

Web Mapping and the Next Generation of Broadband

Sean Myers, Co-Founder





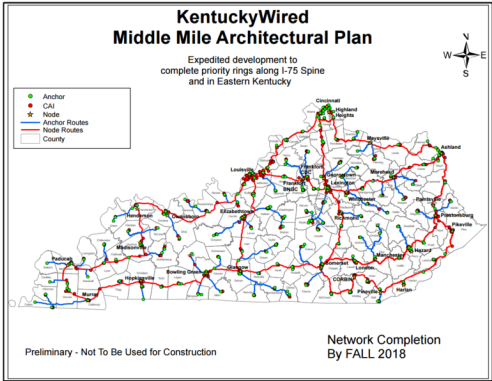
Economic Development

Bridging the Digital Divide

Creating Responsive Cities



Kentuckywired







**IN 1950, 30% OF PEOPLE LIVED IN CITIES.
TODAY, MORE THAN HALF DO.
BY 2050, TWO-THIRDS WILL.**

The Problem Is....

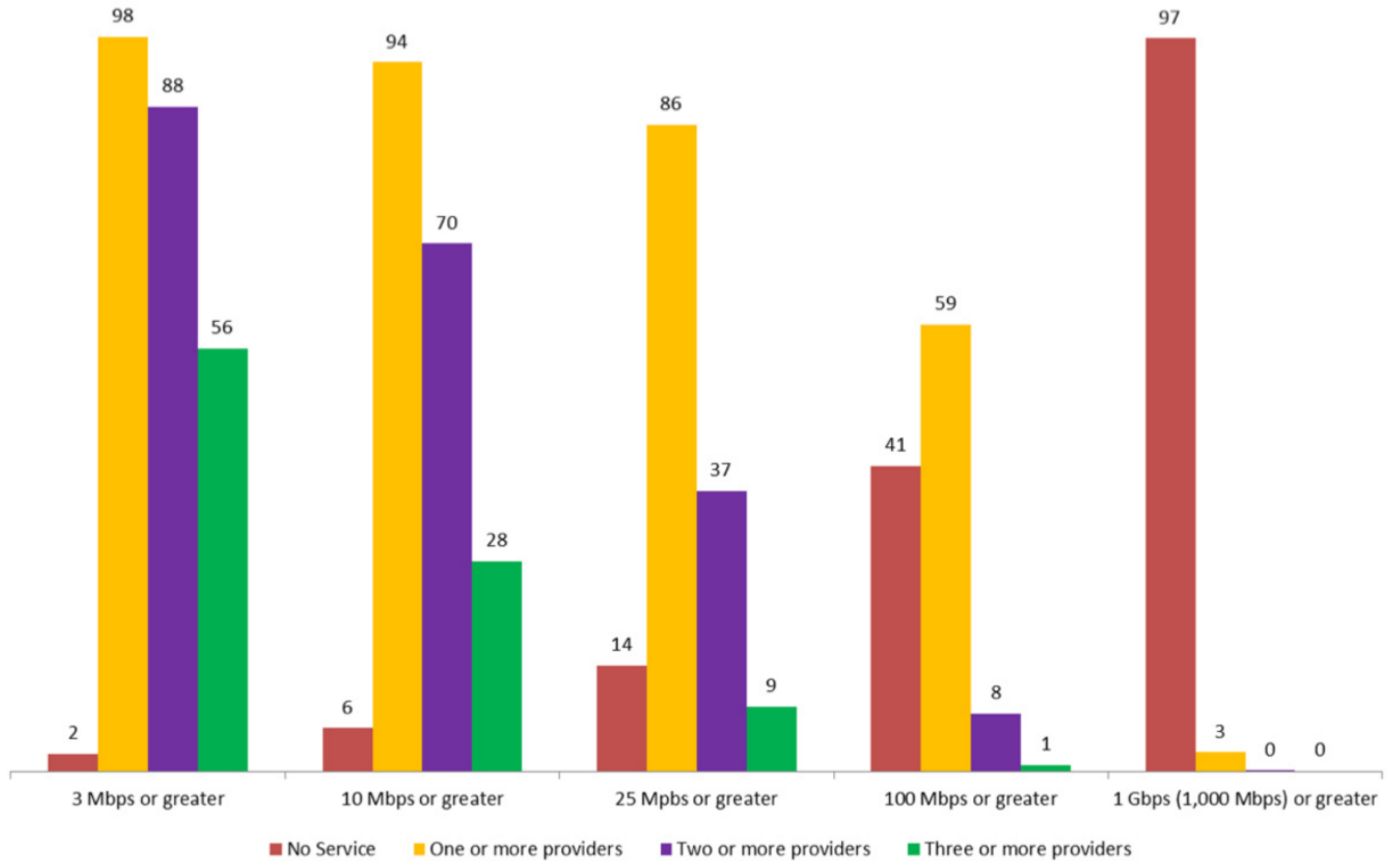


Look Familiar?



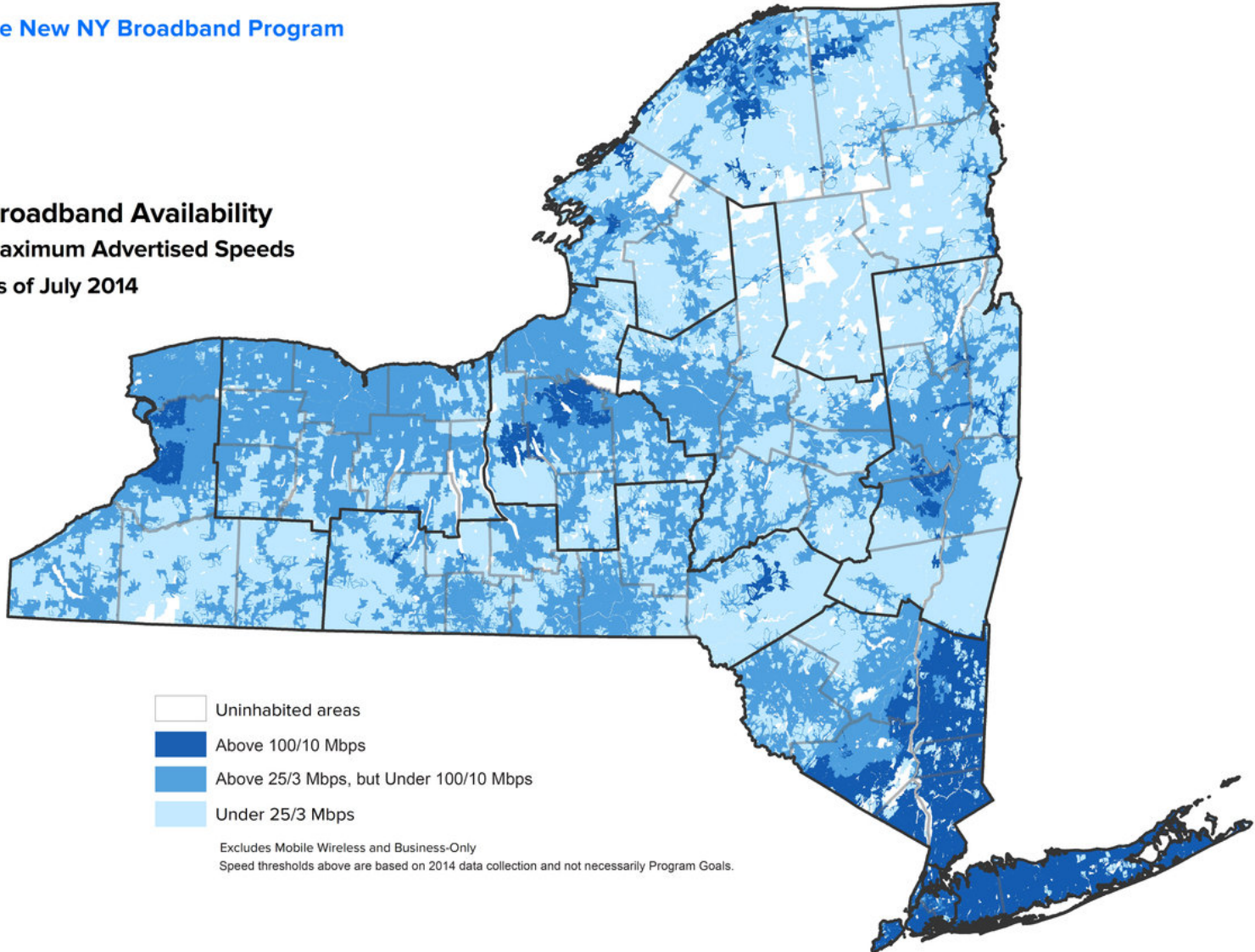
...Loading

Figure 2: December 2013 Population Shares by Numbers of Available Fixed Broadband Providers by Maximum Available Advertised Download Speeds in Mbps
(in percents)



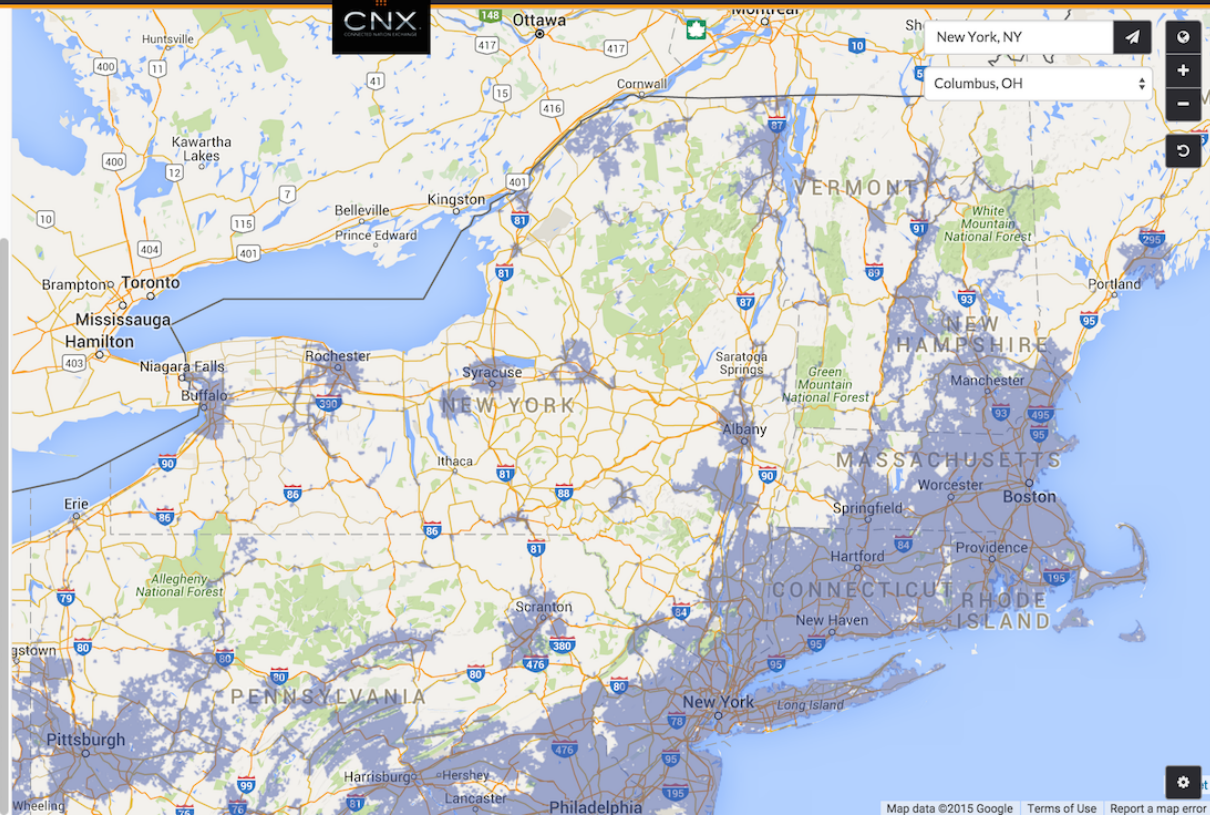
The New NY Broadband Program

Broadband Availability Maximum Advertised Speeds As of July 2014





- Long Haul Fiber
- Metro Fiber
- Lit Buildings
- Data Centers
- Broadband Service Areas
- Broadband Service Availability**
 - Fiber Availability Footprints
 - Cable Availability Footprints
 - DSL Availability Footprints
 - Terrestrial Wireless Availability Footprints
 - Mobile Wireless Availability Footprints
 - Wired Coverage 10 Mbps Down
 - Wired Coverage 25 Mbps Down
 - Wired Coverage 100 Mbps Down
 - Wireless Coverage 10 Mbps Down
 - Wireless Coverage 25 Mbps Down
 - Unserved 10 Mbps down
 - Unserved 25 Mbps down
 - Connect America Phase II Eligible Blocks
- Tower Data
- National Tower Data
- Analytics



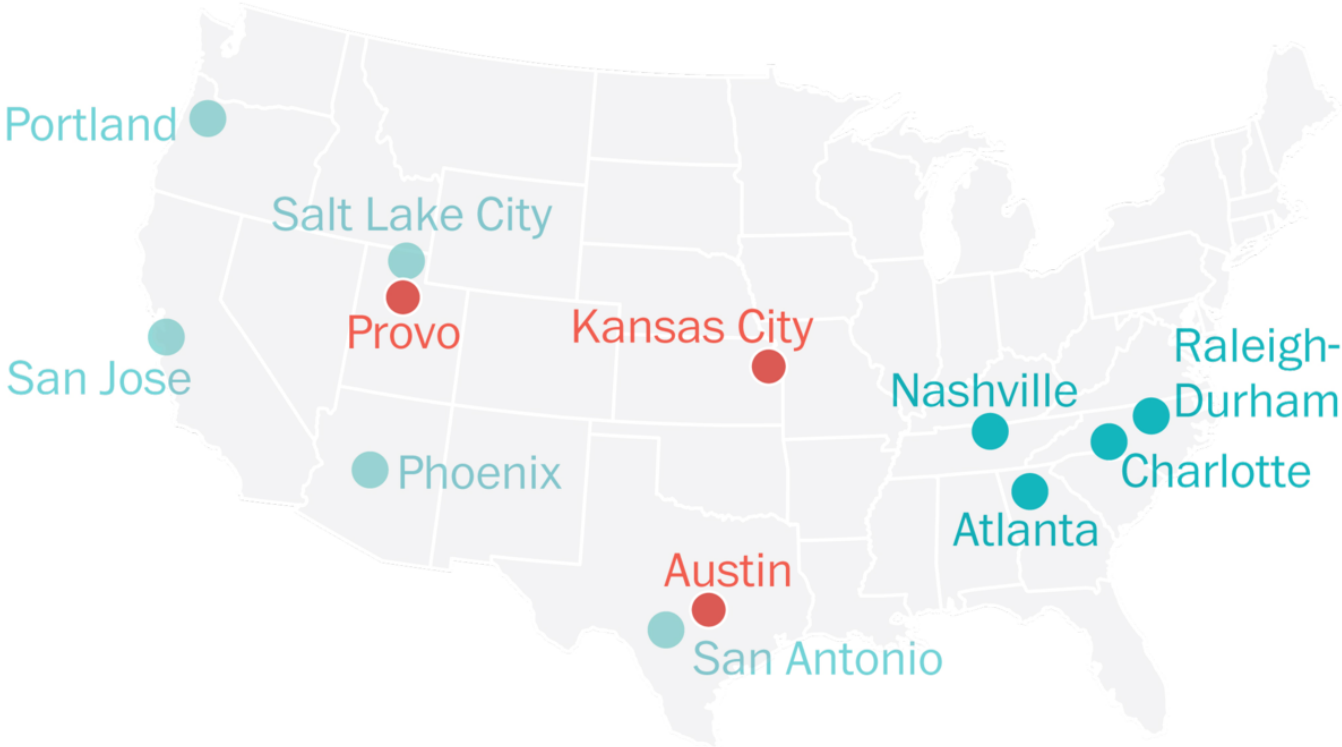
**So What Is
Being Done to Fix
This Problem?**

Google fiber



Google Fiber cities

● Active ● Planned ● Potential



Source: Google

YOUR GIG IS HERE.

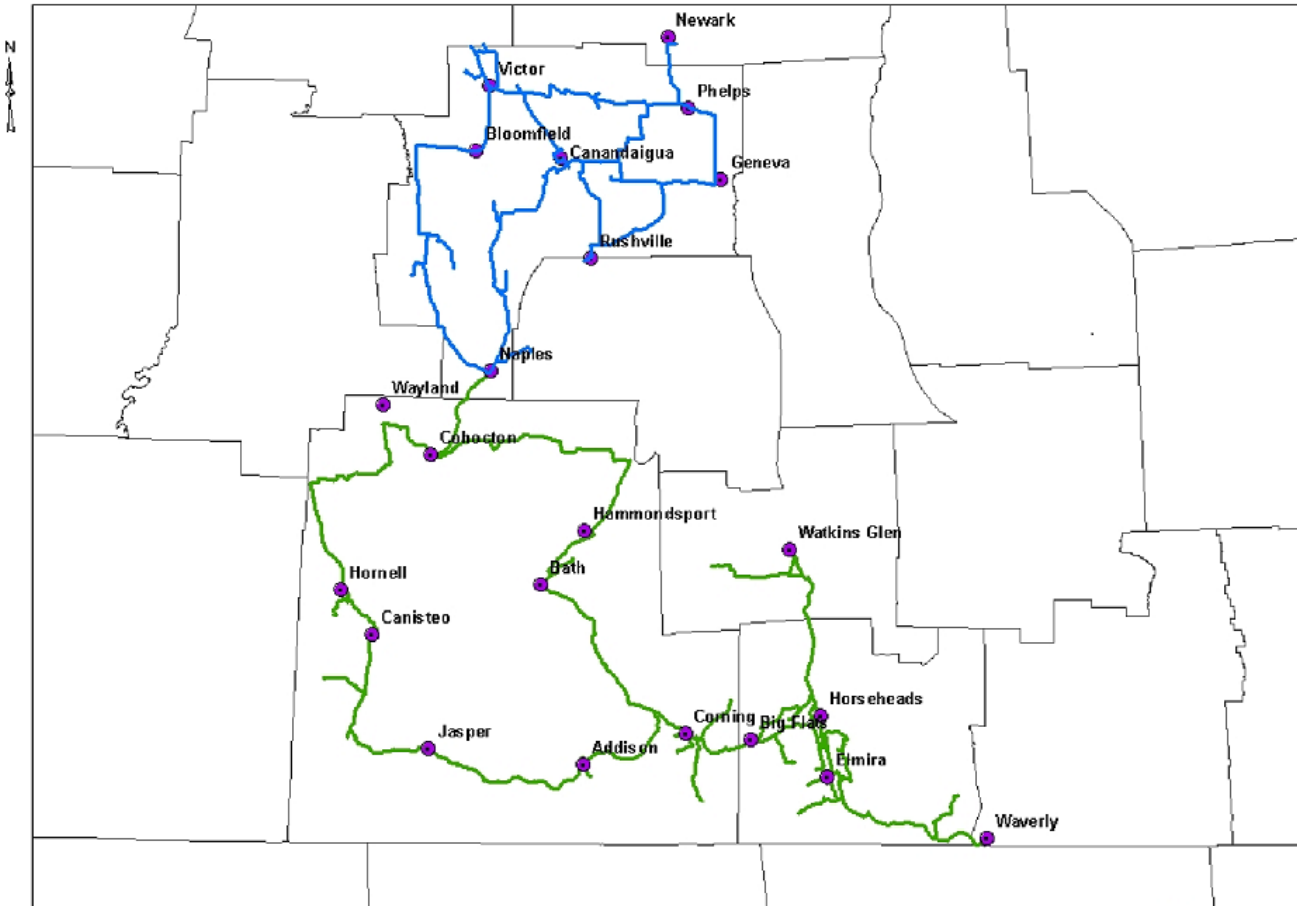
Right here, in Chattanooga.

Only in Chattanooga, Tennessee is 1 Gigabit-per-second Internet speed available to every home and business - over 150,000 of them - throughout the entire community. Urban or rural, business or residence, Internet speeds that are unsurpassed in the Western Hemisphere – from 50 Megabits-per-second all the way up to one gigabit-per-second are accessible here. Today.



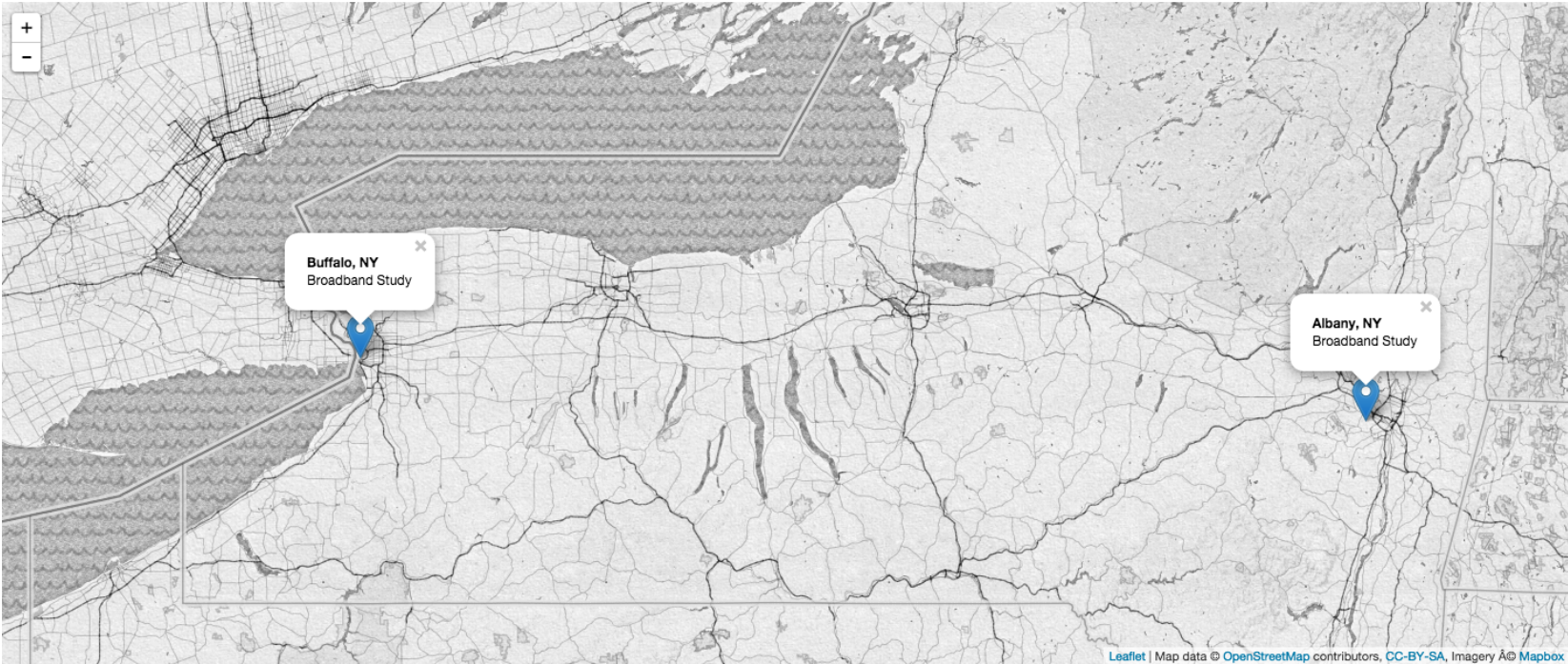
Thanks to the Gig, STEM students in Chattanooga are experiencing biology and STEM like never before. Researchers at USC place live biological specimens under a Digital Cinema Microscope and capture ultra-high resolution (4k) movies of the microorganisms while simultaneously transmitting live, HD images from the microscope to students in the STEM class.

[Learn More >](#)



Access Ontario and Southern Tier Network
FIBER MAP





The Role of Web Mapping

- Asset Inventorying
- Costing and Planning
- Management

Fiber Network Inventories

The screenshot displays the FiberLocator web application interface. At the top left, the logo "FiberLocator" is visible. In the top right corner, there are buttons for "Support & Training", "Logout", and a user profile icon. The main map area shows a detailed view of fiber networks in Albany, NY, with various colored lines representing different providers. The sidebar on the left contains the following sections:

- Map Data**
- Available Data Sets**
Select the data you'd like to see on your map:
 - Lit Buildings/Data Centers
 - Metro Networks
 - Long Haul Networks
- Map Data in View**
Data visible on your current map
 - Metro Networks
 - 186 Communications
 - Axia NGNetworks USA
 - CenturyLink Metro
 - DANC
 - Fibertech
 - First Communications
 - FirstLight
 - FirstLight - Leased
 - G4S
 - Hibernia
 - Level3 Metro
- [Request Network Pricing](#)
- Show Network Pricing

At the bottom of the sidebar, there is a "My Workspace" section. The map area includes a search bar with "Albany, NY" entered, a "My Workspace" button, and a "Map Data" button. The map shows a dense network of fiber lines in various colors (red, orange, green, blue, purple) overlaid on a satellite-style map. The bottom right corner of the map area contains the FiberLocator logo and copyright information: "FiberLocator | NBT Solutions, © 2010 NAVTEQ, © 2015 Microsoft Corporation, © AND, Powered By NBT Solutions".

Finding Vertical Assets for Small Cell Equipment

The screenshot shows a web application interface for finding vertical assets for small cell equipment. The interface is divided into three main sections: a search panel on the left, a map in the center, and a table of results at the bottom.

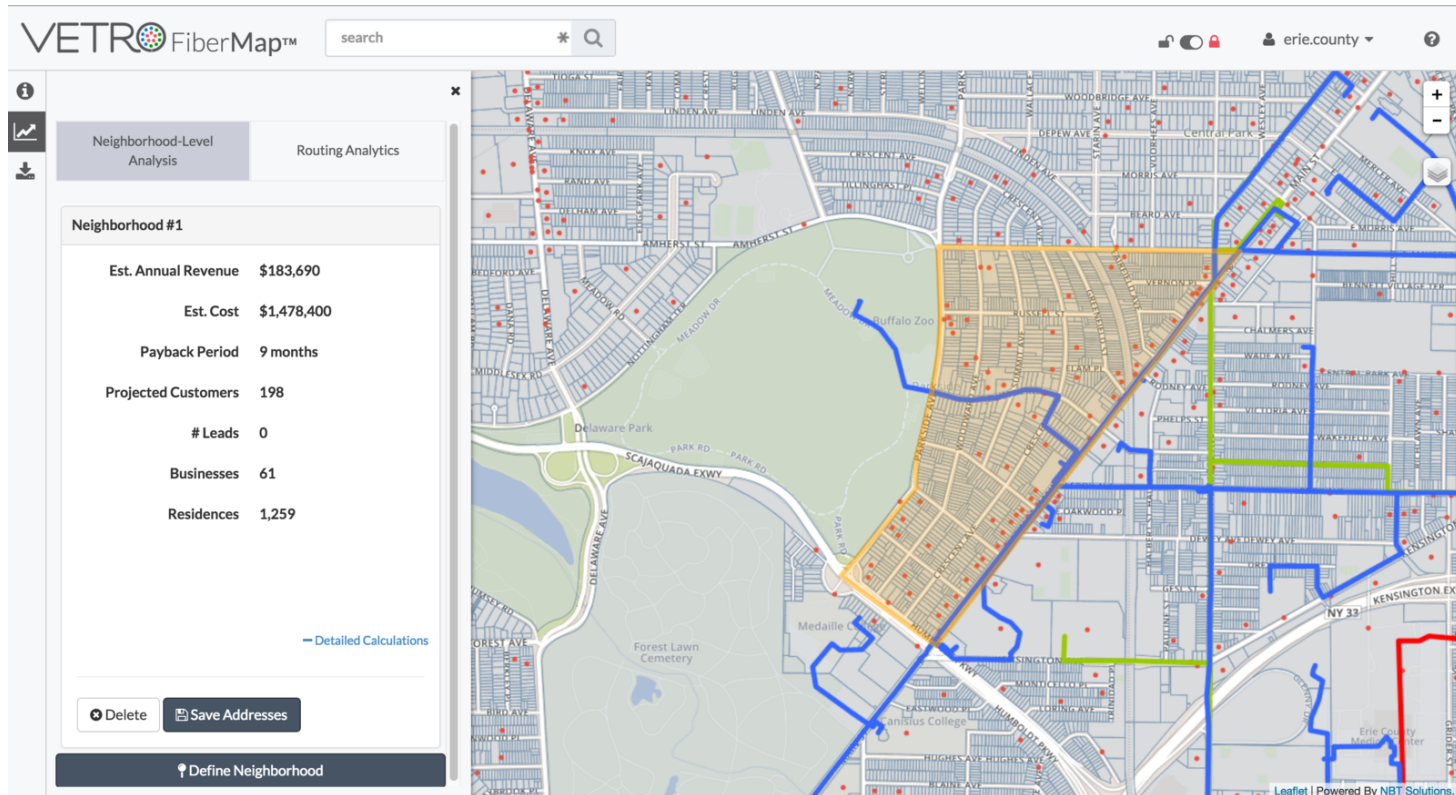
Search Panel: The search panel is titled "Search" and "Define a Search Area". It includes a search bar, a "Radius" input field, and a "meters" dropdown menu. There are also buttons for "Define a Search Area" and "Reset Search Area".

Map: The map shows an aerial view of Columbus, OH, with a yellow circular search area centered on the city. The map is overlaid with a grid of blue and red markers, representing the locations of vertical assets. The text "Columbus" is visible on the map.

Table: The table displays the results of the search, showing 260 assets found. The table has the following columns: Select All, Asset ID, Name, Site Type, Site Subtype, Site Status, and Base Ground Elevation (FT). The first three rows are highlighted in orange.

<input type="checkbox"/> Select All	Asset ID	Name	Site Type	Site Subtype	Site Status	Base Ground Elevation (FT)
<input checked="" type="checkbox"/>	CNX-COLOH0000065LB	Police Safety Building	Buildings	Lit Building		728.34648
<input type="checkbox"/>	CNX-COLOH0000041LB	Lincoln Theatre	Buildings	Lit Building		800.52496
<input type="checkbox"/>	CNX-COLOH0000074LB	City Parking Garage	Buildings	Lit Building		741.46984

Neighborhood Based Costing



Asset Management

The screenshot displays the VETRO FiberMap™ web application interface. At the top left, the logo "VETRO FiberMap™" is visible next to a search bar containing the word "search". The main map area shows a geographic view of Knightville, Indiana, with a red line representing a fiber optic route along Highland Ave. The route is marked with yellow circular nodes and blue square nodes. Other streets shown include Columbus Ave, Scamman St, Rosewood, and Stanley. A green area represents a park or undeveloped land. A blue line indicates a creek labeled "Kimmerling Creek".

On the left side of the interface, there is a sidebar with a table of details for a selected "Pole":

Pole	
Road:	Highland
Elec #:	24
Telco #:	24
Licensed:	Licensed
Owners:	
Status:	Survey Complete

Below the table is a photograph of a utility pole with multiple power lines against a blue sky.

At the bottom right of the map, there is a small text credit: "Leaflet | Powered By NBT Solutions."

Summary

- **Broadband is becoming an essential utility**
- **Public/Private partnerships can help create broadband alternatives**
- **Mapping and spatial analysis will facilitate much of this new expansion**

Sorry NO

INTERNET Today