



A Guide on How to Use the State Broadband Mapping Tool

Home Page

New Jersey SBI Data Mapping Tool

http://njgin.state.nj.us/oit/gis/OIT_BroadbandMapping/

The screenshot shows the home page of the New Jersey SBI Data Mapping Tool. The page has a header with the 'CONNECTING NJ' logo and navigation links for 'State of New Jersey', 'ConnectingNJ', and 'Broadband USA'. Below the header is a navigation bar with 'Home', 'Legend/Layer List', 'Find a Location', 'Map', and 'FAQ & Help'. The main content area is divided into two columns. The left column contains sections for 'Getting Started' and 'Last Updated'. The right column features a map of New Jersey with a 'Continue' button overlaid on it. A blue arrow points to the 'Continue' button.

To access the New Jersey Broadband Map, go to:

http://njgin.state.nj.us/oit/gis/OIT_BroadbandMapping/.

A welcome popup dialog box will appear as shown to give a brief description of the map prior to “entering the site”.

Click the “**Continue**” button, to access the map,

Home Page

New Jersey SBI Data Mapping Tool

http://njgin.state.nj.us/oit/gis/OIT_BroadbandMapping/

CONNECTING NJ
State of New Jersey ConnectingNJ Broadband USA

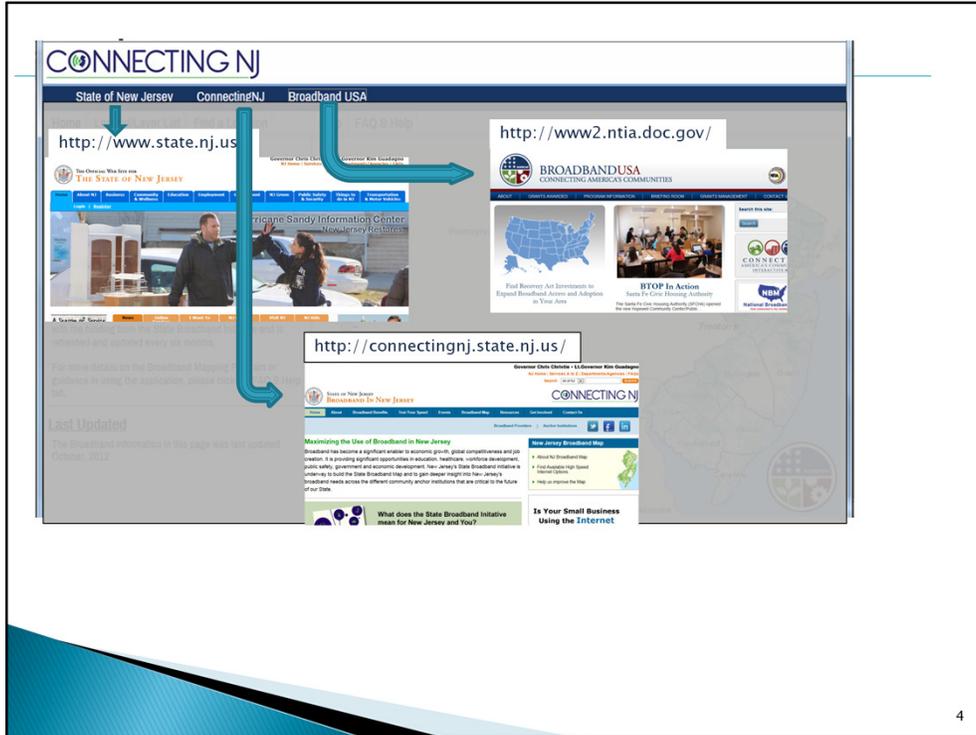
Home Legend/Layer List Find a Location Map FAQ & Help

Getting Started
To begin realizing the benefits of the initial phase of data collection, NJ OIT created a Broadband Map with data from 30 Broadband providers and approximately 15,000 community anchor institutions, including educational institutions, libraries, healthcare, state and local government within the State.
The purpose of the Broadband Map is to support efforts to expand broadband access and provide businesses and consumers with the relevant information they need to make decisions related to their high speed internet options.
The State of New Jersey's Broadband Map was developed with the funding from the State Broadband Initiative and is refreshed and updated every six months.
For more details on the Broadband Mapping Program or guidance in using the application, please click the FAQ & Help tab.

Last Updated
The Broadband information in this page was last updated October, 2012

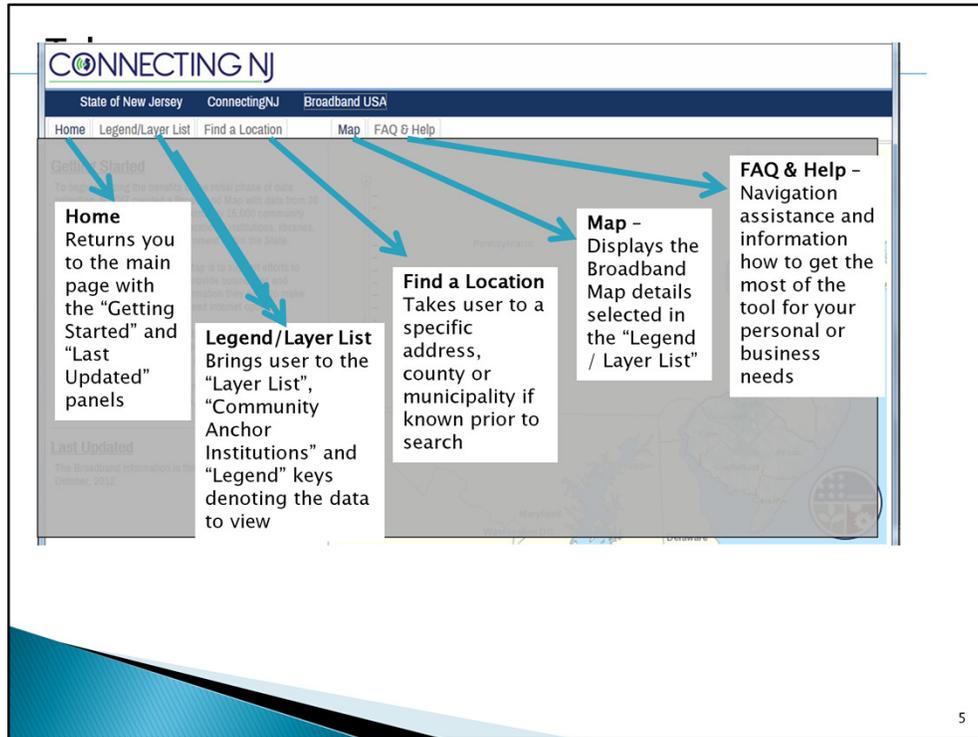
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After clicking the “Continue” button, the map website landing page will be full visible. You will notice 2 menu bars across the top of the screen, a “Getting Started” and “Last Updated” notice on the left, and finally a high-level view of the New Jersey broadband map graphic.



After entering the New Jersey Broadband Map website, you will be taken to a landing page with the following topline menu options for navigating to 3 supporting websites:

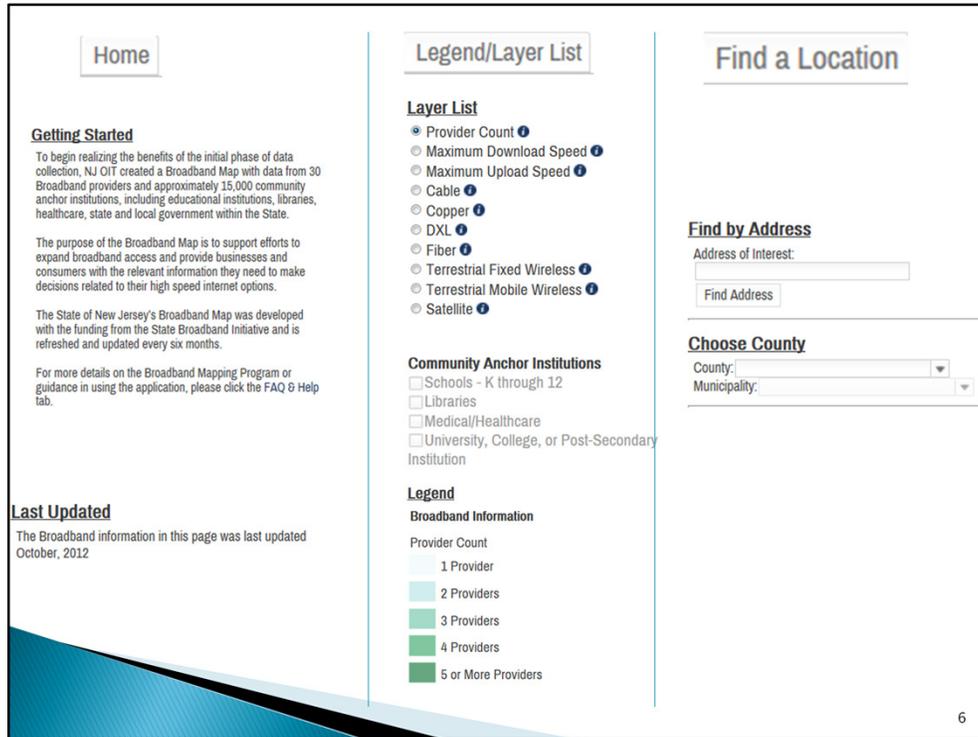
- **State of New Jersey** – Official site for the State of New Jersey
- **Connecting NJ** – Official website for New Jersey’s State Broadband Initiative. Access to this State Broadband Mapping tool can be found on the main page of Connecting NJ’s website.
- **Broadband USA** – Department of Commerce’s National Telecommunications and Information Administration (NTIA) website for the Broadband Program.



This page is also the main navigation tool for the webpage. Navigation options are grouped under 5 tabs:

- Home
- Legend/Layer List
- Find a Location
- Map
- FAQ & Help

On the next few slides we'll break down what each tab looks like and it's use.

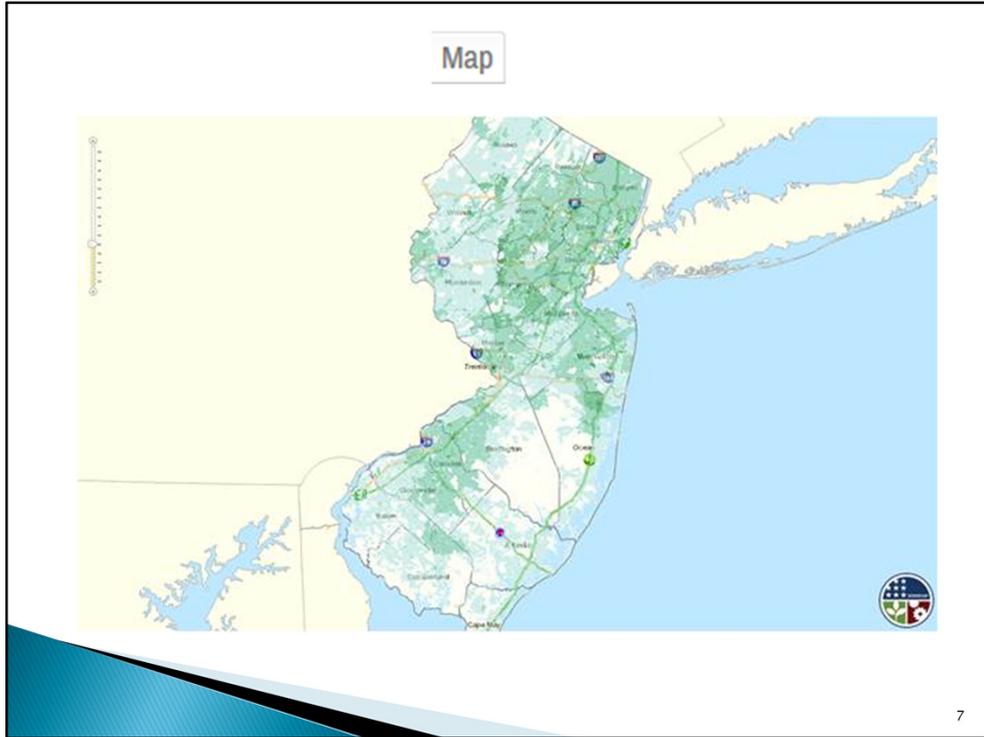


The “Home” menu navigates the left panel of the screen back to the main page “Getting Started” and “Last Updated” panes which include a high-level background on the mapping project, the purpose, currency of the map data, and where to find additional information.

The “Legend/Layer List” changes the color shading on the map based on the layer chosen (e.g., providers are Green, Copper is yellow, etc). The Community Anchor Institute (CAI) check boxes provide a way to display CAIs graphically on the map.

Finally the “Find a Location” tab provides a way to highlight a specific area on the map in order to view or analyze it in more detail.

We will go through examples of how to use the “Legend/Layer List” and “Find a Location” features later in this presentation.



Clicking on the “Map” tab, displays the New Jersey Broadband Map in its current orientation. The initial legend layer is provider count. Notice that the ARRA funding logo is on the bottom right and a zoom bar is on the upper left.

FAQ & Help

Getting Results

There are many ways to get information regarding the wired broadband coverage for a specific area in the application. Users can:

- Enter an address
- Choose a County and Municipality from drop down lists
- Click on the map

Depending on the method used to select a location, different levels of information are presented. The **"Find a Location"** tab returns specific information about service providers for a location that is defined by either clicking on the map or entering an address.

Navigating

Double-click on the map to zoom in, and drag to pan. Hold down the shift key and drag to zoom to a particular area.

Map Uses

With a comprehensive and continually updated map, the State can continue building the value of the New Jersey Broadband Map, so it can be used as an effective tool for state policy makers, businesses and citizens to:

- Identify pockets of unmet demand or need
- Help policy makers identify where the unmet needs are so they can determine how best to fulfill them
- Use the map as a tool to market NJ and support decisions for businesses looking to relocate
- Identify where existing technology infrastructures can be leveraged
- Help providers and customers find each other

To-date, most service providers have been responsive. However, collecting data on community anchor institutions has been a challenge due to the lack of existing broadband data sources and a lack of participation to provide the data. As additional information and data is provided, the New Jersey Broadband map will become more dynamic and interactive.

How Other States and Groups have Gained Value from the Broadband Map

Utah, a mid-sized company in the health care field was losing time and money due to frequent broadband outages at a rural office. The company considered moving these jobs to their headquarters in an urban location. However the company was able to use the National Broadband Map to identify other broadband providers in this rural county – and retain hundreds of jobs in this rural area.

Kansas, The Kansas Department of Commerce and a customer service company used the map to identify communities with the broadband necessary to support home-based workers. As a result, the customer service company hired about 200 workers in the state, providing much-needed jobs in small towns that may have otherwise been overlooked for this work.

South Dakota, An online training company used the map to identify towns in South Dakota where they can locate new offices, which will support more than 100 professional jobs in these rural locations.

Academic Research, The map has supported academic research at more than 1,000 colleges and universities and been used by more than 500 city and county governments.

The “FAQ & Help” tab provides basic navigation information and a reminder of the map uses for citizens and government officials. We also included examples of how 4 states have utilized the national broadband map that can be seen at the state level.

CONNECTING NJ
New Jersey State Broadband Initiative



Navigation Examples

Provider Count

How many providers service my area?

Home [Legend](#) [Layer List](#) [Find a Location](#) [Map](#) [FAQ](#) [Help](#)

Layer List

- Provider Count
- Maximum Download Speed
- Maximum Upload Speed
- Cable
- Copper
- DSL
- Fiber
- Terrestrial Fixed Wireless
- Terrestrial Mobile Wireless
- Satellite

Community Anchor Institutions

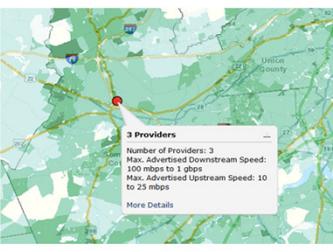
- Schools - K through 12
- Libraries
- Medical/Healthcare
- University, College, or Post-Secondary Institution

Legend

Broadband Information

Provider Count

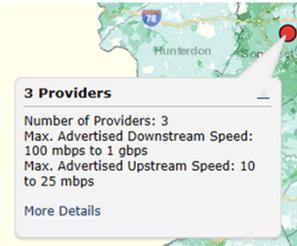
- 1 Provider
- 2 Providers
- 3 Providers
- 4 Providers
- 5 or More Providers

As you can see the Pinelands area and southwest/northwest have intermittent provider coverage. Select Layer “Provider Count” and view the Legend immediately below. The darker the green the more providers servicing the area. After clicking a particular point on the map, a popup dialogue box will display the number of providers, maximum advertised speeds and option to load “more details”.

Provider Count – “More Details”

What are statistics on the particular area I'm analyzing?



3 Providers

Number of Providers: 3
 Max. Advertised Downstream Speed: 100 mbps to 1 gbps
 Max. Advertised Upstream Speed: 10 to 25 mbps

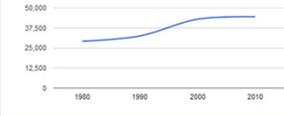
[More Details](#)

Broadband Coverage Information

Municipal Information

Bridgewater Township, Somerset County
 Square Miles: 22.34

Population (1980 to 2010)



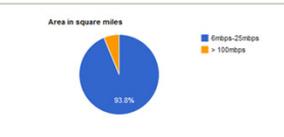
Provider Coverage

Area in square miles



Upload Speed Coverage

Area in square miles



Wired Provider Options

Provider	Wired Broadband Technology
CABLEVISION	Cable Modem - DOCSIS 3.0
Covad Communications Company	Asymmetric xDSL
Covad Communications Company	Symmetric xDSL
Covad Communications Company	Other Copper Wireline
Verizon	Asymmetric xDSL

The result of clicking “More details” is a display of municipal information: population statistics, provider coverage/speed in a pie chart and a listing of the wired provider options and associated technology.

Provider Count – Community Anchor Institutions

Where are the schools, libraries, and medical facilities in relation to my point of interest?

Community Anchor Institutions

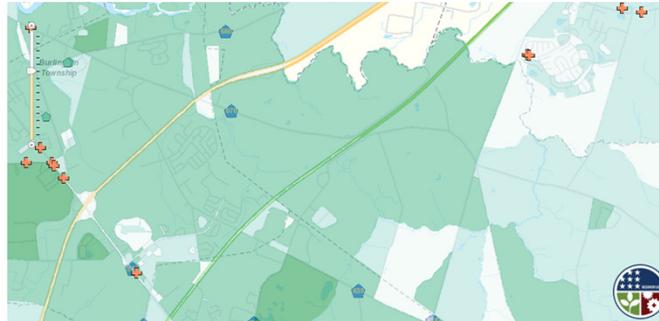
- Schools - K through 12
- Libraries
- Medical/Healthcare
- University, College, or Post-Secondary Institution

Legend

Community Anchor Institutions

-  School - K through 12
-  Library
-  Medical/healthcare
-  University, college, other post-secondary

- A user must zoom 5 Levels deep via the zoom bar to have this option available to select CAIs menu
- Current CAI categories available are School (K–12), Libraries, Medical/Healthcare, and University, College, or Post-Secondary Institution (each marked separate by symbol)

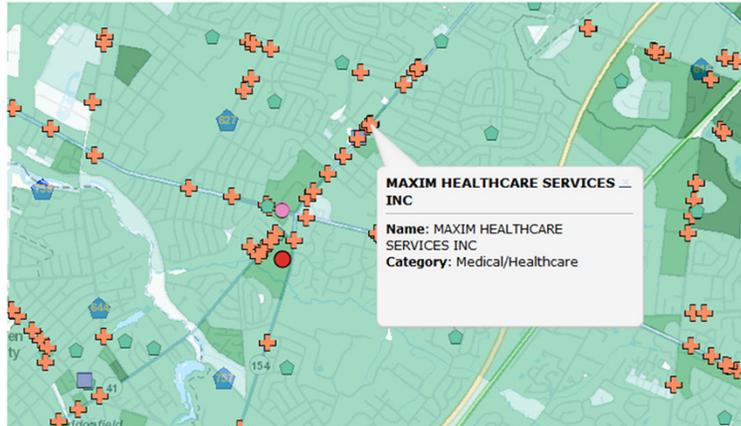


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You must zoom 5 levels deep into map prior to having the option to select CAIs. Each CAI has its own symbol. The selections shows represent the 4 most reported CAIs per other Broadband sites. Use the CAI selector can help determine “where schools, libraries and medical facilities” are located in relation to your searched area.

Provider Count – Community Anchor Institutions (cont.)

Click on a specific CAI and retrieve name of institution and its category (Libraries, Schools, etc)



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If you hover over a CAI symbol, you will see the name of the entity and the category it falls under. In future releases we'd consider adding in broadband information to the dialogue box.

Find a Location

I want to focus on a specific address or county/township, can I jump directly to it?

Find by Address
Address of Interest:

Choose County
County: ATLANTIC
Municipality:

Find by Address
Address of Interest:

Choose County
County: ATLANTIC
Municipality: Atlantic City



You can jump directly to a specific address in New Jersey on the map. You can also choose only a county, or choose both a county and a municipality within that county to view and focus on a specific region in New Jersey.



For more information go to
<http://connectingnj.state.nj.us/map>