



# **AT&T's Digital Redlining Leaving Communities Behind for Profit**

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AT&T is making the digital divide worse and failing its customers and workers by not investing in crucial fiber-optic buildout that is the standard for broadband networks worldwide. An analysis of AT&T's 21-state network, an August 2020 survey of CWA members, and reports by local advocates in AT&T's service area reveal widespread service below the Federal Communications Commission's broadband definition of 25/3 Mbps and demonstrate AT&T's disinterest in building fiber-optic cable.

In all, AT&T has made fiber-to-the-home available for fewer than one-third of the households in its network. AT&T's employees -- many of whom are Communications Workers of America (CWA) members -- know that the company could be doing much more to connect its customers to high-speed Internet if it invested in upgrading its wireline network with fiber. They know the company's recent job cuts -- more than 40,000 since 2018 -- are devastating communities and hobbling the company's ability to meet the critical need for broadband infrastructure.

Community stakeholders have for years called on AT&T to upgrade service, but often in vain. **During the pandemic, as more people than ever are relying on internet service for vital everyday activities, and as the country begins its long recovery from the economic crisis, AT&T must do more to make broadband available to its customers.**

## Executive summary

- AT&T has made fiber-to-the-home available to fewer than a third of the households in its footprint.
- Across rural counties in AT&T's footprint, only 5 percent of households have access to fiber.
- For 28 percent of the households in its network footprint, AT&T's internet service does not meet the FCC's 25/3 Mbps benchmark to be considered broadband.
- AT&T prioritizes network upgrades to wealthier areas, leaving lower income communities with outdated technologies -- households with fiber available have median income 34 percent higher than those with DSL only.
- Of technicians with knowledge of AT&T's fiber plant, 93 percent strongly agreed (670/870) or agreed (135/870) that AT&T could be building more fiber.
- Of techs with knowledge of fiber deployment, 63 percent (546/869) report that in their work areas, AT&T is not installing splitting equipment to enable home connections even where a fiber backbone exists.

## Recommendations



- Invest in next-generation networks -- AT&T should commit to capital investment in fiber deployment that would double the number of households passed by fiber in two years. If AT&T invests one quarter of its annual free cash flow (projected to be more than \$25 billion) into rapid fiber deployment, it could deploy to more than 6 million locations per year.<sup>1</sup>
- Stop leaving rural communities behind -- AT&T must upgrade its network in rural communities to meet the FCC's broadband definition, at least, and renew its efforts to deploy next-generation fiber.
- Stop leaving parts of urban communities behind -- AT&T must renew its efforts to equitably deploy next-generation fiber in urban locations.
- Make its low-income product more accessible -- AT&T should invest more in advertising these products and agree to bulk sales of its wireline service to school districts and other public entities which redistributes plans to households.
- Invest in good jobs -- AT&T must stop laying off its skilled, unionized workers and stop outsourcing work to subcontractors in order to pay lower wages and avoid being held legally responsible for the subcontractors' conduct.

## Background:

AT&T is the largest communications company in the world, yet it has not grown its broadband subscriber base at the pace of its cable competitors. While AT&T has 14 million broadband subscribers, Comcast has 27 million residential subscribers to broadband and Charter has 26 million.<sup>2</sup> As a leader in both broadband and wireless networks with significant capital resources, AT&T should be upgrading its current customers and deploying the infrastructure of the future to new locations. Instead, AT&T largely halted its national build-out of fiber to residential homes in mid-2019 after it met FCC-imposed conditions following the acquisition of DIRECTV.<sup>3</sup>

This report details AT&T's failure to upgrade its current customers to next-generation fiber infrastructure or deploy that infrastructure to unconnected and underconnected communities. An analysis of AT&T's 21-state network,<sup>4</sup> an August 2020 survey of CWA members, and reports by local advocates in AT&T's service area detail insufficient internet speeds that do not meet the FCC's definition of broadband and AT&T's disinterest in building fiber-optic cable that is the standard for broadband networks worldwide. AT&T has made fiber-to-the-home available for fewer than a third of the households in its network. And AT&T's employees -- CWA members -- know that the company could be doing more to connect its customers to high-speed Internet by upgrading its wireline network with fiber.

## The Digital Divide in AT&T's Territory

High-speed broadband internet is essential infrastructure. AT&T's failure to upgrade and maintain its broadband infrastructure equitably has left millions of urban and rural households without access to true high-speed internet. Even where that access is available from another provider -- typically a cable provider -- consumers are deprived of the benefits of competition in price, choice, and service quality.

Without competition for market share, providers have minimal incentive to expand the market by recruiting and supporting new broadband adopters -- for example, by promoting low-income discount programs or investing in community digital inclusion partnerships. NDIA's affiliates report that their community members who qualify for the AT&T's low-income discount offering, *Access from AT&T*, often find that the data speeds available at their homes are too slow for the video-intensive applications they need for school, work, and telemedicine.

These problems are usually associated in the public mind with rural communities. But millions of urban households experience them, too, as a direct result of AT&T's longstanding failure to invest equitably in low-income city neighborhoods.<sup>5</sup>

## Who Is Not Connected

**18 Million U.S. Households do not have broadband of any kind**, including mobile and satellite.



**14 Million Households in URBAN Areas**



**4 Million Households in RURAL Areas**

Source: U.S. Census. American Community Survey.

## AT&T Network Analysis

An analysis of AT&T's 21-state network reveals widespread service below the FCC's broadband definition of 25/3 Mbps and AT&T's disinterest in building fiber-optic cable that is the standard for broadband networks worldwide.

**Fiber build-out stalled:** AT&T has made fiber-to-the-home available to fewer than a third (28 percent) of the households in its footprint as of June 30, 2019 (14,928,408 households with fiber access out of 52,968,052 total households). AT&T's fiber-to-the-home buildout is worst in Michigan (14 percent of households), Illinois (15 percent), Mississippi (15 percent), and Arkansas (16 percent). Across the predominantly rural counties in AT&T's national footprint, only 5 percent of households (217,284 out of 4,442,675) have access to fiber.<sup>6</sup>

**Failure to meet FCC broadband benchmark:** In addition to abysmal fiber deployment levels, AT&T's internet speeds fall short of modern standards. For 28 percent of the houses in its network footprint, AT&T's internet service does not meet the FCC's 25/3 Mbps benchmark to be considered broadband. It's even worse in some states: For 49 percent of its network footprint in Oklahoma and for 45 percent of its network footprint in Mississippi, AT&T's internet service does not meet the FCC's benchmark.

AT&T is leaving rural communities stuck in the slow lane. Across the predominantly rural counties in AT&T's national footprint, 72 percent of households (3,195,380 out of 4,442,675 households) do not have access to high-speed broadband as defined by the FCC. In 349 of these 651 predominantly rural counties, 10 percent or fewer of households in AT&T's footprint have access to high-speed broadband.

**Income disparities define deployment:** The analysis of AT&T's network reveals that the company is prioritizing network upgrades to wealthier areas, and leaving lower income communities with outdated technologies. Across the country, the median income for households with fiber available is 34 percent higher than in areas with DSL only -- \$60,969 compared to \$45,500. A similar disparity exists for households where AT&T does not meet the FCC speed threshold. A report from the California Public Utilities Commission report states, "AT&T's investments in fiber upgrades have tended to favor higher-income communities, such that wire centers that serve areas with the lowest household incomes are also characterized by the poorest service quality."<sup>7</sup>



**72 PERCENT** of households in rural counties in AT&T's footprint **DO NOT** have access to high-speed broadband.

**FEWER THAN A THIRD** of households in AT&T's footprint have access to fiber internet.

## Case Study of AT&T Deployment: The Central Valley of California



The Central Valley of California is a largely agricultural region where farmworker families live in small colonias, but there are also significant population centers like the City of Fresno. Despite the critical role of the Central Valley in producing our food supply, AT&T has deployed fiber to 10 percent or fewer households in the counties of Kings, Tulare, and Madera. In Kings County, 45 percent of households do not have access to service that meets the FCC standard for broadband, while in Tulare County, 36 percent of households lack that access.

Access issues are compounded by low adoption rates due to unaffordability. Even in the more populous Fresno County, where AT&T claims it has made broadband available to 81 percent of households at speeds that meet the FCC standard, Census data for 2019 shows that 30 percent of households lack any type of home internet subscription.<sup>8</sup> Fresno has a poverty rate of 20 percent, compared to 12 percent nationally, creating serious barriers to broadband adoption.<sup>9</sup>

### Urban Inequity and Failure to Upgrade Service

AT&T is also failing to make fiber available to the majority of its customer base in cities. While most of AT&T's fiber build has focused on urban areas -- 96 percent of households with access to fiber in AT&T's footprint are in predominantly urban counties -- the company hasn't built enough fiber to reach the majority of urban residents. Seventy percent of households in urban counties still lack access to fiber from AT&T because the company has made fiber available to only 14.7 million households out of 48.4 million total households in these counties.<sup>10</sup> The network simply has a limited reach to customers on the ground in these counties.

While AT&T ramped up its fiber build in some urban areas to fulfill regulatory requirements during a three year period -- 2016 to 2019 -- this build has not significantly closed the digital divide, due to a combination of unavailability and unaffordability.<sup>11</sup>

AT&T has a documented history of unequal deployment to low-income communities in cities. In 2017, NDIA began drawing attention to AT&T's digital redlining of low-income neighborhoods. Analyzing FCC Form 477 and poverty rates from the Census' American Community Survey, NDIA issued reports for Cleveland,<sup>12</sup> Dayton,<sup>13</sup> Detroit, and Toledo.<sup>14</sup>

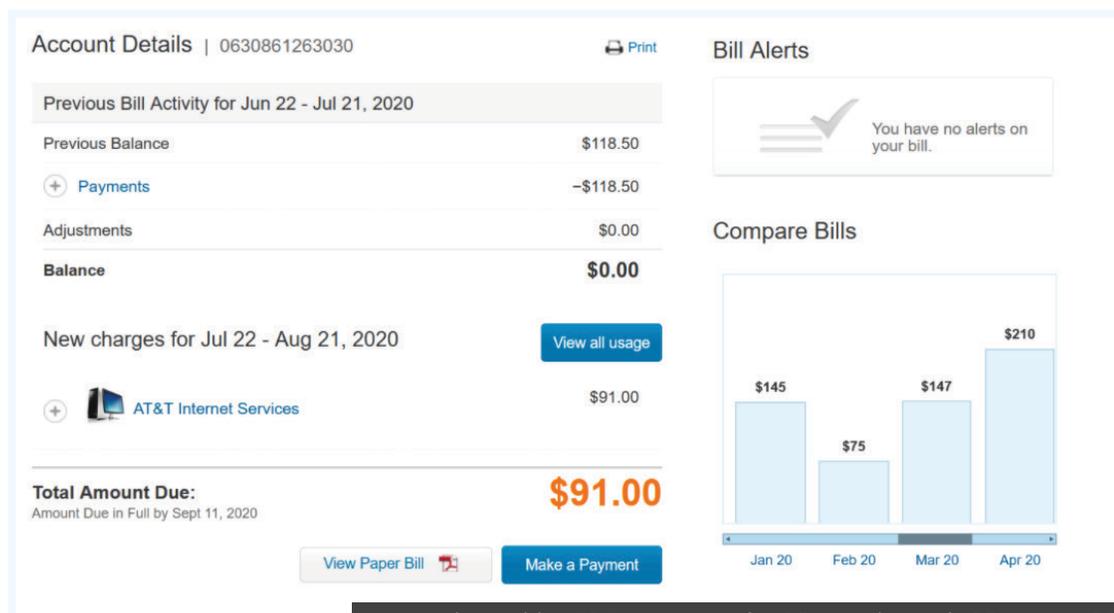
Dr. Brian Whitacre of Oklahoma State University replicated and confirmed NDIA's analysis of Cleveland.<sup>15</sup> He also used the same process to map the existence of digital redlining in Dallas.<sup>16</sup> Dr. Whitacre states:

The analysis for Dallas demonstrates that AT&T has withheld fiber-enhanced broadband improvements from most Dallas neighborhoods with high poverty rates, relegating them to Internet access services which are vastly inferior to the services enjoyed by their counterparts nearby in the higher-income Dallas suburbs... Because the patterns revealed by this analysis result from a decade of deliberate infrastructure investment decisions, I argue that they constitute strong evidence of a policy and practice of "digital redlining" by AT&T — i.e. income-based discrimination against residents of lower-income urban neighborhoods in the types of broadband service AT&T offers, and in the company's investment in improved service.

AT&T's similar pattern of not deploying fiber, or not lighting up deployed fiber, over the past four years leaves many residents with 2005 vintage DSL, at download speeds of 6, 3, 1.5 or even .768 Mbps. Many households that can only receive slow service from AT&T still pay the same \$70 monthly price they would be charged for 100/100 Mbps fiber service -- if they could get it.<sup>17</sup>

Jacob North lives in Oak Grove, a property of the Oklahoma City Housing Authority. Mr. North and his family have AT&T DSL service. A speed test conducted on September 14, 2020 clocked his service at 2.08 mbps down and 0.24 Mbps up.

The North family's bill comparison shows that their slow AT&T DSL service costs them between \$75 and \$210 per month. Their DSL service has a 150 GB data cap. They pay a base rate of \$59 per month plus \$10 per month for each additional 50 GB. In contrast, New Street Research estimates data consumption per household in 2020 at 581 GB per month.<sup>18</sup>



Jacob North's AT&T statement for DSL service, July 22-August 21, 2020.

AT&T's poor maintenance of its DSL networks, with limited capacity for new connections, results in would-be new customers in some areas being denied service entirely or told they can only subscribe to fixed wireless service (a 4G wireless connection for home use, designed for rural areas).<sup>19</sup>

Mr. North attempted to help his neighbor sign up for AT&T service. He recorded the call with the AT&T service representative. The service representative states, "There are only limited slots. The slots are full." She explains that if one of the neighbors disconnects, then AT&T could provide DSL service.

Mr. North happens to live next to Dell's Oklahoma City Campus, so fiber is likely available just across the street from Mr. North.<sup>20</sup> If AT&T fiber were available to the North Family, they would have the option for unlimited monthly data usage.<sup>21</sup> But AT&T has built fiber-to-the-home to fewer than a third (28 percent) of the households in its footprint, while continuing to charge customers like Mr. North for subpar service.

## Failure to Build Fiber and Provide Adequate Service

AT&T's workers know AT&T could do more to deploy next-generation fiber networks. In an August 2020 survey of 1,500 AT&T technicians conducted by CWA, 93 percent of techs with knowledge of AT&T's fiber plant strongly agreed (670/870) or agreed (135/870) that AT&T could be building more fiber.

Techs report that in some cases, AT&T is installing fiber "backbone" that could serve many households, but not installing the equipment necessary to connect it to homes. Of responding techs with knowledge of fiber deployment, 63 percent (546/869) report that in their work areas, AT&T is not installing splitting equipment even where a fiber backbone exists. As a result, consumers can not purchase next-generation fiber service, even if a fiber network exists nearby.

"AT&T had placed some fiber overbuilds in my service area," one AT&T tech explained. "But then they sat for over a year without any customers on them as the company claimed we couldn't offer service in that area." Another survey respondent explained: "There is a fiber cable running under my driveway yet only half of the town can get any services and it's only on copper. The other half has to get satellite for services including me."



**93 PERCENT** of techs with knowledge of AT&T's fiber plant strongly agreed or agreed that AT&T could be building more fiber.

AT&T's workers experience firsthand that AT&T isn't providing sufficient broadband to their communities. Of the AT&T workers who responded to a survey about broadband availability, 46 percent (825/1800) said they do not have sufficient broadband speed at home. Of this group, 59 percent (488/825) said it was because there was no broadband product with sufficient speed available in their area. Another 12 percent (99/825) said a high-speed broadband package was available in their area but is too expensive. Eighty-nine percent (1563/1763) said AT&T failed to provide broadband with adequate speeds to parts or all of their neighborhood.

One technician said, "I myself as an AT&T technician cannot get fiber mainly because the company doesn't want to take on the cost of providing connectivity to areas where it isn't extremely easy or profitable. Being a major provider of service I feel AT&T has an obligation to provide the latest and most reliable services available to all their customers within reason."

## Recommendations

### AT&T should:

- Invest in next-generation networks -- AT&T should commit to capital investment in fiber deployment that would double the number of households passed by fiber in two years. If AT&T invests one quarter of its annual free cash flow (projected to be more than \$25 billion) into rapid fiber deployment, it could deploy to more than 6 million locations per year.<sup>22</sup>
- Stop leaving rural communities behind -- AT&T must upgrade its network in rural communities to meet the FCC's broadband definition, at least, and renew its efforts to deploy next-generation fiber.
- Stop leaving parts of urban communities behind -- AT&T must renew its efforts to equitably deploy next-generation fiber in urban locations.
- Make its low-income product more accessible -- AT&T should invest more in advertising these products and agree to bulk sales of its wireline service to school districts and other public entities which redistributes plans to households.
- Invest in good jobs -- AT&T must stop laying off its skilled, unionized workers and stop outsourcing work to subcontractors in order to pay lower wages and avoid being held legally responsible for the subcontractors' conduct. An experienced workforce is a prerequisite to reliable, high-quality internet service, particularly in areas where AT&T's network is out-dated or deteriorated. Rather than layoffs, AT&T should invest in a workforce that will connect customers, rural and urban, to next-generation fiber networks.

## Endnotes

- 1 This assumes a cost of \$1,000 per household for fiber deployment, which should be realistic as an average cost, given the widespread fiber backbone already deployed.
- 2 AT&T Inc., Second quarter 2020 financial and operational trends, p. 8. <https://investors.att.com/~media/Files/A/ATT-IR/financial-reports/quarterly-earnings/2020/q2-2020/2q20-trending-schedule.pdf>; Comcast, Q2 2020 Earnings, Trending Schedules, Cable Customer Metrics, cell O35. <https://www.cmcsa.com/financials>; Charter Communications, Inc., Q2 2020 Customer Metrics. <https://ir.charter.com/static-files/d1cc5751-d268-4acb-8d31-04a3c30253cc> By way of comparison, AT&T is serving 10 percent of its addressable customer base (134 million) with broadband, whereas Comcast is serving 23 percent of its base (117 million) and Charter serves 24 percent of its base (109 million). For more detail, see H. Trostle and Christopher Mitchell, Institute for Local Self-Reliance, "Profiles of Monopoly: Big Cable and Telecom," August 2020. [https://cdn.ilsr.org/wp-content/uploads/2020/08/2020\\_08\\_Profiles-of-Monopoly.pdf](https://cdn.ilsr.org/wp-content/uploads/2020/08/2020_08_Profiles-of-Monopoly.pdf)
- 3 Mike Robuck, Fierce Telecom, "AT&T's Donovan says telco will take a more incremental approach to fiber builds," June 5, 2019. <https://www.fiercetelecom.com/telecom/at-t-s-donovan-says-telco-will-take-a-more-incremental-approach-to-fiber-builds> Also see Jon Brodtkin, Ars Technica, "AT&T cuts another 1,800 jobs as it finishes fiber-Internet buildout," June 17, 2019. <https://arstechnica.com/tech-policy/2019/06/att-cuts-another-1800-jobs-as-it-finishes-fiber-internet-buildout/>
- 4 The figures in this report are from June 2019 Form 477 data reported by AT&T to the FCC, and are likely a good approximation of the current state of AT&T's fiber service today. However, it is probable that AT&T's low deployment numbers are conservative estimates that overstate the extent of fiber build-out. This is a result of the FCC's problematic Form 477 broadband deployment measurement method in which, if even one household in a census block has access to broadband service at a particular speed, the FCC considers the entire census block to have access to that speed. For example, FCC data showed 100 percent broadband access in Ferry County, WA. However, Microsoft estimates that same county's coverage at two percent. See Steve Lohr, New York Times, "The Digital Divide is Wider Than We Think," Dec. 4, 2018. <https://www.nytimes.com/2018/12/04/technology/digital-divide-us-fcc-microsoft.html> The FCC acknowledged the many problems with its Form 477 data and took early steps to improve its data maps, adopting the Digital Opportunity Data Collection and new processes for data collection. See Federal Communications Commission, *Report and Order and Second Further Notice of Proposed Rulemaking*, WC Docket No. 19-195, WC Docket No. 11-10 (Rel. Aug. 6, 2019). <https://ecfsapi.fcc.gov/file/080629599705/FCC-19-79A1.pdf> The idea behind the Order was correct -- the FCC's maps are bad -- but the FCC's plans in this Order are insufficient, incomplete, and confused.
- 5 Bill Callahan, National Digital Inclusion Alliance, "New NDIA infographic: Who doesn't have internet?" August 2, 2019. <https://www.digitalinclusion.org/blog/2019/08/02/new-ndia-infographic-who-doesnt-have-internet/>
- 6 Predominantly rural counties refers to counties where a majority of the population resides in a rural area. Our analysis only includes counties where AT&T's footprint covers 10 percent or more of households in the country.
- 7 California Public Utilities Commission, "Examination of the Local Telecommunications Networks and Related Policies and Practices of AT&T California and Frontier California, 2010 – 2017 (Network Exam)," Chapter 11, p. 515. <https://www.cpuc.ca.gov/General.aspx?id=6442462050>
- 8 This compares to 22.7 percent nationally. American Community Survey, 2019, Presence and Type of Internet Subscription in Household.
- 9 American Community Survey, 2019, Poverty Status in the Last 12 Months.

- 10 By urban counties, we refer to counties where a majority of the population resides in urban areas. We are referring only to AT&T service areas in these counties. Our analysis only includes counties where AT&T's footprint covers 10 percent or more of households in the country.
- 11 Regarding the persistent digital divide, see U.S. Census, American Community Survey, 2016 and 2019, Presence and Type of Internet Subscriptions in Household. In the 21 states AT&T serves, in 2016, 27.4 percent of households lacked a home internet subscription and in 2019, 24.2 percent lacked the same, a reduction of only 3 points.
- Regarding AT&T's period of accelerated build-out, see AT&T quarterly earnings transcripts, for example:
- Q2 2016: "The next phase of driving fiber into our network is our GigaPower deployment. Over the next few years, we expect to reach at least 12.5 million customer locations with our gigabit broadband service. We now have more than 2.2 million Fiber to the Home customer locations, and we expect to reach 2.6 million or more by the end of the year." Q2 2019: "We passed an important milestone with our fiber deployment reaching 14 million customer locations and satisfying our fiber build commitments."
- 12 Bill Callahan, National Digital Inclusion Alliance, *AT&T's Digital Redlining of Dallas: New Research* by Dr. Brian Whitacre, August 6, 2019. <https://www.digitalinclusion.org/blog/2019/08/06/atts-digital-redlining-of-dallas-new-research-by-dr-brian-whitacre/>
- 13 Bill Callahan, National Digital Inclusion Alliance, *AT&T Broadband Deployment Skipped Low-Income Dayton Neighborhoods*, March 22, 2017. <https://www.digitalinclusion.org/blog/2017/03/22/att-skipped-low-income-dayton-neighborhoods/>
- 14 Bill Callahan, National Digital Inclusion Alliance, *More digital redlining? AT&T home broadband deployment and poverty in Detroit and Toledo*, September 6, 2017. <https://www.digitalinclusion.org/blog/2017/09/06/more-digital-redlining-att-deployment-and-poverty-in-detroit-and-toledo/>
- 15 Federal Communications Commission, Formal Complaint of Joanne Elkins, Hattie Lanfair, Rochelle Lee v. AT&T Corp., Proceeding No. 17-223, File No. EB-17-223, September 2017. <https://www.fcc.gov/ecfs/filing/1092355565047>
- 16 AT&T's Digital Redlining of Dallas.
- 17 Bill Callahan and Angela Siefer, National Digital Inclusion Alliance, *Tier Flattening: AT&T and Verizon Home Customers Pay a High Price for Slow Internet*, July 2018. <https://www.digitalinclusion.org/wp-content/uploads/2018/07/NDIA-Tier-Flattening-July-2018.pdf> Households with top download speeds under 5 Mbps pay slightly lower rates. See AT&T Inc., Internet offer details: <https://www.att.com/internet/>
- 18 Information provided by New Street Research to NDIA, September 15, 2020.
- 19 AT&T Inc., Fixed Wireless. <https://www.att.com/internet/fixed-wireless/>
- 20 Oak Grove public housing is located at 3301 SW 17th Street, Oklahoma City, OK, 73108, just across SW 15th Street from Dell's campus, located at 3501 SW 15th Street Oklahoma City, OK 73108.
- 21 AT&T Inc., Monthly data allowance by speed: <https://www.att.com/help/internet/usage.html>
- 22 This assumes a cost of \$1,000 per household for fiber deployment, which should be realistic as an average cost, given the widespread fiber backbone already deployed.