury emphasized the importance of working with trusted organizations to inform eligible households about broadband affordability programs: “Their reach in the neighborhood is so much stronger than any government’s reach.”¹⁶⁶ Community organizations and legal service providers can help with the issues of trust that exist around signing up for broadband services.

This sentiment is felt nationwide. In a meeting with the office of FCC Chairwoman Rosenworcel community advocates from Baltimore, Maryland, shared similar concerns. During the discussion, Lydia Walther-Rodriguez, the Baltimore Regional Director for CASA de Maryland, emphasized that without trusted community partners, new federal programs may be viewed by residents as “too good to be true.”¹⁶⁷ Ensuring that cities are able to provide trusted community partners with the resources and information they need to assist with the sign-up process is essential for widespread participation in any broadband subsidy program.

DEVICE AND LITERACY BARRIERS

Beyond awareness and trust, a lack of digital literacy and appropriate devices may inhibit adoption and broadband use even when service is available and affordable.

During the pandemic, online portals were the only way for many San Rafael residents who lost their jobs to apply for unemployment benefits. However, Canal Alliance discovered that aside from providing a free mesh network to access those benefits, volunteers also needed to help residents navigate the

online application process. Many community members were not comfortable using the government's unemployment site—or the Internet generally—to apply for assistance unaided. Carmen Sanchez, a social worker in San Francisco discussed the difficulty clients faced making appointments with the DMV and applying for housing, even when they had Internet access. Some clients don't know how to sign a document electronically, or pay their bills online.¹⁶⁸

[A] social worker in San Francisco discussed the difficulty clients faced making appointments with the DMV and applying for housing, even when they had Internet access.

Some online tasks are harder to complete on a smartphone or a tablet than on a computer. That poses a problem for the fifty-seven percent of Canal

neighborhood residents who do not own a computer, compared to ten percent in the rest of San Rafael.¹⁶⁹ Only six percent of usage on the mesh network is through a personal computer, Gallegos told us.¹⁷⁰ The majority of people are using smartphones or tablets. Websites designed for computer users that do not take into consideration the high number of mobile or tablet users, are destined to be underused.

Lack of training and familiarity with devices hampered the distribution and use of hotspots in the City of Gonzales. Some residents did not accept the hotspots or returned them because they could not operate the devices on their own.¹⁷¹

* * *

Broadband access is critical for community members in need of government benefits and public safety information. Local governments like Gonzales and San Rafael recognize this and took creative approaches to ensuring their residents can connect. However, barriers to access remain, including lack of knowledge and lack of trust in existing broadband subsidy programs. By partnering with trusted community partners, such as legal service providers and nonprofit organizations, local governments can overcome these barriers.

Findings and Recommendations

The underlying research and interviews cited in this analysis uncovered a paradox in remote access to justice, civic engagement, and government services. Remote access can provide substantial benefits in communities where the impact of the digital divide is acutely felt. At the same time, the digital divide often puts those benefits out of reach of those most in need of them. While there are no easy answers to this dilemma, a few clear findings and recommendations emerge for those working to bring about greater justice, equity, and fairness, in the digital age.

Findings

- 1** Lack of adequate broadband access, devices, and digital literacy skills entrenches existing inequalities that civic institutions are working to eliminate.
- 2** Remote hearings should be optional. In the courts, remote hearings can be effective for ministerial legal hearings and some substantive civil hearings. For civic institutions, remote hearings can increase access, but they can also exclude residents contending with digital access and adoption barriers.
- 3** Deficiencies in public awareness of broadband affordability programs or community broadband services ensure that they remain underutilized. Trusted legal service providers, who work with residents eligible for broadband affordability programs, could be program ambassadors as they are an overlooked touchpoint for information.
- 4** Lack of trust in government affordability programs can be just as much of a barrier to broadband affordability programs as lack of information.
- 5** Mobile Internet service and devices are not sufficient for equitable access to courts, legal services, government proceedings, and public benefits.

Recommendations

- 1 Invest in adoption as well as access.** Greater access to affordable broadband service offerings and digital skills training must accompany the push for remote judicial and administrative proceedings, civic engagement, and government services. Investments in both access and adoption will help to ensure that residents can be heard, apply for government services, and stay informed about local emergencies.
- 2 Partner with community organizations.** Government partnerships with local community organizations may help overcome trust barriers that prevent some households from enrolling in broadband affordability and access programs.
- 3 Support the full range of service providers.** To promote awareness of broadband subsidy programs and digital literacy education initiatives, it is important to partner with and provide resources for public defenders, legal aid offices, and other legal service providers. These providers can serve as program ambassadors and promote broadband adoption in low-income communities. That support should go along with robust resources for libraries, schools, senior centers, and other community anchor institutions.
- 4 Streamline enrollment.** Enrolling in broadband subsidy programs should be as easy as possible. Streamlining the application process and establishing a single application for multiple programs will reduce burdens on some residents.
- 5 Support local solutions.** Broadband funding should support innovative municipal and community-based initiatives to expand access (e.g., municipal mesh networks and hotspot programs). They expand broadband access for communities who are underserved by traditional providers and may not be able to afford broadband even with the assistance of subsidy programs. Flexible funding programs and local best practices are two strategies that can empower communities to tackle persistent digital divides.

Endnotes

- 1 Interview with Sarah Reisman, Directing Att’y of Litig. and Advoc., Cmty. Legal Aid SoCal (Apr. 23, 2021). Notes from all interviews conducted for this report are on file with the authors.
- 2 Interview with Camille Pannu, Co-Dir., Cmty. and Econ. Dev. Clinic, UC Irvine Sch. of L. (Apr. 13, 2021).
- 3 Interview with Jeremy Haile, former Chief of Staff to Berkeley City Councilmember Sophie Hahn (Nov. 5, 2021).
- 4 Interview between Congressman John Lewis and David Cohen, Aug. 24, 2012, <https://perma.cc/LC62-V248>; see also Cynthia K. Sanders & Edward Scanlon, *The Digital Divide Is a Human Rights Issue: Advancing Social Inclusion Through Social Work Advocacy*, 6 J. Hum. Rights Soc. Work 130–143 (2021), <https://perma.cc/8STE-SJK4>.
- 5 Jessamyn C. West, *Without a Net: Librarians Bridging the Digital Divide* xxiv (2011). We also use the term “digital divide” to connote lack of Internet access or affordability.
- 6 See, e.g., Organization for Economic Cooperation and Development, *Understanding the Digital Divide* (2001), <https://perma.cc/ZG8T-Q6FQ>.
- 7 Sanders & Scanlon, *supra* note 4.
- 8 *Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, 2019 Broadband Deployment Report, 34 FCC Rcd 3857, 3858, para. 2 (2019), <https://perma.cc/5X7U-QJDR>.
- 9 Sanders & Scanlon, *supra* note 4.
- 10 *Id.*
- 11 Infrastructure Investment and Jobs Act, Pub. L. No. 117-58, § 60502(a)(10)(C) (2021) [hereinafter Infrastructure Act].
- 12 *Id.*
- 13 18 U.S.C. § 3006A(b); see also Guide to Judiciary Policy, vol. 7, pt. A § 210.40.30.
- 14 Am. Bar Ass’n, *Frequently Asked Questions*, https://www.americanbar.org/groups/legal_services/flh-home/flh-faq/ (last visited Mar. 4, 2022); Cal. Comm. on Access to Justice, *California’s Attorney Deserts: Access to Justice Implications of the Rural Lawyer Shortage* (July, 2019), <https://perma.cc/QZN5-GKUC>.
- 15 Univ. Servs. Admin. Co., *Income Eligibility*, <https://perma.cc/53CB-TQUU> (last visited Mar. 4, 2022).
- 16 Infrastructure Act § 60502(b)(A)(i)(I).
- 17 See, e.g., Legal Servs. Corp., *The Justice Gap: Measuring the Unmet Civil Legal Needs of Low-Income Americans* 28 (June 2017), <https://perma.cc/5FN4-ZFKY> (stating that “86% of the civil legal problems reported by low-income Americans in the past year received inadequate or no legal help”); Emily A. Vogels, *Digital Divide Persists Even as Americans with Lower Incomes Make Gains in Tech Adoption*, Pew Rsch. Ctr. (June 22, 2021), <https://perma.cc/9JK4-SJH2> (“About four-in-ten adults with lower incomes do not have home broadband services (43%)”).
- 18 Interview with Camille Pannu, *supra* note 2.
- 19 See, e.g., Jud. Council of Cal., *Workgroup on Post-Pandemic Initiatives, Interim Report: Remote Access to Courts 1* (Aug. 16, 2021), <https://perma.cc/3SYZ-KX3C>.
- 20 Allie Reed & Maddison Alder, *Zoom Courts Will Stick Around as Virus Forces Seismic Change*, Bloomberg L. (July 30, 2021), <https://perma.cc/DN76-K6WV>.
- 21 *Id.*

- 22 Nat'l Ctr. for State Cts., *Call to Action: Achieving Civil Justice for All: Recommendations to the Conference of Chief Justices by the Civil Justice Improvements Committee* 37–38 (2016) <https://perma.cc/YVN5-QBQD>.
- 23 Interview with Youseef Elias, Chief Assistant Pub. Def., Off. of the Alameda Cnty. Pub. Def. (Sept. 5, 2021).
- 24 Interview with Camille Pannu, *supra* note 2.
- 25 Interview with Youseef Elias, *supra* note 23.
- 26 Interview with Genna Beier, Deputy Pub. Def., S.F. Off. of the Pub. Def. (Aug. 31, 2021).
- 27 Interview with Candis Mitchell, Chief Assistant Fed. Pub. Def., Fed. Pub. Def.'s Off., N. Dist. of Cal. (May 2, 2021).
- 28 Interview with Kaelan Orozco, Staff Att'y, Cmty. Legal Aid SoCal (Apr. 19, 2021).
- 29 See Am. Bar Ass'n, *Legal Deserts Threaten Justice for All* (Aug. 3, 2020), <https://www.americanbar.org/news/abanews/aba-news-archives/2020/08/legal-deserts-threaten-justice/>.
- 30 Interview with Camille Pannu, *supra* note 2.
- 31 Interview with Tony Cheng, a former public defender in Alameda County. (Apr. 19, 2021).
- 32 Jud. Council of Cal., *supra* note 19.
- 33 Lyle Moran, *California Is Poised to Permit Remote Court Hearings Through at Least Mid-2023*, ABA J. (Sept. 16, 2021), <https://perma.cc/4U6G-AC5N>.
- 34 S.B. 241, 2021–2022 Sess. (Cal. 2021) (enacted).
- 35 U.S. Courts, *Judiciary Authorizes Video/Audio Access During COVID-19 Pandemic* (Mar. 31, 2020), <https://perma.cc/WW7S-56FF>; see also Coronavirus Aid, Relief, and Economic Security Act (CARES Act) § 15002(b), Pub. L. No. 116-136, 134 Stat. 281.
- 36 U.S. Courts, *supra* note 35.
- 37 Interview with Judge Jeremy Fogel, Exec. Dir. of the Berkeley Jud. Inst. at Berkeley L. (Oct. 6, 2021).
- 38 Interview with Brooke Weitzman, Chief Exec. Officer, Elder L. & Disability Rts. Ctr., (Sept. 20, 2021).
- 39 Alicia Bannon & Janna Adelstein, *The Impact of Video Proceedings on Fairness and Access to Justice in Court*, Brennan Ctr. for Justice (Sept. 10, 2020), <https://perma.cc/E27Y-TEP9> (“Beyond the current moment, several court leaders have also suggested that expanded use of remote technology should become a permanent feature of our justice system.” (citation omitted)).
- 40 Interview with Sarah Reisman, *supra* note 1.
- 41 *Id.*
- 42 Interview with Tony Cheng, *supra* note 31.
- 43 Gov't Accountability Off., *Immigration Courts: Actions Needed to Reduce Case Backlog and Address Long-Standing Management and Operational Challenges* 55 (2017), <https://perma.cc/AG6C-7Q6M>.
- 44 Interview with Olivia Sideman, Assoc. Pub. Def., Alameda Cnty. Pub. Def.'s Off. (Sept. 15, 2021).
- 45 *Id.*
- 46 Chris Arnold, Zoom Call Eviction Hearings: “They’ll Throw Everything I Have out on the Street,” NPR (June 19, 2020), <https://perma.cc/9PG6-FN7U> (quoting Emily Benfer, a professor at Columbia Law School).
- 47 Interview with Brooke Weitzman, *supra* note 38.
- 48 Interview with Olivia Sideman, *supra* note 44.
- 49 *Id.*
- 50 *Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, 14th Broadband Deployment Report, 36 FCC Rcd 836, 855, para. 33 (2021), <https://perma.cc/Z7H9-A3TR>.

- 51 “Digital redlining” refers to broadband providers not serving low-income areas or discriminating against lower-income urban neighborhoods in the types of broadband they provide. Commc’ns Workers of Am. & Nat’l Digital Inclusion All., *AT&T’s Digital Redlining: Leaving Communities Behind for Profit* (Oct. 2020), <https://perma.cc/D7KA-PD5E>. In the 1930s, communities in major U.S. cities were rated for lending risk based on race, ethnicity, and income status. Bruce Mitchell, *HOLC “Redlining” Maps: The Persistent Structure of Segregation and Economic Inequality* (Mar. 20, 2018), <https://perma.cc/ZR6A-9L8T>. The communities that were deemed “high lending risk” and discriminated against by lending institutions are disproportionately minority and low-income neighborhoods and persistently lack equitable fiber and digital tools access. *Id.* Digital redlining “further entrench[es] discriminatory practices against already marginalized groups” by significantly hindering daily life and educational opportunities. *Banking on Your Data: The Role of Big Data in Financial Services: Hearing Before the H. Comm. on Fin. Servs.*, 116th Cong. 3 (statement of Christopher Gilliard, PhD).
- 52 See Shara Tibken, *The Broadband Gap’s Dirty Secret: Redlining Still Exists in Digital Form*, CNET (June 28, 2021), <https://perma.cc/CPL2-J826>; see also Greenlining Insti., *On the Wrong Side of the Digital Divide* (June 2, 2020), <https://perma.cc/AJN2-8J35> (illustrating digital redlining in Alameda County, California).
- 53 *Banking on Your Data: The Role of Big Data in Financial Services: Hearing Before the H. Comm. on Fin. Servs.*, 116th Cong. 3 (statement of Christopher Gilliard, PhD).
- 54 Emily A. Vogels, *supra* note 17.
- 55 *Id.*
- 56 Infrastructure Act § 60506(b)(1).
- 57 *Id.* § 60506(b)(2).
- 58 *Id.* § 60506(d).
- 59 See *generally* Order Instituting Rulemaking Regarding Broadband Infrastructure Deployment and to Support Service Providers in the State of California, Rulemaking 20-09-001, Assigned Administrative Law Judge’s Ruling (May 28, 2021), <https://perma.cc/2UQ9-NL95>.
- 60 Interview with Olivia Sideman, *supra* note 44; Interview with Carmen Sanchez, Social Worker, S. F. Pub. Def.’s Off. (Sept. 20, 2021); Interview with Camille Pannu, *supra* note 2; Interview with Air Gallegos, Dir. of Educ. and Career, and Lucia Martel-Dow, Dir. of Immigr. & Soc. Serv., Canal Alliance (Apr. 27, 2021).
- 61 Interview with Camille Pannu, *supra* note 2.
- 62 Interview with Olivia Sideman, *supra* note 44. BlueJeans is the videoconferencing platform many courts use.
- 63 Interview with Carmen Sanchez, *supra* note 60.
- 64 Interview with Miguel Soto, Staff Att’y, Consumer Just. Clinic, East Bay Cmty. L. Ctr. (Apr. 12, 2021).
- 65 Interview with Ted Mermin, Dir., Cal. Low-Income Consumer Coal. (Apr. 15, 2021).
- 66 *Id.*
- 67 Interview with Judge Jeremy Fogel, *supra* note 37.
- 68 *Id.*
- 69 *Id.*
- 70 Interview with Olivia Sideman, *supra* note 44.
- 71 *Id.*
- 72 Interview with Candis Mitchell, *supra* note 27.
- 73 See Greenlining Inst., *supra* note 52 (“What I’ve found is my phone is a hotspot, but it slows down the data. So I’ve become very acquainted with the libraries, I commute back and forth to the libraries a lot. I go several times a week, my foot [disability] has kind of slowed me down but I still go several times a week.”).

- 74 Interview with Olivia Sideman, *supra* note 44.
- 75 *Id.*
- 76 Interview with Sarah Reisman, *supra* note 1.
- 77 Interview with Candis Mitchell, *supra* note 27.
- 78 *Id.*
- 79 Am. Library Ass'n, *National Survey Finds Libraries Play Expanded Role in Digital Equity, Bridging Gaps in Access to Technology* (Aug. 31, 2021) (press release), <https://perma.cc/C3GJ-2J46>.
- 80 Pub. Library Ass'n, *2020 Public Library Technology Survey 12* (2020), <https://perma.cc/GH2S-BJTJ>.
- 81 *Id.* at 19.
- 82 Kaelan Nguyen Orozco, *supra* note 28.
- 83 Interview with Candis Mitchell, *supra* note 27.
- 84 Interview with Tony Cheng, *supra* note 31.
- 85 Interview with Carmen Sanchez, *supra* note 60.
- 86 *Id.*
- 87 *Id.*
- 88 Interview with Peter Estes, Consumer Rts. Org., *Senior and Disability Action* (Sept. 11, 2021).
- 89 Jessica Lehman & Jamel Burrell, *In the Zoom Era, Disabled Californians Need Permanent Options for Remote Participation*, *Sacramento Bee* (April 27, 2021), <https://www.sacbee.com/opinion/op-ed/article250959344.html>.
- 90 *Id.*
- 91 Michael Jonas, *Pandemic Shutdown Has Opened up Civic Participation*, *CommonWealth* (Mar. 17, 2021), <https://perma.cc/47Q6-L9AT>.
- 92 Interview with Rene Mendez, City Manager, City of Gonzales, and Carmen Gil, Dir. of Cmty. Engagement and Strategic P'ships, City of Gonzales (Oct. 1, 2021).
- 93 Stan Finger, *A "Zoom Boom" Boosted Civic Engagement Across Kansas. But Will It Continue*, *Kan. Leadership Ctr. J.* (July 20, 2021), <https://perma.cc/WSZ9-J3Z9>.
- 94 Elizabeth Regan, *What Does Civic Participation Look Like Post-Pandemic*, *Gov't Tech.* (July 19, 2021), <https://perma.cc/8VXQ-D7VR>.
- 95 Cal. Gov't Code §§ 54950 *et seq.*
- 96 Legislative Counsel's Digest, A.B. 339, 2021–2021 Leg., Reg. Sess. (Cal. 2021), <https://perma.cc/8ARB-FDH5>.
- 97 *Id.*
- 98 Letter from Governor Gavin Newsom to California State Assembly (Oct. 7, 2021), <https://perma.cc/2Z82-LMXN>.
- 99 Damien Newton, *L.A. City Council Takes Aim at Proposed Law to Preserve Virtual/Telephone Public Comment*, *Cal Streets Blog* (Aug. 10, 2021), <https://perma.cc/4AVU-LKGU>.
- 100 Interview with Jeremy Haile, *supra* note 3.
- 101 *Id.*
- 102 *Id.*
- 103 Interview with Peter Estes, *supra* note 88.
- 104 Interview with Ted Mermin, *supra* note 65; *see also* Newton, *supra* note 99.
- 105 Interview with Ted Mermin, *supra* note 65.
- 106 Greenlining Inst., *supra* note 52.

- 107 Mayor Garcetti Announces Free Internet Access to Residents in Four Public Housing Communities (Oct. 9, 2020) (press release), <https://perma.cc/ZA68-GT5U>.
- 108 *Id.*
- 109 Pub. Pol’y Inst. of Cal., *California’s Digital Divide*, <https://perma.cc/9LZR-8F5L> (last visited Mar. 4, 2022). Persons of color make up more than 99% of the population in the Watts neighborhood. *Profile Page, Los Angeles City, South Central/Watts*, Census Reporter, <https://perma.cc/F4AU-P828> (last visited Mar. 4, 2022).
- 110 U.S.C. Price Spatial Analysis Lab, *Who Gets Access to Broadband: Evidence from Los Angeles County 2014-17*, Connected Cities & Inclusive Growth (CCIG) Policy Brief # 4, at 3–4 (Sept. 2019), <https://perma.cc/AV8X-HSYU>.
- 111 Newton, *supra* note 99.
- 112 Sydney Johnson, *Disconnected: Internet Stops Once School Ends for Many Rural California Students*, EdSource (Dec. 6, 2019), <https://perma.cc/V9SJ-WDR6>.
- 113 *Id.*
- 114 See, e.g., Gov’t Accountability Off., *Broadband Internet: FCC’s Data Overstate Access on Tribal Lands* (2018), <https://perma.cc/8HQP-DDML>; *Rural Digital Opportunity Fund; Connect America Fund*, Report and Order, 35 FCC Rcd 686, 688, para. 5 (2020), <https://perma.cc/9QK5-R8XC>.
- 115 Shara Tibken, *States Couldn’t Afford to Wait for the FCC’s Broadband Maps to Improve. So They Didn’t*, CNET (Feb. 23, 2021), <https://perma.cc/X52N-XK2C>.
- 116 Interview with Marisol Aguilar, Dir. of Cmty. Equity Initiative, Cal. Rural Legal Assistance, Inc. (Apr. 26, 2021).
- 117 Ron Mackovich, *California Surpasses 90% Internet Connectivity, But Low-Income Households Still Lack Access*, USC News (Mar. 30, 2021), <https://perma.cc/X5WH-ZSKU>.
- 118 *Id.*
- 119 See Pub. Pol’y Inst. of Cal., *supra* note 110.
- 120 *Digital Literacy*, San Jose Pub. Library, <https://perma.cc/2ZAM-RB3M> (last visited Mar. 4, 2022).
- 121 Interview with Ted Mermin, *supra* note 65.
- 122 Shawn Landres, *Reform the Brown Act to Enhance Transparency and Public Access*, Cal. Matters (Nov. 4, 2020), <https://perma.cc/3PY8-Q535>.
- 123 Infrastructure Act § 60304.
- 124 Infrastructure Act § 60304(b), (c).
- 125 Newton, *supra* note 99.
- 126 See Doherty Cella Keane, LLP, *SSDI Claimants with Representation Increase Their Chances of Award by 41.3%* (Sept. 18, 2020), <https://perma.cc/LV4V-HSKF> (“58.7% of claimants received a fully or partially favorable decision compared to only 17.4% of those without representation.”)
- 127 Interview with Sarah Reisman, *supra* note 1.
- 128 See, e.g., Karina Gonzalez, *No Luck Reaching EDD? Here Are a Few Resources that Might Help*, ABC 10 (Mar. 4, 2021), <https://perma.cc/7WXS-SYN4>.
- 129 Catherine J.K. Sandoval & Patrick Lanthier, *Connect the Whole Community: Leadership Gaps Drive the Digital Divide and Fuel Disaster and Social Vulnerabilities*, in *Technology vs Government: The Irresistible Force Meets The Immovable Object* 15 (Lloyd Levine, ed., Jan. 14, 2021) (forthcoming 2021), <https://perma.cc/WG38-JFPA>.
- 130 *Id.* at 3.
- 131 *Id.* at 6.
- 132 *Id.*

- 133 “WiFi hotspots are Internet access points that allow you to connect to a WiFi network using your computer, smartphone or another device while away from your home or office network.” CenturyLink, *What Is a WiFi hotspot*, <https://perma.cc/AFN3-LGW3> (last visited Mar. 4, 2022).
- 134 Interview with Rene Mendez and Carmen Gil, *supra* note 92.
- 135 *Id.*
- 136 *Id.*
- 137 *Id.*
- 138 *Id.*
- 139 *Id.*
- 140 Zach Quaintance, *How One City Built a Wi-Fi Network During a Pandemic*, TechWire (June 18, 2020), <https://perma.cc/2QDQ-9UVC> (quoting San Rafael’s then-Director of Digital Services and Open Government, Rebecca Woodbury).
- 141 A mesh network is a group of interconnected devices that blanket an area with Wi-Fi coverage. Glenn Fleishman, *Wireless Mesh Networks: Everything You Need to Know*, PC World (May 5, 2020), <https://perma.cc/DS3G-8UWP>.
- 142 Interview with Rebecca Woodbury, Founder, Dep’t of Civic Things (formerly Dir. of Digit. Services & Open Gov’t, City of San Rafael) and Javier Trujillo, Chief Assistant Dir., County of Marin (Apr. 20, 2021).
- 143 Ry Marcattilio-McCracken, *How San Rafael, California Built a Neighborhood Mesh Network That Turned into Something More*, Community Networks (Sept. 3, 2020), <https://perma.cc/LJN6-2B4Y>.
- 144 For example, FCC Chair Jessica Rosenworcel has prioritized network resiliency in light of natural disasters. Chair Rosenworcel’s Statement regarding *Resilient Networks; Amendments to Part 4 of the Commission’s Rules Concerning Disruptions to Communications; New Part 4 of the Commission’s Rules Concerning Disruptions to Communications*; PS Docket Nos. 21-246 and 15-80, ET Docket. No. 04-35, Notice of Proposed Rulemaking, FCC 21-99 at 40 (Sept. 30, 2021) (“We have hurricanes in Louisiana, a snowstorm in Texas, and wildfires out West. These issues are not going away. We need to think deeply about what network resiliency means and how our policies can support it.”).
- 145 Interview with Air Gallegos and Lucia Martel-Dow, *supra* note 60.
- 146 *Id.*
- 147 Mitchell Crispell, Ctr. for Cmty. *Innovation at UC Berkeley, Canal: An Immigrant Gateway in San Rafael at Risk* 4 (2015), <https://perma.cc/YKE9-P5A5>.
- 148 Interview with Air Gallegos and Lucia Martel-Dow, *supra* note 60.
- 149 Interview with Candis Mitchell, *supra* note 27.
- 150 Cal, Emerging Tech. Fund, *Statewide Survey on Broadband Adoption—2021*, (Mar. 2021), <https://perma.cc/2YTC-Y77D>.
- 151 Mackovich, *supra* note 118.
- 152 Greenlining Inst., *supra* note 52.
- 153 Cal, Emerging Tech. Fund, *Statewide Survey on Broadband Adoption—2021*, (Mar. 21, 2021), <https://perma.cc/V8LN-LRZA>.
- 154 Mackovich, *supra* note 118.
- 155 Univ. Srvc. Admin. Co., *Program Data* (Aug. 26, 2021), <https://perma.cc/JUT6-3TD3>.
- 156 *Id.*
- 157 Interview with Rene Mendez and Carmen Gil, *supra* note 92.
- 158 Interview with Rebecca Woodbury and Javier Trujillo, *supra* note 142.
- 159 *Id.*
- 160 *Id.*

- 161 Interview with Brooke Weitzman, *supra* note 38.
- 162 *Id.*
- 163 47 U.S.C. § 1752(a)(7)(A).
- 164 47 U.S.C. § 1752(b)(8).
- 165 *Affordable Connectivity Program, Emergency Broadband Benefit Program*, WC Docket No. 21–450, Report and Order and Further Notice of Proposed Rulemaking, para. 207 (2022), <https://perma.cc/EMK2-JXEU>.
- 166 Interview with Rebecca Woodbury and Javier Trujillo, *supra* note 142.
- 167 Letter from Next Century Cities to Marlene H. Dortch, Secretary, FCC, WC Docket No. 20-445, at 3 (filed Sept. 14, 2021), <https://perma.cc/EFC6-Z8SU>.
- 168 Interview with Carmen Sanchez, *supra* note 60.
- 169 Canal Alliance, *Canal Digital Access Equity Fund*, <https://perma.cc/TLN3-UNE4> (last visited Mar. 4, 2022).
- 170 Interview with Air Gallegos and Lucia Martel-Dow, *supra* note 60.
- 171 Interview with Rene Mendez and Carmen Gil, *supra* note 92.

