



The Partnership for a Connected Illinois Webinar Series

Webinar 1
The Illinois Broadband Map

Agenda



1. The Partnership for a Connected Illinois' <http://broadbandillinois.org> Web Site (Drew Clark)
2. The ESRI BroadbandStat Tool (Mike Rudibaugh)
3. The National Broadband Map at <http://broadbandmap.gov> (Brian Webster)
4. The Broadband Illinois Data Collection Process (Ruben Clark)
5. The Broadband Illinois Data Verification Widget (Paul Baker, Webitects)



Presenters

- Drew Clark
Executive Director, PCI
- Mike Rudibaugh
Director of Mapping and Analysis, PCI
- Brian Webster
Telecom Project Coordinator, PCI
- Ruben Clark
GIS Analyst, PCI
- Paul Baker
President and Co-Founder, Webitects

PCI - Broadband Illinois

Drew Clark



PCI



- The Partnership for a Connected Illinois (PCI) is a 501(c)(3) non-profit organization based in Springfield, Illinois.
- PCI has a three-fold mission: (a) to collect and publish freely available broadband data on <http://broadbandillinois.org>, and elsewhere, (b) to ensure broadband access throughout the State, and (c) to maximize broadband's impact and use.

Broadband Service Finder

Go to www.broadbandillinois.org Enter the address in the search box to acquire the list of Carrier providers that serve your address. Then click **SEARCH** for the results

The screenshot shows the website's header with the logo and navigation links: HOME, NEWS, EVENTS, GET IT, USE IT, API, About, Contact, eTeams. A search bar contains the text "400 west monroe street springfield, il 62704" and a "Search" button. Below the search bar is a map of Illinois with a red pin indicating the search location. To the right of the map is a sidebar with sections: "What is Broadband Illinois?", "Tools" (Better data will help everyone get better connections...), "Research" (What kind of social and economic impact are broadband investments having? The answers will drive universal broadband. More »), and "Opportunity" (Better broadband means better lives. We're working to connect you and your community so that no one gets left behind. More »). At the bottom of the sidebar is a dark blue button that says "Get an API key" with the text "Free for software developers" below it. At the very bottom of the page, there is a line of text: "This is just the first of many tools we plan to build for consumers, policy makers, educators, business developers, and".

Broadband Service Finder

From the results, individuals can best make decisions and research Carrier providers serve their area based off Maximum upload and download speeds. Through the website you may also sort Broadband Carriers from Fastest to Slowest Speeds.

broadbandillinois About Contact eTeams

HOME NEWS EVENTS GET IT USE IT API Developer sign in

Find broadband near you (Find me)

400 west monroe street springfield, il 62704 Search Clear map

Closest address: 400 W Monroe St, Springfield, IL 62704
Lat, Long (39.799605,-89.658533)
Zoom to census block
See expanded results

What is Broadband Illinois?

7 carriers serve this area

Show community broadband centers

» See expanded results

Sort by Fastest Slowest Carrier Technology

AT&T Illinois
Asymmetric xDSL

10-25	--	1.5-3	--
Mbps MAX	Mbps TYP	Mbps MAX	Mbps TYP

Comcast
Cable Modem - Other

10-25	--	1.5-3	--
Mbps MAX	Mbps TYP	Mbps MAX	Mbps TYP

Broadband Service Finder

Carriers can also be identified by Census Block coverage. The providers within that Census block can further be displayed in expanded results.

broadbandillinois About Contact eTeams

HOME NEWS EVENTS GET IT USE IT API Developer sign in

Find broadband near you (Find me)

400 west monroe street springfield, il 62704 Search Clear map

Closest address: 400 W Monroe St, Springfield, IL 62704
Lat, Long (39.799605, -89.658533)
See expanded results

What is Broadband Illinois?

- 7 carriers serve this area
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Sort by Fastest Slowest Carrier Technology

AT&T Illinois
Asymmetric xDSL
10-25 Mbps MAX 1.5-3 Mbps TYP

Comcast
Cable Modem - Other
10-25 Mbps MAX 1.5-3 Mbps TYP

Verizon Wireless
Terrestrial Mobile Wireless
3-6 Mbps MAX 0.7-1.5 Mbps TYP 1.5-3 Mbps MAX 0.7-1.5 Mbps TYP

Application Programming Interface

Developers can also register for a API Key to build their maps on our data.

The screenshot shows a web browser window with the URL http://developer.broadbandillinois.org/users/sign_up. The page features a dark blue header with the "broadbandillinois API" logo and navigation links for "About", "Contact us", and "eTeams". Below the header is a light blue navigation bar with links for "HOME", "NEWS", "GET IT", "USE IT", and "API" (highlighted in green), along with a "Sign in" link. The main content area is divided into two sections. The left section, titled "Get an API key", includes a legend indicating that asterisks (*) denote required fields. It contains three input fields: "First name *", "Last name *", and an unlabeled field. The right section, titled "Already have a key? Sign in", includes two input fields: "Email *" and "Password *", a "Remember me" checkbox, and a "Sign in" button.

http://developer.broadbandillinois.org/users/sign_up

Broadband Illinois

broadbandillinois API

About Contact us eTeams

HOME NEWS GET IT USE IT API Sign in

Get an API key

* required

First name *

Last name *

Already have a key? Sign in

Email *

Password *

Remember me

Sign in

BroadbandStat

Mike Rudibaugh



BroadbandStat

BroadbandStat is a new interactive mapping platform that provides a multi-functional, user-friendly way for local leaders, policymakers, consumers, and technology providers to devise a plan for the expansion and adoption of broadband.



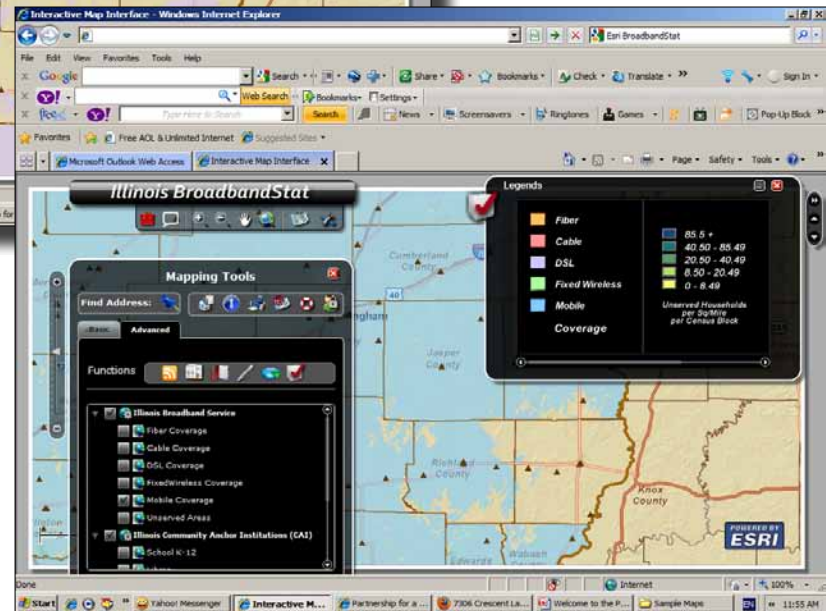
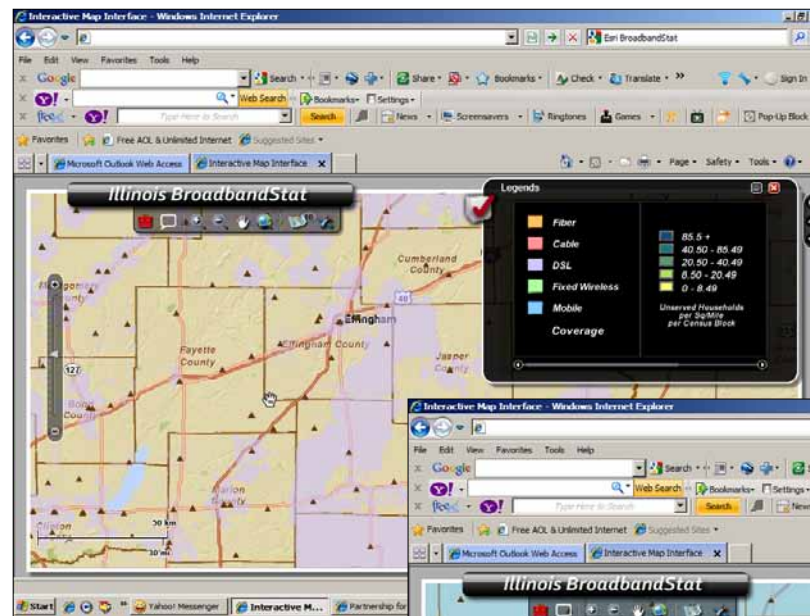
BroadbandStat



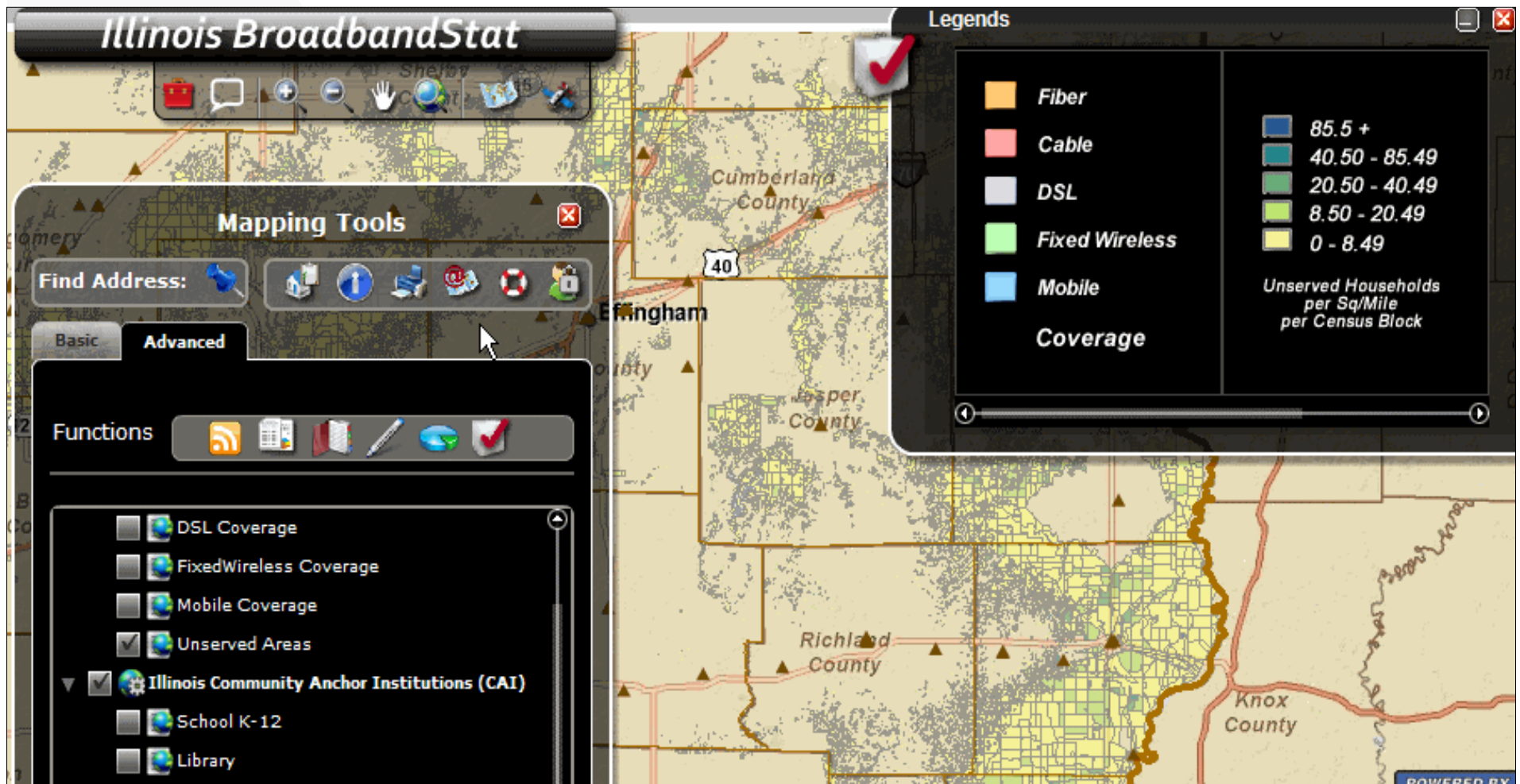
- Mapping Functions
- IDENTIFY broadband service options.
- VISUALIZE broadband coverage areas.
- SHOW types and speeds of existing coverage.
- ANALYZE barriers to broadband adoption.
- EVALUATE the impact of proposed broadband projects.
- TRACK broadband growth.



BroadbandStat – Coverage



BroadbandStat – Mapping Functions



BroadbandStat – Mapping Functions



- IDENTIFY broadband service options.
- VISUALIZE broadband coverage areas.
- SHOW types and speeds of existing coverage.
- ANALYZE barriers to broadband adoption.
- EVALUATE the impact of proposed broadband projects.
- TRACK broadband growth.
- Assessing CAIs in relation to underserved areas relative to broadband.
- Example: Southeast Illinois and Public Safety



BroadbandStat Mapping



- Advantages
 - Ease of use
 - No software
 - Interface appears just like another website
- Disadvantages
 - Limited query capabilities
 - Speed
 - Errors
 - Users have little ability to modify or customize the look and feel of the data relative to map presentation



Illinois Broadband Map

Assessing the Social and Economic Impacts

PCI Mapping Goals

How does PCI link data, maps, and research to support adoption and access goals for broadband expansion in Illinois?



Illinois Broadband Map

Assessing the Social and Economic Impacts



1. Evaluate current mapping resources being used in Illinois.
 - Awareness on current resources
 - Feedback from user community
2. Survey PCI's users relative to data, mapping, and research goals.
3. Construct mapping objectives from prior steps in developing PCI's Strategic Broadband Mapping Portal (IBM Version 1.0)
 - Data (underserved areas, regions, and identifying marketing opportunities)
4. Education

National Broadband Map

Brian Webster



National Broadband Map




- <http://www.broadbandmap.gov/>
- The National Broadband Map can list all carrier providers for any specific address Nationwide.

The screenshot shows a web browser window with the URL <http://broadbandmap.gov/>. The page features the NBM logo (a blue map of the United States with 'NBM' in white) and the text 'National Broadband Map v1.0' and 'How connected is my community?'. Below this is a search bar containing the address '300 S. Durkin Dr. Springfield, IL 62704' and a blue 'FIND Broadband' button. Underneath the search bar are two buttons: 'Explore the Map' (red) and 'Analyze the Data' (yellow). A section titled 'Top 5 searches' lists the following addresses: '38 w 45th st new york, ny 10036', 'franklin mcpherson square', '2 1st avenue, new york, ny', and '2017 mission street, san francisco, california ny'. At the bottom of the page, there is a navigation menu with links for 'Analyze', 'Map', 'Developer', 'About', 'Native Nations', 'Rank', 'Summarize', 'Engage', 'Share', 'Blog', 'Twitter', and 'Data Download'.

National Broadband Map

The site generates the list of providers that service the address entered along with speeds. It can also be viewed by Wired or Wireless. There are other features such as map my community or rank my community.



 **National Broadband Map**
How connected is my community?

Homepage • Analyze • Map • Developer • About • Native Nations

300 s. durkin dr. springfield, il 62704 **FIND**

Print this page • About area • Compare Areas

Search Results: Broadband Providers for this Area

The list below contains broadband providers that have reported offering service to all or part of the area that is shaded on the map to the right. Providers are listed in order of maximum speed advertised by the provider. To see more information about each provider, click on an individual service provider's name or click the Expand All button. Help improve this data by confirming the availability and speed information. This dataset is updated approximately every six months and your input is important to us.

Show All • Show Wired • Show Wireless Expand All

Advertised Speeds Above 3 Mbps Data as of: 6/30/10

AT&T Inc.	<div style="width: 100%;"><div style="width: 100%; background-color: #ccc;">10 - 25 Mbps</div></div>	»
Comcast Corporation	<div style="width: 100%;"><div style="width: 100%; background-color: #ccc;">10 - 25 Mbps</div></div>	»
Verizon Communications Inc.	<div style="width: 100%;"><div style="width: 33%; background-color: #ccc;">3 - 6 Mbps</div></div>	

Advertised Speeds Above 768 Kbps and Below 3 Mbps Data as of: 6/30/10


T-Mobile USA	<div style="width: 100%;"><div style="width: 33%; background-color: #ccc;">1.5 - 3 Mbps</div></div>	
KeyOn Communications Holdings, Inc.	<div style="width: 100%;"><div style="width: 33%; background-color: #ccc;">1.5 - 3 Mbps</div></div>	
Monster Wireless Internet, LLC	<div style="width: 100%;"><div style="width: 33%; background-color: #ccc;">1.5 - 3 Mbps</div></div>	
Sprint Nextel Corporation	<div style="width: 100%;"><div style="width: 33%; background-color: #ccc;">768 Kbps - 1.5 Mbps</div></div>	

Most Common Speed: 10 Mbps Data Source • Download • API Call

Satellite is also available in most areas. [Click here to read more](#)

Is your broadband provider listed? If not, please enter the provider below

SEND



Data © 2009 OpenStreetMap, Rendering © 2009 CloudMade

Share »
Share this page with my community

Map »
Map my community

Rank »
Rank my community

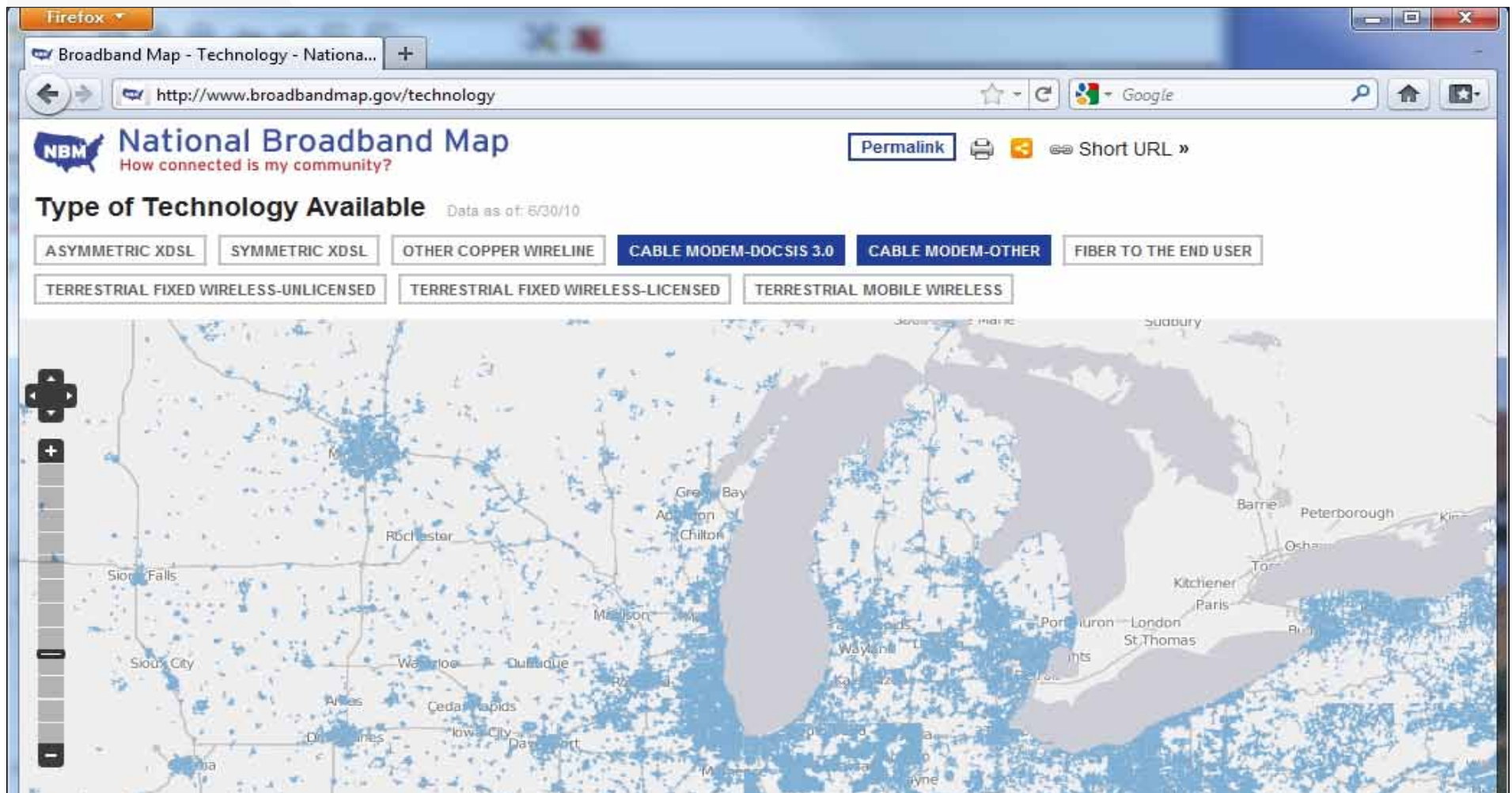
Summarize »
View statistics about my community

Broadband Classroom »
Learn more about broadband

Engage »

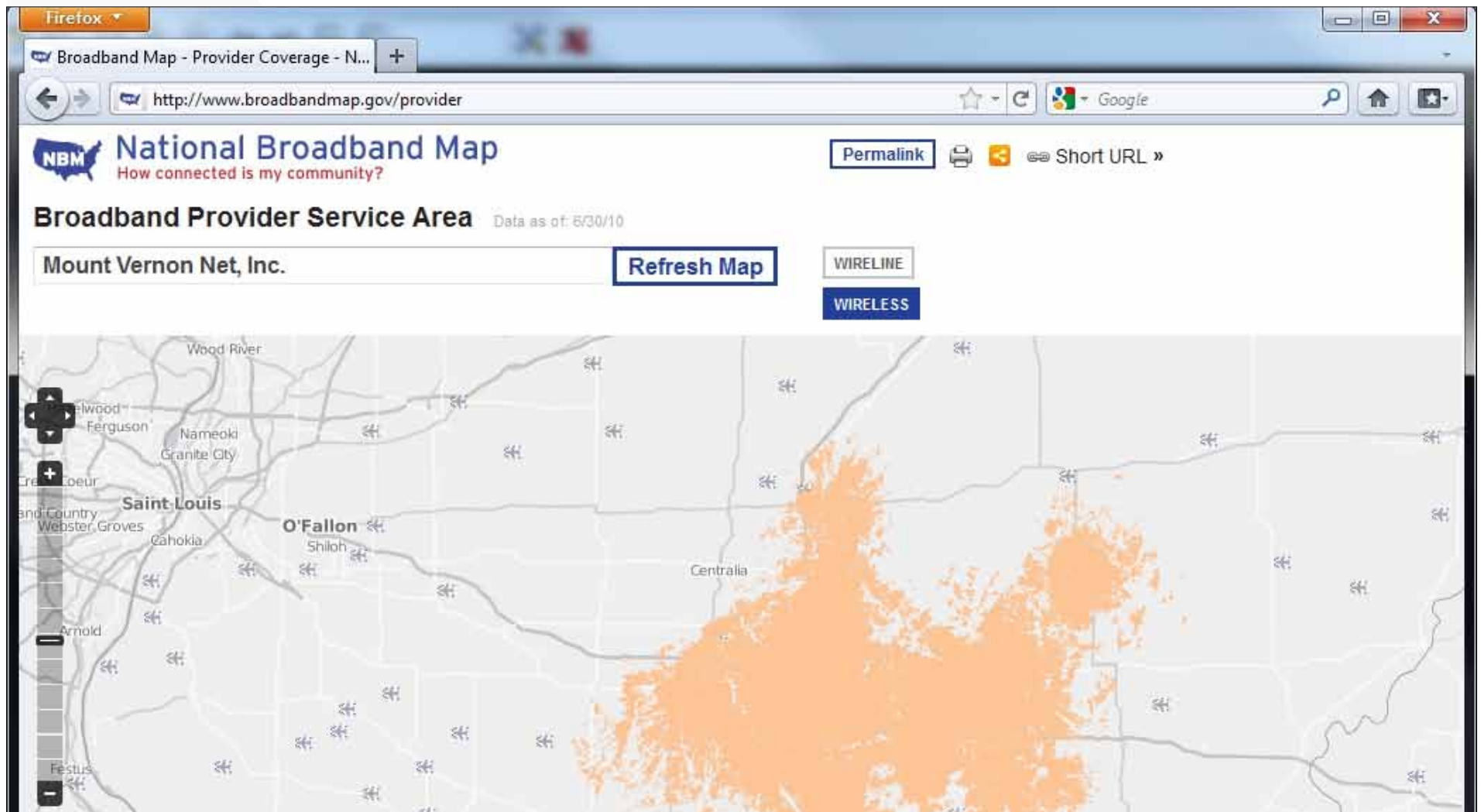
National Broadband Map

This is an overview of broadband providers coverage by technology type (cable modem).



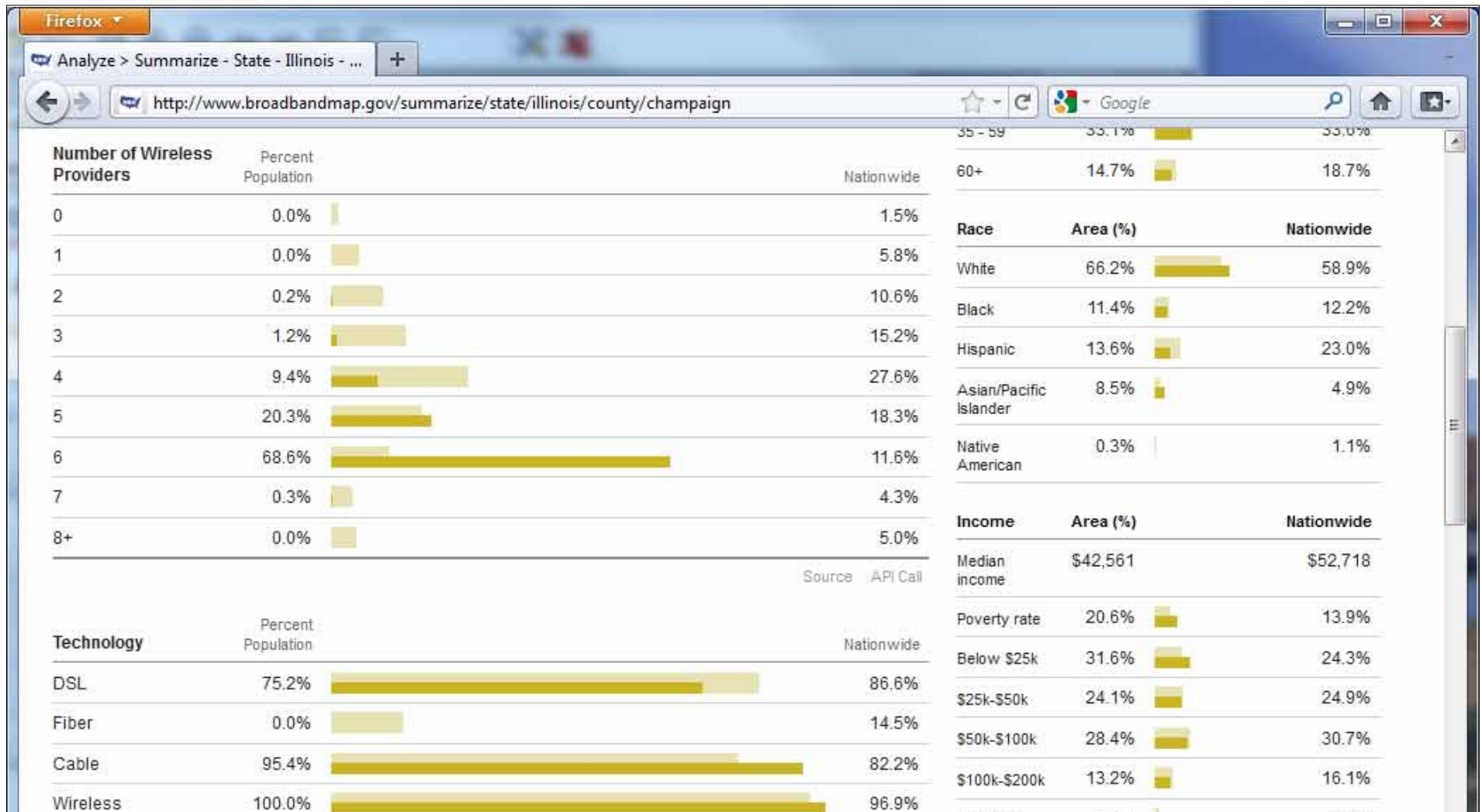
National Broadband Map

This map view shows a specific carrier coverage area.



National Broadband Map

This shows the demographics of a specific county.



National Broadband Map

This shows county rankings.

The screenshot shows a Firefox browser window with the address bar displaying <http://www.broadbandmap.gov/rank/champaign,il/county/illinois/percent-household-uni>. The page content is a table of county rankings in Illinois.

Rank	Name	Provider Any no>1	Speed Download DL>1.5	Demographics Income Median	Demographics Age 20-34	Demographics Age 35-59	Demographics Age 60+
78	Gallatin, IL	100%	98.3%	33,954	18.7%	30.4%	23.3%
79	Putnam, IL	100%	99.9%	54,528	18.2%	31.7%	23.0%
80	Hardin, IL	100%	100%	32,083	17.7%	33.2%	24.9%
81	Jefferson, IL	100%	98.1%	40,343	19.2%	33.1%	20.6%
82	Union, IL	100%	97.6%	38,028	18.4%	32.1%	22.9%
83	Clay, IL	100%	80.8%	37,660	18.6%	29.8%	21.7%
84	Stephenson, IL	100%	99.5%	43,561	18.7%	32.1%	21.7%
85	Jo Daviess, IL	100%	97.3%	52,514	17.5%	31.3%	25.8%
86	Marion, IL	100%	96.2%	37,446	19.2%	31.1%	20.4%
87	Schuyler, IL	99.9%	87.6%	42,425	18.1%	31.2%	22.8%
88	Jersey, IL	99.9%	93.9%	51,553	20.9%	33.0%	20.0%
89	Macoupin, IL	99.9%	97.1%	46,857	19.4%	31.7%	20.8%
90	Henderson, IL	99.8%	81.9%	39,536	17.8%	31.8%	23.6%
91	Hancock, IL	99.8%	96.7%	42,732	18.3%	30.6%	22.3%
92	Wabash, IL	99.7%	96.4%	44,738	19.5%	31.7%	21.8%
93	Adams, IL	99.7%	97.1%	43,460	19.6%	31.7%	21.2%
94	Alexander, IL	99.6%	94.7%	28,983	18.8%	30.1%	20.2%

Carrier Provider Data Collection

Ruben Clark



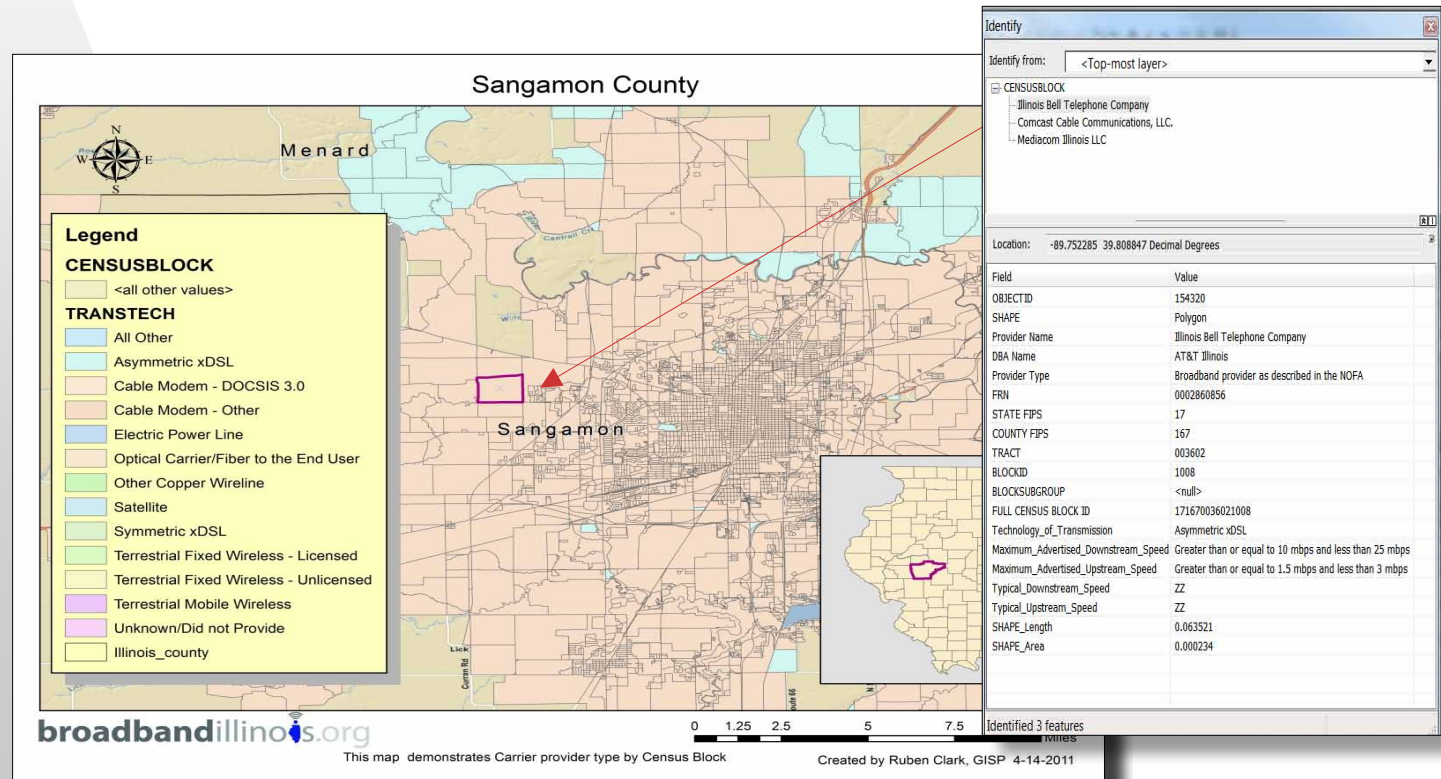
Carrier Provider Data Collection



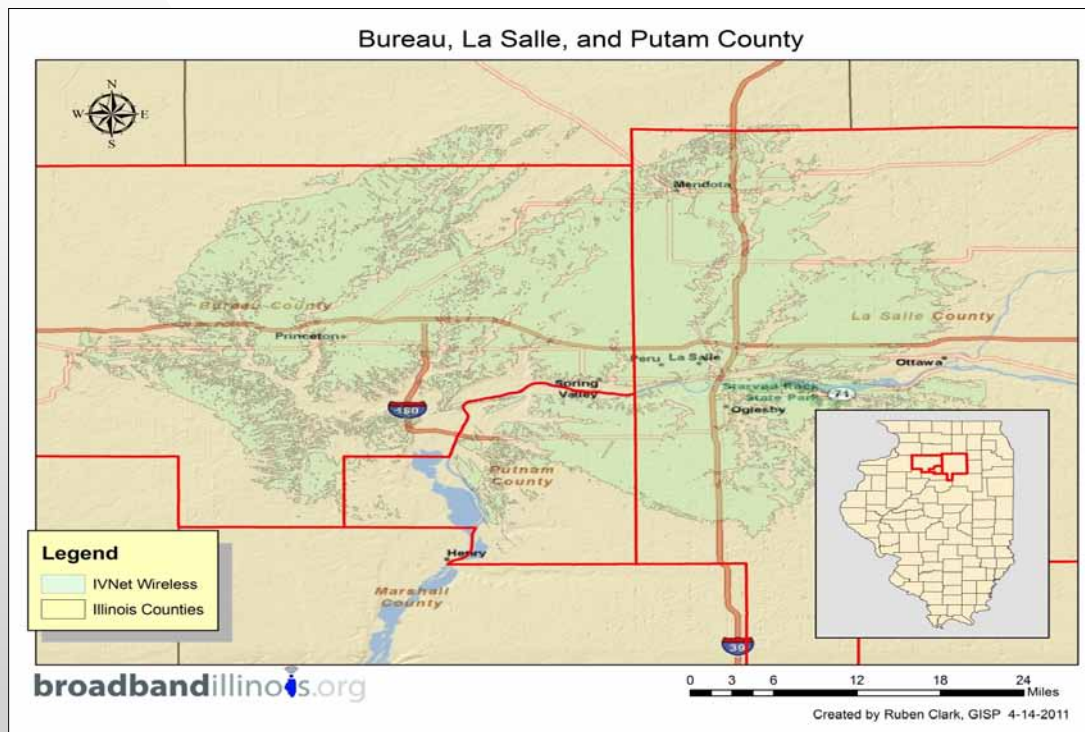
- Carrier Providers by Census Block
- Carrier Providers by Wireless Coverage
- Carrier Technology and Speeds
- Carrier Wireless Technology and Speeds
- Community Anchor Institutions (featured also in Webinar 3, on June 1, 2011)

Carrier Provider by Census Block

The Census Block selected shows the number of carrier providers that service that particular Census Block. Provider data is collected at a detailed level, including DBA name, Technology Transmission, Speeds and Census Block identification numbers.



This map demonstrates IVNET Wireless footprint over county boundaries.



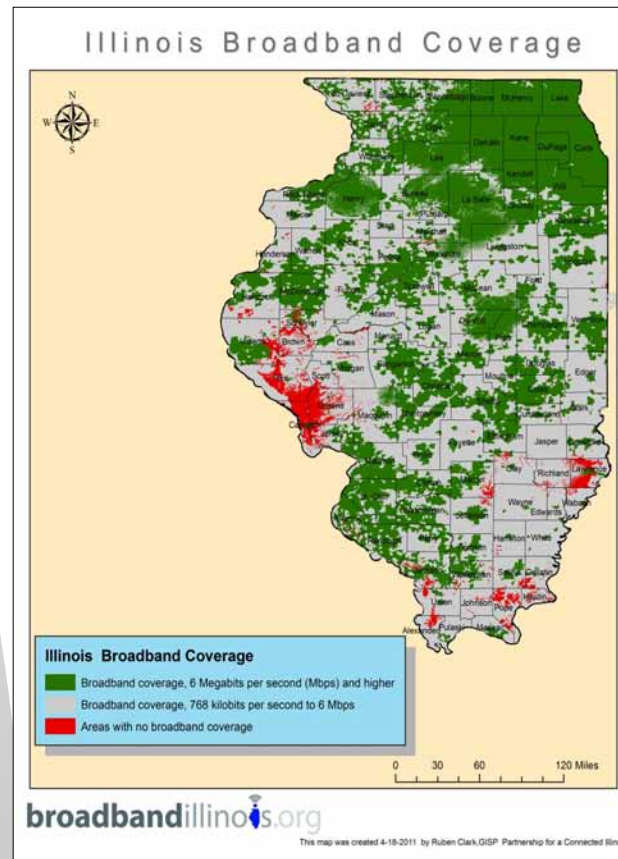
IVNet Wireless
IVNet, LLP

Location: -89.212268 41.392081 Decimal Degrees

Field	Value
FID	0
Shape	Polygon
ID	94
OBJECTID	0
PROVNAME	IVNet, LLP
DBANAME	IVNet, LLP
FRN	9999
TRANSTECH	70
SPECTRUM	6
MAXADDOWN	10
MAXADUP	10
TYPICDOWN	
TYPICUP	
STATEABBR	IL
SHAPE_Leng	0
SHAPE_Area	0

Identified 1 feature

Speed Tiers

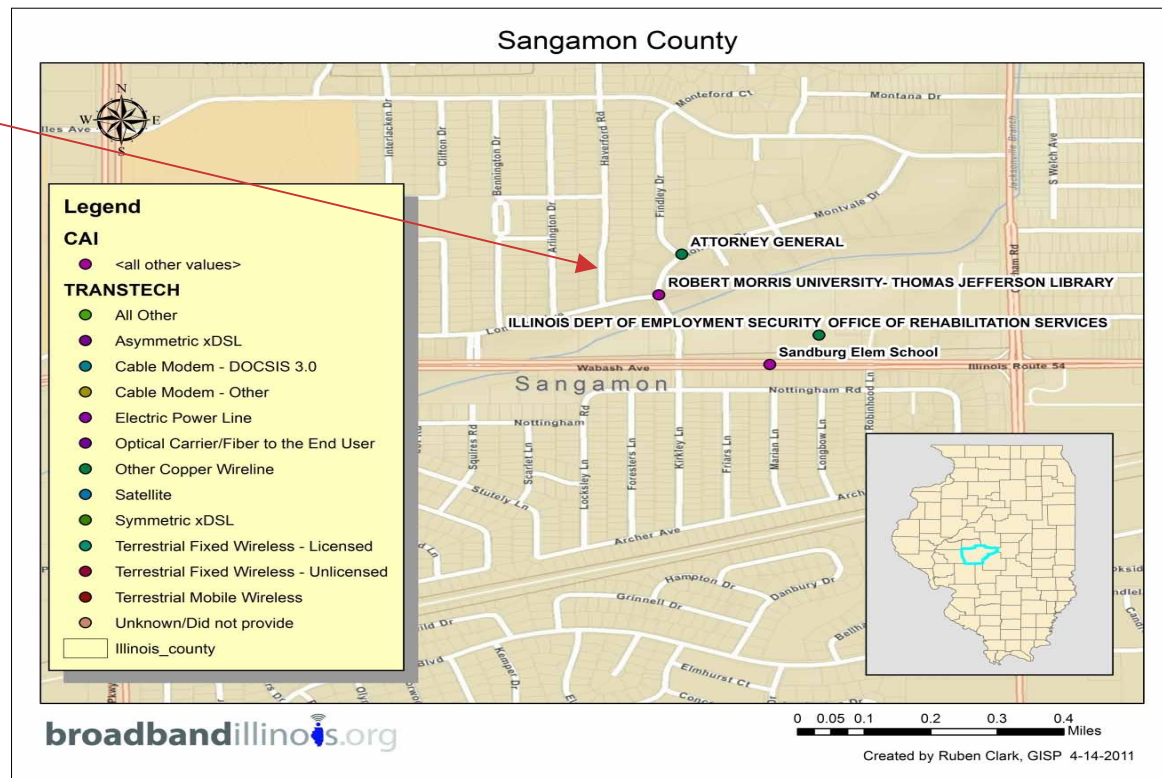


- We can also identify Coverage areas by specific speed tiers.
- This gives us a better understanding of areas with slower speeds to no broadband coverage.

CAI (Community Anchor Institutions)

CAIs consist of schools, libraries, medical and healthcare providers, public safety entities, community colleges and other institutions of higher education, and other community support organizations and entities.

Field	Value
OBJECTID	4575
SHAPE	Point
ANCHOR NAME	Sandburg Elem School
ADDRESS	2051 Wabash Ave
Building Number	N/A
PREDIR	
STREET NAME	2051 Wabash Ave
STREET TYPE	
End_User_Suffix_Direction	
CITY	Springfield
STATE CODE	Illinois
End_User_Zipcode	62704
End_User_Zip_Plus4	
LATTITUDE	39.764105
LONGITUDE	-89.692089
Category	School - K through 12
Broadband Service	U
PublicWifi	Unknown
LURL	
Technology_of_Transmission	
Advertised_Downstream_Service_Speed	ZZ
Advertised_Upstream_Service_Speed	ZZ
FULL_CENSUS_BLOCK_ID	171670020002022
CAIID	



Broadband Illinois Widget

Webitects



Broadband Illinois Widget

The widget is an extension application that will soon be on our BroadbandIllinois.org website
The application will allow us to record carrier provider coverage discrepancies.

Broadband Illinois Widget

broadbandillinois

Use this widget!
Praesent vehicula nisi tincidunt purus rhoncus in bibendum magna tincidunt. Integer malesuada lorem in nibh.

Enter your address to see broadband carriers in your area.

© 2011 Broadband Illinois. All rights reserved.

broadbandillinois

Use this widget!
Praesent vehicula nisi tincidunt purus rhoncus in bibendum magna tincidunt. Integer malesuada lorem in nibh.

Can you get these services here?

CARRIER & SPEED	YES	NO
Mediacom 10-25 Mbps MAX Cable Modem - DSL	<input type="checkbox"/>	<input type="checkbox"/>
Verizon Wireless 3-6 Mbps MAX Terrestrial Mobile Wireless	<input type="checkbox"/>	<input type="checkbox"/>
Sprint 0.7-1.5 Mbps MAX Terrestrial Mobile Wireless	<input type="checkbox"/>	<input type="checkbox"/>

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broadbandillinois

Thank you!
We hope to nisi tincidunt purus rhoncus in bibendum magna tincidunt. Integer malesuada lorem in nibh.

Help improve Broadband Illinois in your area
Questions? Visit Broadband Illinois.

I want to volunteer
 I want to be an organizer

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broadbandillinois

Thank you!
We hope to nisi tincidunt purus rhoncus in bibendum magna tincidunt. Integer malesuada lorem in nibh.

Help improve Broadband Illinois in your area
Questions? Visit Broadband Illinois.

Thank you for signing up!

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Questions & Answers



<http://broadbandillinois.org>

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