BROADBAND in the NASHUA REGION

December 2014

Produced by the Nashua Regional Planning Commission

NRPC

About the Project

The New Hampshire Broadband Mapping and Planning Program (NHBMPP) is a comprehensive program that seeks to understand where broadband is currently available in New Hampshire, how it can be made more widely available in the future, and how to encourage increased levels of broadband adoption and usage. Specifically, the NHBMPP involves the following:

- Mapping broadband availability to identify unserved and underserved areas.
- Collecting field data to help verify and improve mapping results
- Assisting community anchor institutions to determine their broadband access
- Assisting communities to better understand their broadband access options
- Working with groups to assess broadband needs and promote broadband use
- Designing instructional tools to support increased broad-based adoption and use
- Delivering technical assistance and training
- Developing broadband best practices
- Developing regional broadband plans in New Hampshire

What is **Broadband**?

Broadband or "high-speed" internet access is generally considered any internet service that allows significantly faster speeds than dial-up internet access services. For the purpose of this project, it is defined by the National Telecommunications and Information Administration (NTIA) as internet access that is at least 768 kbps downstream (from



In August 2014, the Nashua Regional Planning Commission published the Broadband Plan for the Nashua Region, based on data analysis and public outreach related to broadband needs in the region. The plan offers potential strategies for addressing regional broadband gaps and is available online at http://tiny.cc/nrpcbroadband

the internet to the user) and 200 (kbps) upstream (from the user to the internet). Even these speeds may not be adequate for many of today's users, particularly for internet activities like video streaming, teleconferencing, online gaming, heavy social media use and sending and receiving large files.

BROADBAND in your **COMMUNITY**

Important to local economies and public services

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Broadband impacts many different facets of everyday life from the efficiency of public services to the quality of educational instruction. Local economies rely on speedy broadband connections as do emergency responders and medical professionals.



Broadband helps public safety professionals respond to emergencies by providing critical site and access information as well as access to criminal or medical records in urgent situations when seconds count.



From public libraries to town halls, broadband can vastly improve efficiency in handling business and vehicle registrations, processing permits and tax payments and the provision of other key public services.



Teachers are increasingly utilizing the internet to supplement lesson plans and many schools now provide laptops or iPads to students. Many courses and educational programs are specifically centered around internet access.

"We lose streaming ability during poor weather and slow connections make online training very difficult."

- Lyndeborough police officer

"During periods of high use, patrons have difficulty accessing our wireless service."

- Merrimack librarian



Businesses rely on speedy internet access to communicate with customers, place orders, conduct transactions and to meet tax and regulatory requirements. Slower internet speeds reduce efficiency and impact the bottom line.



Broadband can help improve the quality and efficiency of medical treatment, and reduce errors, by providing doctors and nurses immediate access to medical histories and current treatment plans.

Statewide Speed Test Results

11,309

Number of speed tests taken across New Hampshire as of November 1, 2014

49%

Share of speed tests where download speeds registered below minimum broadband standard 51%

Share of speed tests where upload speeds registered below minimum broadband standard

Take the speed test!

www. iwantbroadbandnh .org

REGIONAL BROADBAND GAPS & RESOURCES

Rural communities face largest gaps

- Telephone survey of residents by UNH for the regional planning commission revealed that 96 percent of region's residents enjoy internet access in their homes.
- Speed test analyses and local verification revealed that region's western and more rural communities face largest broadband coverage gaps.
- Town of Mason faces largest gaps in broadband coverage.
- Additional gaps identified in communities of Lyndeborough, Mont Vernon, and Wilton
- Majority of region's eastern communities enjoy widespread broadband availability.



Fastest Available Broadband Technologies Cable Fiber For most of the Nashua Region, cable pro In the Town of Hollis and small areas sur

For most of the Nashua Region, cable provides the fastest broadband connections. Cable is almost universally available in the region with the exception of the westernmost communities. In the Town of Hollis and small areas surrounding Fidelity Investments in Merrimack and the Technology Park in south Nashua, fiber service offers the fastest connections. For most residents, fastest broadband speeds are provided through one of three technologies.

Mobile Wireless

For large parts of Amherst, Mason, Lyndeborough and Wilton mobile wireless service offers the fastest broadband speeds.

Community-level strategies to address broadband needs

Planning

Update local zoning and land use regulations to support broadband expansion, incorporate broadband into master plans. Consider grant opportunities.

Education

Continue to update broadband service and availability maps. Educate homeowners of existing broadband programs. Promote training opportunities for residents and businesses.

Partnerships

Key to addressing broadband needs is continued coordination & collaboration with regional and state partners, underserved residents & businesses and internet and wireless providers.

Read more

The Broadband Plan for the Nashua Region includes a full list of potential strategies. The plan is available at http://tiny.cc/nrpcbroadband

Degree of broadband options

- The degree of broadband competition in a location is closely correlated with the area's population and development density—densely populated and developed areas enjoy the most broadband options.
- In the Nashua Region, Central Hudson and Nashua enjoy the most broadband options. Healthy levels of broadband competition are also widespread in Litchfield, Merrimack and Milford.
- Broadband options are fewest in rural areas with identified gaps in broadband coverage. In the Nashua Region, these areas are most concentrated in the communities of Lyndeborough and Mason.



Implementation

Improved Data

NRPC and the University of New Hampshire are currently coordinating in an effort to map every residential address point in a rural census block in the State. In addition to having countless benefits to general planning and mapping efforts, this dataset will specifically help verify and enhance the picture of broadband availability in the Nashua Region by providing more accurate spatial information to locate where people are being unserved or underserved by broadband technology. This data should be available to localities in mid-2015.

Action Plans

In communities with identified broadband gaps, municipal action plans can be helpful in charting a long-term course to meet needs. The plan should be supported by local and regional planning efforts, include measures of success to gauge progress and a review process to ensure the plan remains relevant in light of developing technologies and changing local conditions. For more information in drafting action plans and for examples of successful such plans in other areas, visit:

http://iwantbroadbandnh.org/toolkit/section5/

Funding Opportunities

From federal grant opportunities like the USDA Rural Utilities program and the FCC's Universal Service Fund to philanthropic solutions or local and state government loan and grant programs, a number of funding opportunities can assist implementation efforts.

LOCAL

http://iwantbroadbandnh.org/toolkit/section6/local

STATE

http://iwantbroadbandnh.org/toolkit/section6/state

FEDERAL

http://iwantbroadbandnh.org/toolkit/section6/federal

For more information

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