BroadbandUSA

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Indicators of Broadband Need Map

Data Sources: FCC Form 477

- Created using the Jan-Jun 2020 FCC Form 477 data collection from U.S. Internet service providers (ISPs).

- U.S. where no ISP reported consumer fixed terrestrial broadband Internet services at speeds which meet the FCC's 25/3 Mbps benchmark for fixed broadband.

- Reported at the census block level and this layer was created by selecting all land-based census blocks (water census blocks excluded) which had no providers reporting fixed terrestrial broadband consumer offerings at the 25/3 Mbps threshold or above.

Disclaimer: The data presented in the map is "as is", "as available" for informational purposes. NTIA does not warrant the accuracy, adequacy or completeness of this information and expressly disclaims liability for any errors or omissions.

Data Sources: Microsoft

- Estimate of broadband usage over multiple Microsoft services in November 2019
  - Every time a device using Microsoft software receives an update or connects to a Microsoft service, Microsoft is able to estimate the device's throughput speed based on the size of the packet sent and the time it takes to download.
  - Using this information Microsoft was able to provide an estimate of the percentage of the population using broadband (25 Mbps download speeds or higher) in each county.
  - Microsoft estimates that ~157 million people in the US are not using the Internet at broadband speeds.
  - The layer in this map shows counties in red where 75% or more of users are not using broadband according to Microsoft estimates (reported percentage of broadband use below 0.25 in the dataset). Data does not include values for all counties. Areas with higher broadband usage percentages are shown in green while areas without data are shown in gray.

Data Sources: Speed Test Data

Measurement Lab (M-Lab)

- Time period from January - June 2020
  - Shows speed test results at the county level. Counties with collective median speed test results below 25/3 Mbps are shown in red while counties with median results above 25/3 are shown in green.

Ookla

- Time period from January - June 2020
  - Speed test results at the census tract level. Tracts with collective median speed test results below 25/3 Mbps are shown in red while tracts without Ookla results are shown in gray. Tracts with median speeds above 25/3 Mbps are shown in green.

Data Sources: American Community Survey (ACS)

- U.S.Census American Community Survey data taken from 2015-2019, processed, and made available via Esri Living Atlas
  - Three ACS layers
    - Broadband Need (2) estimates five years at the tract level
      - "At the house, apartment, or mobile home do you or any member of this household have access to the Internet?"
      - "At this house, apartment or mobile home do you or any member of this household own or use any of the following types of computer?"
    - "High Poverty Communities" appears in the Additional Layers section of the application
      - Last 12 months of 2019 showing census tracts based on the percentage of residents who report living below 100% of the U.S. Census poverty threshold.
  - The ACS is a yearly survey conducted by the U.S. Census with information collected from approximately 3.5 million American households. ACS data is collected at the census block group level and can be aggregated to higher census geographies including the census tract level seen on the map.

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