MMTC
Multicultural Media, Telecom & Internet Council

Wireless in Communities of Color:

Bridging the Digital Divide

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In Partnership with CTIA

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Foreword

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Thanks to years of technological innovation, we live in a world of opportunity where access to high-speed internet directly correlates to success in today's society. This powerful tool can uplift our communities, unlocking access to jobs, education, telemedicine, civic engagement, economic empowerment, and much more. Without it, unserved and underserved groups face widening gaps when it comes to quality of life and opportunities for advancement. This is why it is crucial to close the digital divide.

MMTC has advocated for years on this issue, working alongside other advocacy groups, government, and industry. Over a decade ago, we recognized the role wireless played in connecting our communities—a role mobile connectivity still plays today. Here, we present a history of the digital divide, major steps in closing it, and how we can continue expanding access to transform lives for communities of color. With this paper in partnership with CTIA, we highlight our progress toward closing the digital divide, and we continue our march for and with our communities to get everyone connected.

Introduction

High-speed internet access has changed the landscape of opportunity for millions of people across the nation. This change is especially true in communities of color, who span financial demographics, urban and rural communities, young children and the elderly, immigrants, transient households, and many others—large parts of the tapestry that is America. Major portions of all these communities, and particularly the less-affluent households, have much to gain from internet connectivity; yet a divide persists as we work toward achieving full digital equity and inclusion.

In efforts to close this divide over the past decade, immense strides have been made. Industry, government, and community initiatives have combined to address this issue, spurring both greater access and greater adoption. These efforts include a mix of federal policies and programs, substantial private-sector investment, public-private partnerships, and targeted education campaigns.

The COVID-19 pandemic has played a major role in underscoring the truth in Rep. Lewis's famous words: "Access to the internet … is the civil right issue of the 21st century." The pandemic thrust the digital divide into the spotlight, and industry, Congress, the White House, and the FCC responded with a bevy of programs and funding mechanisms. Together with advocacy from civil rights groups, community organizations, and school districts across the nation, this moment became the U.S.'s greatest opportunity to close the gap and get more communities online.

> ***"Access to the internet … is the civil rights issue of the 21st century."***
>
> ***REP. JOHN LEWIS***

Wireless internet in particular has had a major impact. Communities of color tend to over-index in wireless adoption due to factors that include attractive pricing tiers, such as pre-paid plans or discounted devices, along with its innate mobility and flexibility. These factors, along with wireless's widespread coverage, also help drive adoption for other groups that have lagged in internet adoption. As we continue our work to close this divide, it is important for government to continue working to build technology-neutral solutions that will maximize consumer choice and get everyone connected.

We must never forget why this issue is so important: access to reliable, affordable high-speed internet uplifts our communities in life-changing ways, opening doors that lead to improved opportunities for education, jobs, healthcare, community engagement, economic empowerment, and much more.

The Digital Divide

A Real Barrier to Opportunity in Our Connected Society

High-speed internet connections today open the doors to boundless opportunity for those who have access. Unfortunately, a gap has existed between the haves and the have-nots from the very beginnings of the personal computer's debut in the American home.[1] In the mid-1990s, this gap in ownership and adoption was coined the "digital divide,"[2]—and due to a mix of factors, some historical, communities of color were disproportionately among the "have-nots."

DIGITAL DIFFERENCES

In 1995, whites owned computers at nearly three times the rate of African Americans and Latinos.[3] And as internet connections became more common in U.S. households, many demographic groups, including African Americans, Latinos, non-English speaking Asians, tribal and rural populations, the elderly, and adults living with disabilities, were slow to adopt the technology, locking them out of internet-driven opportunities for growth and advancement.[4]

Researchers continued to study this phenomenon, and the Pew Research Center found that many households either *could not* or *chose not* to subscribe to an internet connection for one or more of several reasons. Top reasons included: (1) they had no service available in their area, (2) they could not afford it, (3) they did not understand how to use it, (4) they did not trust it, or (5) they did not see its usefulness, among others.[5]

Together, these factors drove the disparities in internet adoption for many, including communities of color,[6] low-income households, and rural populations.[7] African Americans and Latinos live in poverty at double the rate of non-Hispanic whites, making it a contributing factor in the rates at which these communities have lagged in adoption.[8] Similarly, rural populations, including large African American, Latino, and tribal communities in the South and West, have also historically been less likely to have access to high-speed internet.[9]

Industry, government, and community have made significant progress in closing these gaps—due in large part to wireless.

[4] *The Pew Research Center began studying this phenomenon in 2000, recognizing adoption gaps for people of color, Baby Boomers and senior citizens, and rural communities. In future studies, including the 2012 Digital Differences report, Pew also noted internet adoption gaps among the disabled in addition to these groups, along with trends and factors that either contributed to the digital divide or led to greater home and mobile broadband adoption across demographics.*

THE MINORITY WIRELESS MIRACLE

Despite the initial internet adoption disparities for many communities, wireless broadband has served as a major on-ramp to connectivity that helps to bridge these gaps. The technology's innate mobility-based flexibility, varied and attractive pricing tiers, and widespread coverage attract subscribership and adoption for many in underserved communities.

This phenomenon is not new. People of color have over-indexed in wireless internet use since at least 2011, when Pew began tracking and reporting such data.[10] That year, wireless internet use was nearly equal for African Americans, Latinos, and whites, with usage rates between 62% and 63% for all three groups.[11] Interestingly, at the same time, about 50% more African Americans and Latinos owned smartphones than whites.[12] And in another study, Pew even found that people of color over-indexed in their use of mobile apps to track or manage their health: 15% of African Americans and 11% of Hispanics had downloaded such an app, compared to just 7% of whites[13]—indicating that people of color were more quickly beginning to appreciate the opportunities mobile connectivity provided to improve their lives.

This "minority wireless miracle," as MMTC dubbed the phenomenon in the early 2010s,[14] was a significant factor in bridging the digital divide and providing underserved communities with the 21st century tools they need for advancement. Today, wireless internet connects more previously unserved and underserved groups than ever before—91% of adults in the U.S. are now connected to wired or wireless broadband, and 85% own a smartphone.[15] About 15% of adults solely use their smartphones for broadband internet access, and this number increases to 25% for Latino and 17% for African American adults.

Further wireless innovation, expansion, policies, and programs are enabling even greater access and adoption—delivering more avenues for connectivity and bridging the digital divide.

Getting Connected

How Wireless Plays Key Roles in Connecting Communities of Color

Mobile broadband offerings have played a major role in narrowing the digital divide, delivering high-speed connectivity to those who may not otherwise have had access. For example, although rural populations have historically lagged in internet access and adoption, rural smartphone ownership increased by 9 percentage points from 2019 to 2021.[16] Today, 80% of rural populations—many of which are majority-minority—own a smartphone compared to 84% of suburban and 89% of urban populations.[17]

When it comes to smartphone and tablet ownership for communities of color nationwide, disparities disappear: A 2021 Pew study found that 85% of African Americans and 83% of Latinos own smartphones, compared with 85% whites.[18] Similarly, 54% of African Americans and 53% of Latinos own tablets, compared with 53% of whites.[19] It is clear that consumers across the country value wireless service.

Wireless addresses some of the greatest barriers to broadband adoption, providing both widespread access and affordable pricing structures that attract people of color, low-income households, rural populations, and other unserved and underserved groups, helping to narrow the digital divide.

ACCESS

A key driver for wireless broadband adoption is access: America's nationwide 5G networks are expanding at a remarkable pace, granting hundreds of millions of households access to the fastest generation of wireless yet—up to 100x faster than 4G. And even though the networks just launched in 2018, 5G already covers 315 million people across the country and counting,[20] thanks to major providers' rolling out 5G nationwide nearly 1.5 times faster than 4G.

The previous generation of wireless, 4G, covers even more households, blanketing 99.9% of the nation.[21] And now, new technology is delivering 5G to the home, granting new, competitive options for high-speed home broadband access to millions more.

Offerings like 5G for home broadband service—also called 5G fixed wireless access (FWA)—are a welcome solution for those who live in areas that were previously unserved by home broadband. 5G FWA delivers quick buildouts to homes in rural and remote areas, as well as urban and suburban households that may lack high-speed internet access. [22] With its high bandwidth, 5G FWA can support many devices at once, including wireless devices such as smartphones and tablets, as well as wired devices such as laptops and desktop computers. Combined with its low

latency that enables quick response time, it can support multiple members of a single household simultaneously, whether they are teleworking, attending online classes, visiting with doctors, engaging with friends, or simply watching videos.

The service is already available for more than 40 million households,[23] and providers are expanding deployment rapidly, growing by more than 450% in the past year.[24] At the current pace, the number of households with access to connections that are able to reach 100/20 Mbps speeds will increase 16x by 2025.[25]

5G FWA can help connect more homes for rural areas in particular. As mentioned previously, rural areas often have significant diverse populations, with people of color accounting for 24% of rural America in 2020, including a substantial number of majority-minority rural counties in the South and West.[26] Accenture estimates that wireless providers' 5G FWA deployments could serve up to nearly half of America's rural households, with at least one new provider serving each community.[27]

All of these factors make 5G for home broadband and other wireless options a viable pathway toward achieving widespread digital equity as expanding accessibility continues to narrow broadband adoption gaps.

AFFORDABILITY

Another key driver for wireless adoption is affordability: Real wireless prices have decreased over time, and as compared with U.S. inflation. And as mobile broadband has become more affordable, greater proportions of communities have adopted it as their on-ramp to connectivity. For example, the share of Americans with lower incomes who solely use their smartphones to go online has roughly doubled since 2013, increasing from 12% to 27%.[28]

Several factors have contributed to mobile broadband's relative affordability, including low initial costs and robust competition.

U.S. Wireless Prices Have Steadily Declined Since 1997

Over the long-term, since the Bureau of Labor Statistics (BLS) first established its Wireless Price Index in 1997, overall wireless prices fell by more than 50 percent through 2021. The Index, which tracks changes in wireless costs for consumers over time, indicates that wireless costs fell 13.5 percent from the start of 2015 through April 2021.[29] These declining prices, especially in relation to the costs of other consumer goods, are a significant consideration for low-income consumers.

Lower Initial Connection Cost

Intense competition between wireless providers drives remarkable offers on smartphones, creating a market of wireless devices that are often cheaper and more accessible compared to laptops and computers.[30] They are also more versatile, serving more than one purpose, which adds to

their value. Today's wireless experience offers more, for less—and communities of color agree. People of color say that mobile internet service is less expensive (>50%), faster (~83%), and offers more value (~75%) than it did five years ago.[31]

Lots of Competition and Many Low-Cost Options

In addition to the four largest wireless carriers—AT&T, T-Mobile, Verizon, and UScellular—hundreds of mobile virtual network operators, or MVNOs, offer wireless service to consumers. MVNOs purchase mobile wireless services such as talk, text, and data wholesale from the major operators, then resell these services to consumers at competitive rates. Offerings from a number of providers—including three major national carriers, dozens of regional carriers, and hundreds of low-cost providers—results in a range of affordable options for consumers, including prepaid plans and other low-cost offerings, reducing barriers to broadband adoption.

FLEXIBILITY

In addition to access and affordability, many choose to adopt wireless for its flexibility—wireless connectivity is inherently flexible, giving consumers the freedom to connect wherever they go.

Competition drives flexibility further, as consumers can choose between a variety of carriers that offer a wide range plans to fit their needs, from unlimited data to prepaid and no-contract options, as outlined above. In addition, competition has made it easy for wireless customers to select and change carriers, plans, devices, or the number of people on their accounts—making it easy to adjust wireless services for changing lives.

These factors are particularly beneficial for transient and home-insecure individuals and families. The COVID-19 pandemic both emphasized and exacerbated this issue for low-income populations and other vulnerable groups. The Center for Economic and Policy Research found that African American and Latino renters have seen particularly large increases in housing insecurity, with roughly 44 percent of renters in both groups reporting housing insecurity during the pandemic, an increase of about 11 percentage points for Latino renters and 7 percentage points for African American renters since 2019.[32]

Connectivity is critical for individuals and families who may be unhoused or forced to frequently relocate, and the mobile nature of wireless can make it a useful tool for those without a permanent home address. In times of instability, wireless offers a stable connection to jobs, healthcare, education, family, and support services.

[31] For example, Samsung released its Galaxy S22 smartphone in February at prices ranging from $799 to $1199 for various versions. As of May, the major carriers and other providers are offering deals that enable customers to purchase the phone for as little as $99, or free with trade-in.

Connecting to Opportunity

Evolving Technologies Meet More Needs and Provide More Opportunities

There is no question today that internet access is integral to full participation and advancement in modern society. For communities of color in particular, which have historically faced inequities in access to resources for advancement, a connection to the internet means a connection to opportunity. And for millions of families, these opportunities are made possible through wireless connections.

As wireless technology has continued to evolve, it has both increased access to these connections and enhanced the ways lives can be transformed.

5G USE CASES IMPACT REAL LIVES IN REAL WAYS

5G, the latest generation of wireless technology, delivers applications that are transforming entire industries and impacting individual lives. It is important for our communities to realize that 5G's high speeds, high bandwidth, and low latency translate to more than downloading videos faster. 5G can handle a lot of data processing and connections at once, and it has very low lag time when connecting from device to device or user to user.

Here's what 5G's capabilities mean: vastly improved quality of life for communities of color as this wireless connectivity improves our healthcare outcomes, transforms the way we learn and work, reduces the impacts of climate change, and much more.

Access to Education

As wireless helps to close the digital divide, it also addresses the education divide. In early 2020, the COVID-19 pandemic shined a light on the disparities communities of color have always faced in education as school was suddenly forced online—but even before the pandemic, children of color often lacked the connectivity they needed outside of school to complete homework assignments and thrive academically. A Pew study found that in 2018, African American and lower-income students were especially likely to be impacted by the digital homework gap, a term coined by FCC Chairwoman Jessica Rosenworcel.[33] Twenty-five percent of African American and 24% of low-income teens said they were sometimes or often unable to complete homework because they did not have access to a reliable computer or internet connection.[34] When classrooms moved online just two years later due to COVID-19, many families that lacked adequate broadband connectivity worried about their children falling behind in school in addition to the public health crisis.

Thankfully, Congress, the FCC, and wireless providers worked quickly to connect students to the tools they needed to participate in distance learning and remotely engage with their classmates and teachers. Over the course of the pandemic, the wireless industry connected over 2.4 million students with free and discounted

devices and data plans, as well as millions of dollars in donations and resources.[35]

But basic connectivity is just the tip of the iceberg when it comes to education. 5G technology can also revolutionize the way children learn as it connects them with entirely new experiences. For example, many children of color and those from low-income families often lack the opportunity to travel far beyond their own neighborhoods and hometowns. With 5G, classrooms can implement virtual reality (VR), augmented reality (AR), and extended reality (XR) technology[36]—all of which visually immerse users into new environments. Students can be transported to the Apollo Theatre in Harlem, or they can interact with a jaguar in the Amazon. Entire classrooms can tap into the Internet of Things to engage with these environments and each other, virtually, in real-time, *simultaneously*—without ever leaving the classroom.

These experiences are made possible today thanks to 5G's high capacity and low latency, which enable multiple devices to connect, interact, and share huge amounts of information with each other at once, with negligible lag time. For young people, this technology can erase the barriers imposed by a lack of income or resources. 5G holds enormous potential to expand children's views of what is possible for them to see, do, and achieve in their lifetimes.

Jobs and Training

In addition to the education gap, communities of color have also faced skills and unemployment gaps that have locked many out of opportunities for high-skilled jobs. Various studies have also shown that people of color often face unemployment rates anywhere from double to *six times* the national average in some areas.[37]

5G can help as it revolutionizes industries across the nation, transforming work and skills training as we know it. The newest technologies provide new opportunities for our communities by creating jobs, improving safety and efficiency, streamlining job education and training, opening doors for remote work, and enabling jobseekers to apply for jobs and take training classes from their devices.

A recent Pew study found that nearly 60% of workers whose work can be performed at home are working from home some or all of the time.[38] Reducing or eliminating commutes grants workers more time to spend with their families, access healthcare, further advance their education or skills training, and more. It also provides welcome relief for families with tight budgets as recent surges in gas prices have increased financial pressures.

For workers whose jobs cannot be performed remotely, 5G can significantly enhance training, safety, and efficiency. For example, Seattle-based company Taqtile is partnering with the 5G Open Innovation Lab, AT&T, T-Mobile, Verizon, and others to pair 5G with augmented reality and mixed reality in a work-instruction platform that enhances training for front-line workers in industries such as manufacturing, energy, and defense.[39] The technology digitizes work processes and enables workers to use headsets to view and physically interact with blueprints, instructions, tooltips, and even remote trainers overlaid on the equipment in their real-world work environment.[40]

5G can also enhance worker safety in industrial and factory environments. For example, 5G's

low latency enables technology such as light curtains—invisible light beams between an operator and a dangerous piece of machinery that trigger an emergency stop function when the beams are crossed.[41] This technology can save fingers, limbs, and lives—as long as the signal can travel quickly from the light beams to the server that stops the machinery and back. 5G's low latency can allow this to happen, along with countless other industrial safety applications that are actively being explored and implemented today.

Climate Change

Princeton reports on the disparate impacts of climate change on vulnerable communities, including those who suffer from socioeconomic inequities—and particularly people of color. The most pressing climate change issues, such as air quality, ocean acidification, and natural disasters all cost much greater financial and physical hardship on communities of color.[42]

For example, African Americans are 75% more likely to live near commercial facilities that produce noise, odor, emissions, or other pollution that directly impacts the population.[43] The majority of African Americans consider air and water pollution, drinking water safety, and a lack of green spaces and parks to be major problems in their local areas, and we see the impact of these issues through health problems such as asthma, which affects African American children at nearly double the rates of white children.[44]

But there is hope—thanks to the power of technology, we now have the tools to address these issues, along with national emissions reduction goals. The Biden Administration has set major climate change goals to reduce and neutralize emissions over the near- and long-term. New high-speed internet technologies will play a significant role in enabling the U.S. to meet these goals, with 5G-enabled use cases alone projected to make up to a 20% contribution toward the country's carbon emission reduction targets by 2025, according to Accenture.[45]

5G will achieve this through infrastructure and applications that impact several industries. In transportation, for example, 5G connected traffic lights and roads can manage traffic flow, improve public transportation, and reduce emissions. This can lead to carbon reductions equal to the amount removed by 106 million acres of forests every year. Unsurprisingly, Accenture reports that "5G is poised to be the greenest generation of network technology yet."[46]

Healthcare

As noted above, communities of color face significant gaps in healthcare. These communities are at higher risk for many chronic diseases, they on average have fewer financial resources to cover medical expenses, and they are often not as well-positioned to take time off work for or travel to medical appointments. African Americans, Latinos, tribal populations, and other minority groups over-index in many chronic health issues, such as diabetes,[47] hypertension,[48] and asthma.[49]

High-speed internet connectivity addresses many of these issues by helping vulnerable communities access improved healthcare, telehealth visits, remote health monitoring, and other health tools. FCC Commissioner Brendan Carr has touted the benefits remote healthcare offers, including for the chronic issues that

disproportionately impact communities of color. As Commissioner Carr recently noted, "[Health care] facilities have been using connected care technologies to address a number of healthcare needs, from diabetes to strokes, from mental healthcare to alternative pain management, from maternal care to pediatrics."[50]

Wireless 5G technology further enhances these telehealth capabilities, including AR-assisted pre-surgical planning and remote robotic assistance, diagnostic image transmission that enables remote patient consultation and 3D-rendered clinical team training, real-time patient monitoring, and more.[51] Further applications include remote surgery and access to specialists and life-saving procedures from thousands of miles away.

Telecommunications technology, along with ongoing advancements in 5G applications, will help address the major health inequities faced by our communities and vastly improve quality of care and quality of life.

Community Empowerment

Wireless connectivity provides access to information on community events and opportunities, economic empowerment programs, real-time information on neighborhood threats, community and social support, the power to record and share interactions with other community members or authority figures to assist with the criminal justice process, and more.

CLOSING THE GAPS IN WIRELESS LIMITATIONS

Wireless devices are an important tool for connecting those who can't afford computers and laptops—but limitations still exist. For example, some online forms cannot be completed on mobile devices as many websites still lack mobile versions or support.

Both web and mobile technology continue to evolve—major websites, education programs, healthcare providers, and essential services now offer mobile compatible versions at one end. At the other end, manufacturers and wireless providers continue to enhance their devices and offerings with both hardware and software that enables users to seamlessly access and interact with the online tools they need. Although gaps persist, wireless has been and will continue to be a welcome solution to address the barriers millions still face in getting online.

Samsung Insights notes that we've witnessed "the evolution of mobile computing technology firsthand over the past decade, but probably don't fully appreciate how much it has increased our productivity."[52] Today's smartphones are not just more powerful than technology used to send astronauts to the moon, but "faster than the laptops most of us are carrying around today."[53]

As society evolved to embrace the benefits of internet technology through wireless hardware, it became increasingly apparent that software offerings must, too, evolve to ensure their users also have access to the tools they need to advance in our digital society. Today, software and mobile app offerings are catching up—innovators are using the cross-platform capabilities of mobile

technology to help connect people to education, jobs, and other services.

For example, mRelief is an easy-to-use platform available on the web and via text and voice messaging that enables Americans to sign up for SNAP benefits. The program uses text messaging to reach families through their mobile phones. mRelief also created Johnnie, a Customer Relationship Management technology, designed specifically to enable caseworkers to connect to their SNAP clients remotely instead of in-person.[54]

For those who transitioned to remote work and school during the COVID-19 pandemic, productivity and workplace apps, including the Microsoft Office app releases on iOS and Android devices, offered welcome support as the nation locked down. At the same time, there were nearly a billion educational apps available on Android and iOS mobile devices to help students adapt to remote learning,[55] and education app downloads nearly doubled compared to the end of 2019.[56]

These developments appear to be on track to continue driving the "minority wireless miracle," discussed above, that MMTC predicted over a decade ago.

Policies and Programs to Promote Access

Government and Industry Policies and Programs Evolve to Keep Pace with Technology

America's wireless industry continues to evolve its networks and deliver applications that will transform nation, industry, and community. Amidst this innovation and the need for connectivity, government leaders, community groups, and connectivity providers have redoubled their efforts to get everyone online.

To that end, the U.S. has made enormous progress toward getting everyone connected. Through widespread innovation and investment from industry, along with concerted efforts from federal, state, and local policymakers, wireless connectivity has been granted to millions of people and had a major impact on the digital divide.

It is important to continue this momentum with technology-neutral policies and programs that spur deployment, upgrades, and innovation.

INDUSTRY PROGRAMS AND OFFERINGS

In recent remarks, FCC Commissioner Geoffrey Starks called for a "whole-of-nation approach by federal, state, and local leaders and action from the public and private sectors" to continue to "meet disconnected Americans where they are."[57] In addition to government efforts, industry is rising to the challenge.

Industry Programs

The three nationwide wireless carriers—AT&T, T-Mobile, and Verizon—all provide numerous offerings to connect underserved communities, including discounted mobile offerings, tuition reimbursement and educational support, community outreach programs, and training opportunities for youth, low-income individuals, and people of color.

In 2021, for example, AT&T pledged to invest $2 billion over the next three years to help address the digital divide—doubling the $1 billion investment it made over the previous three years.[58] As part of its efforts, AT&T is opening 20 new Connected Learning Centers in under-resourced communities across the country, including Dallas, Cleveland, and Detroit.[59] The Centers connect students and families to free internet, computers, digital learning resources, and education, tutoring, and mentoring services, with the goal of creating a safe space for communities to participate in online learning, job searches, and more.

In addition to delivering free, safe connectivity to the communities that need it most, AT&T supports diverse businesses as part of its extensive supplier diversity program. The Connected Learning Centers and diverse supply chain commitment complement each other to achieve AT&T's common goals—AT&T partners with

Overland-Tandberg, an African American-owned, global IT firm, to direct computer installation and configuration at the Connected Learning Centers. In fact, AT&T spent over $3 billion with African American-owned businesses in 2020 alone, contributing to a $13.2 billion spend in diverse businesses that year, and over $200 billion in the past 52 years.[60]

Similarly, Verizon has pledged $3 billion through its Citizen Verizon plan to support economic, environmental, and social advancement. As part of this plan, Verizon's Innovative Learning program works to address barriers to digital inclusion by connecting students, teachers, schools, and districts with free internet access, devices, and innovative, next-generation technology-infused lessons.[61] Verizon's Innovative Learning HQ online education portal further supplies lesson plans, credentialed professional development, and even cutting-edge resources that use augmented reality and immersive media that enable students to learn about anything from creating and designing product prototypes to imagining life on Mars.[62]

These efforts support Verizon's goal of providing digital skills training to 10 million youth, along with resources to help more than 1 million small businesses thrive in the digital economy, by 2030.[63] So far, Verizon, in collaboration with its partner Digital Promise, has supported over 400,000 students, 28,000 teachers, and 500 schools.[64] Additionally, Verizon Skill Forward, an upskilling/reskilling program in partnership with Generation USA, aims to prepare 500,000 workers for high-demand digital roles—maximizing job creation and minimizing displacement as technology advances and disrupts today's job market—by 2030.[65]

As part of its commitment to bridge the digital divide, T-Mobile has pledged $10.7 billion over five years through its Project 10Million initiative to provide free and heavily subsidized connectivity and mobile devices to millions of underserved student households. [66] This was just one of three promises T-Mobile committed to when it merged with Sprint, along with adding new low-cost prepaid plans and free 5G service for first responders. Through partnerships with school districts, T-Mobile's Project 10Million offers wireless hotspots, high-speed data, and access to affordable laptops and tablets to underserved student households.

In addition, T-Mobile unveiled three new programs in 2021 to support diverse students, technology professionals, and business owners. Through Magenta Scholars, T-Mobile has partnered with the Thurgood Marshall College Fund and donated $500,000 to create 18 scholarships for HBCU students.[67] Through its NextTech Diversity Program, T-Mobile is helping thousands of underrepresented candidates pursue careers as 5G network technicians over five years through a partnership with The Learning Alliance, creating long-term careers in roles such as tower climber, 5G small cell technician, and field technician.[68] And through Magenta Edge, T-Mobile provides digital resources and support for small business owners to address systemic barriers, grow, and scale their businesses.[69]

All three major carriers, and many regional wireless providers, also participate in the FCC's Affordable Connectivity Program, a $14 billion fund that connects eligible low-income households—including those on the SNAP program for free and reduced school lunches, the WIC nutritional program for low-income parents, Medicaid, federal

public housing assistance, supplemental security income, veterans pension or survivor benefits, and qualifying tribal households—with access to free and discounted home and mobile internet they need for work, school, healthcare, and more.[70]

In total, the three companies have pledged over $15.7 billion over the next several years toward closing the digital divide, and they invested nearly $22 billion in diverse suppliers in 2020 alone.[71] AT&T and Verizon are also members of the Billion Dollar Roundtable, a group of companies that each spend more than $1 billion annually with diverse suppliers, and T-Mobile is on the path to join them.

Low-Cost and Prepaid Offerings

Major wireless companies and MVNOs also offer low-cost and prepaid mobile options, such as AT&T subsidiary Cricket Wireless, DISH subsidiary Boost, T-Mobile subsidiary MetroPCS, and Verizon subsidiary Tracfone. At low costs and with no contracts, these flexible offerings are highly attractive to communities of color and low-income households.

There are about 74 million prepaid subscribers in the United States as of Q3 2020.[72] These offerings are welcome options for underserved groups, and low-income individuals in particular, granting them access to opportunities for economic empowerment.

FEDERAL PROGRAMS

The Federal Communications Commission has long recognized the importance of access to basic communications services, from the establishment of the Lifeline program in 1985 to connect low-income households to home telephone service, to its efforts to bridge the homework gap and keep Americans connected during the COVID-19 pandemic.[73]

FCC Programs Evolve with Technology

Following the FCC's establishment of the Lifeline program in 1985, the agency expanded its commitment to connecting America to telecommunications service through the creation of the Universal Service Fund (USF) in 1997. USF provides four core programs: the Lifeline program for low-income households, the E-Rate program for schools and libraries, the High Cost Fund for expensive-to-serve areas, and the Rural Health Care Program to supplement rural telehealth costs.

As USF's original program, Lifeline represents the importance of ensuring telecom policy evolves with technology. Although the program was created in 1985 to support wireline phone service, the program evolved over time to include wireless phone support, home broadband, and wireless broadband access.

Wireless Connectivity in the COVID Era

Congress recognized the urgency of facilitating affordable broadband in the wake of the COVID-19 pandemic as communities of color, low-income communities, rural households, and other unserved and underserved populations faced

increased challenges when education, civic services, and other essential needs moved online.

In 2021, Congress allocated $3.2 billion for the Emergency Broadband Benefit (EBB) and an additional $14 billion in the Infrastructure Investment and Jobs Act (IIJA) for the longer term Affordable Connectivity Program (ACP). NTIA received $42 billion for the Broadband Equity Access and Deployment (BEAD) Program. This amounts to a historic investment in broadband access and digital inclusion.

When EBB users were given the choice on how to connect, about two out of three chose wireless—underscoring the value millions place on mobile connectivity, as well as the importance of technology-neutral policies and programs that allow households to select the connectivity options that best fit their needs.[74]

Together, programs like EBB, ACP, BEAD, and the Universal Service Fund can help connect our communities by improving the affordability of home and mobile broadband for households and individuals, as well as improving its affordability more broadly in schools and other public buildings.

Community Connections

Nonprofit and community-based organizations also play a major role in connecting their communities—both as hubs that often provide access to much-needed internet technology, and also as sources of information that flows to and from community members and government leaders.

MMTC launched a new coalition, Black Churches 4 Broadband, to educate members of the African American community about broadband internet assistance programs, encourage unconnected households to get online, and advocate for a permanent broadband benefit.[75] In 2022, MMTC renamed the initiative Black Churches 4 Digital Equity and evolved its efforts to further ensure communities of color learn about and take advantage of low-cost broadband options, as well as become active participants in advancing digital equity at state and local levels. MMTC and the coalition have held and participated in numerous events with churches, communities, and municipalities, discussing the importance of working toward digital equity through programs such as the Affordable Connectivity Program and Emergency Connectivity Fund;[76] and providing guidance to states and municipalities on how to access this funding to support digital equity and infrastructure buildout.[77]

Policymakers Can Help Communities of Color Get and Stay Connected through Targeted, Technology-Neutral Programs

Policymakers have significantly advanced high-speed internet access and adoption, connecting millions of people across the country through focused policies, programs, and partnerships. As leaders from Congress, the FCC, states, and municipalities continue their efforts to close the remaining gaps, they should build on the proven policy successes that encourage innovation and investment.

To close the digital divide, policymakers should focus on: 1) further expanding access, 2) increasing adoption, and 3) encouraging skill development.

EXPANDING ACCESS

The U.S. has made impressive progress toward expanding high-speed internet access from coast to coast. This progress has largely been driven by policies that encouraged industry investment; lowered barriers to buildout in urban and rural areas, states, and municipalities; and promoted both wired and wireless broadband connectivity options.

Building on this success toward expanding access, policymakers should:

- Continue to encourage technology neutrality as the federal government and states stand up programs to disburse the massive broadband funding in the bipartisan infrastructure bill, as both wired and wireless solutions will be needed to reach all populations.
- Continue to protect and promote pro-investment policies, such as siting reforms, at all levels of government.
- Ensure Universal Service Fund programs are technology-neutral.

ENCOURAGING ADOPTION

While government policies have addressed many of the reasons communities of color, low-income households, and other groups choose not to adopt broadband, 9% of the country remains disconnected.[78] For those who have access to high-speed internet connections but remain offline due to other barriers such as affordability, leaders should advance policies that address these issues.

To encourage adoption, policymakers should:

- Promote competition to provide choice for consumers.
- Help connect low-income households and families through properly funded connectivity programs.
- Ensure the ACP has a permanent funding source, and with Congress appropriating the money to do so.
- Ensure connectivity programs provide families the flexibility to select the broadband solutions that work best for them.

FOSTERING INCLUSION

Inclusion requires intentionality. Well-meaning policies and programs can unintentionally exclude some communities and groups because they do not account for historical, social, economic, geographic, or other factors that are specific to these groups. From the Universal Service Fund to the Affordable Connectivity Program, policymakers have been intentional, strategic, and inclusive in their drive to connect everyone. To foster digital inclusion among underrepresented communities, policymakers should:

- Collaborate with community partners to build inclusive programs that address barriers to connectivity.
- Develop best practices and programs to create awareness and adoption of broadband services and devices.

By ensuring future policies embrace approaches that expand access, encourage adoption, and foster inclusion, policymakers will move us closer to connecting all of our communities.

Conclusion

Access to a wireless connection is access to opportunity. As we work to bridge the digital divide once and for all, our communities edge closer to accessing the full breadth of opportunities available in today's digital world. By continuing our whole-of-government, technology-neutral approach, substantial industry investment, and public-private partnerships, we will provide under-resourced communities with as many options as possible.

Connecting families to high-speed internet connects them to a vastly improved quality of life, including economic empowerment, improved healthcare outcomes for chronic illnesses, broader opportunities for advanced education, safer workplaces, and much more. And wireless's flexibility, accessibility, and affordability have played key roles in bridging the gaps.

In spite of our progress, we must never become complacent in our advocacy. Today, our communities have greater access to connectivity than ever before—but our work is not done. With continued investment, forward-thinking policies, and on-the-ground advocacy from government, industry, and public policy and community organizations, we will enable our communities to harness the power of the internet and connect to opportunity.

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MMTC
Multicultural Media, Telecom & Internet Council

The Multicultural Media, Telecom and Internet Council (MMTC) is the tech, media, and telecom (TMT) industries' leading non-partisan, national nonprofit diversity organization. Since opening our doors in 1986, MMTC has worked tirelessly to promote and preserve equal opportunity, civil rights, and social justice in the mass media, telecom, and broadband industries, and to close the digital divide on behalf of its members and constituents, including owners of radio and television broadcast stations, programmers, prospective station owners, and others involved in the TMT industries.

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CTIA® represents the U.S. wireless communications industry and the companies throughout the mobile ecosystem that enable Americans to lead a 21st century connected life. The association's members include wireless carriers, device manufacturers, suppliers as well as apps and content companies. CTIA vigorously advocates at all levels of government for policies that foster continued wireless innovation and investment. The association also coordinates the industry's voluntary best practices, hosts educational events that promote the wireless industry and co-produces the industry's leading wireless tradeshow. CTIA was founded in 1984 and is based in Washington, D.C.