



An Overview of the NH Broadband Mapping Initiative

April 25, 2023

New Hampshire Broadband Mapping Initiative

- New Hampshire understands that residents, businesses, and institutions require broadband access to promote economic development, quality education, energy efficiency, adequate health care, overall quality of life
- In recognition of these facts, the Office of Broadband Initiatives at the New Hampshire Department of Business and Economic Affairs (BEA) has provided funding to map broadband availability throughout New Hampshire
- BEA is using funds from the American Rescue Plan Act of 2021 to finance the mapping effort
- NH GRANIT has been selected to implement broadband mapping in the state and is leading the NH Broadband Mapping Initiative
- The mapping timeline spans the period of November 2022 through December 2026

Initiative Participants

- NH GRANIT
 - Primary mapping responsibilities
 - Website and dashboard development
 - Speed test/survey evaluation
- Carol Miller (National Collaborative for Digital Equity)
 - Acquire ISP data
 - Facilitate E9-1-1 data delivery
 - General consultant
- Scott A. Valcourt, PhD (Northeastern University)
 - Fiberoptic analyst
 - General consultant

Mapping Initiative Overview

- Goal – map broadband availability by type of technology and speed, in order to identify areas served/unserved/underserved in the state
- Broadband is defined by the NH Office of Broadband Initiatives as wireline service with speeds of 100 Mbps downstream and 20 Mbps upstream
- Mapping is based on data submitted by the active wireline providers in the state and will include technology types and transmission speeds
- Data is mapped using locally-derived address locations (e.g., E9-1-1 data) which are aggregated for public display
- Data will be verified via speed tests and online surveys
- Data are collected and processed on a bi-annual schedule with intervening updates when/if data becomes available

Project Home Page

<https://NHBroadbandMapping.unh.edu>

NH Broadband Mapping Initiative

New Hampshire Broadband Mapping Initiative

The **New Hampshire Broadband Mapping Initiative** seeks to identify where internet access is available, how it can become more widely available, and how to encourage higher levels of broadband adoption and usage in New Hampshire. It is clear that vibrant local and state economies require broadband infrastructure to support economic development, energy efficiency, advances in health care, and improved educational opportunities.

NEWS: The Broadband Dashboard and Web Map are now live!
Explore the status of broadband internet availability around New Hampshire and in your neighborhood. Scroll down to the resource gallery to begin.

Choose from the gallery below to explore various broadband activities currently happening in New Hampshire and around the country. Contribute to our efforts to improve connectivity in New Hampshire by conducting a speed test of your location's broadband connection or completing the Connectivity Survey.

Data Availability

- Round 1 data was published in early April of 2023
- Round 1 data is based on ISP data that is current as of December 31, 2022
- Round 2 data is expected to be published in early October of 2023
- Round 2 data will be based on ISP data is current as of June 30, 2023

Item Gallery

<https://NHBroadbandMapping.unh.edu>

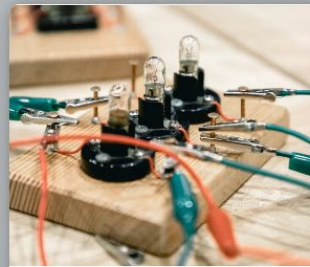
Choose from the gallery below to explore various broadband activities currently happening in New Hampshire and around the country. Contribute to our efforts to improve connectivity in New Hampshire by conducting a speed test of your location's broadband connection or completing the Connectivity Survey.



Broadband Dashboard and Web Map

Explore the status of broadband availability around NH and in your neighborhood.

[Explore](#)



Connectivity Survey

Complete this survey to identify an address without a fast internet connection.

[Explore](#)



NH Broadband Speed Test Site

Use this application to test internet speeds or report availability.

[Explore](#)




New Hampshire Department of
**BUSINESS AND
ECONOMIC AFFAIRS**

NH Office of Broadband Initiatives

Find Broadband Resources and current projects.



[Explore](#)

Dashboard



New Hampshire Department of
BUSINESS AND
ECONOMIC AFFAIRS

NH Broadband Mapping Initiative
Broadband Mapping Applications

NH Municipalities
Select a Municipality

NH Counties
Select a County

NH Regional Planning Com...
Lakes Region Planning Com...

Filter...

Select a Regional Planning Commission

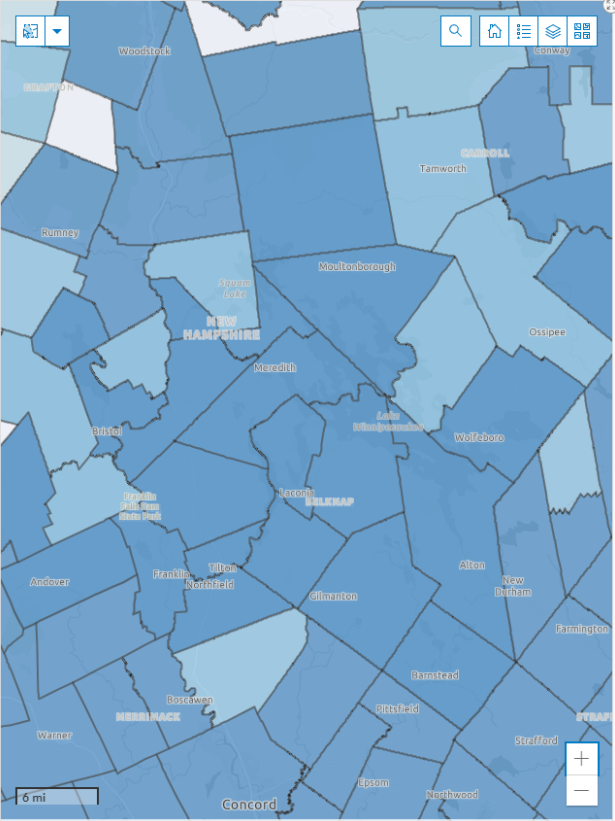
North Country Council

Lakes Region Planning Commission

Upper Valley Lake Sunapee Regional Planning Commission

Southwest Region Planning

Reset



Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS
Powered by Esri

Map About the Dashboard


The **New Hampshire Broadband Mapping Initiative Dashboard** presents data concerning broadband internet availability in New Hampshire. Maps, graphs, and summary statistics reflect data provided by cooperating internet service providers and are current as of December 31, 2022.

The NH Office of Broadband Initiatives uses the following definitions to describe broadband access in the state:

- Served** - wireline connections offering speeds of ≥ 100 Mbps downstream and ≥ 20 Mbps upstream
- Underserved** - wireline connections that do not meet the definition of served
- Unserved** - all other, including wireless and satellite service

Statewide statistics are presented by default. Users may filter data and adjust the map display. The following are some suggestions to begin interacting with the dashboard:

Percent Broadband Access



- Unserved 1.9%
- Underserved 3.7%
- Served 94.4%

<p>Address Locations Served</p> <p>80,565</p> <p>94.4% Served</p>	<p>Address Locations Underserved</p> <p>3,160</p> <p>3.7% Underserved</p>
<p>Address Locations Unserved</p> <p>1,619</p> <p>1.9% Unserved</p>	<p>Total Address Locations</p> <p>85,450</p>

Report No Service
Run a Speed Test

Dashboard
Data Viewer

Reset the Application

Data Viewer

BEA New Hampshire Department of BUSINESS AND ECONOMIC AFFAIRS

NH Broadband Mapping Initiative
Broadband Mapping Applications

NEW HAMPSHIRE broadband MAPPING INITIATIVE NH GRANIT

Search for Broadband Availability

Home Layers Legend Results

Results: (5)

> Refine

Breezeline
Max Upload: 600 mbps
Max Download: 1000 mbps

Consolidated Communications, Inc.
Max Upload: 10 mbps
Max Download: 40 mbps

Consolidated Communications, Inc.
Max Upload: 2000 mbps
Max Download: 2000 mbps

FirstLight Fiber
Max Upload: 1000 mbps
Max Download: 1000 mbps

Xfinity
Max Upload: 35 mbps
Max Download: 1200 mbps


Scale: 2234 200 ft

NH Stateplane X: 1018829.26 Y: 257640.88

Report No Service Run a Speed Test Dashboard Data Viewer Reset the Application

Speed Test

- Speed tests will help verify broadband mapping
- Speed test results will be used to do spatial statistical mapping to show areas of “hot” and “cold” spots (meaning statistically significant groups of high and low internet speeds)



The screenshot shows a web form titled "NEW HAMPSHIRE broadband MAPPING INITIATIVE". It includes a "Español" link, a welcome message, and instructions for users. The form asks for an address and a contact email (optional). There are three radio button options for address input: "Enter my exact address" (selected), "Enter my partial address (if you are concerned about privacy, choose this)", and "Enter an address with NO AVAILABLE SERVICE". A "Let's do it" button is at the bottom. A disclaimer states that tracking cookies are not used, but location and speed test results are stored, with a link to the full disclaimer.

<https://nhbroadbandspeedtest.unh.edu>

Connectivity Survey

- Connectivity survey developed for citizens to report lack of internet availability
- Developed for use on mobile devices
- Survey information will be used to help validate the mapped data

Broadband Service Status Report Form

Use this form to report a street address that lacks sufficient internet access. The Federal Communications Commission (FCC) defines broadband internet speed as 25 Mbps downstream and 3 Mbps for upstream. In New Hampshire, an address is considered fully served when speeds are at least 100 Mbps downstream and 20 Mbps upstream. Information you submit through this survey will be used to inform New Hampshire's efforts to improve internet connectivity in our State.

Street Address

Address*

Location Map
Adjust the location if needed

Find address or place

Tip: This question will try to use your location. Press to continue.

What type of building is located at this address?

Single Residence

Multi-Unit Residence

Commercial

Community Anchor Institution (school, library, medical facility, public safety, etc)

Other

Does this address have internet connection?

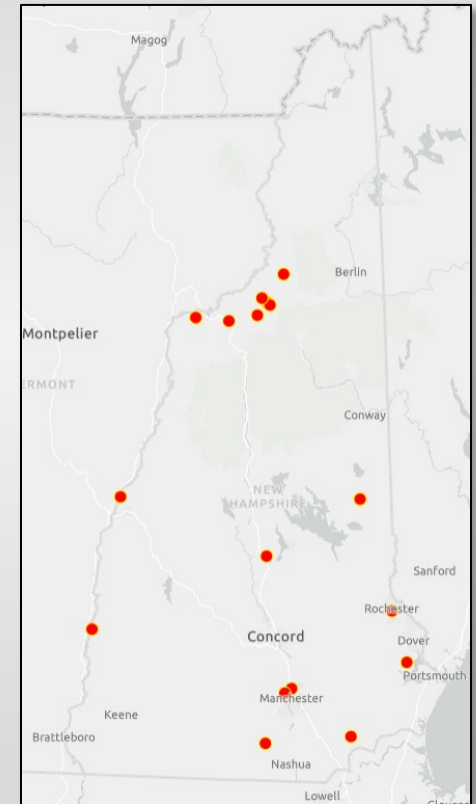
Yes

No

Comments

Submit

Powered by ArcGIS Survey123



Local Assistance

This mapping effort will benefit from local assistance by way of

- Cities and towns requesting E9-1-1 data for their municipalities
- Encouraging participation in the speed test
- Encouraging participation in the online survey

Resource Links

NH Broadband Mapping Initiative Website

<https://NHBroadbandMapping.unh.edu>

NH Broadband Mapping Initiative Speed Test

<https://nhbroadbandspeedtest.unh.edu>

NH Broadband Mapping Initiative Connectivity Survey

<https://arcg.is/CXDfq>

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