ABOUT CONNECTED NATION

National nonprofit organization focused on broadband expansion; established in 2001.

Our mission is to improve lives by providing innovative solutions that expand the access, adoption, and use of high-speed internet and its related technologies to all people. Everyone belongs in a Connected Nation.

WHY
We believe that everyone should have opportunities to improve their lives, families, and communities regardless of who they are, where they live, or how they begin.

HOW
We develop and provide the tools, resources, and methods that help states and communities create and implement solutions to their broadband and digital technology gaps.

WHAT
We assess and plan for the expansion of broadband access, adoption, and use. We empower people with technology skills and resources to improve their quality of life, and we develop public-private partnerships to bring technology access to targeted geographies and population.
WHO LACKS BROADBAND?

- 42 million Americans
- 43% of low-income families
- 14.6% of rural residents
- 16.9 million school-aged children
HOLISTIC APPROACH

Broadband Mapping

Community Engagement
HOLISTIC APPROACH

Digital Inclusion

Education

Digital Literacy Training

Telehealth
Current FCC Definition: 25 Mbps Download and 3 Mbps Upload

Mobile Broadband
High-speed internet designed for use on-the-go with seamless connectivity from one location to another.

Fixed Wireless
Broadband service provided between towers and customers using radio waves. Primarily found in rural areas.

Satellite
Broadband service provided by satellites orbiting the earth. Satellite service can be impacted by line-of-sight and latency.

Cable
Internet provided by a cable television company over a mixed coaxial and fiber-optic network.

Fiber
Fiber-optic service uses transparent glass fibers to carry data across distances. Some customers can receive fiber connections directly to their home, but fiber is also used to transport data from communities to the broader internet.

DSL
Digital-subscriber line (DSL) is broadband delivered over a mixed network of fiber and traditional copper phone lines.
• FCC Form 477 Data
• FCC Broadband Map: broadbandmap.fcc.gov

Current federal broadband data is inadequate for local planning

Primary Challenges:
• Not all providers are submitting data as required
• Not all providers have GIS capabilities
• Fixed broadband data is filed as .csv only
• Fixed wireless services are filed as census block lists
• Inherent overstatement with census blocks as unit of measure
• Understatement issues because of missing provider data
• Data can be old by the time it is published
• Provider submitted data is not thoroughly validated

Better federal data is on the way!
Walton County, Florida
Broadband Service Comparison to FCC Form 477
25 Mbps Download / 3 Mbps Upload
Michigan Broadband – Resident Feedback

Please enter the following fields, search or click on the map to identify the proper location, and if necessary, move the location on the map. Complete the form by clicking the Submit Feedback button.

1. Enter Information

- Reason For Feedback (required)
  - Select...

- Description

  1500 characters remaining

- Street Address (required)
GIS FOR SOCIAL GOOD

• Conducting independent research on licensing, databases, etc.

• Mapping actual broadband service areas, independent of census blocks or other arbitrary boundaries

• Collecting public feedback on discrepancies

• Conducting field validation to independently verify broadband network coverage and speeds

• Identifying truly unserved and underserved areas where attention and funding should be
POLICY IMPLICATIONS

• Community Approach
  • Not one size fits all
  • They are unique and have their own objectives
  • Technology Action Plan development

• Federal Policy
  • Broadband DATA Act of 2020
  • Comments and Meetings with FCC, NTIA, Treasury

• State and Federal Funding Programs
  • Various levels of grant administration
  • Various types of site visits and field validation
QUESTIONS?

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Esri ArcUser Article (Dec 2020)
bit.ly/3gedfdi