



Connect Michigan

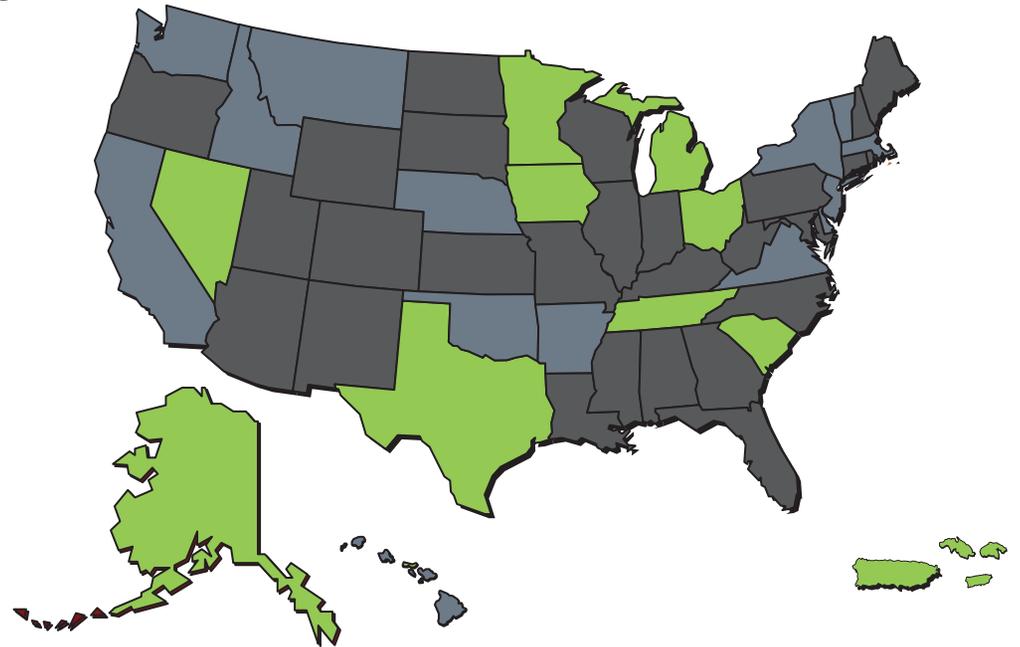
Technology Transitions

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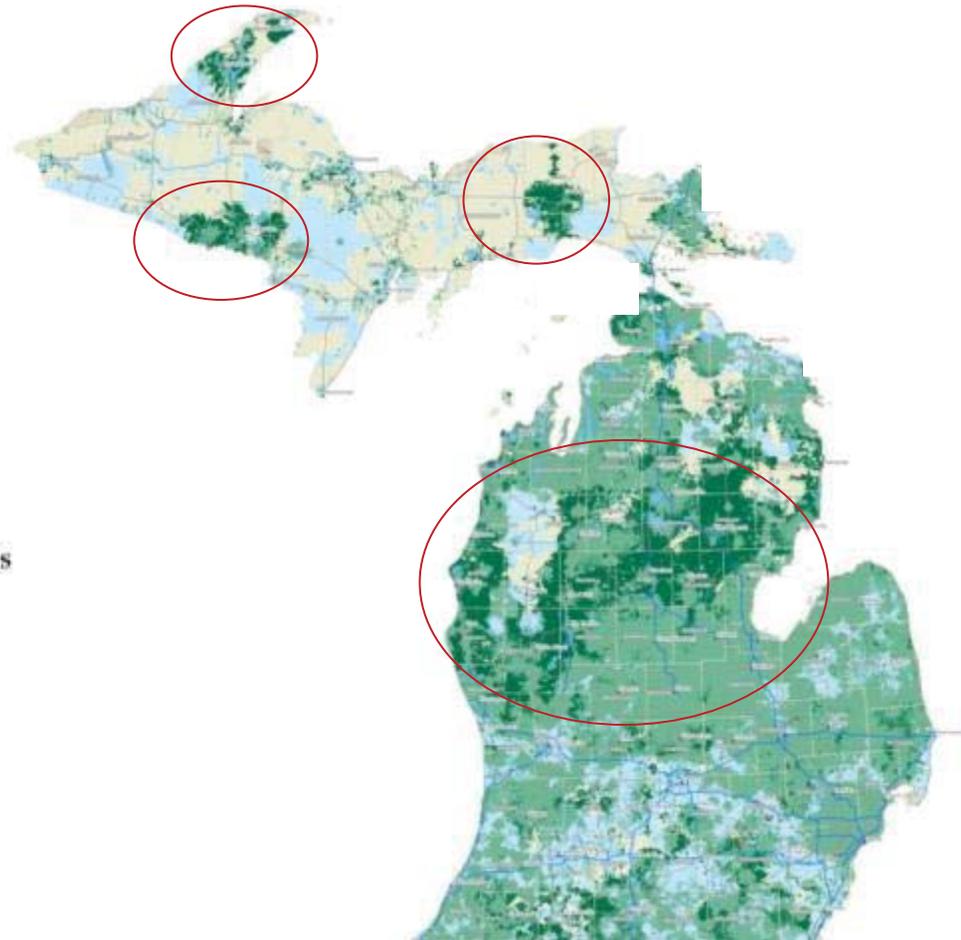
TOM KOUTSKY
Chief Policy Counsel
Connected Nation

- ✓ Program Overview
- ✓ Connected Community Engagement Program
- ✓ Technology Transitions and Access to Data

- 10 state-based broadband public-private partnerships, from Alaska to Puerto Rico, impacting 876 counties
- Library-focused initiatives in an additional 13 states in partnership with the Bill & Melinda Gates Foundation
- Broadband availability mapping in 37% of U.S. landmass and 27.5 million households
- Connectivity surveys and mapping for 90,000 Community Anchor Institutions
- 171 communities actively engaged in local technology planning activities

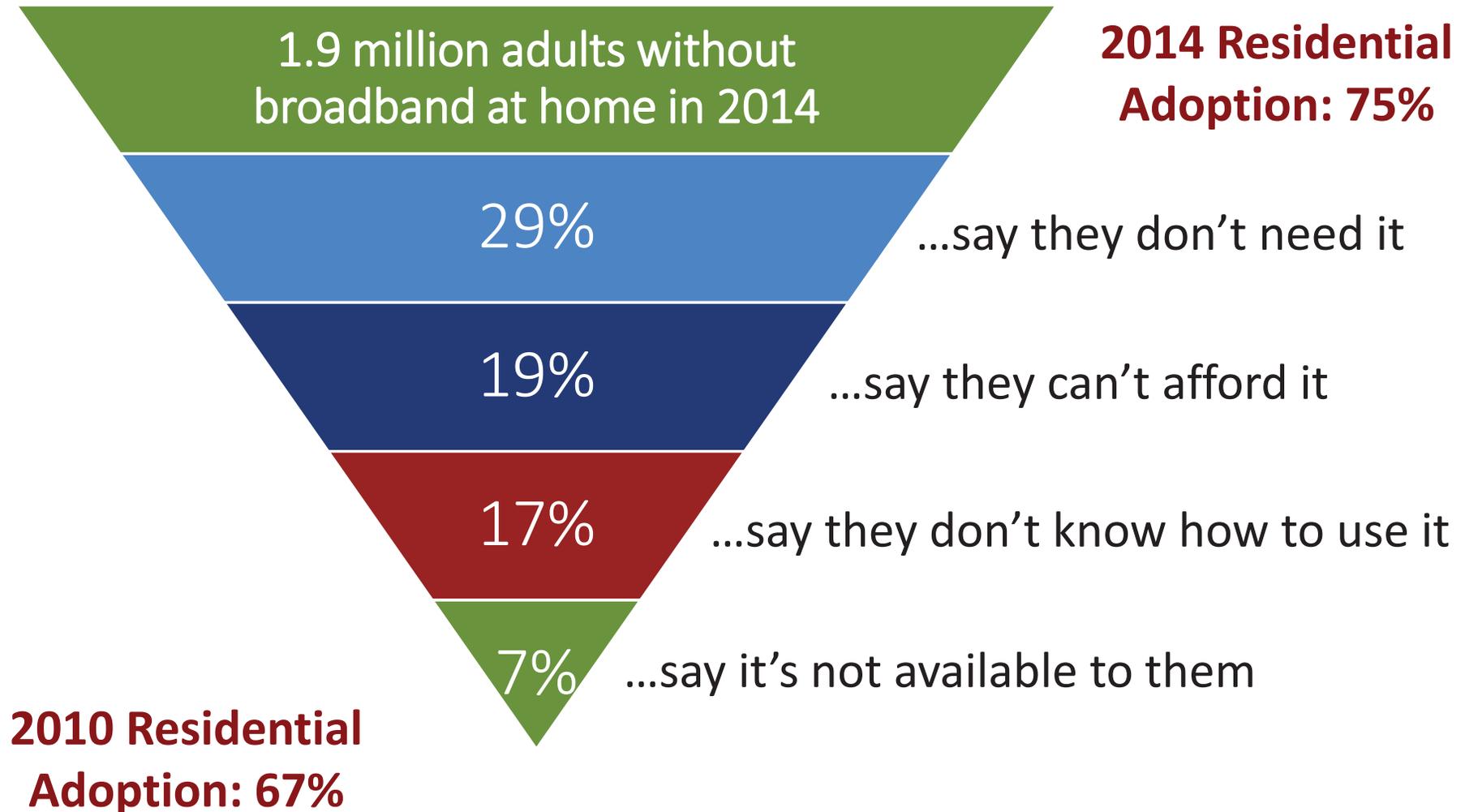


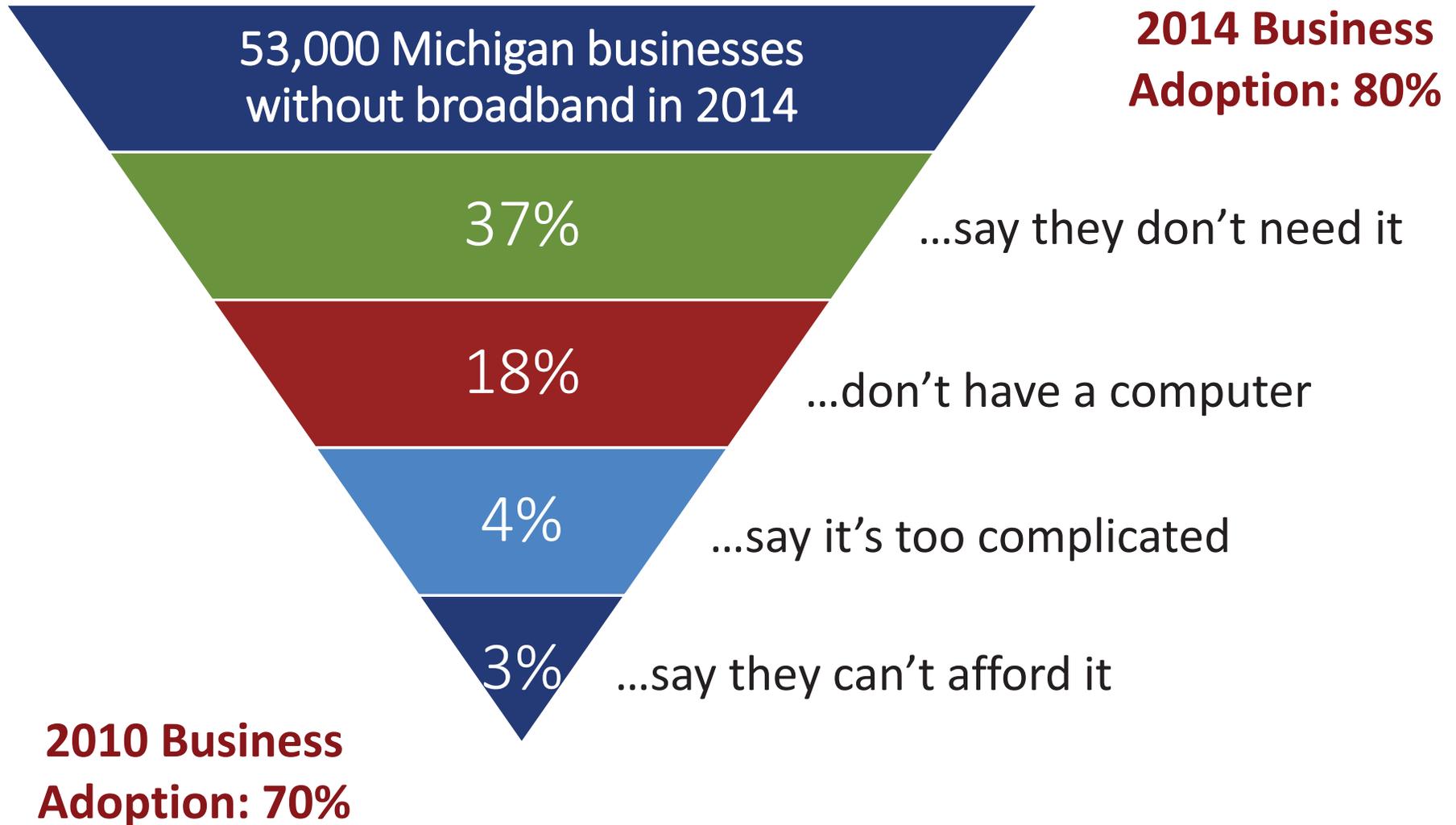
Broadband Growth (Since October 2010)



We partnered with Connect Michigan to create a pilot program to help communities create local task forces to improve their small businesses' use of technology—with great success. We hope to work on similar collaborative projects in the future.

—Community Economic Development Association of Michigan





The Connect Michigan initiative has helped not only our local communities get connected, it has helped our local entrepreneurs and businesses succeed right from their own homes or businesses located outside the city limits.

—West Central MichiganWorks!

1. Local technology planning program
 - a. Establish community team of diverse stakeholders
 - b. Assess the local broadband/technology landscape against standards based on the National Broadband Plan
 - c. Develop a plan to fill gaps and local technology issues identified through the assessment process
 - d. Implement projects to increase the access, adoption, and use of technology and broadband throughout the community
 - e. Achieve Connected certification
2. Federal grant funded and required engagement with 14 communities in Michigan
3. Actively working with 53 communities



ACCESS – is the infrastructure available?

Availability	Speed	Competition	Platform Dependency	Middle Mile	Mobile
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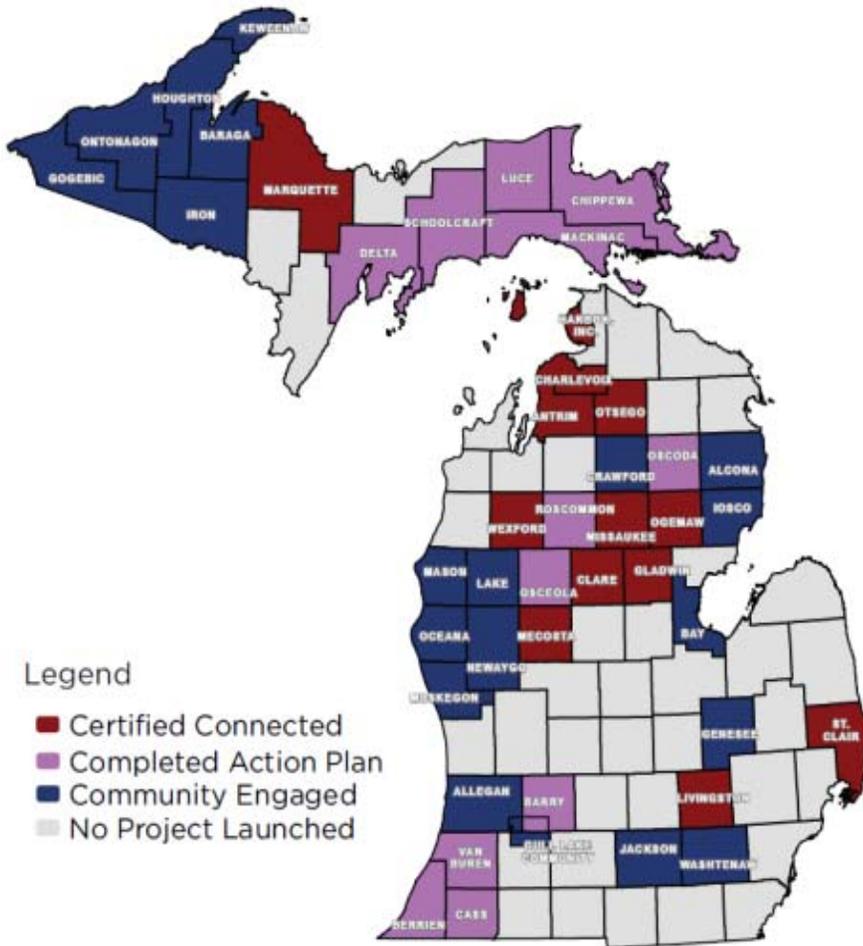
ADOPTION – are the skills and desire present?

Basic Adoption	Digital Literacy – Hardware	Digital Literacy – Software	Digital Literacy – Online Activity	Public Computer Centers	Frequency of Use	Affordability
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USE – how does our community leverage technology?

Government	Libraries & Comm. Organizations	Economic Prosperity	K-12 Education	Healthcare	Tourism	Agriculture	Public Safety	Entrepreneurship/ Talent/ Workforce	Higher Education
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- Seven states participating in Connected (Michigan, Ohio, Tennessee, South Carolina, Iowa, Texas, and Nevada)
- 57 communities have attained Connected Certification (nationwide)
- 15 are in Michigan (Antrim, Charlevoix, Clare, Crawford, Gladwin, HARBOR, Inc., Houghton, Livingston, Marquette, Mecosta, Ogemaw, Otsego, Roscommon, St. Clair, and Wexford Counties)
- 67 communities have received a Technology Action Plan, but have not attained certification
- More than 3,200 participants have been engaged in the Connected program in the last three years
- Ongoing funding from Michigan Public Service Commission and state Department of Agriculture

Through the Connected Community Engagement Program we have put together a plan for broadband access, use, and engagement. This is the first time our area has looked at improving broadband access, and it's been a tremendous tool in building improved access for the future.

—Delta County Economic Development Alliance

Michigan Program Impact

Metric	Connected Communities	Statewide
3 Mbps Broadband Availability Growth between 2011 and 2014	17%	5.3%
Residential Broadband Adoption	85%	79%
Businesses with Websites	70%	65%



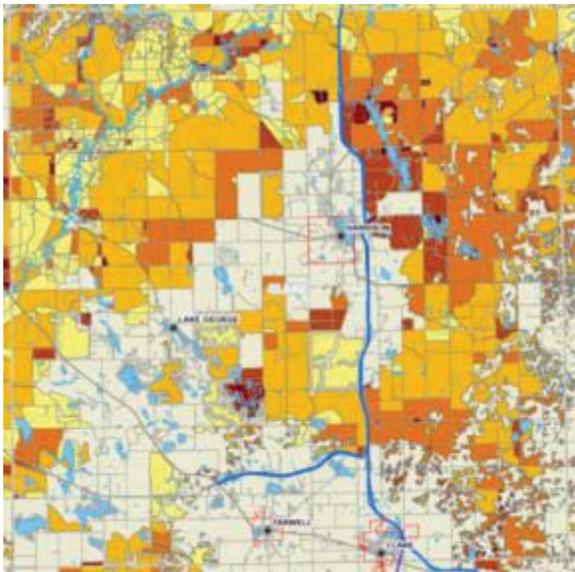
- Projects being implemented include:
 - Website and social media classes for businesses
 - Digital literacy campaigns
 - Residential and business surveys to better identify access issues and areas of demand
 - Zoning ordinance language review and updates, and other regulatory language modifications to lower barriers to expansion
 - Awareness and support campaigns for educational one-to-one device programs
 - Support for local placemaking initiatives
 - Public-private partnerships for infrastructure expansion
- Increasing use of residential surveys to more precisely identify local demand to support provider business cases (and continually refine Connect Michigan maps)
- Community broadband plans almost always include support for small businesses (website and social media development, technology for entrepreneurs, new business incubators and facilities, etc.)



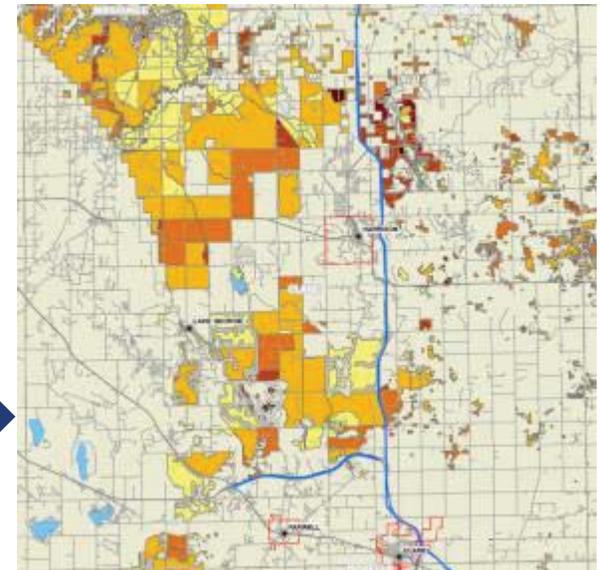
Through Connect Michigan we devised a project plan to assist our county, our businesses, and residents to enter into the global arena. Without the guidance of Connect Michigan our county would not have had access to the knowledge base that enabled us to complete the assessments needed for certification.

—Roscommon County Economic Development Corporation

- Collaboration between schools, libraries, local government (cities and townships), and broadband provider resulted in public-private partnership for expanding service in rural areas.
- Leveraged unused portions of existing fiber ring to increase capacity for spurs to rural areas; townships shared the cost of tower construction; ISP installed equipment, and provided service.



Unserved Household Density: October 2011
69% of households with access to 3 Mbps



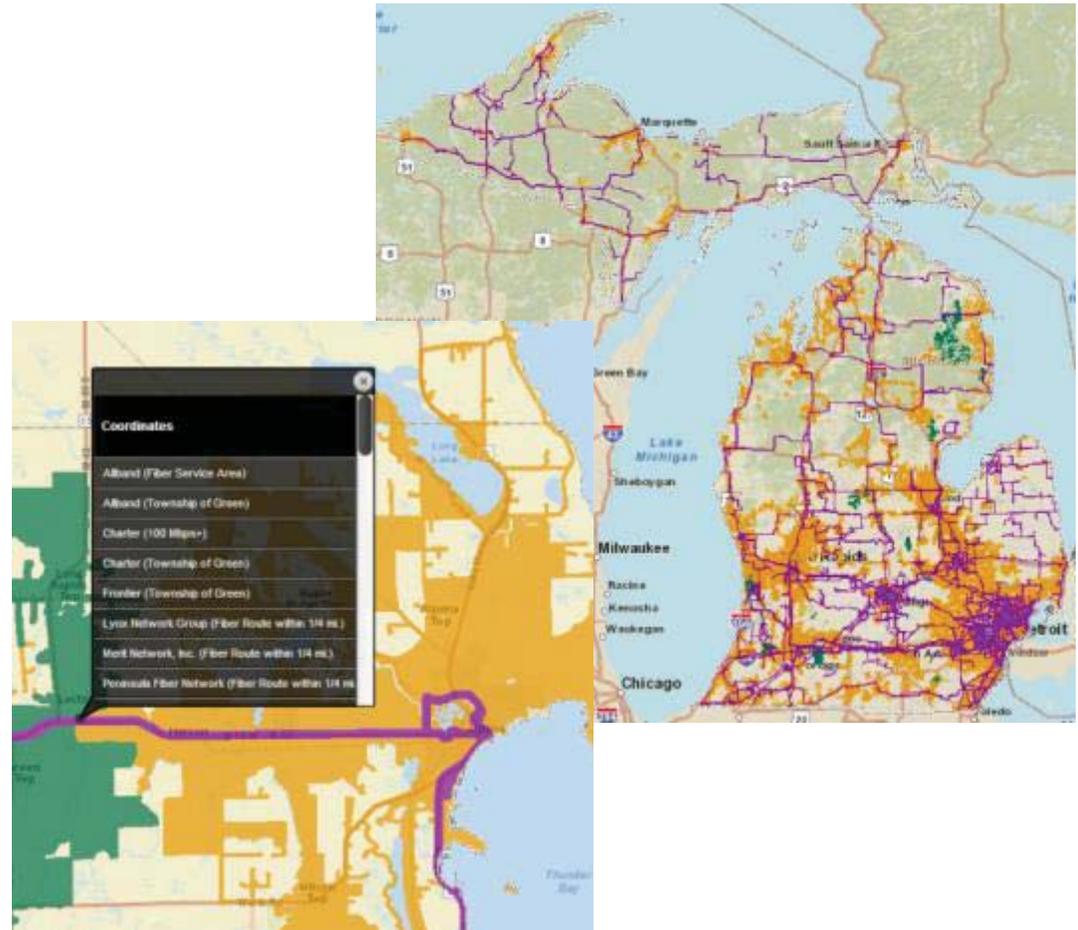
Unserved Household Density: October 2012
88% of households with access to 3 Mbps

It is our sincere conviction that the Connect Michigan program has made a significant difference throughout Michigan in expanding access to broadband Internet service and also by expanding the knowledge and use of this very important communication system.

—City of Clare

- First publicly available map of fiber routes
- Voluntary participation from carriers
- When clicked or address entered, lists carriers:
 - w/fiber within a ¼ mile
 - w/100 Mbps service
 - known to have fiber in the municipality

www.miconnects.org



- Developed a methodology to examine multiple broadband variables simultaneously to identify areas in need of infrastructure improvements
- Combined speed, dependency, competition, and density
- Updating for FCC definition, historical growth, cost, adoption, etc.

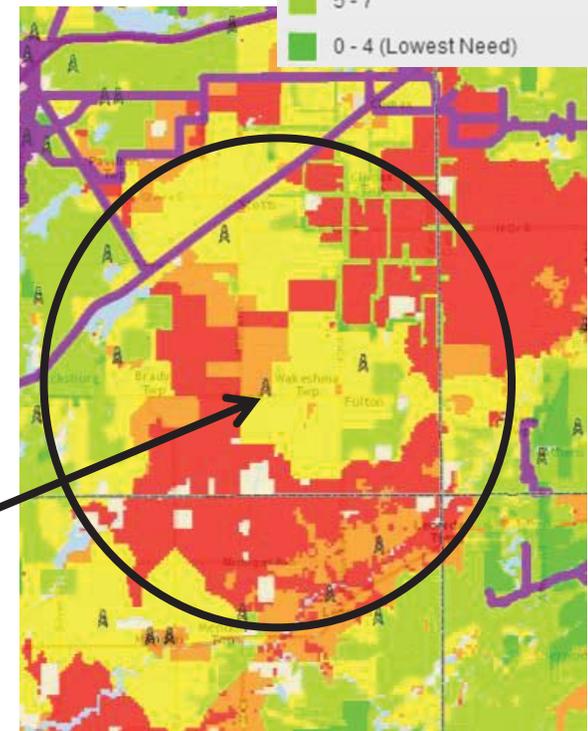
~4,900 HHs w/i 7 miles of tower
 ~4,500 w/o broadband
 Single carrier, low speeds

Fiber Carriers

AT&T (Township of Pavilion)
Broadwing (Township of Pavilion)
Charter (Township of Pavilion)
Climax Telephone (Township of Pavilion)
Comcast (100 Mbps+)
Comcast (Township of Pavilion)
Level 3 Communications (Fiber Route within 1/4 m
US Signal (Township of Pavilion)

Tower Owner

SBA Towers II LLC	
Owner:	SBA Towers II LLC
Registration#:	1246552
Location:	Vicksburg, MI
Height (meters):	78.6
Latitude:	42.118200
Longitude:	-85.396600
Website:	http://wireless2.fcc.gov/AsApp/AsrSearch/asrRegistration.jsp?regKey=2646716



What role can and should community engagement and outreach play in the IP transition?

What is needed for community engagement to be successful in this regard?

Public Act 52 of 2014

- New process effective January 1, 2017
- ILECs can ask to discontinue basic local exchange service if “comparable” voice service with “reliable access to 9-1-1” exists
 - “Comparable voice services” defined to include interconnected VoIP and wireless
 - “Reliable access to 9-1-1” includes “rules, regulations, and guidelines” in FCC January 2014 Technology Trials Order (FCC 14-5)
- If FCC grants Section 214 application for discontinuation, ILEC to provide 90-day notice to all customers in exchange, interconnecting providers, and MPSC
- If claimed that standard not met, MPSC has 180 days to investigate

Michigan Telecommunication Act, Section 484.2313

- If a “comparable” alternative not available, MPSC can declare an “emergency” and ask for “willing providers” to offer service.
 - MPSC cannot make alternative providers participate
 - MPSC cannot use state universal service fund to fund alternative provider
 - If no willing provider, MPSC can order incumbent to offer the service using an approved technology
 - “Comparable voice services” defined to include interconnected VoIP and wireless
 - “Reliable access to 9-1-1” includes “rules, regulations, and guidelines” in FCC January 2014 Technology Trials Order (FCC 14-5)

- MPSC required to establish a publicly available database of providers of toll or local exchange service in each exchange; providers required to furnish data to prepare and maintain that database

Michigan Telecommunications Act, Sections 484.2103, 484.2313

- Educate and train consumers
- Educate and train small businesses
- Inform local government and public safety community
- Provide forum for incumbent to understand and address particular or unique challenges to community
- Identify, develop, and expedite solutions to copper infrastructure alternatives
- Technology training and skill development so that consumers and small businesses can use new technology to maximum impact



Effective Community Engagement Programs Require Timely and Verified Data

- Despite Congressional mandate in Broadband Data Improvement Act that states be on forefront of collecting broadband data to support local planning initiatives pursuant to federal standards, states are “going at it alone” – this is costly to states and a missed opportunity for FCC

- How FCC and states can work together
 - Timely updates to National Broadband Map
 - Full data access to states and communities
 - Documentation of data validation procedures used on provider submissions
 - Notification to states on 477 revisions, corrections, and FCC staff review
 - Inquiry Process for communities and citizens
 - Include anchor institution, small business availability
 - More granular representation, include infrastructure assets
 - Document and verify Connect America Fund build-out

Questions?

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www.connectmi.org or www.connectmycommunity.org