Broadband for All Americans

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America’s broadband networks met the challenge of the pandemic . . .

. . . but also highlighted the digital divide, showing that those not connected are at a significant disadvantage.



Internet traffic jumped 27% at the height of the pandemic* but the country’s broadband networks rose to the challenge.

**Source: USTelecom*

However, many **rural** and **low-income** families don’t have the internet access they need to work and learn.

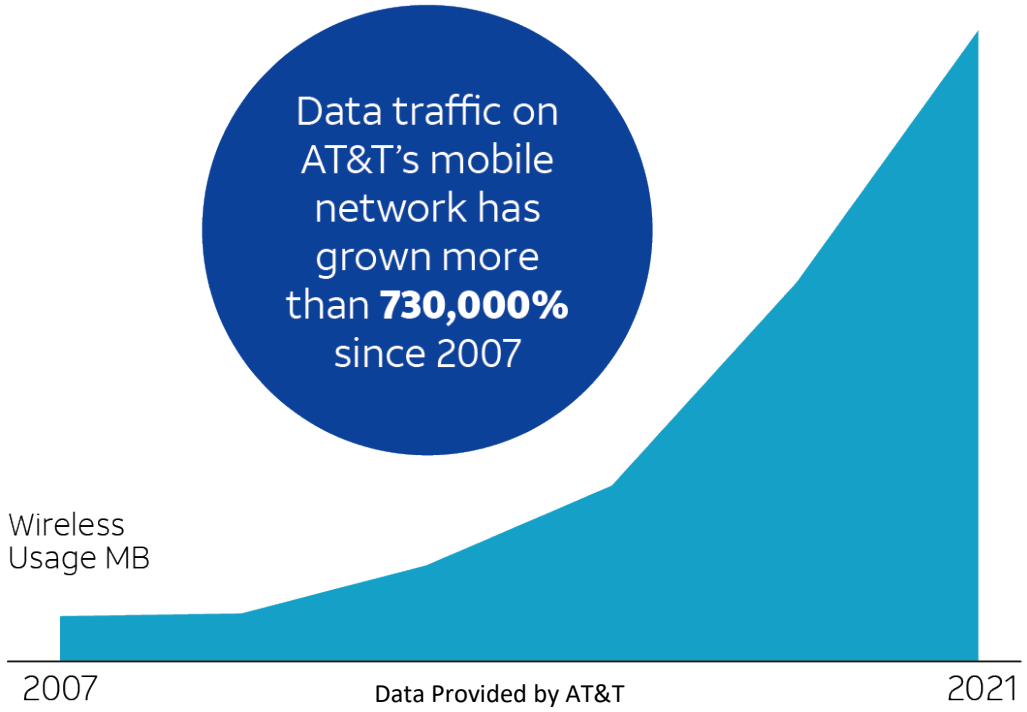
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Rapid Growth In Wireless Data Use

- **The way we use cell phones has changed**
- 4 in 5 adults ages 18-34 live in households that are wireless only.*
- 4 in 5 adults living in rented homes are wireless only.*
- Hispanic adults are more likely than non-Hispanic adults to live in wireless-only households.*
- Adults with family incomes below the federal poverty threshold are more likely than higher income families to live in wireless-only households.*
- 80%+ of 911 calls are from wireless devises**

- **Wireless Devices Are Essential**
- Work
- School
- Family

What the demand looks like on AT&T's network:



* Per the National Center for Health Statistics, Wireless Substitution: Early Release of Estimates from the National Health Interview Survey, July-December 2020, Released August 2021
** NENA, The 9-1-1 Association: https://www.nena.org/page/911Statistics

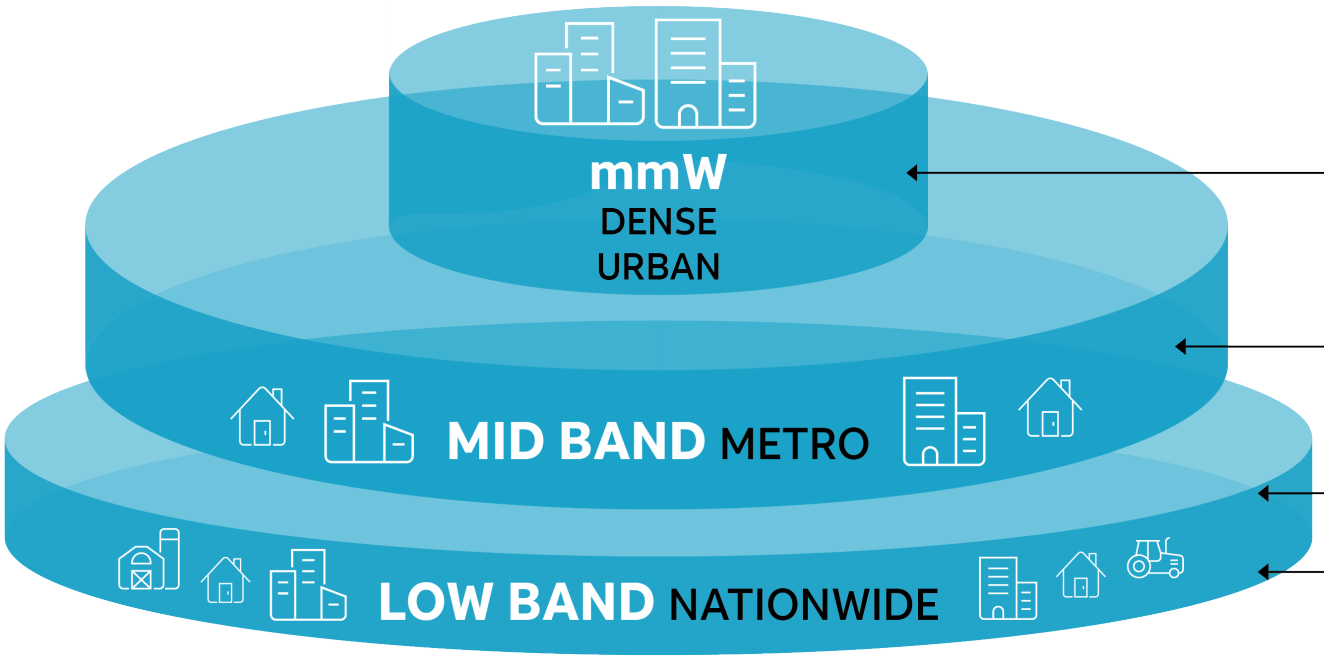
Importance of Ubiquitous Wireless Connections

- 95% of Americans own a cellphone and 77% own a smartphone. [1]
- More than 62% of American households rely on wireless as their primary means of communication. [2]
- The number of mobile subscribers in the U.S. has increased by more that 4x since 1999 (+323.8%)
- **Public Safety:** 80% of all 911 calls originate from cell phones. [3]
- **Economic Development:** 98% of small businesses rely on wireless technology. [4]
- Residents use smartphones, tablets, laptops at home—all drive the need for reliable and expanded connectivity
- 5G technology will help us connect more devices faster, enable lower latency, increase battery life and handle more data.

1. http://www.pewinternet.org/fact-sheet/mobile/
2. https://www.cdc.gov/nchs/data/nhis/earlyrelease/wireless201605.pdf
3. https://www.nena.org/page/911Statistics
4. https://about.att.com/innovationblog/2019/01/restaurant_industry_5g_updates.html
5. https://smallbiztrends.com/2013/05/small-business-use-wireless.html

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Spectrum – Geographic Reach



26/28 GHz - industry standard

3.5 GHz - industry standard

Sub- 6 GHZ band

700 MHz - industry standard

AT&T recommends a holistic framework to bridge the digital divide

Congressional actions to date

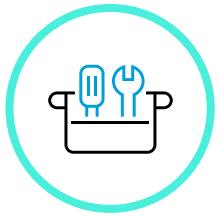


Establish and make permanent low-income broadband benefit

Help people who have limited financial resources to afford internet service

ENACTED: **$3.2B** Emergency Broadband Benefit funding $50/month benefit ($75/month Tribal) during pandemic for eligible households. 6.6M household participating as of 10/17/21

PENDING: **$14.2B** permanent Affordable Connectivity Program funding $30/month benefit for eligible households



Fund broadband service deployment

Target funding to ensure that all Americans have universally robust internet service

ENACTED: **$360B** American Rescue Plan Act funding that states and local governments may direct to broadband infrastructure

Enacted: $42.5B broadband infrastructure deployment funding to states, to create own grant programs



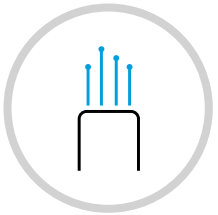
Support digital equity & adoption

Enable flexible, locally-targeted programs addressing barriers to adoption among people who aren't online

PENDING: **$2.75B** Digital Equity Grant funding for states, to promote digital equity, support digital inclusion, and foster greater adoption of broadband

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In broadband infrastructure funding legislation, State policymakers should…



- Future-proof deployments to extent possible
- Promote funding for faster speeds, including fiber deployments
- To ensure all people have robust service, require the use of technologies capable of achieving speeds of 100/20 Mbps service; and
- Encourage funding for projects that would deploy fiber to the premises (≥ 100/100 Mbps service), where feasible



- Utilize competitive processes, like RFPs
- Encourage customized proposals tailored to a community's unique needs
- Accommodates a range of proposals, including large-scale proposals that can get service to more consumer locations most efficiently and expeditiously
- Facilitates participation by all providers, including those with the expertise, financial capability, and proven experience successfully deploying retail internet service



- Incentivize private sector investment & innovation
- Realize the greatest taxpayer value at the least taxpayer risk
- The private sector is best positioned financially and technically to deploy broadband efficiently, and to make ongoing investments and pro-consumer service improvements
- Proven track record of innovation and investment ($1.9T since 1996; $79B in 2020 alone). Result: Prices have dropped for all speed tiers while speeds have continued to increase
  - (Source: USTelecom)



- Rely on existing mapping resources
- Utilize limited state funds for deployment and adoption programs, not mapping
- The FCC is hard at work implementing new, congressionally-mandated broadband maps, but they may not be ready for ARPA deadlines
- Because any state maps will quickly be superseded by the FCC maps, using existing broadband maps, no matter how imperfect, will result in faster deployments

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