NO HOME LEFT OFFLINE

BRIDGING THE BROADBAND AFFORDABILITY GAP

A historic opportunity to close two-thirds of the digital divide.

Education **SUPERHIGHWAY**

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A Letter from Founder and CEO Evan Marwell

The **pandemic has changed everything**. It has exposed the consequences of being on the wrong side of the digital divide and made it clear that without home broadband, you are shut out of economic security and opportunity. Without high-speed Internet access at home, Americans can't send their children to school, work remotely, or access healthcare, job training, the social safety net, or critical government services. Internet access is no longer a luxury; it's a necessity in the daily lives of every American.

Approximately 28.2 million of the 122.8 million households in the United States do not have high-speed broadband. The historical narrative has been that these households are unconnected because they do not have access to high-speed Internet infrastructure. However, the reality is that 18 million of these households, home to 47 million people, are simply offline because they cannot afford an available Internet connection.

This **broadband affordability gap** is present in every state and has become one of the primary inhibitors of access to economic security and opportunity. It is a reality centered in our nation's poorest communities and disproportionately impacts people of color. You are more likely to be offline if you are a low-income, Black, or Latinx American.

We now have a historic opportunity to dramatically accelerate progress towards closing the digital divide.

In response to the pandemic, a bipartisan consensus has emerged to close the digital divide for all Americans. Congress has recognized the need to address the affordability gap by investing over $20 billion in the nation's largest-ever broadband affordability and adoption programs. At the same time, Internet Service Providers (ISPs) have continued to increase the availability and speed of affordable broadband plans and we have seen the emergence of game-changing approaches to identifying unconnected households, innovative solutions to increasing adoption, and the creation of programs that eliminate the need for households to sign-up for broadband service altogether. We must now seize this moment and assemble a broad public-private partnership that can rise to the challenge of closing the broadband affordability gap.

Today, we are launching EducationSuperHighway 2.0. Having completed our mission to close the classroom connectivity gap, we are pivoting our focus to igniting the movement to close the broadband affordability gap. **Our new mission is to close the digital divide for the 18 million households that have access to the Internet but can't afford to connect.** Our work will be modeled

"Affordability has now emerged as the number one barrier to closing the digital divide. We have a historic opportunity to close two-thirds of the digital divide by connecting 18 million households that have access to the Internet but can't afford to connect."

on the successful playbook we used to close the K-12 digital divide, and we will focus on America's most unconnected communities, where more than 25% of households don't have a home broadband connection. We will begin by focusing on the following actions:

1. Building a public-private partnership to close the broadband affordability gap
2. Developing a means to identify unconnected households on a recurring basis
3. Helping states design their Broadband Plans for the Capital Projects Fund and bipartisan infrastructure bill.
4. Launching demonstration projects and creating playbooks for states, cities, school districts, housing authorities, and other trusted institutions of innovative programs to increase broadband adoption at scale

We have much to learn but are excited to have the opportunity to once again help catalyze the closing of another critical aspect of the digital divide.

Congress has made a down payment toward providing the resources needed to close the broadband affordability gap. It is poised to dramatically expand its investment, but we need a broad public-private partnership to take the actions outlined at the end of this report if we are going to remove the barriers that keep low-income families from connecting and ensure no home is left offline.

We look forward to working together to achieve this goal.

Evan Marwell
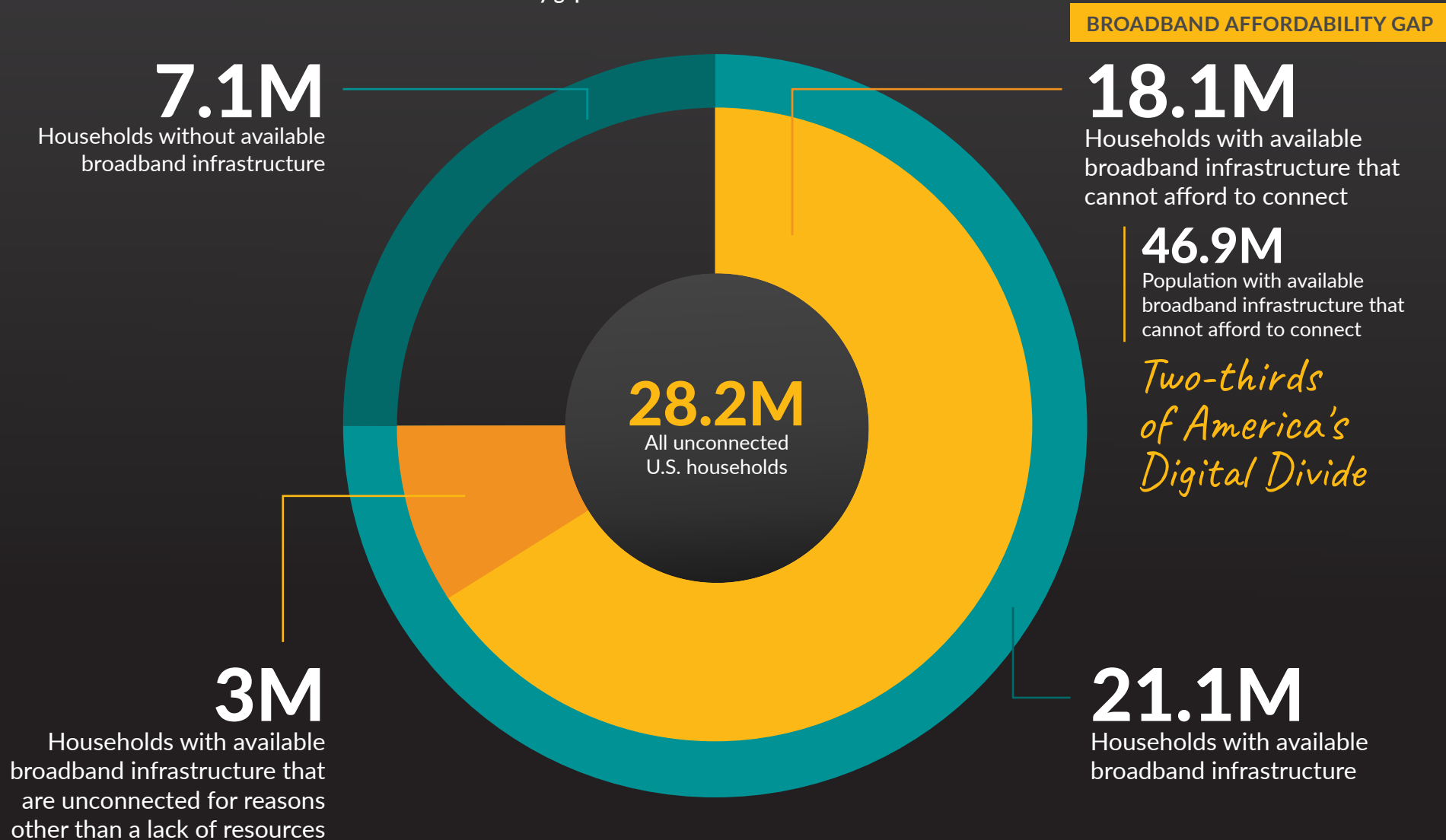Founder and CEO
EducationSuperHighway

THE CAUSES AND IMPACT OF THE DIGITAL DIVIDE

2

The Causes and Impact of the Digital Divide

After decades of public and private investment in broadband infrastructure, **affordability is now the number one barrier to closing the digital divide.** Nearly two-thirds of unconnected households have access to a home broadband connection but are offline primarily because they cannot afford to connect. This is the **broadband affordability gap.**

BROADBAND AFFORDABILITY GAP

7.1M
Households without available broadband infrastructure

18.1M
Households with available broadband infrastructure that cannot afford to connect

46.9M
Population with available broadband infrastructure that cannot afford to connect

Two-thirds of America's Digital Divide

28.2M
All unconnected U.S. households

3M
Households with available broadband infrastructure that are unconnected for reasons other than a lack of resources

21.1M
Households with available broadband infrastructure

The Causes and Impact of the Digital Divide

Why are 28.2 million of the 122.8 million U.S. households offline?

LACK OF RESOURCES	AVAILABILITY OF BROADBAND NETWORKS	CHOOSING NOT TO CONNECT

64% *of unconnected U.S. households*

18.1 MILLION HOUSEHOLDS
are offline because they can't afford to connect to an available Internet connection - despite the availability of low-cost broadband plans from ISPs. These households make up nearly two-thirds of our nation's digital divide.

25% *of unconnected U.S. households*

7.1 MILLION HOMES
are without access to any broadband network. Primarily in rural areas, these are locations where there is insufficient coverage to deliver wired or wireless broadband service, or service speeds and quality are unreliable.

11% *of unconnected U.S. households*

3 MILLION HOUSEHOLDS
have access to available broadband networks and can afford to connect but are offline for reasons other than a lack of resources. The reasons cited commonly include digital literacy, reliance on smartphones, access options outside the home, and concerns about privacy or going online.

The broadband affordability gap is present in every state and impacts virtually every community in America - urban, suburban, and small-town.

The largest portion of the digital divide in
43 STATES
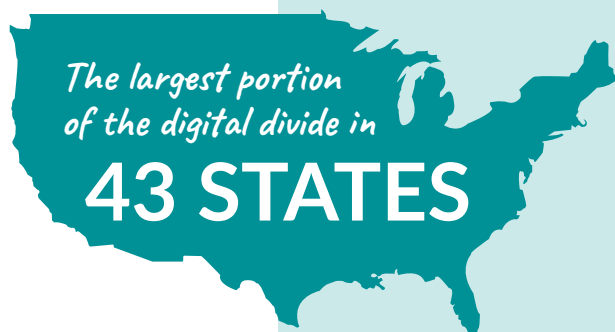
59%
of the digital divide in eleven states where more than 40% of the population is rural.

58%
of the digital divide in states with rural populations that exceed the national average.
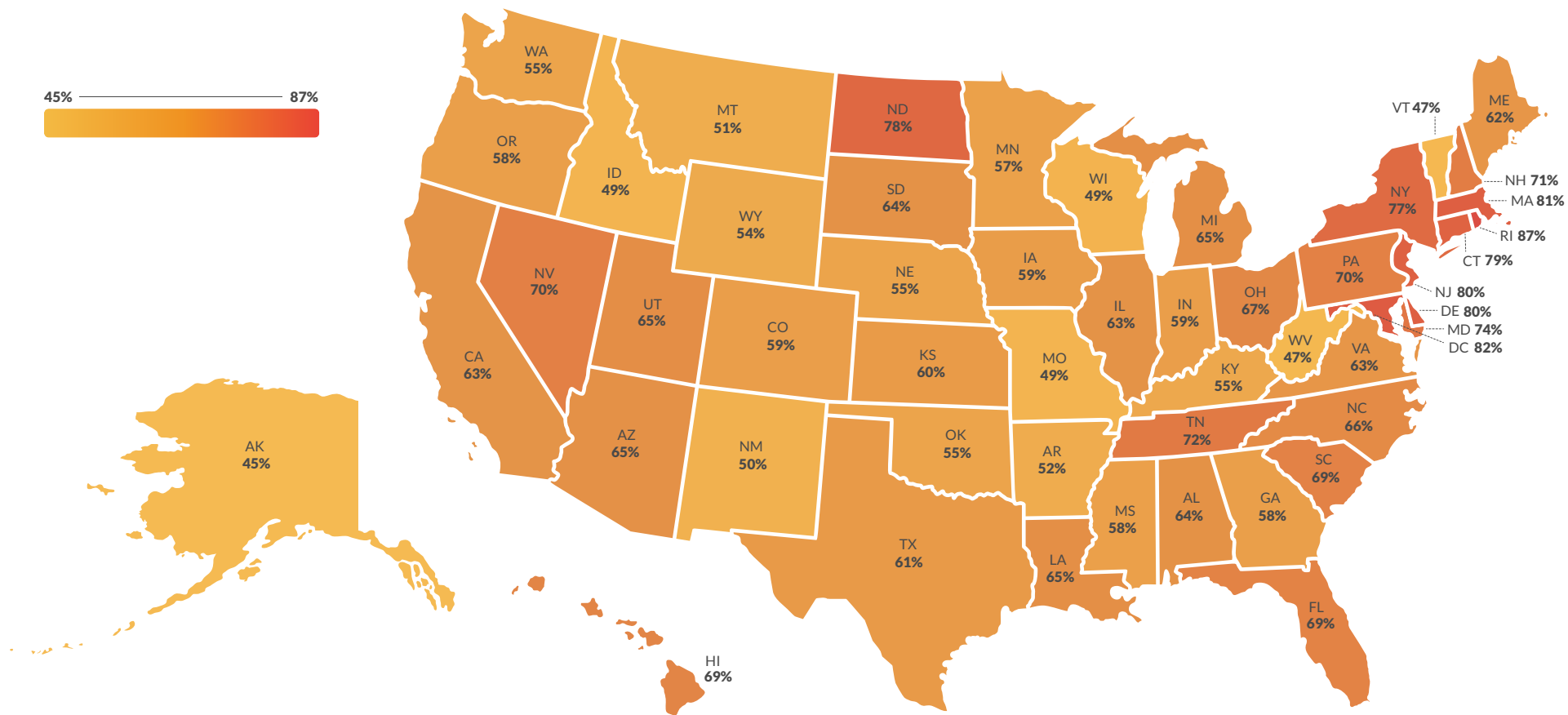
53%
of the digital divide in the four states where over half the population is rural.
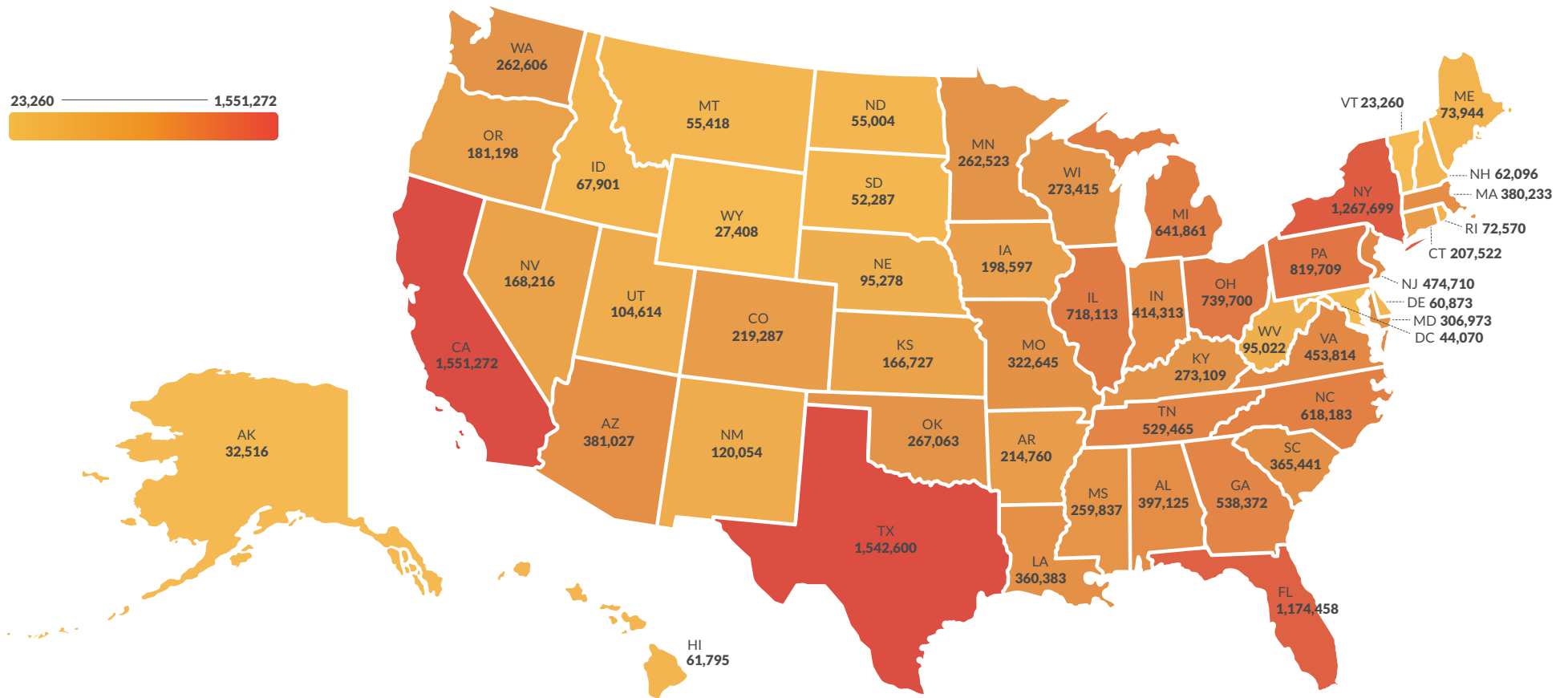
The Causes and Impact of the Digital Divide

CHART 1

The broadband affordability gap is the largest portion of the digital divide in 43 states.

Legend: 45% — 87%

State	Value
WA	55%
MT	51%
ND	78%
MN	57%
WI	49%
OR	58%
ID	49%
SD	64%
MI	65%
VT	47%
ME	62%
NH	71%
MA	81%
RI	87%
NY	77%
WY	54%
IA	59%
PA	70%
CT	79%
NV	70%
NE	55%
IL	63%
IN	59%
OH	67%
NJ	80%
DE	80%
MD	74%
DC	82%
UT	65%
CO	59%
KS	60%
MO	49%
WV	47%
VA	63%
CA	63%
AZ	65%
NM	50%
OK	55%
AR	52%
KY	55%
TN	72%
NC	66%
SC	69%
AK	45%
MS	58%
AL	64%
GA	58%
TX	61%
LA	65%
FL	69%
HI	69%

The Causes and Impact of the Digital Divide

CHART 2

The broadband affordability gap impacts 18.1 million households.

Legend: 23,260 — 1,551,272

State	Value
WA	262,606
MT	55,418
ND	55,004
MN	262,523
ME	73,944
VT	23,260
OR	181,198
ID	67,901
SD	52,287
WI	273,415
MI	641,861
NY	1,267,699
NH	62,096
MA	380,233
WY	27,408
IA	198,597
PA	819,709
RI	72,570
NV	168,216
NE	95,278
IN	414,313
OH	739,700
CT	207,522
UT	104,614
IL	718,113
NJ	474,710
CA	1,551,272
CO	219,287
KS	166,727
MO	322,645
KY	273,109
WV	95,022
VA	453,814
DE	60,873
MD	306,973
DC	44,070
AK	32,516
AZ	381,027
NM	120,054
OK	267,063
AR	214,760
TN	529,465
NC	618,183
SC	365,441
MS	259,837
AL	397,125
GA	538,372
TX	1,542,600
LA	360,383
FL	1,174,458
HI	61,795

The Causes and Impact of the Digital Divide

"[Broadband] isn't a luxury; it's now a necessity, like water and electricity."

President Biden

Who Is Most Impacted by The Broadband Affordability Gap?

The broadband affordability gap is concentrated in communities where 25% or more of the households lack home broadband. These areas, which we refer to as "America's most unconnected communities," represent only 30% of the U.S. population but 67% of the 18.1 million homes that have access to the Internet but cannot afford to connect. These communities have 43% more households below the poverty level[1], 57% more Black households, and 49% more Latinx households than the national average.

CHART 3

The digital divide is most concentrated in our poorest communities.

Percent of Households

	44.9%	31.3%
Below 200% Poverty Threshold		

■ Unconnected Communities ■ National
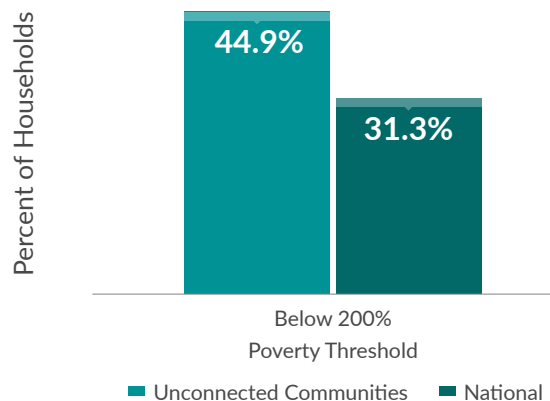
CHART 4

The digital divide also disproportionately impacts Black and Latinx Americans.

Black or African American	Latinx[2]
21.1% / 13.4%	27.6% / 18.5%

■ Unconnected Communities ■ National
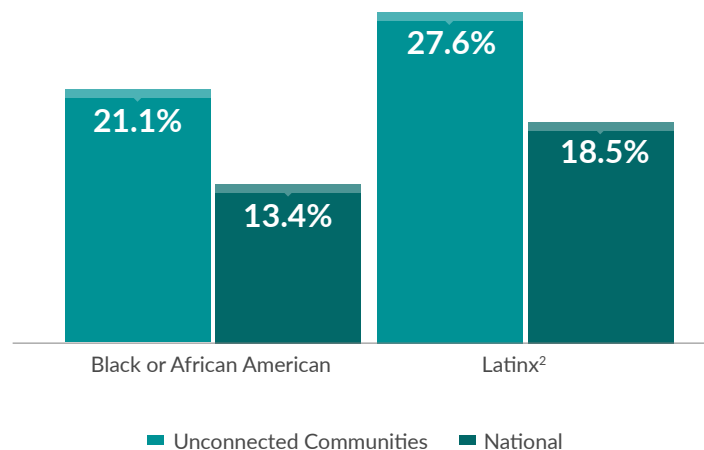
The Causes and Impact of the Digital Divide

The digital divide is also significantly higher for Americans with less than a high school education. These households are twice as likely to be unconnected as those with a high school education and six times more likely to be unconnected than those with a college education.

Percentage of unconnected households by educational attainment.

- 27.4% — Less than High School graduate or equivalency
- 13.3% — High School graduate, some college or associate's degree
- 4.5% — Bachelor's degree or higher
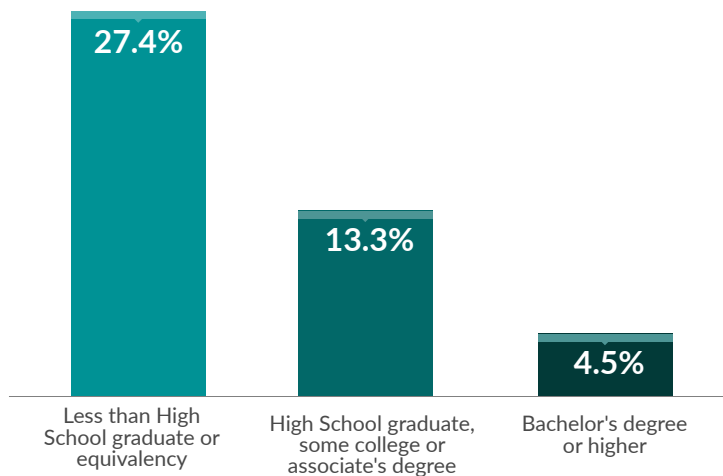
Households in America's most unconnected communities and those with less than a high school education are precisely the households who most need a broadband connection to find better jobs, educate their children, connect with affordable healthcare and access the social safety net. Without home broadband, these households are significantly disadvantaged in the pursuit of economic security and opportunity.

SEIZING THE MOMENT -
A HISTORIC OPPORTUNITY
TO CLOSE THE BROADBAND
AFFORDABILITY GAP

3

Seizing the Moment - A Historic Opportunity to Close the Broadband Affordability Gap

The COVID-19 pandemic has been an unprecedented catalyst to dramatically accelerate progress towards closing the digital divide. With the consequences of being unconnected laid bare, policymakers at all levels are rethinking who is responsible for ensuring all Americans have broadband at home.

Our nation's leaders are taking action.

1. The federal government has created the nation's largest-ever broadband affordability and adoption programs.[3]

2. States, municipalities, and school districts are spending billions to directly procure Internet access for the unconnected.

3. ISPs are expanding their affordable broadband options and providing the data needed to close the digital divide.

4. Corporate America is taking up the cause of closing the digital divide because of its impact on companies' ability to access the talent they need to compete globally.

The federal government is poised to invest $20 billion in the nation's largest-ever broadband affordability and adoption programs.

Over the last year, a bipartisan effort in Congress has made closing the digital divide one of the signature priorities of its response to the COVID-19 pandemic. Starting with the Consolidated Appropriations Act of 2021 and continuing with the American Rescue Plan Act and the bipartisan infrastructure bill. Congress is poised to provide over $85 billion in new funding for broadband infrastructure, affordability, and adoption programs.

Perhaps most importantly, the Consolidated Appropriations Act of 2021 created the $3.2 billion Emergency Broadband Benefit Program to ensure that all households could afford a home broadband connection. This is "the nation's largest-ever broadband affordability program,"[4] and the bipartisan infrastructure bill will increase funding for the program by $14.2 billion in order to ensure it can help close the affordability gap for at least the next five years.

The Emergency Broadband Benefit, to be renamed the Affordable Connectivity Program as part of the bipartisan infrastructure bill, will provide $30 per month to ISPs for any household with an income below 200% of the poverty line.[5] This is significantly more than the price of existing affordable connectivity plans from most ISPs and will likely result in ISPs offering home broadband plans at this price that meet the new broadband standard of 100 Mbps download / 20 Mbps upload being established by Congress as part of the bipartisan infrastructure bill. Together, the Emergency Broadband Benefit and higher capacity affordable broadband plans from ISPs will ensure that most households will have sufficient bandwidth to learn, work, and access healthcare and critical services remotely.

The bipartisan infrastructure bill also makes clear that Congress understands the need for proactive efforts to drive broadband adoption. The $2.75 billion Digital Equity Act provides five years of funding for state and local entities to tackle the barriers to broadband adoption. This would be an unprecedented investment in driving broadband adoption and will enable state and local governments, non-profits, community-based organizations, and the private sector to provide the outreach, training, and enrollment assistance required to reach and connect unconnected households to home broadband services.[6]

In addition, Congress is paving the way for innovative approaches to driving broadband adoption by making the installation of free Wi-Fi networks in low-income apartment buildings an allowable use of the $42.5 billion of infrastructure funding in the bipartisan infrastructure bill and the $10 billion Capital Projects Fund already enacted in the American Rescue Plan Act. Modeled after the success of free Wi-Fi networks in hotels, airports, and coffee shops, the installation of free Wi-Fi networks in low-income apartment buildings has the potential to rapidly close 20% of the digital divide without requiring unconnected households to overcome the myriad of challenges that prevent them from enrolling in federal broadband programs and ISPs' affordable broadband plans.

Seizing the Moment - A Historic Opportunity to Close the Broadband Affordability Gap

We must overcome the barriers that have prevented previous attempts to tackle America's broadband affordability gap from succeeding.

Congress is stepping up to make resources available to close the affordability gap, but history shows us that this unprecedented investment will not succeed if states, municipalities, non-profits, and ISPs do not develop and implement effective broadband adoption programs. The lack of effective, comprehensive, and well-funded adoption strategies is the missing link in closing the affordability gap and is evident in low adoption rates for both the Lifeline program and the Emergency Broadband Benefit.

Prior to the COVID-19 pandemic, America's primary affordable broadband program was the Federal Communications Commission's (FCC) Lifeline program. As part of the Universal Service Fund, the FCC made broadband connections eligible for Lifeline support in 2016. Unfortunately, while 32.5 million households were eligible for the Lifeline program, only 7.7 million households (24%) enrolled in Lifeline. In addition, because Lifeline provided only a $9.25 monthly service discount and could not be used with popular $10 per month affordable broadband plans offered by cable companies, the vast majority of Lifeline subscribers use the program to lower the cost of their mobile phone bill.

With the introduction of the Emergency Broadband Benefit earlier this year, Congress and the FCC targeted these critical issues. Households could use the Emergency Broadband Benefit with any existing ISP, and the program provided a $50 discount - more than enough to purchase a robust home broadband connection. Once again, however, Congress and the FCC's well-intentioned efforts to close the broadband affordability gap haven't been fully leveraged and thus far fallen short, with only 16.4% of eligible households (6.1 million out of 37 million) enrolling in the program. In addition, anecdotal evidence suggests that the vast majority of households enrolled in the Emergency Broadband Benefit were not unconnected households but those using the program to ensure that they could continue to afford their existing service in the face of the economic challenges created by the COVID-19 pandemic. This was a key goal of policymakers, but highlights the need to pair these programs with well-funded broadband adoption strategies.

CHART 6

Only 24% of eligible Americans participated in the Lifeline Program pre-pandemic (2019).
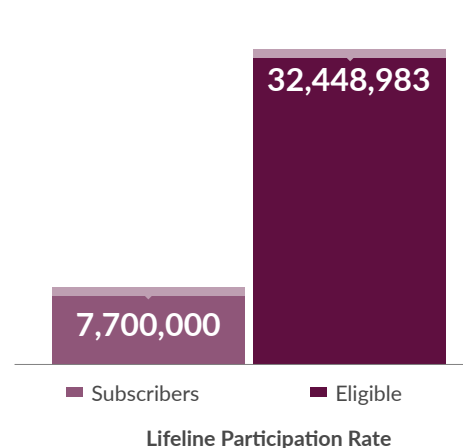
32,448,983

7,700,000

- Subscribers
- Eligible

Lifeline Participation Rate

CHART 7

Only 16.4% of eligible Americans participate in the Emergency Broadband Benefit (October 2021).

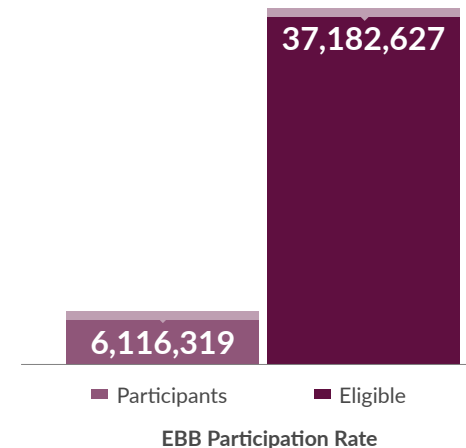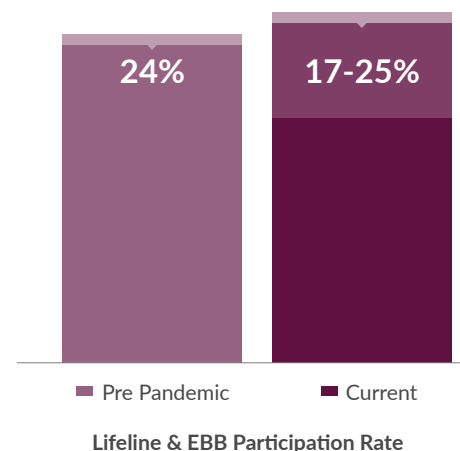37,182,627

6,116,319

- Participants
- Eligible

EBB Participation Rate

CHART 8

Despite the pandemic, there has been little change in the adoption of federal broadband affordability programs.

24%

17-25%

- Pre Pandemic
- Current

Lifeline & EBB Participation Rate

In 2019, the Lifeline program participation rate was 24%.

In October 2021, Lifeline and Emergency Broadband Benefit participation rate was 17%-25%.

Seizing the Moment - A Historic Opportunity to Close the Broadband Affordability Gap

Broadband adoption challenges have also hindered the ability of K-12 schools to connect their students to online learning. Despite an incredibly compelling reason for unconnected households to sign up for home broadband (the ability for their children to attend remote school), most school districts saw less than 10% of households enroll in free broadband programs. As a result, when Congress made $7.1 billion available to schools to pay for devices and home connectivity for unconnected students, 86% of schools chose to provide mobile hotspots to unconnected students, despite the capacity and coverage limitations that make hotspots a challenging solution for many students.[7]

Three key barriers stand in the way of widespread broadband adoption for households on the wrong side of the affordability gap.

In order to ensure that Congress' investment in closing the broadband affordability gap is a success, we must overcome three key barriers to broadband adoption:

Awareness

Most unconnected households are unaware of the Emergency Broadband Benefit and how it can help them get connected. A recent national survey of low- and lower-middle income households found that only 25% had heard of the program.[8]

Trust

Many unconnected households are concerned about sharing personal information as part of the sign-up process and are skeptical the Emergency Broadband Benefit will actually cover the cost of their home broadband connection.

Enrollment Challenges

Signing up for the Emergency Broadband Benefit can be confusing, requiring households to provide documentation of their income status that many cannot easily access.

Seizing the Moment - A Historic Opportunity to Close the Broadband Affordability Gap

Overcoming these challenges will require a broad public-private partnership amongst state and local governments, ISPs, non-profits, community-based organizations, and corporations.

Together, we need to:

1. Develop innovative marketing approaches to build awareness of federal broadband programs.

2. Use data to identify unconnected households.

3. Engage trusted organizations to conduct direct outreach to these households and provide concierges to help households enroll in the program.

4. Allow low-income apartment owners to aggregate federal broadband benefit resources for their tenants to provide free Wi-Fi throughout their buildings.

Cities, school districts, and apartment owners that have followed this blueprint have shown that broadband adoption rates can exceed 80%, and Congress is wisely planning to make over $2.75 billion available to fund these efforts. We must seize this unprecedented opportunity to close the broadband affordability gap.

"There was no funding to help a lot of these non-profit and local organizations around the country get the word out [about the Emergency Broadband Benefit program]. And I know that it would get the word out faster if we had that opportunity."[9]

FCC Acting Chairwoman, Jessica Rosenworcel

STRATEGIES AND BLUEPRINTS FOR SUCCESS

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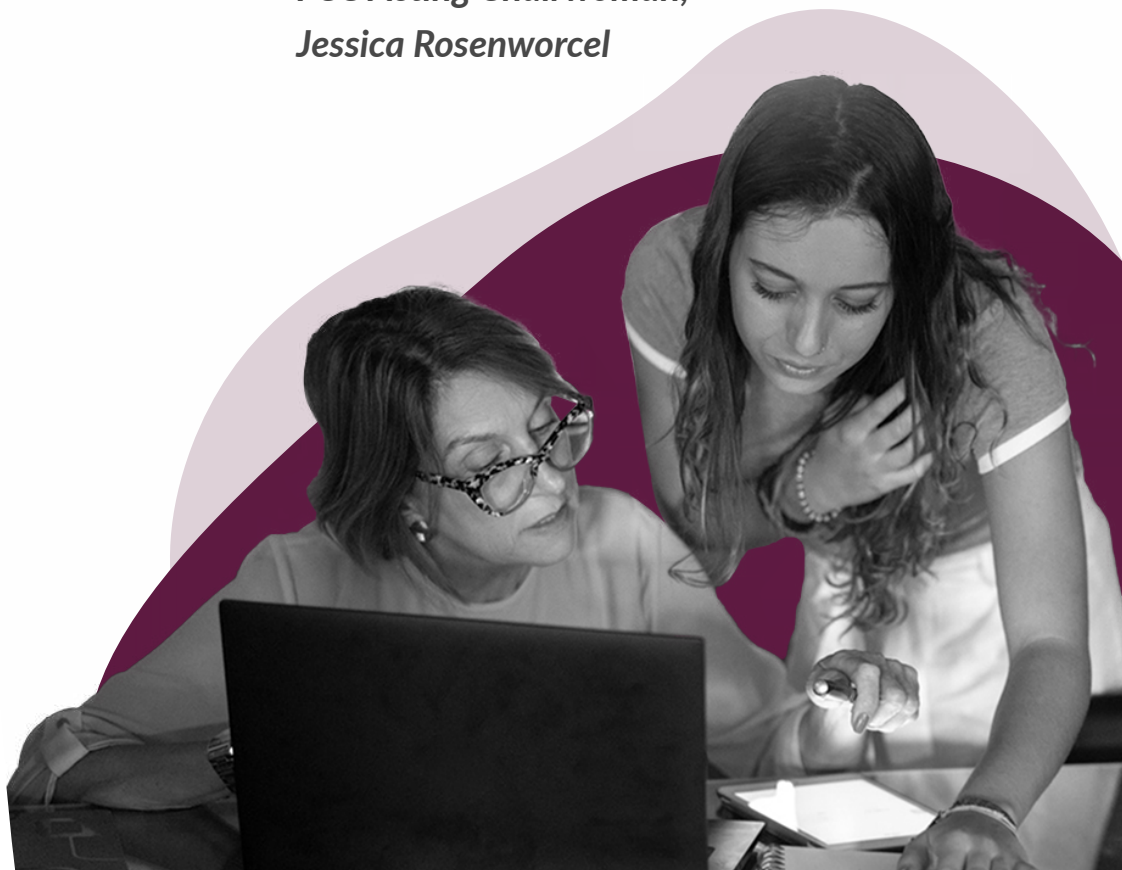
Strategies and Blueprints for Success

America's efforts to close the affordability gap have highlighted the challenges we must overcome to connect low-income households. They have also provided a blueprint for the work we must now undertake as a nation to ensure that Congress' historic investment in closing the digital divide leaves no home left offline.

Leverage data to identify unconnected households

Collect broadband adoption data at the address level to target outreach and adoption efforts and track progress.

Launch broadband adoption programs

Help ISPs sign up eligible households for federal broadband programs and home broadband service.

Deploy free Wi-Fi to low-income apartment buildings

Eliminate the need for households to sign-up for broadband service altogether.

The onset of the COVID-19 pandemic has unleashed a wave of innovation in each of these areas. State and local governments, school districts, non-profits, and community-based organizations are developing effective strategies for achieving these goals. What follows are examples of these innovative solutions and approaches used to overcome similar challenges that can inform our collective work to close the broadband affordability gap.

Strategy #1: Leverage Data to Identify Unconnected Households

To close the broadband affordability gap, we need a ubiquitous tool for identifying unconnected households on a recurring basis.

Collecting data to identify who has access to existing broadband infrastructure but lacks connectivity is a critical first step in closing the broadband affordability gap. This was also the case when COVID-19 caused nationwide school closures in the spring of 2020. Before the pandemic, schools mostly viewed home Internet access as the responsibility of parents and families, but as remote learning became the primary form of instruction, delivering an equitable learning experience meant identifying and ensuring all students were connected. School districts undertook incredible efforts to transition to online learning and identify which students needed help to get online. While some of these approaches were successful in identifying needs and enabled schools to deliver timely solutions, many school districts encountered challenges like low survey response rates, inaccurate responses, and inconsistent data sets.

As part of EducationSuperHighway's K-12 Bridge to Broadband program, ISPs agreed to provide actionable data to identify unconnected students for the first time. These secure, confidential data exchanges tell school districts which of their students lack home broadband and which ISPs can connect the unconnected. A similar approach is now needed to help close the broadband affordability gap; ISPs should expand the data exchange program in partnership with cities, housing authorities, health centers, and other trusted organizations to America's most unconnected communities. This will accelerate adoption efforts by enabling these organizations to focus their outreach efforts on unconnected households and simplify the process of identifying which ISPs can serve each household.

Strategies and Blueprints for Success

Blueprint: Using K-12 Bridge to Broadband to Identify and Connect Student Households

Rochester City School District (RCSD), New York

This Spring, Rochester City School District's leaders deployed K-12 Bridge to Broadband to help them understand the connectivity status of the district's more than twenty-five thousand students. The City of Rochester ranks no. 1 for childhood poverty among cities in comparably sized metro areas. The Rochester City School District has a diverse student population in a community where every child qualifies for free and reduced lunch. Armed with K-12 Bridge to Broadband data, leadership can better target the unconnected student households with connectivity resources. In the near term, the district hopes to use this data to ensure that their existing cache of nearly four-thousand 10Million project hotspots is more effectively leveraged and appropriately dispersed. After that, the school district will use the information about which ISPs can serve each household to help unconnected families sign up for wired broadband services. Families in the district face difficult challenges, but the robust outreach teams at RCSD remain dedicated to supporting their community to reduce the digital divide.

Worcester Public Schools, Massachusetts

During the early months of the pandemic, the administrative team at Worcester Public Schools sprang into action with internal surveying efforts to try to understand the level of connectivity affecting their students at home. By using K-12 Bridge to Broadband, the district was able to compare their earlier survey results against updated data from ISPs to understand a more comprehensive picture of connectivity needs. Moving forward, leaders at the district hope to use the data to raise awareness of the digital divide with their School Board and help families sign up for the Emergency Broadband Benefit.

Strategy #2: Launch Broadband Adoption Programs

Unconnected households need help overcoming the obstacles to signing up for federal broadband programs and home broadband service.

To ensure that Congress's investment in closing the broadband affordability gap is successful, we need to help unconnected households sign up for the Affordable Connectivity Program and the affordable broadband services offered by ISPs. Unconnected households face a plethora of obstacles to successfully signing up for home broadband services. Many eligible families are simply not aware that federal broadband programs exist. They often struggle to find information about the availability of affordable broadband programs from ISPs and navigate complex sign-up processes that are primarily online and particularly challenging for non-English speakers. In addition, many are ultimately deemed ineligible due to poor credit histories, outstanding debts to ISPs, or a lack of documentation. Overcoming adoption challenges requires developing solutions that address these systemic challenges that prevent people from enrolling in federal broadband programs and affordable broadband plans offered by ISPs.

Common Barriers to Adoption of Low and No-Cost Broadband Programs

Awareness

Low awareness of federal broadband programs

Difficulty finding information about service provider low-cost options

Confusion about eligibility and how to sign up

Trust

Skeptical about free services

Worried about future or unexpected costs

Concerned about sharing personal information for eligibility confirmation

Uncertainty about the installation process

Enrollment

No way to access online sign-up processes

Unable to navigate complex sign-up process

Long phone wait time to activate service

Language barriers

Strategies and Blueprints for Success

While adoption of affordable broadband programs has been low nationally, examples of successful adoption programs at the local level prove that it is possible to achieve much better results. If states, cities, and municipalities want to boost Affordable Connectivity Benefit program adoption and help unconnected households access ISPs affordable broadband options, they will need to engage in outreach campaigns that build awareness, establish trust and provide households with enrollment support. Congress' plan to invest $2.75 billion in the Digital Equity Act, will give policymakers the resources to invest in the data, tools, staff, and marketing resources required to launch and sustain these efforts.

Build Awareness

Many families eligible for federal broadband subsidies are simply not aware that the programs exist or are confused by the multitude of options presented to them. A recent national survey of low- and lower-middle-income households found that only 25% had heard of the Emergency Broadband Benefit program.[10] Historically marginalized groups are notoriously hard to reach, struggle with language barriers, and are more likely to have experienced challenges accessing other government programs. Broad outreach alone often only adds to the confusion and should be accompanied by targeted information from trusted sources such as school districts, community health centers, faith leaders, and other community-based organizations. Outreach should be multilingual, multi-channel (e.g., paper, digital, phone, and in-person), and always use clear, unambiguous language to better inform key constituencies and answer common concerns, including those about eligibility, hidden costs, and use of personal data.

Blueprint: Partnering With Community-Based Organizations for Outreach

Michigan Reconnect

Monroe County Community College (MCCC) has seen a significant increase in enrollment in 2021 in large part due to a program called Michigan Reconnect, which allows people 25 and older to apply to attend college for free. Michigan Reconnect hoped to get 60,000 applications. They received nearly 170,000 applications. The program focused on building awareness by partnering with "community champions," who committed to spreading information about the resources Michigan Reconnect offered. To facilitate this, Michigan Reconnect created an online toolkit through their website to provide multilingual materials for champions, including graphics, messaging, and stories that champions could use as templates to share digitally and in print with their networks. Strong, well-organized community champions are effective at creating awareness of and building trust in a program.

Strategies and Blueprints for Success

Establish Trust

When cost is the primary barrier, offering services at no or reduced cost is the simplest solution to increase adoption. However, this brings its own challenges as people may sometimes believe that the offer is too good to be true or that the services they will receive are cheap, inferior, or a gateway to hidden costs and future fees. When tackling misinformation and long-held misconceptions, community voices are essential in establishing trust and increasing the adoption of home Internet and federal programs needed to pay for it. By ensuring the messenger is a trusted community member or institution, it is possible to provide high-quality information and data while responding to the specific context and concerns of the hardest to reach populations. In addition, local, frequent, and ongoing engagement from those individuals and organizations that are already actively engaged in the community makes it possible to address skepticism about free services with stories of community members who have benefited.

Blueprint: Establishing Trusted Sources to Share Critical Information

La Abuelina: Montgomery County, MD's High Vaccination Rates Among Latinx Population

Across the country, vaccination rates among the Latinx community have lagged behind White residents, but an initiative in Montgomery County, MD, demonstrated how building trust through authentic community engagement could reverse this trend. "Abuelina" is a cartoon grandmother character developed through a Salud y Bienestar initiative - a county-specific public-private partnership - who has appeared in messaging that has run throughout the pandemic. (She now has a husband and grandchildren). Her ubiquitous presence is in part responsible for the high vaccination rate among Latinx residents, which is 9.2% higher than that of White residents. As of the beginning of August, 74.2% of Latinx residents in Montgomery County are vaccinated compared to 65% of White residents. Abuelina demonstrates the importance of understanding the community you are working with and the positive impact of building narrative and familiarity in outreach messaging.

Provide Support for Enrollment

Making enrollment as straightforward and painless as possible is an important piece of ensuring high adoption rates. Many low-income Americans struggle with the cost of long wait times, complex terms and conditions, language barriers, or navigating eligibility and enrollment information. For older Americans and those who rent their homes, concerns about the installation process can also influence the decision to apply. The efforts of K-12 schools to connect the 10-15 million students without home broadband during the pandemic show the power of concierge-like enrollment assistance centers to help unconnected households overcome these barriers.

Case Study: Clark County School District, Las Vegas, Nevada

How partnerships, coordinated outreach, and extensive family support enabled Clark County School District (CCSD) to address the digital adoption challenges faced by students during the pandemic.

When the pandemic hit, Clark County School District (CCSD), the fourth largest district in the country, had to shift approximately 320,000 students to remote learning. An initial needs assessment by CCSD found that 70,000 respondents did not have a device, 18,000 did not have Internet access, and 120,000 did not respond at all. CCSD partnered with Communities in Schools Nevada (CIS) and Nevada Governor Sisolak's COVID-19 Task Force to ensure every student had access to an Internet connection and learning device at home. Their bold strategies provide the benchmark for addressing and overcoming critical barriers to broadband adoption:

Innovative Partnerships

CCSD and CIS partnered with **Cox Communications** to provide Internet access to low-income families via **Connect2Compete**, sponsored by the initiative at no cost to the families through June 2021. Nevada became **T-Mobile's** first **Project 10Million partner,** giving hotspots to CCSD families who did not live in Cox service territory, were experiencing homelessness, or had more than four students in a household.

Strategies and Blueprints for Success

Outreach Strategy

The initiative formed a sophisticated marketing and outreach campaign, tracking progress within their Student Information System. With CIS's coordination, **community-based organizations leveraged their networks,** distributed information through door-to-door outreach, and canvassed highly frequented locations such as food distribution centers.

Family Support Center

The virtual Family Support Center was a cornerstone of the initiative, where trained multilingual call agents connected with families to sign them up for subsidized service. **Empowering call agents to walk families through the entire sign-up process** was critical to their success as households never had to interact with the provider's system. CCSD and Cox agreed that they would meet the program requirements for eligibility and consent by recording calls. Calling agents tracked the progress of inbound calls and implemented strategies to target unresponsive families.

Tactics to Reach Every Student

When calling options had been exhausted, schools and community-based organizations started going door-to-door to **talk to families who were unresponsive** after several call attempts. Finally, when there were only a few hundred students left to reach, the initiative escalated the list to each school, giving them a deadline to contact every student on their list. These coordinated, intentional, and data-driven outreach efforts provide a template for overcoming barriers faced by similar programs.

The public-private partnerships formed during the pandemic enabled ISPs and anchor institutions to work together to provide hands-on support to overcome enrollment barriers and walk families through the entire sign-up process. This concierge support is also needed to ensure enrollment for federal and affordable broadband programs is as seamless as possible. The FCC could substantially improve success rates by modifying its Emergency Broadband Benefit Program rules to allow adoption centers run by community-based organizations or state and local governments to enroll households in federal broadband programs.

In addition, the need to provide documentation to prove eligibility for federal broadband programs remains one of the most significant broadband adoption barriers faced by unconnected households. In June 2021, USAC took steps to streamline enrollment due to issues consumers faced when application information didn't exactly match with the National Verifier. However, more action is needed to make it easier to prove eligibility by relaxing data-sharing rules and providing automatic eligibility approval for households already participating in Medicaid, SNAP, Free and Reduced Lunch; Supplemental Security Income, Federal Public Housing Assistance, Veterans and Survivors Pension Benefits, Pell Grants, or Tribal specific benefit programs.

Blueprint: Simplifying Sign-up Processes to Boost Adoption

Code for America: GetYourRefund - Earned Income Tax Credit

The Earned Income Tax Credit (EITC) is the country's largest benefit for workers, but one in five eligible households are not claiming the benefit, leaving $10.5B on the table each year. Code for America recognized that the steps to claim the EITC were a barrier for eligible households who didn't have easy access to filing support. So, in partnership with the IRS Volunteer Income Tax Assistance program, Code for America created GetYourRefund, which simplifies the process with a mobile-friendly, bilingual application that asks simple questions and connects filers directly with experts who can review and file on their behalf. In its pilot year, GetYourRefund helped 500,000 people file and distributed $62M in flexible cash to households. GetYourRefund demonstrates that removing enrollment barriers is critical to closing adoption or participation gaps.

Strategies and Blueprints for Success

Strategy #3: Deploy Free Wi-Fi to Low-Income Apartment Buildings

There are no broadband adoption problems in airports, hotels, and coffee shops.

| Users connect to the SSID, and say "Yes" on the splash screen | We can close **20-25%** of the digital divide by extending free Wi-Fi to low-income apartment buildings |

In America's most unconnected communities, where 38% of households do not have home broadband, 20-25% of the digital divide is concentrated in multi-dwelling units.[11] By deploying free Wi-Fi in these buildings, just as cities have in airports, libraries, and other community spaces, we can make a significant impact on the digital divide in months, not years. Congress recognized this opportunity and is explicitly including the deployment of free Wi-Fi networks in low-income apartment buildings as an eligible use of the $42.5 billion of broadband infrastructure funding in the bipartisan infrastructure bill.

Using federal broadband infrastructure funds to deploy free apartment Wi-Fi solves the two main barriers to connecting low-income households. First, it solves the affordability problem by making Internet access free. Second, it solves the adoption problem by eliminating the need for households to sign-up for broadband service. Instead, all a household needs to do is find and connect to the network available in their building - something that every American with a connected device does on a regular basis. In addition, because of dramatic improvements in Wi-Fi technology, households in apartment buildings can be connected simply by deploying Wi-Fi access points in hallways and other common areas - lowering the cost of installation by 75% or more. Finally, because free Wi-Fi helps landlords attract and retain tenants, they are often willing to support the installation and maintenance of the networks in their buildings.

How Free Apartment Wi-Fi Works

Free apartment Wi-Fi is modeled after the way Wi-Fi is delivered in most hotels today. Rather than buy a separate Internet connection for each room, the hotel buys a single internet connection for the building and then installs a building-wide Wi-Fi network. The hotel then makes it easy for guests to use the Wi-Fi by giving them the SSID and password when they check-in. There are no complicated forms to fill out, and the competition for guests has now made Wi-Fi a standard, free amenity in virtually every hotel.

To make free Wi-Fi available in apartment buildings, cities should work with building owners to:

▶ **Step #1: Activate an Internet connection in the building.**
This can be purchased from a local Internet service provider, or the city can leverage the Internet access it uses to connect city facilities by extending its network to apartment buildings using a wired or wireless wide area network.

▶ **Step #2: Install Wi-Fi Infrastructure in the apartment building.**
This step involves simply wiring hallways and common areas for Wi-Fi access points and then configuring the network.

▶ **Step #3: Provide residents with the SSID and password to connect to the Internet.**
Residents can also be given a unique username and password for enhanced security.

Strategies and Blueprints for Success
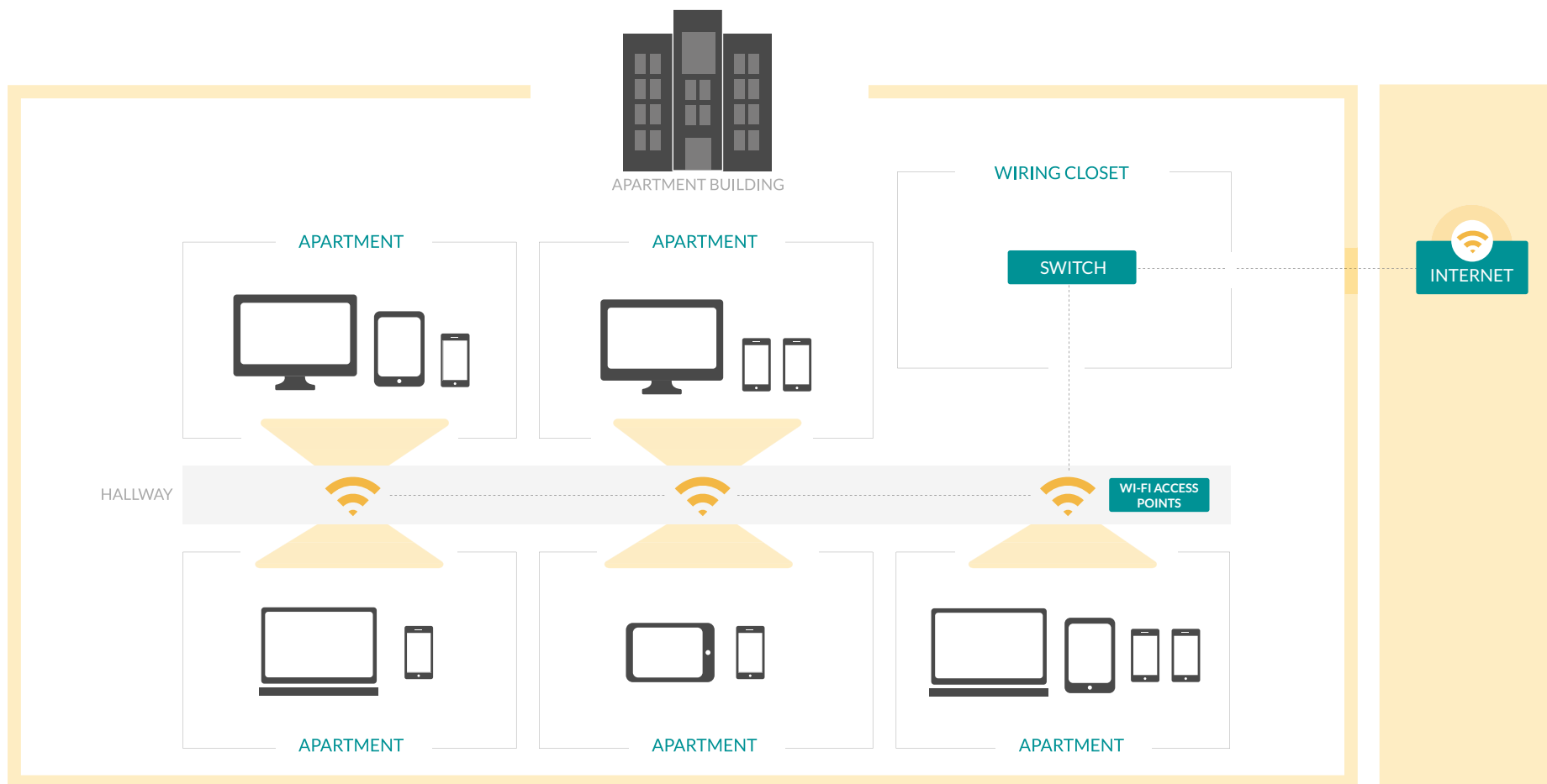
With the improvements in WI-Fi technology, free Wi-Fi can be made available to residents of low-income apartment buildings without having to upgrade the wiring in individual apartments. Wi-Fi access points are simply installed in common areas and hallways and can deliver symmetrical speeds up to 1 Gbps depending on the speed of the building's Internet connection.[12]

Strategies and Blueprints for Success

Blueprint: Eliminating the Need for Households to Sign-up for Broadband Service

EducationSuperHighway, Free Apartment Wi-Fi in Oakland, CA

EducationSuperHighway began deploying free apartment Wi-Fi in Oakland, CA, in early 2020. To date, we have installed free Wi-Fi networks in five apartment buildings. We coordinated the activation of an Internet connection from an ISP that already had service in the building and then installed the Wi-Fi network. We monitor the network and provide any required maintenance and support. In each building, there has been widespread adoption of the network by tenants, and building owners have received tremendously positive feedback.

In all five of these buildings, the landlord pays for the cost of the network. They have contracted directly with the ISP for Internet service and pay a monthly fee for the amortization and maintenance of the Wi-Fi network. The total cost to building owners has ranged from $200-500 per month, demonstrating the value they see in the network as a tool for attracting and retaining tenants.

EducationSuperHighway is partnering with the city of Oakland to roll out free apartment Wi-Fi in low-income apartment buildings across the city. Leveraging Oakland's city Internet access and their newly deployed OAK-WIFI network, the city is providing Internet service to the roof of each building, and EducationSuperHighway is connecting this Internet access to Wi-Fi infrastructure throughout the building. This approach, combined with grant funding for the installation of the Wi-Fi networks, will dramatically lower the cost to landlords to less than $100 per month in most buildings. Our objective is to connect an estimated 5,400 households by deploying free apartment Wi-Fi in the 127 buildings in Oakland, where more than 25% of the households do not have a home broadband connection.

Blueprint: Building Community Partnerships to Provide Free Internet

Project Waves, Baltimore, MD

Over one-third of the Baltimore City population is without Internet access. Project Waves is a Baltimore-based Community ISP focused on lighting up access to residential areas classified as "Internet Deserts." Their users all live below the federal poverty line and have a median household income of $13,000. They build relationships with community organizers across the city to connect apartment buildings and use a point-to-multipoint wireless network to provide free home internet to residents in Baltimore.

Project Waves recently connected an entire multi-dwelling building (MDU) at Johnston Square Apartments in East Baltimore. The 217 unit property serves low-income seniors and previously had no wired Internet options. Project Waves worked with a local fiber builder to connect the building to Project Waves' 10 Gbps backbone. Project Waves technicians installed cabling and access points in the hallways to deliver 200 Mbps symmetrical service throughout the property. Following the installation, the residents were given educational resources about the new free service and encouraged to connect. The response from the Johnston Square community has been overwhelmingly positive, and Project Waves is currently evaluating several additional MDU properties in underserved parts of Baltimore for similar projects.

A ROADMAP FOR PUBLIC-PRIVATE PARTNERSHIPS

5

A Roadmap for Public-Private Partnerships

With federal funding, we will have a historic opportunity to close the digital divide, but we must now do the hard work of driving adoption.

President Biden has set the goal of ensuring "every American has access to high quality, affordable high-speed Internet." Congress has already made a down payment toward providing the resources needed to close the broadband affordability gap and is poised to dramatically increase its investment. To ensure no home is left offline, we need the bold leadership of a public-private partnership to remove the barriers that keep low-income families on the wrong side of the digital divide.

Federal Policymakers

▶ **Action 1: Ensure that State Broadband Plans Include Programs to Close the Affordability Gap**

As part of the bipartisan infrastructure bill, states must submit a plan for how they intend to use their broadband infrastructure and Digital Equity Act funding. These plans must be approved by the National Telecommunications and Information Administration (NTIA) prior to states receiving their funds. NTIA should require that all state broadband plans include investments in programs to close the affordability gap, including allocating infrastructure funds for the deployment of free Wi-Fi networks in low-income apartment buildings; investments in marketing and direct outreach campaigns to unconnected households; and the creation and staffing of broadband adoption centers.

▶ **Action 2: Require Federal Agencies to Inform the FCC of Households that are Automatically Eligible for the Affordable Connectivity Program**

One of the largest broadband adoption barriers faced by unconnected households is the need to provide documentation proving they are eligible for the Affordable Connectivity Program. Congress attempted to reduce this burden by providing automatic eligibility approval for households that were enrolled in Medicaid, SNAP,

Free and Reduced Lunch, Supplemental Security Income, Federal Public Housing Assistance, Veterans and Survivors Pension Benefits, Pell Grants, or any of a number of Tribal specific benefit programs. Unfortunately, households must still obtain documentation to prove they are enrolled in one of these programs. To eliminate this barrier, Congress or the President should require the Federal Agencies in charge of these programs to establish data-sharing agreements with the FCC and provide the FCC with automatic eligibility verification for households who state they are enrolled in their program. Agencies could leverage funding from the $1 billion Technology Modernization Fund included in the American Rescue Plan Act and should be required to implement these data-sharing arrangements within one year. If necessary, Congress should provide agencies with data privacy waivers for this specific purpose.

▶ **Action 3: Allow Non-profits and State and Local Governments to Remotely Enroll Households in the Affordable Connectivity Program**

In order to maximize the effectiveness of broadband adoption centers, the FCC should modify its Emergency Broadband Benefit rules to allow these organizations to enroll households in the Affordable Connectivity Program without requiring eligible households to come to an adoption center in person. For unconnected households without Internet access, the need to go to a library or an adoption center during the pandemic is an unnecessary burden that dramatically reduces participation in the program. By limiting this provision only to broadband adoption centers run by non-profits or state and local governments and expressly excluding service providers and their agents, the FCC can eliminate concerns about improper enrollments.

▶ **Action 4: Allow Apartment Owners and Housing Authorities to Aggregate Affordable Connectivity Program Benefits for their Residents**

To maximize the availability and capacity of free Wi-Fi networks in low-income apartment buildings, the FCC should modify its Emergency Broadband Benefit rules to allow apartment owners and housing authorities to aggregate these benefits for their residents. This will enable the purchase of high-capacity, symmetrical, enterprise-grade Internet access circuits for the apartment building, resulting in higher speeds for residents and offsetting the ongoing costs for building owners.

A Roadmap for Public-Private Partnerships

State Leaders

▶ **Action 1:** Set Specific Goals for Closing the Broadband Affordability Gap and Leverage Adoption Data to Track Progress

One of the most powerful actions governors took to close the K-12 digital divide was establishing a public goal to upgrade all of a state's schools. This provided the direction that local leaders needed to develop and implement upgrade plans. States then leveraged annual progress tracking to hold stakeholders accountable and identify where additional support was needed. The same approach can be used to close the affordability gap, and governors should once again provide the leadership and follow-up critical to ensuring no home is left offline.

▶ **Action 2:** Include Programs to Close the Affordability Gap in State Broadband Plans

As part of the bipartisan infrastructure bill, states must submit a plan for how they intend to use their broadband infrastructure and Digital Equity Act funding. States should ensure that their plans include investments in programs to close the affordability gap, including allocating infrastructure funds for the deployment of free Wi-Fi networks in low-income apartment buildings; investments in marketing and direct outreach campaigns to unconnected households; and the creation and staffing of broadband adoption centers.

▶ **Action 3:** Prioritize Infrastructure Investments in Affordability Programs

In establishing how they will use infrastructure funding from the bipartisan infrastructure bill and the Capital Projects Fund in the American Rescue Plan Act, states should put investments in infrastructure-based affordability programs such as free apartment Wi-Fi networks at the same priority level as the deployment of infrastructure to unconnected households. This will maximize the impact of infrastructure funding by taking advantage of the significantly lower cost per household to connect residents in low-income apartment buildings.

▶ **Action 4:** Establish Statewide Broadband Adoption Centers for Enrollment Assistance

While it may be advantageous to have trusted local institutions conduct outreach to unconnected households as part of a coordinated broadband adoption effort, states should consider performing enrollment assistance functions at a single broadband adoption center. This will create economies of scale, increase the hours enrollment concierges are available, ensure multiple languages can be supported, and improve the enrollment support experience. In addition, it will allow the state to have a single point of contact with ISPs, facilitating the rapid resolution of issues and enabling the state to partner with ISPs to simplify the enrollment process.

A Roadmap for Public-Private Partnerships

City and County Leaders

▶ **Action 1: Collect Household Level Connectivity Data and Set Specific Goals for Closing the Affordability Gap**

Leadership from cities and counties is critical to closing the broadband affordability gap in a systematic way. To provide effective leadership, local governments must start with a clear understanding of the problem by collecting household-level data on who is and is not connected. Armed with this information, cities, and counties can then set specific, achievable goals for closing the digital divide in their most unconnected communities. EducationSuperHighway is now working with ISPs participating in the K-12 Bridge to Broadband program to make its confidential data exchange platform available to cities to identify unconnected households in low-income communities.

▶ **Action 2: Create a Comprehensive Broadband Adoption Program and Build a Coalition of Key Stakeholders**

Armed with data and specific goals, local governments can then develop a comprehensive strategy to close the broadband affordability gap in their communities. The plan should leverage all elements of an effective broadband adoption strategy and be developed in partnership with key stakeholders, including school districts, housing authorities, non-profits, community-based organizations, health centers, apartment owners, ISPs, and local business leaders.

▶ **Action 3: Utilize State and Federal Funding to Deploy Free Wi-Fi in Low-Income Apartment Buildings and Establish a Broadband Adoption Center**

Armed with a comprehensive strategy to close the broadband affordability gap, cities and counties should leverage their American Rescue Plan Act resources to drive broadband adoption. These investments should focus on deploying free Wi-Fi networks in low-income apartment buildings, conducting marketing and direct outreach campaigns to unconnected households, and creating and staffing a broadband adoption center to help enroll households in the Affordable Connectivity Program. Critically, resources should be used to hire paid outreach and enrollment staff and fund community-based organizations to help with awareness building and outreach. As funding from the bipartisan infrastructure bill becomes available, local governments should also be ready to apply for state and federal grants to support their broadband adoption strategy.

A Roadmap for Public-Private Partnerships

Internet Service Providers

▶ **Action 1: Share Connectivity and Serviceability Data Beyond K-12**

Over 130 ISPs, covering more than 90% of households in the country, have already joined EducationSuperHighway's K-12 Bridge to Broadband data exchange program. This is enabling states and school districts across the country to quickly identify which of their students lack home broadband and which ISPs they can partner with to connect them. To maximize enrollment in the Affordable Connectivity Program, ISPs should expand the data exchange program beyond K-12 to enable other institutions such as housing authorities, health centers, and municipal governments to quickly identify and conduct outreach to households that are offline in America's most unconnected communities.

▶ **Action 2: Offer 100/20 Broadband Plans for $30 to Households Eligible for the Affordable Connectivity Program**

In the bipartisan infrastructure bill, Congress sets out a new standard for what constitutes a broadband connection sufficient to participate fully in our digital society. They also set a new $30 price point for affordable broadband plans. ISPs should follow Congress' lead and immediately begin offering 100 download / 20 upload broadband plans for $30 to households eligible for the Affordable Connectivity Program. These plans will be profitable for ISPs and ensure that households on affordable broadband plans can learn, work and access healthcare and other critical services online.

▶ **Action 3: Simplify Sign-up Processes and Allow Broadband Adoption Centers to Enroll Eligible Households in Affordable Broadband Programs**

Signing up for ISP's affordable broadband programs remains a significant barrier for unconnected households. ISPs should work to reduce these barriers by simplifying eligibility processes and automatically approving any household that has qualified for the Affordable Connectivity Program. In addition, ISPs should shorten the sign-up process by limiting the amount of information collected to only that needed to provide service and minimize fraud. They should also recognize the difficulty unconnected households have in signing up online and embrace mechanisms such as Cox's utilization of voice recordings to confirm consent that enable broadband adoption centers to complete the sign-up process on behalf of unconnected households.

▶ **Action 4: Create and Execute a Business Plan for the Affordable Broadband Customer Segment**

Congress' investments in closing the broadband affordability gap create a significant new business opportunity for ISPs. While historically low price points, high customer acquisition costs, churn, and bad debt have made it difficult for ISPs to create a viable business case for serving low-income households, the Affordable Connectivity Program changes the calculus. The affordable broadband customer segment is now an $8 billion per year market opportunity with a reliable payor. ISPs should create and execute a business plan focused on finding, signing up, and serving unconnected households with access to existing infrastructure to take advantage of this opportunity.

A Roadmap for Public-Private Partnerships

Housing Authorities and Apartment Building Owners

▶ **Action 1: Install Free Wi-Fi Networks in Low-Income Apartment Buildings**

Housing authorities and apartment owners can help close the affordability gap by installing free Wi-Fi networks in their buildings. In addition to eliminating the barriers that many tenants face in signing up for broadband service, this amenity will help attract tenants and increase tenant satisfaction. Apartment owners can leverage federal infrastructure funds to cover up-front costs and outsource the design, installation, and maintenance of these networks.

▶ **Action 2: Help Residents Enroll in the Affordable Connectivity Program**

When installing free Wi-Fi networks in a building is not an option, housing authorities and apartment owners should proactively educate tenants on the availability of the Affordable Connectivity Program and help them enroll in the program.

School Districts

▶ **Action 1: Identify Unconnected Students Using K-12 Bridge to Broadband**

School districts in eleven states have taken advantage of EducationSuperHighway's K-12 Bridge to Broadband data exchange program to understand the connectivity status of 3.5 million students and the best ways to connect those who lack home broadband. According to the Council of Chief State School Officers, collecting this data on an annual basis is now a best practice to ensure all students have equal access to educational opportunity. Unlike family surveys, which are time-consuming to implement and suffer from low response rates, K-12 Bridge to Broadband makes collecting this information on a recurring basis in a FERPA compliant fashion quick and easy for school districts.

▶ **Action 2: Conduct Outreach to Unconnected Families to Enroll Them in the Affordable Connectivity Program or District Provided Internet Access Solutions**

As a trusted institution, school districts are uniquely positioned to help unconnected families overcome the barriers that prevent them from accessing affordable broadband programs. By leveraging data to identify unconnected students and implementing outreach programs to help families enroll in either the Affordable Connectivity Program or a district-provided Internet access solution, districts can reduce the inequities faced by students without home broadband connections.

A Roadmap for Public-Private Partnerships

Community Health Centers

▶ **Action 1: Identify Unconnected Patients in Partnership with ISPs**

Telehealth has become a critical lifeline for care during the pandemic and is a driver of Congress' $65 billion broadband investment in the bipartisan infrastructure bill. Unfortunately, community health centers report that as many as 30% of their patients do not have access to telehealth because they do not have a home broadband connection. To address this issue, health centers should partner with local ISPs to identify which of their patients are without broadband. EducationSuperHighway is now working with ISPs participating in the K-12 Bridge to Broadband program to make its confidential data exchange platform available to community health centers in a HIPAA compliant fashion.

▶ **Action 2: Conduct Outreach to Unconnected Patients to Enroll Them in the Affordable Connectivity Program**

As a trusted institution, community health centers are uniquely positioned to help unconnected patients overcome the barriers that prevent them from accessing affordable broadband programs. Health centers should partner with state or local broadband adoption centers to implement outreach campaigns to help patients enroll in the Affordable Connectivity Program. This will help unlock the power of telehealth for at-risk populations and help address one of the social determinants of health that impacts the lives of health center patients.

Community-Based Organizations

▶ **Action 1: Support Local Adoption Campaigns as Trusted Community Voices**

Community-based organizations (CBOs) play a vital role as trusted partners to unconnected households in America's most unconnected communities. They are well-positioned to build awareness and trust for affordable broadband programs and should be critical partners in outreach campaigns to enroll eligible households in the Affordable Connectivity Program.

Corporations

▶ **Action 1: Deploy Marketing Resources and Leverage Physical Locations to Build Awareness and Enroll Eligible Households in the Affordable Connectivity Program**

Corporations can be force multipliers in the effort to build awareness and enroll unconnected households in the Affordable Connectivity Program. They can help accelerate closing the affordability gap by deploying their marketing resources to build awareness, encouraging employees to participate in outreach programs, and using their physical locations in America's most unconnected communities as enrollment centers for households without Internet access. This last approach, modeled after Boost Mobile's turning its storefronts into polling places[13], can be a transformative CSR experience for corporations and their employees while providing significant support to their unconnected customers.

▶ **Action 2: Support Ongoing Advocacy Efforts to Close the Affordability Gap at the Federal, State, and Local Level**

Closing the broadband affordability gap is critical for the competitiveness of American companies. Without home broadband, over 20% of America's workforce cannot work remotely or access the job training needed to qualify for the millions of jobs corporations are unable to fill. Businesses should continue to focus their advocacy efforts on closing the digital divide at the federal, state and local level, with a particular focus on ensuring that state and local governments are allocating significant resources to affordable broadband programs and adoption of the Affordable Connectivity Program.

A Roadmap for Public-Private Partnerships

EducationSuperHighway Action Plan

EducationSuperHighway was established to be a catalyst for closing the classroom connectivity gap, and we believe that our relationships, strategies, capabilities, and track record positions us to help catalyze the public-private partnership required to close the broadband affordability gap. Our work will be modeled on the playbook used to close the digital divide in K-12 public schools, but recognizes the importance of partnering with a new set of stakeholders that are engaged with the communities we need to connect.

▶ **Action 1: Build a Public-Private Partnership to Close the Broadband Affordability Gap**

EducationSuperHighway is launching No Home Left Offline to build awareness of the broadband affordability gap and catalyze stakeholders and government partners to act. Working with other digital divide advocacy organizations, we will help create models for public-private partnerships at the state and local levels to apply for and utilize federal and state broadband funding to launch effective broadband affordability programs.

▶ **Action 2: Develop a Means to Identify Unconnected Households on a Recurring Basis**

EducationSuperHighway's K-12 Bridge to Broadband data exchange program is already being used by states and school districts across the country to identify unconnected students. We will work with our ISP partners to expand the program to other institutions such as housing authorities, health centers, and municipal governments to quickly identify and conduct outreach to households that are offline in America's most unconnected communities.

▶ **Action 3: Help States Design their Broadband Plans for the Capital Projects Fund and Bipartisan Infrastructure Bill**

During our mission to close the digital divide in America's K-12 schools, EducationSuperHighway partnered with 85 governors in all 50 states to set goals, conduct outreach to school districts, and provide matching funds for fiber construction. In a similar fashion, we will now partner with Governors and state legislatures to help them set goals around the broadband affordability gap, track progress toward those goals, and design their broadband adoption programs. As a critical first step, EducationSuperHighway will help states meet the expectations Congress laid out for the inclusion of broadband affordability programs in the state broadband plans they must submit to NTIA by providing draft language for their plans. We will also provide resources to help states design their grant programs to maximize the impact of their Capital Projects and infrastructure bill funding on the broadband affordability gap.

▶ **Action 4: Launch Free Apartment Wi-Fi Demonstration Projects and Create a Playbook For Cities, Housing Authorities, and Apartment Owners**

Over the last five years, EducationSuperHighway helped thousands of school districts upgrade the broadband infrastructure in their schools. To do this, we developed technical and procurement support programs that made it easy for schools to upgrade. These included help designing upgrades, RFP templates, data to identify the best procurement options, and help connecting with vendors who could bid on their RFPs. In order to make it easy for cities, housing authorities, and apartment owners to deploy free Wi-Fi networks in low-income apartment buildings, we are now building a similar playbook and set of programs. We are also standing up free apartment Wi-Fi demonstration projects to test these programs and provide implementation models that can be replicated by others.

▶ **Action 5: Launch Broadband Adoption Center Demonstration Projects and Create a Playbook for States, Cities, School Districts, and Other Trusted Institutions**

EducationSuperHighway has spent the last year gathering best practices from successful broadband adoption programs across the country. We are now integrating these best practices to create a model broadband adoption center program for states, cities, housing authorities, school districts, and other trusted institutions. As with free apartment Wi-Fi, this model program will include EducationSuperHighway provided tools and playbooks that make it easy for these institutions to stand up their own broadband adoption centers. We are currently implementing broadband adoption center demonstration projects with city, school district, and housing authority partners to test the model and identify the tools that institutions will need to deploy these programs at scale.

ABOUT THE DATA

For more about our data and metric calculations, please view the full version of the methodology.
In addition, a digital version of this report is available at nohomeleftoffline.org.

Data Sources

1. Here we define the poverty level as 200% of the poverty level which corresponds to the eligibility criteria established by Congress for the Affordable Connectivity Program.

2. According to the census, Hispanic origin can be viewed as the heritage, nationality, lineage, or country of birth of the person or the person's parents or ancestors before arriving in the United States. People who identify as Hispanic, Latino, or Spanish may be any race. For the purposes of this report, Latinx will be used to reference people who identify with Hispanic origin.

3. Includes the $3.2 billion Emergency Broadband Benefit Program (part of the Consolidated Appropriations Act of 2021), the $14.2 billion Affordable Connectivity Benefit and $2.75 billion (over five years) Digital Equity Act (both part of the proposed Infrastructure Investment and Jobs Act).

4. "FCC Enrolls Over 4 Million Households In Emergency Broadband Benefit Program." FCC News, (July 28, 2021)

5. The Emergency Broadband Benefit provides $50 per month to ISPs for eligible households. This amount will be reduced to $30 per month as part of the bipartisan infrastructure bill.

6. The Infrastructure Investment and Jobs Act includes $2 billion for the Tribal Broadband Connectivity Program. The bill creates a Digital Equity Competitive Grant Program to support broadband adoption, which includes a 5% set-aside to award grants to, or enter into contracts or cooperative agreements with, Indian Tribes, Alaska Native entities, and Native Hawaiian organizations.

7. From USAC Open Data. Percentage of Billed Entity Numbers (BENs) using mobile broadband service vs. lit fiber, microwave, cable, DSL and satellite.

8. Digital Connectivity During the Pandemic: A national survey of low- and lower-middle income households, a research partnership between EveryoneOn and John B. Horrigan, PhD, 2021.

9. Outreach 'Most Valuable Thing' for Emergency Broadband Benefit Program: Rosenworcel." Broadband Breakfast (September 13, 20)

10. Digital Connectivity During the Pandemic: A national survey of low- and lower-middle income households, a research partnership between EveryoneOn and John B. Horrigan, PhD, 2021.

11. ACS 5-year 2019 Presence and Types of Internet Subscriptions in Household B28002

12. The speed of the connection will be determined primarily by the speed of the Internet connection that a city chooses to connect to the apartment building in step #1.

13. "Boost Mobile Is Turning Its Storefronts Into Polling Places on Election Day," AdAge (October 5, 2016)

ABOUT EDUCATIONSUPERHIGHWAY

EducationSuperHighway is a national non-profit with the mission to close the digital divide for the 18 million households that have access to the Internet but can't afford to connect. We focus on America's most unconnected communities, where more than 25% of people don't have Internet.

From 2012-2020 we led the effort that closed the classroom connectivity gap. In 2013, only 10% of students had access to digital learning in their classrooms. Today, thanks to an unprecedented bi-partisan effort by federal, state, and school district leaders, supported by K-12 advocacy organizations, the classroom connectivity gap is closed - 47 million students are connected, and 99.3% of America's schools have a high-speed broadband connection.

Education
SUPERHIGHWAY