



CONNECTED  
NATION®



CONNECT  
Michigan®

# Broadband in Michigan

## Status, Developments, and the Future

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ERIC FREDERICK, AICP, LEED AP

VICE PRESIDENT FOR COMMUNITY AFFAIRS  
CONNECT MICHIGAN AND CONNECTED NATION

# discussion topics

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1. Infrastructure access
2. Broadband & technology adoption
3. Connected communities
4. Recent developments

# context

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- Connected Nation, non-profit dedicated to expanding broadband access, adoption, and use. Core competencies include:
  - Network mapping, validation, and analysis
  - Residential and business adoption research
  - Local, state, and national policy analysis and capacity building
  - Community technology planning
- Connect Michigan, subsidiary of Connected Nation, implemented the State Broadband Initiative program in the Great Lakes State from 2009 - 2014
  - Partnered with the Michigan Public Service Commission
  - Collaborate at all scales with a diverse group of stakeholders
  - Three in-state staff, (Eric Frederick, Dan Manning, and Tom Stephenson)
  - Broadband mapping, research, and community planning
  - Host the annual Michigan Broadband Conference in Lansing
  - Tasked with facilitating the expansion of broadband throughout Michigan

# current state of broadband access in Michigan - definition

## FCC Definition History

2009 – 768Kbps/200Kbps

2012 – 4Mbps/1Mbps

2014 – 10Mbps/1Mbps

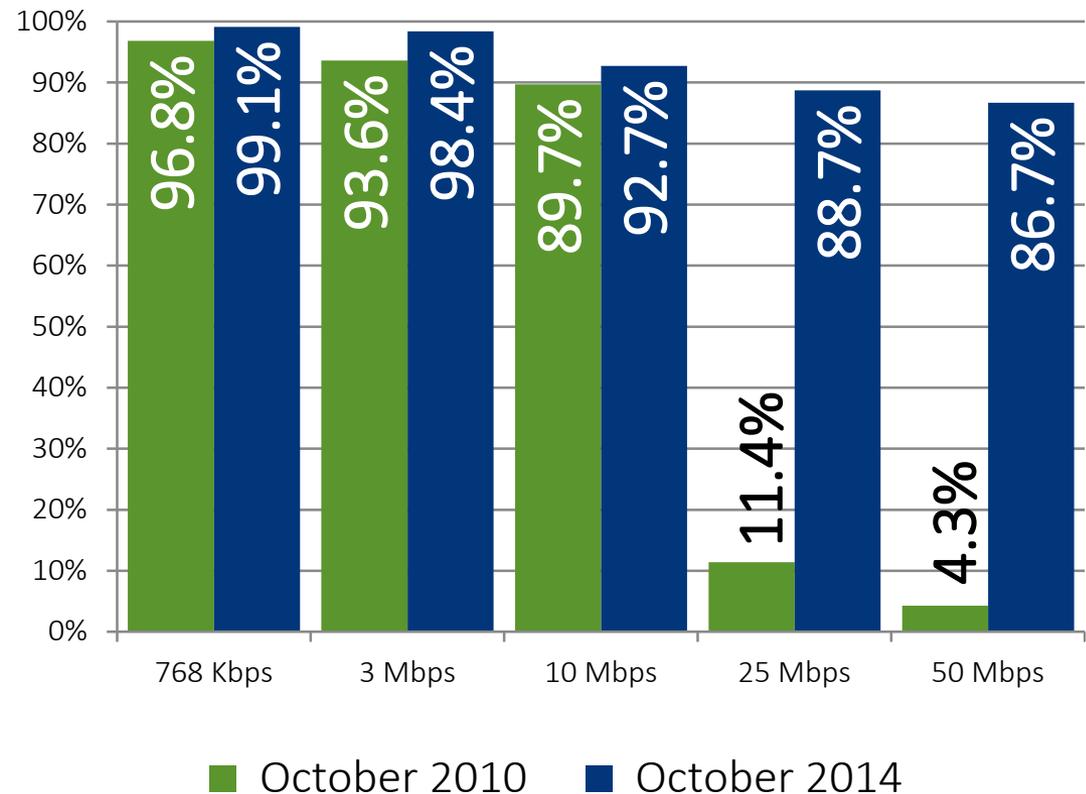
2015 – 25Mbps/3Mbps

## National Broadband Plan Goals:

2015 – 100m homes with 50Mbps/20Mbps

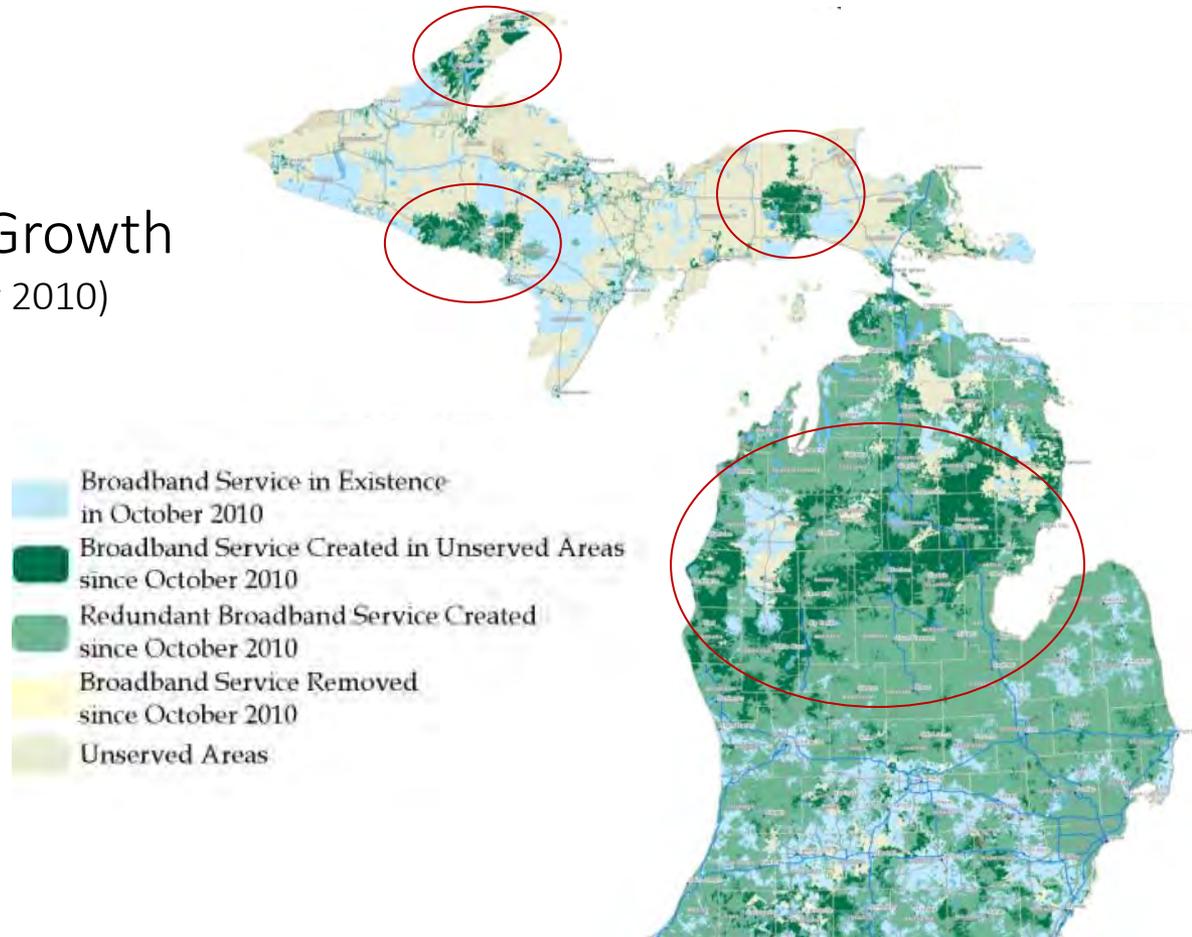
2020 – 100m homes with 100Mbps/50Mbps

## Household Availability



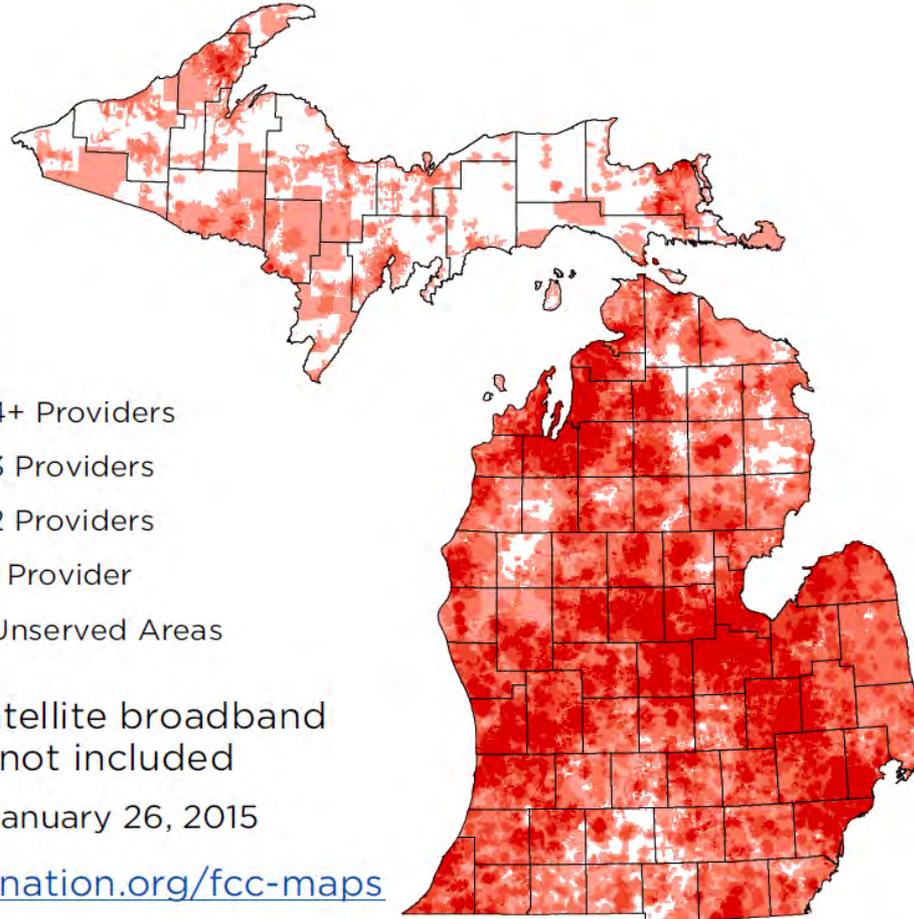
# current state of broadband access in Michigan

## Broadband Growth (Since October 2010)



# current state of broadband access in Michigan

3Mbps/768Kbps  
(October 2014)



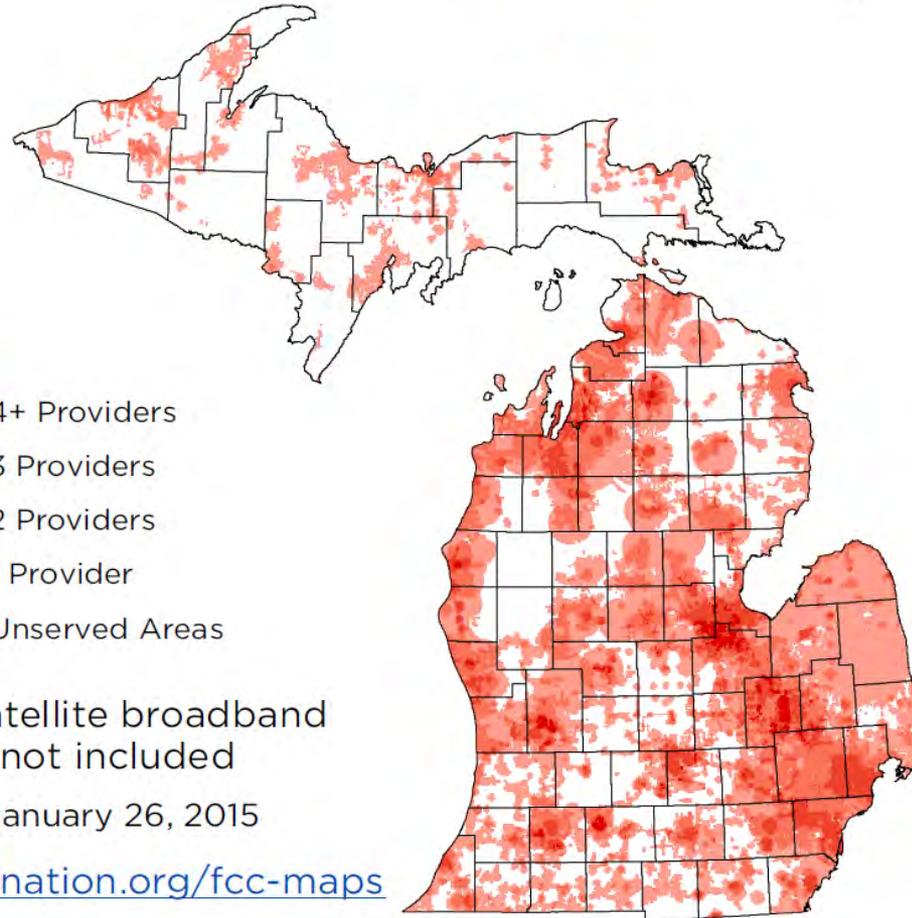
Mobile and satellite broadband services not included

Published January 26, 2015

[www.connectednation.org/fcc-maps](http://www.connectednation.org/fcc-maps)

# current state of broadband access in Michigan

10Mbps/1.5Mbps  
(October 2014)



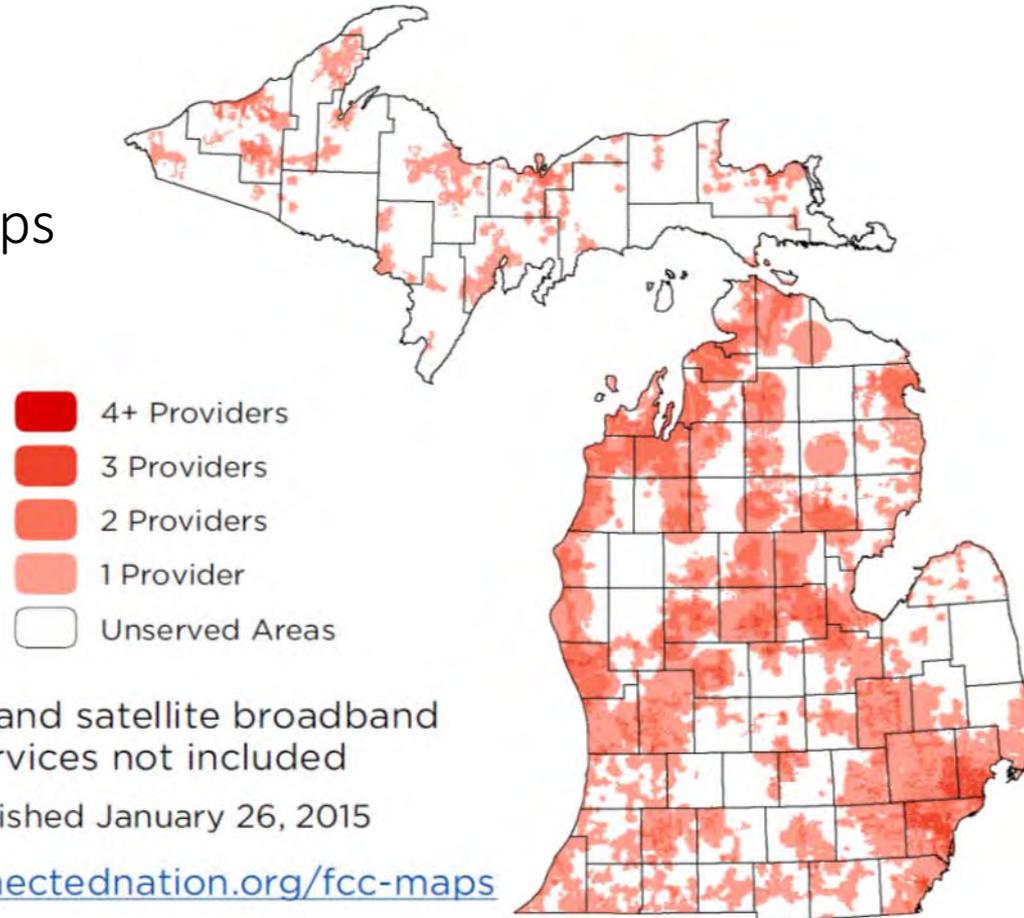
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# current state of broadband access in Michigan

25Mbps/3Mbps  
(October 2014)



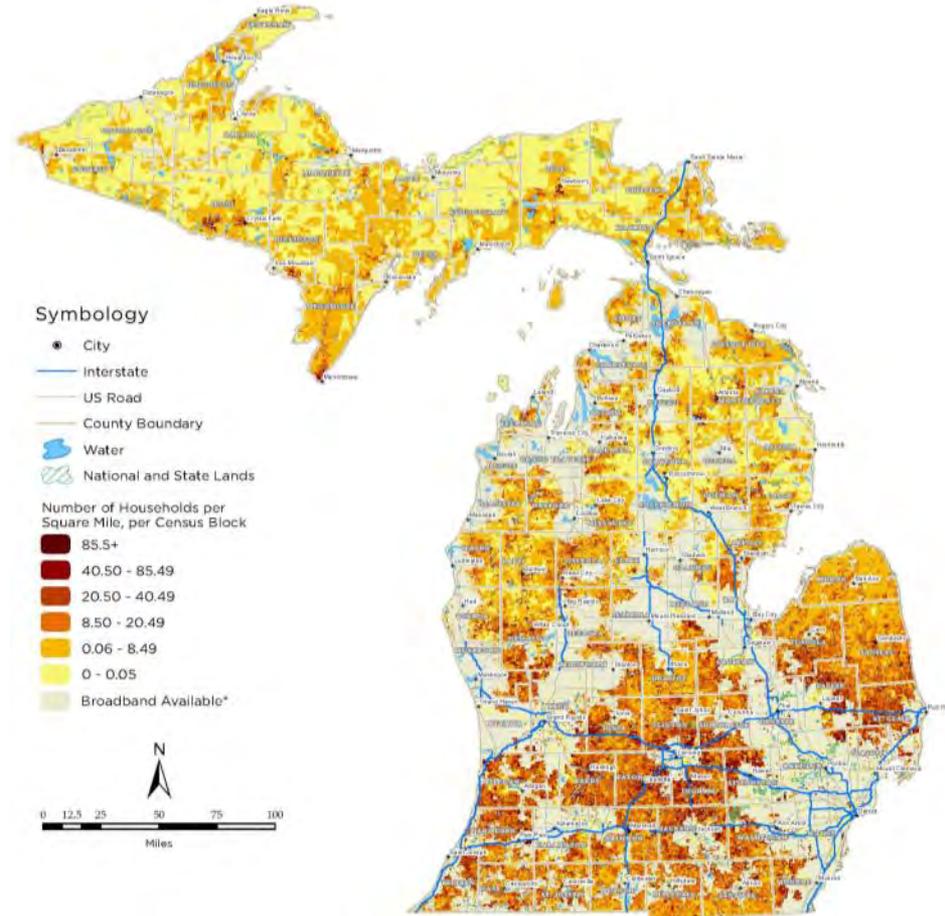
Mobile and satellite broadband services not included

Published January 26, 2015

[www.connectednation.org/fcc-maps](http://www.connectednation.org/fcc-maps)

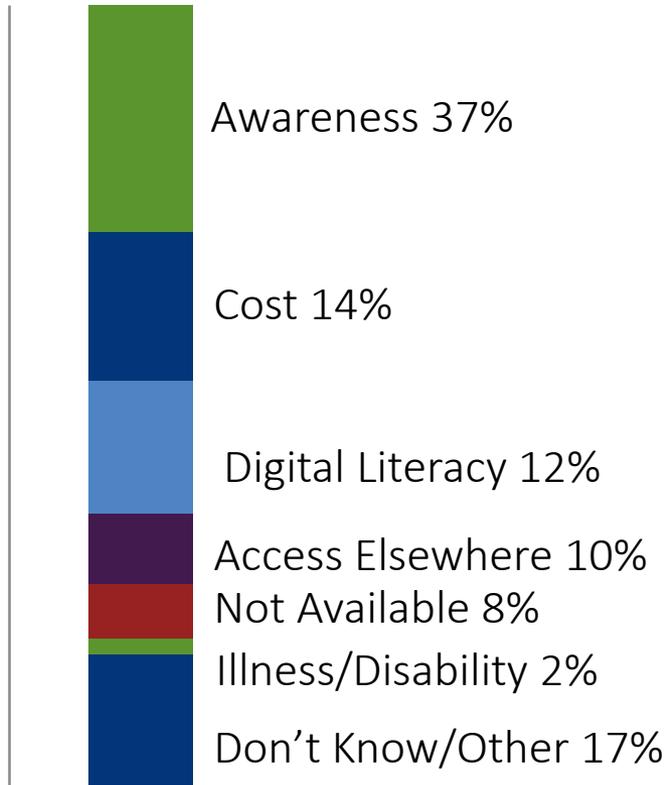
# current state of broadband access in Michigan

Unserved  
Household Density  
25Mbps/3Mbps  
(October 2014)

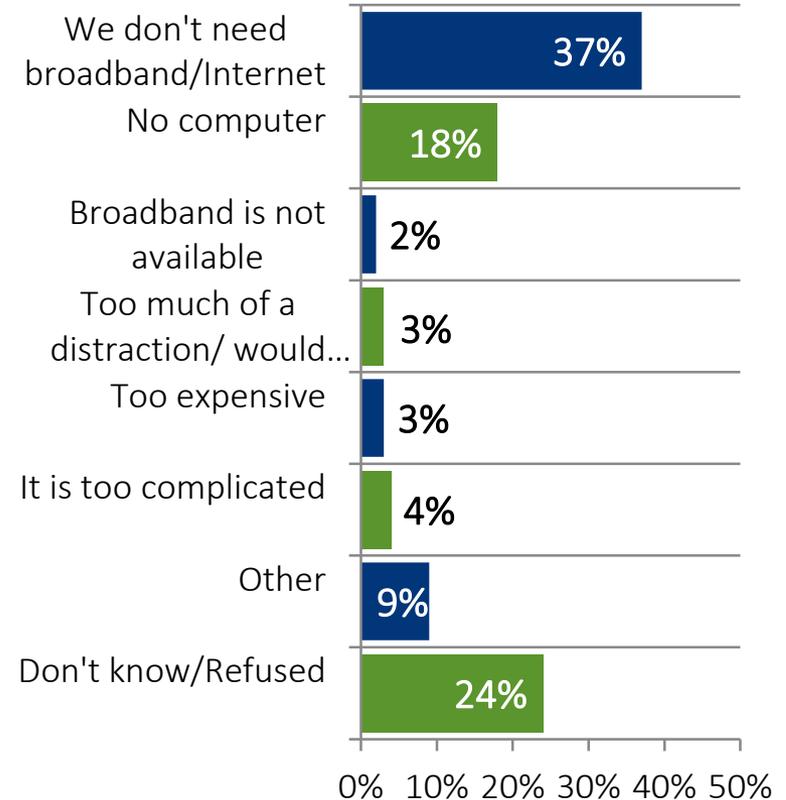


# current state of broadband adoption in Michigan

1.9 Million Non-Adopting Adults in 2014



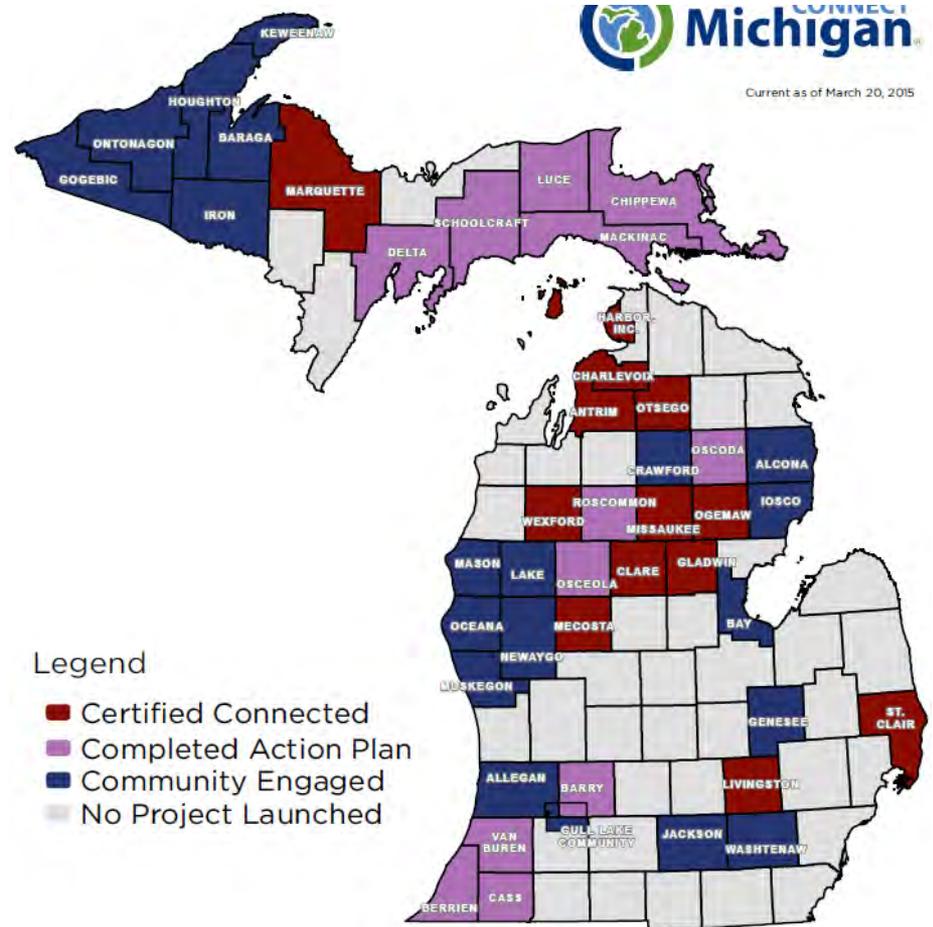
53,000 Non-Adopting Michigan Businesses in 2014





# Connected Community Engagement Program

- Local technology planning program
  - Establish community team of diverse stakeholders
  - Assess the local broadband/technology landscape against standards based on the National Broadband Plan
  - Develop a plan to fill gaps and local technology issues identified through the assessment process
  - Implement projects to increase the access, adoption, and use of technology and broadband throughout the community
  - Achieve Connected Certification
- Federal grant funded and required engagement with 14 communities in Michigan
- Actively working with 45 communities

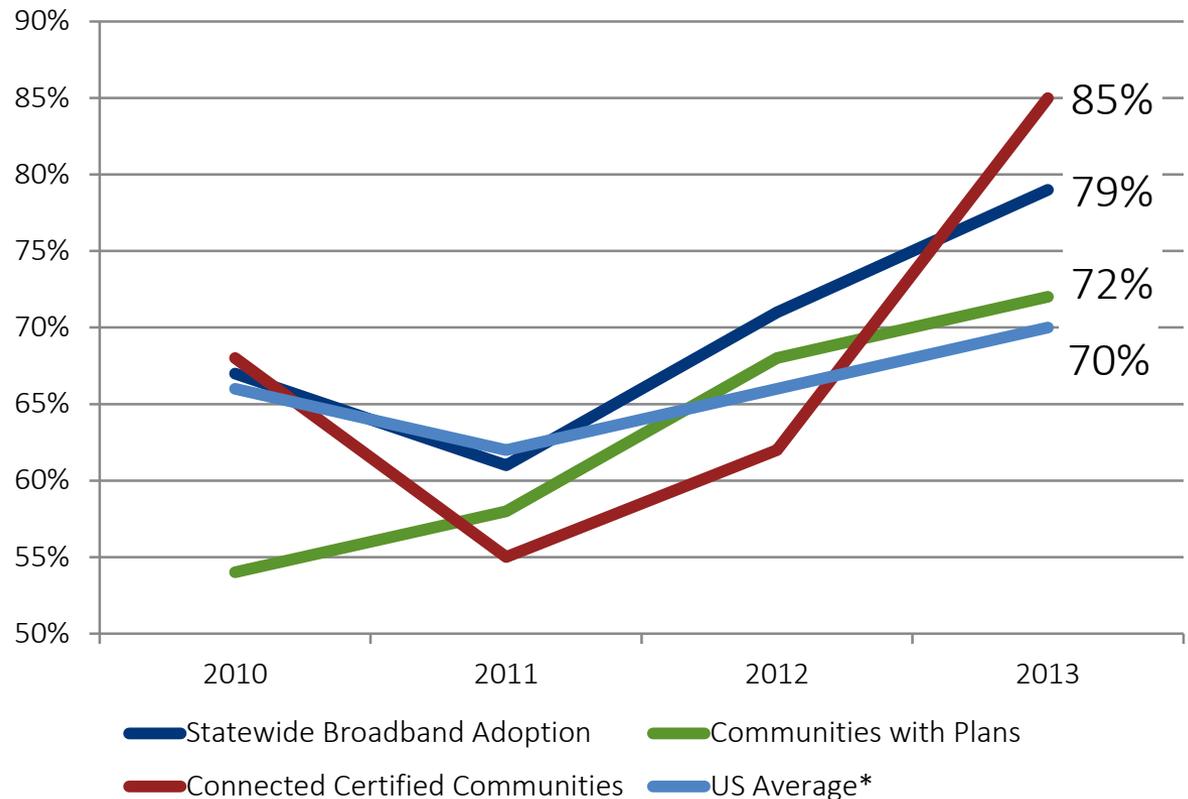




# Connected Community Engagement Program

- Connected Certified Communities have a higher broadband adoption rate than the state as a whole and the US average.
- Communities with plans, (but without certification) are advancing broadband adoption at a rapid pace.

Residential Broadband Adoption



# Connected Community Engagement Program



- 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)
  
- Trend toward more localized, township-level action planning as broadband coverage increases across counties
  
- Community broadband plans almost always include support for small businesses (website & social media development, technology for entrepreneurs, new business incubators and facilities, etc.)

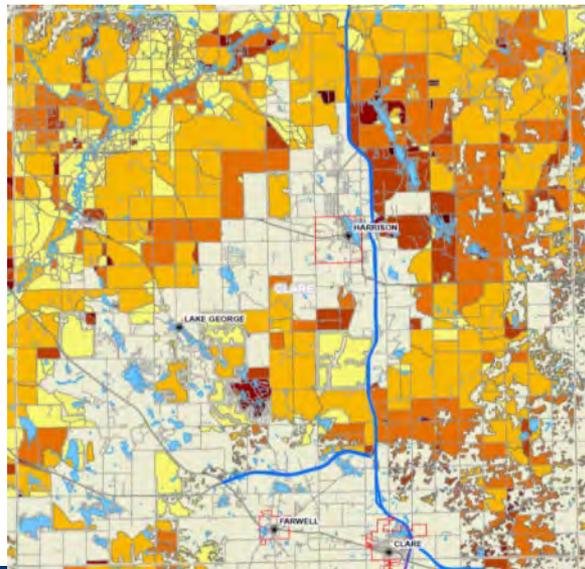


*Through Connect Michigan we devised a project plan to assist our county, our businesses and residents to enter into the global arena. Without the guidance of Connect Michigan our County would not have had access to the knowledge base that enabled us to complete the assessments needed for certification.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



# Connected Community Engagement Program

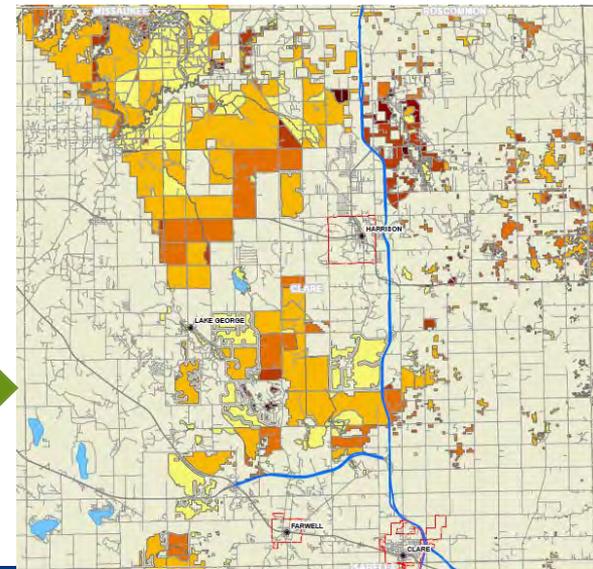
- Clare County Example
  - collaboration between schools, libraries, local government (cities and townships), and broadband provider resulted in public-private partnership for expanding service in rural areas
  - leveraged unused portions of existing fiber ring to increase capacity for spurs to rural 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



# models for success in rural communities

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- know your providers, may have access to providers you didn't know existed
- [www.connectmi.org](http://www.connectmi.org) has maps of broadband providers and their service, and county profiles that list every provider in every county
- ask us for help in finding a provider's local representative
- [site surveys and signal testing](#)

## Broadband service returns to Marion with help of expansion team

BY KARIN ARMBRUSTER  
HERALD REVIEW STAFF WRITER

MARION — After months without a broadband provider, Marion once again has Internet service thanks to the help of a regional company and the work of the Osceola County Broadband Expansion Team.

The village lost its high-speed Internet capability in the spring, according to Osceola County Community Development Coordinator Dan Massy. To counter the situation, he sent emails to providers around the state, letting them know of the opportunity at hand. A meeting was established with Stanton-based Casair.

"After seeing the results from the Osceola County Broadband Survey that Dan coordinated, we felt that we would be a good fit to bring our services to the area and began our due diligence," said Casair President Steve Meinhardt.

"Casair has always been dedicated to serve rural areas of Michigan where communities are limited in their choices for true high-speed Internet. As we are going through our

expansion project we are always seeking out for other locations where we feel that the service would benefit communities the most."

Two towers, in Highland and Middle Branch townships, will be able to provide unlimited data broadband of speeds up to 1MB, 3MB, 5MB and 10MB in a range of seven to 10 miles.

Massy said the Internet availability can only mean positive things for Marion and its residents.

"This is just going to open up a whole new world," Massy said. "If you're going to have any economic development, you're going to need broadband. With any education service, you're going to need it."

Meinhardt agreed, adding he is happy to help provide the rural area of Marion with additional opportunities.

"Fast, reliable broadband is necessary in rural areas for education, culture, entertainment, telemedicine, economic development, e-commerce, working from home and just basic everyday communication," he said. "We are excited to expand residential and business services into the area."

# models for success in rural communities

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- meaningful broadband and technology adoption are as critical as infrastructure access in rural areas
- point of sale software, social media, website development, crowdfunding, inventory control, etc. are all meaningful uses of technology for rural small and micro-businesses
- increased adoption and use helps spur demand, which helps increase supply of network connections

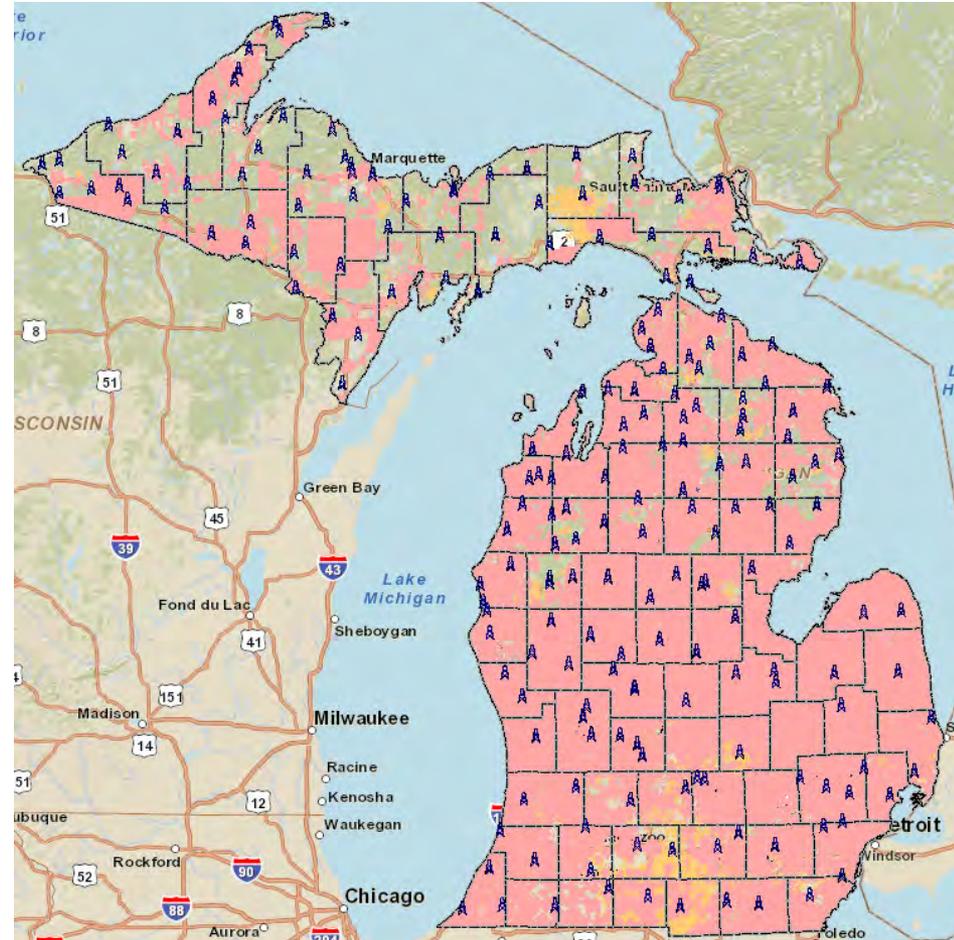
# recent developments impacting Michigan

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1. PA 564 of 2014 – Michigan Public Safety Communications System facility colocation
2. MEDC Michigan Connects Map – map of Michigan’s fiber optic routes
3. Build-out subsidy
  - A. Connect America Fund
  - B. Rural Broadband Experiments

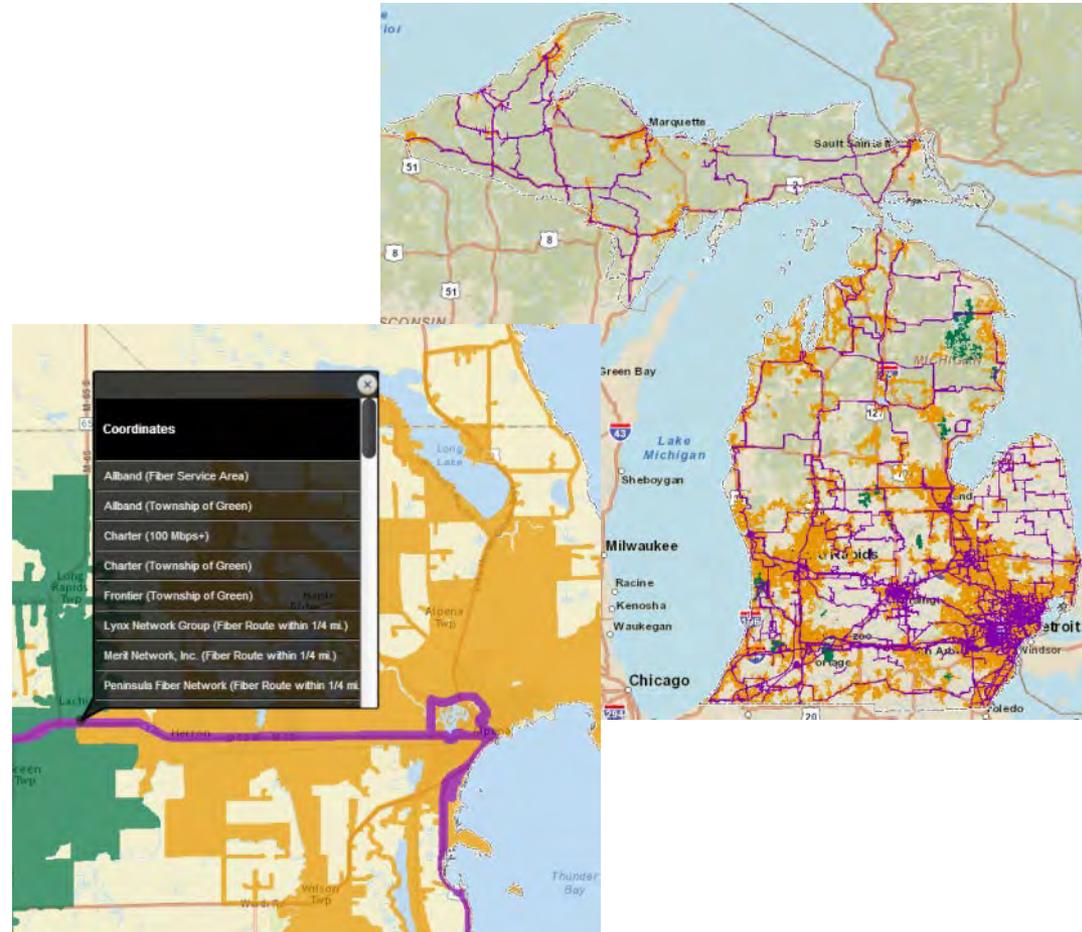
# PA 564 of 2014

- opens the Michigan Public Safety Communications System (MPSCS) towers to collocation by other entities
- area must be unserved at 3Mbps/768Kbps to qualify for collocation



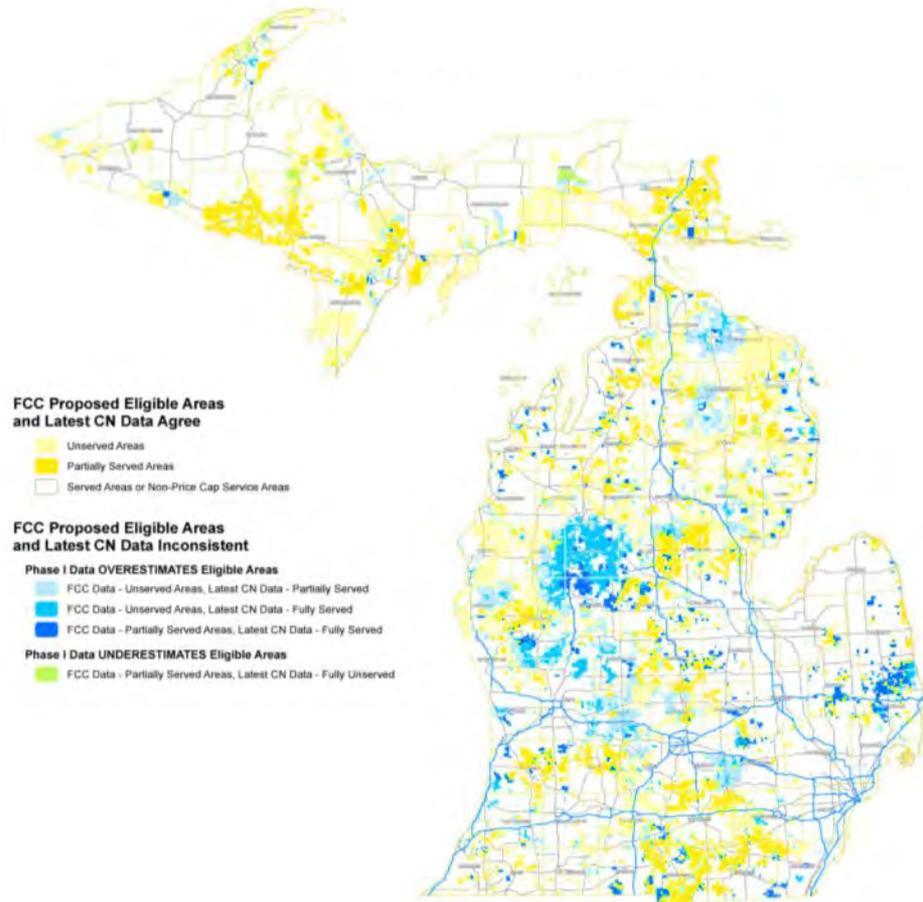
# Michigan Connects Fiber Map

- 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/ 100mbps service
  - known to have fiber in the municipality
- [www.miconnects.org](http://www.miconnects.org)



# build-out programs

- **Connect America Fund**
  - transitions Universal Service Fund subsidies from supporting phone systems to broadband build-out
  - mobile and wired support
  - Frontier and CenturyLink have accepted subsidies for build-out in Michigan



# build-out programs

## ■ Rural Broadband Experiments

- new program created during the CAF transition
- supports new and innovative deployments of broadband with funding available to previously
- several initial applications selected in Michigan, waiting on FCC to decide on waivers, additional rules, path forward, etc. before deployment

### Rural Broadband Experiment Expressions of Interest in Michigan

Agri-Valley Services, Inc./AVCI.net	ISP Management Inc.
AirNorth Communications, Inc.	Lennon Telephone Company
Allband Communications Cooperative	Lennon Telephone Company and TVC, Inc.
Baraga Telephone Co.	M-22 Internet Project, LLC
Barry County Telephone Company	Merit Network, Inc.
Blanchard Telephone Company	Michigan Broadband Services
Bloomington Communications, Inc.	Michwave Technologies, Inc.
Carr Telephone Company	Midwest Energy Cooperative
Cherry Capital Connection	Ogden Telephone Company
Clear Rate Communications, Inc.	Pasty.NET, Inc.
Cloverland Electric Cooperative & Lighthouse.Net	RuralReach.com
Comlink LLC	Sand Creek Telephone Company
Crystal Automation Systems, Inc. (Casair)	Sebewaing Light and Water
Delmerico, Dan; Iasco Township Clerk, Livingston County	SpeedConnect LLC
DMCI Broadband, LLC	Springport Telephone Co.
Freedomnet Solutions	Shorewaves LLC
Great Lakes Energy Cooperative	SyncWave, LLC
Harbor Area Regional Board of Resources, Inc. (HARBOR, Inc.)	Vergennes Broadband LLC
Hiawatha Communications Inc.	Waldron Telephone Company
Hidden Lake Wireless, Inc.	Westphalia Telephone Company
Holland Board of Public Works	

# Questions?

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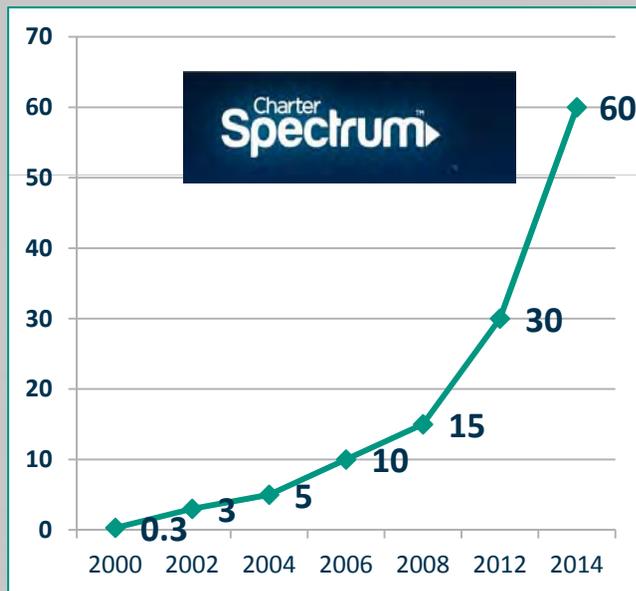
VICE PRESIDENT FOR COMMUNITY AFFAIRS  
CONNECT MICHIGAN AND CONNECTED NATION

more information at: [www.connectmi.org](http://www.connectmi.org) or [www.connectmycommunity.org](http://www.connectmycommunity.org)



## Charter Investments: >\$2 Billion since 2012

- Cable provider for 800+ communities across 75 MI Counties
- Charter added 200+ MI jobs in past 2 years
- 2014: \$100M investment in All Digital system = 200 HD channels, 60Mbps internet
  - Over 1.1 Million MI homes have Charter All Digital available



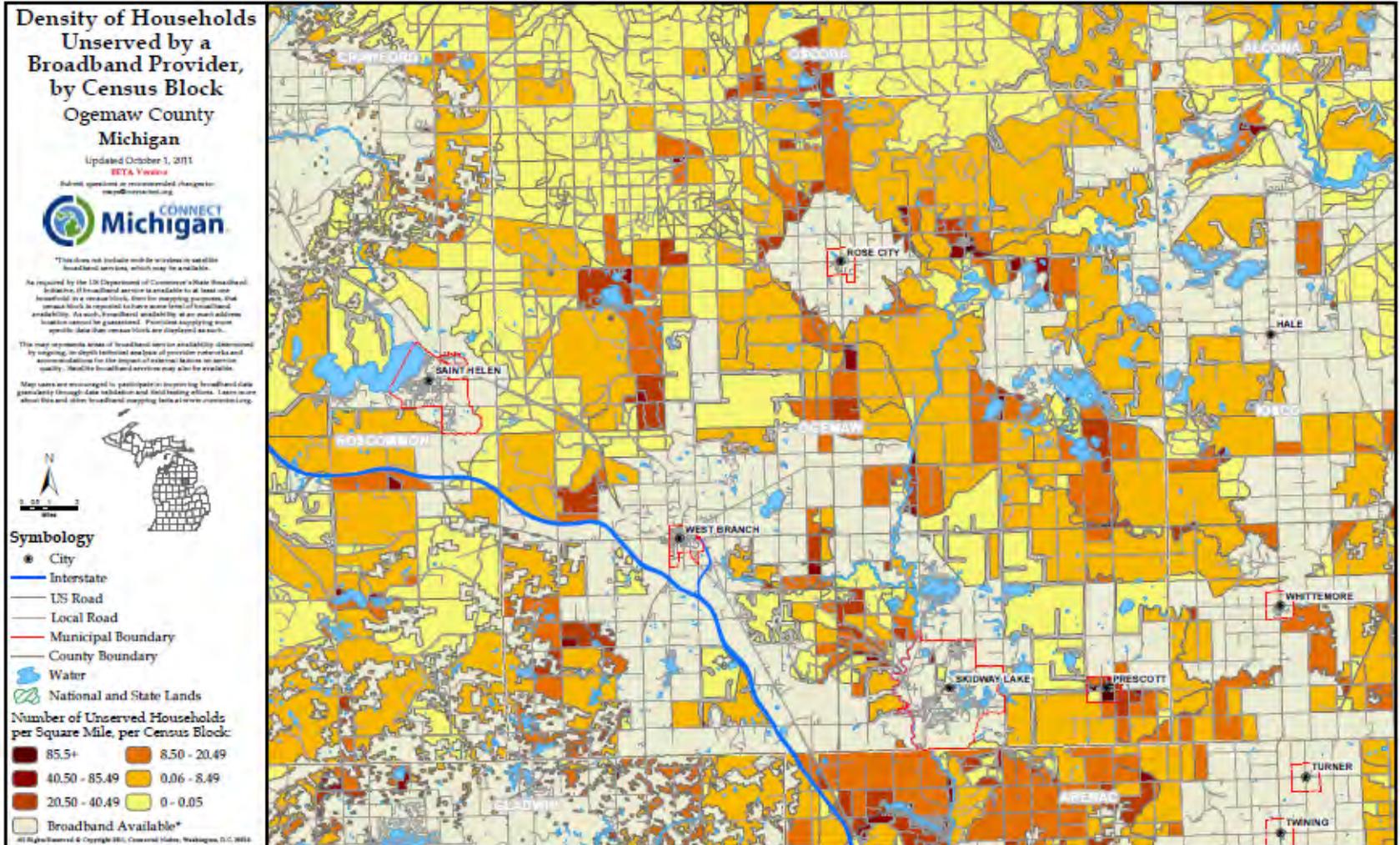
- In 2000 resi speeds were 256K - 1.5Mbps.
- In 2014 resi @ 60Mbps with 100Mbps available, too.
- Charter Business™ offers scalable solutions from 10Mbps - 10Gig.
- 2014: Free Charter TV APP ~ stream 150+ live channels.
- 2014: Charter rebuilt cable systems to 10K rural homes in 20 MI Communities in 6 counties:
  - ✓ Gratiot, Iosco, Isabella, Montcalm, Ogemaw and Ottawa – brought 60Mbps broadband to these markets.
- 2015: Rebuild projects planned for 5 rural cable systems impacting 31 MI communities and > 16K homes in 8 counties.

- **All Charter investments have been private capital.**
- Charter's fiber rich network is positioned for the future ~ we're ready to give our MI communities – even rural communities - options, flexibility and mobility!

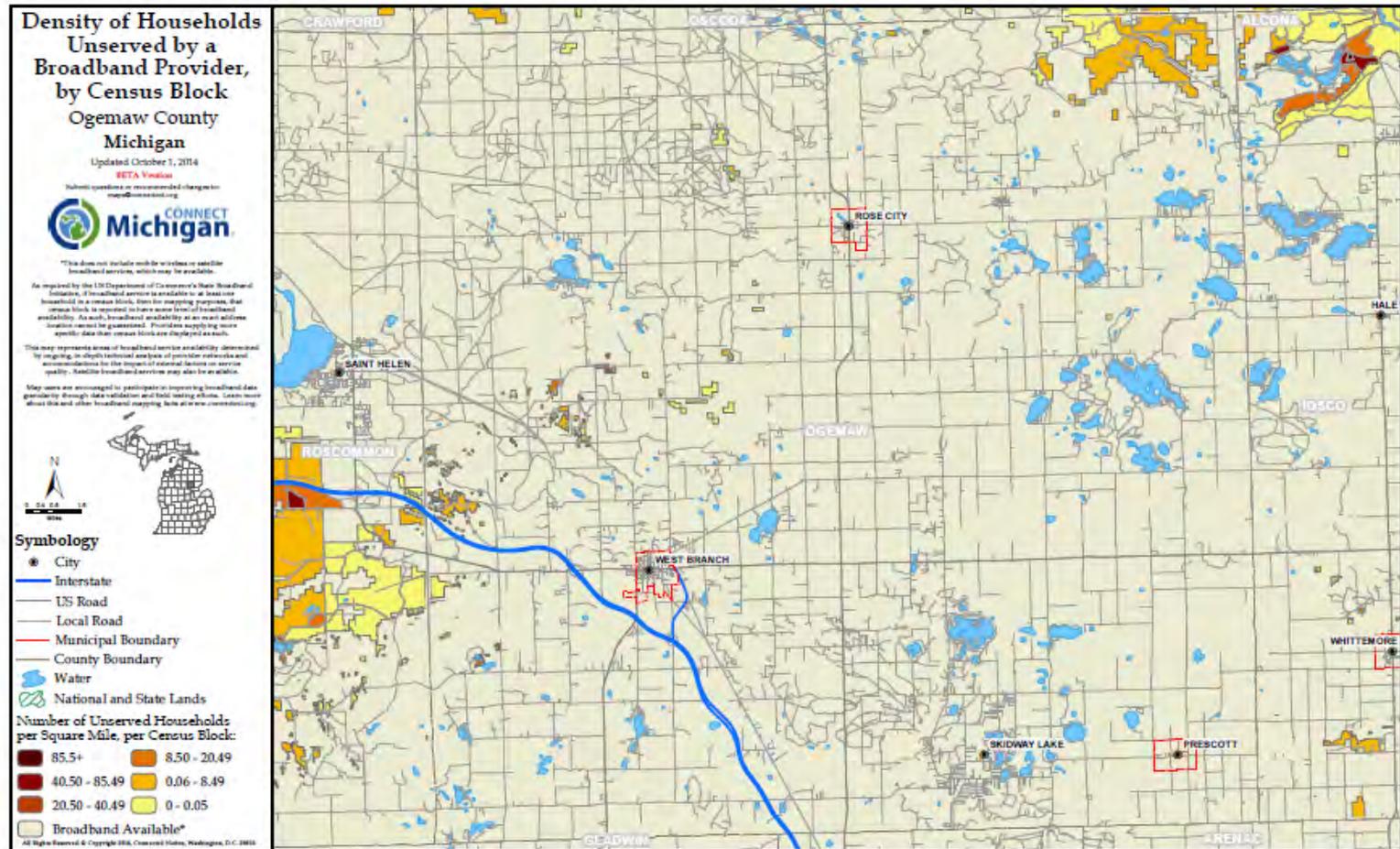


[www.everythingogemaw.com](http://www.everythingogemaw.com)

# Before Work Began-2012



# After Broadband Certification- 2014



# Contact Information:

Mandi Chasey, MPA

Ogemaw County EDC/Michigan Works!

[mchasey@michworks4u.org](mailto:mchasey@michworks4u.org)

[www.everythingogemaw.com](http://www.everythingogemaw.com)

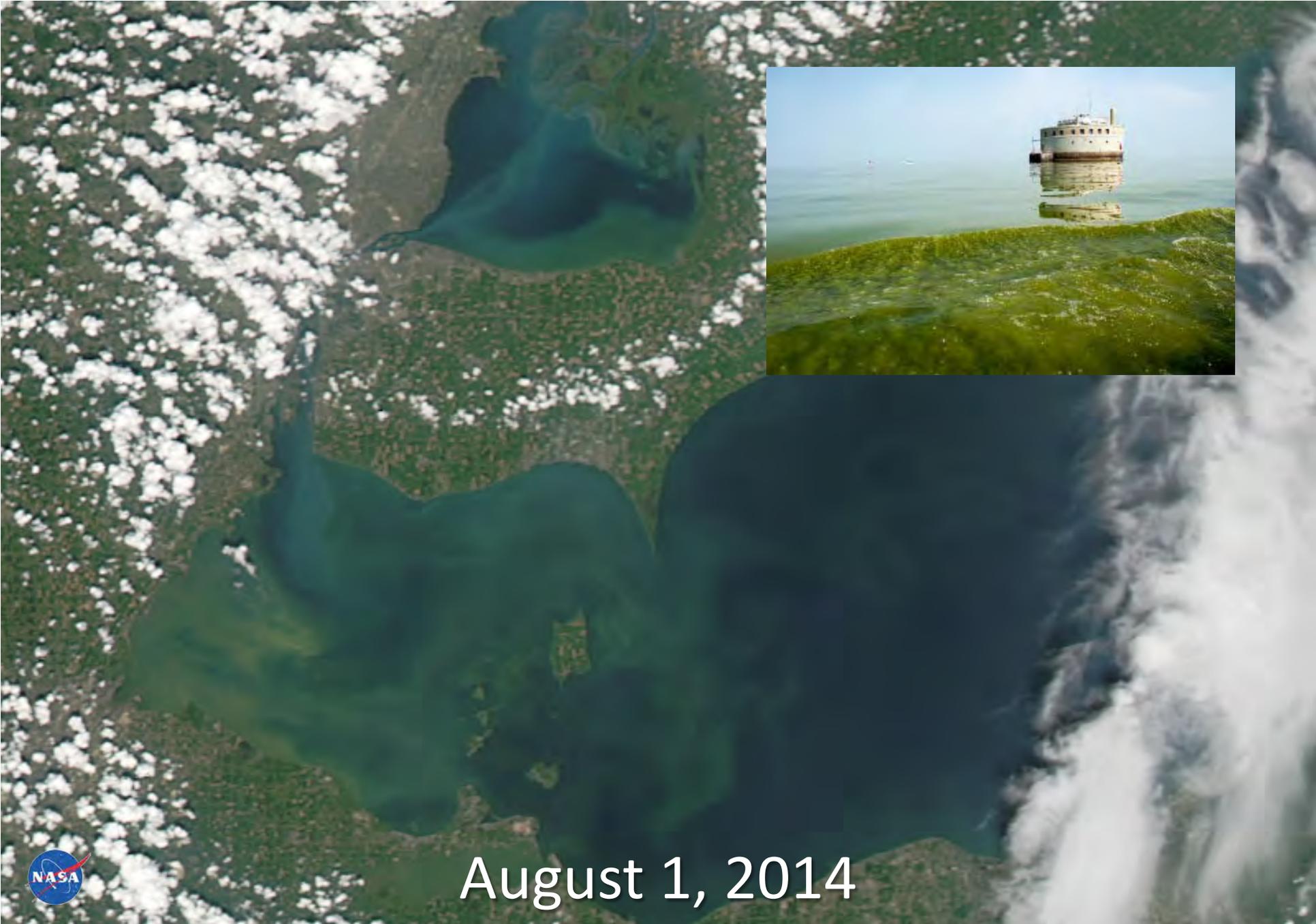




# Soils and Water Quality

**Tim Boring**  
**Michigan Agri-Business Association**





August 1, 2014



March 21, 2012



October 9, 2011



# THE GREAT LAKES BASIN



**LEGEND**

**LAKE OF LAKE BASIN**

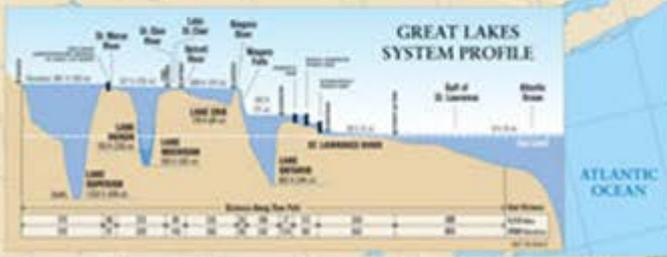
- Orange: Superior
- Green: Michigan
- Pink: Huron
- Brown: Erie
- Purple: Ontario

**Other Symbols:**

- International border
- State/provincial border
- County border
- City
- Township
- Waterway
- Water control structure
- Navigation channel
- Navigation lock
- Navigation dam
- Navigation barrier
- Navigation weir
- Navigation dam
- Navigation barrier
- Navigation weir

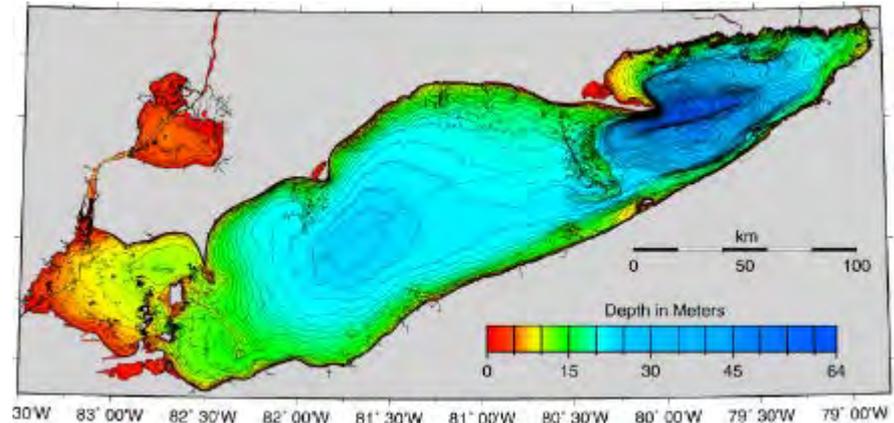
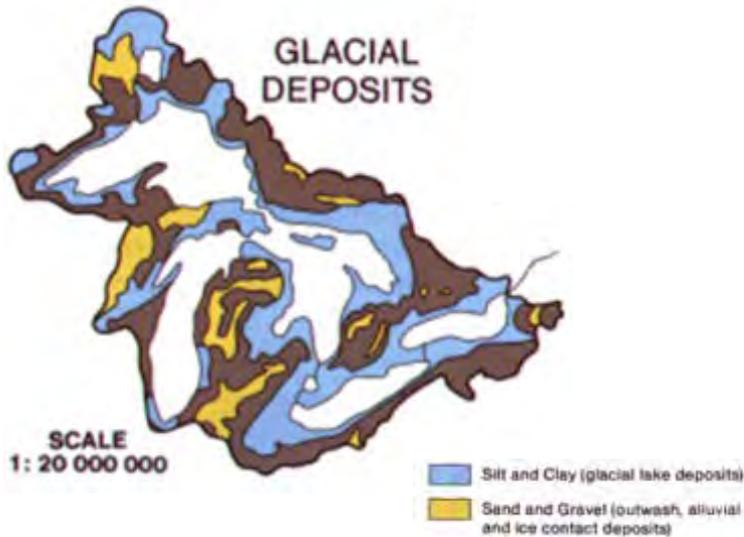
**Scale:** 1:500,000

**Map Information:** The Great Lakes Basin is a large, interconnected system of five large lakes (Superior, Michigan, Huron, Erie, and Ontario) and their connecting waterways. The basin covers an area of approximately 1.2 million square kilometers (467,000 square miles) and is home to over 100 million people. The basin is a major source of fresh water for the region and is a vital part of the global water cycle.

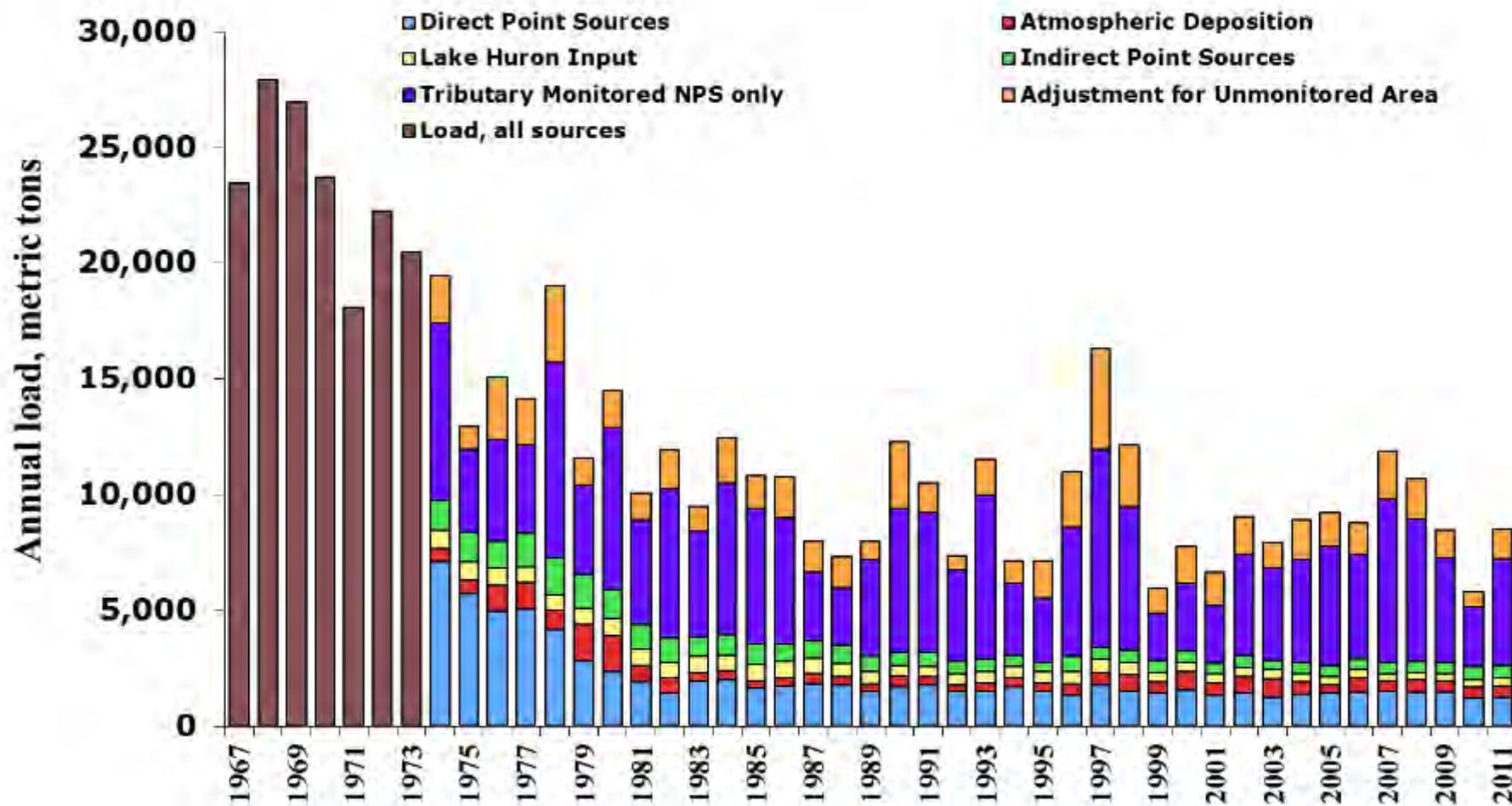


# Lake Erie Western Basin

- Intensive agricultural region
- Shallow lake and drainage basin
- Lakebed soils

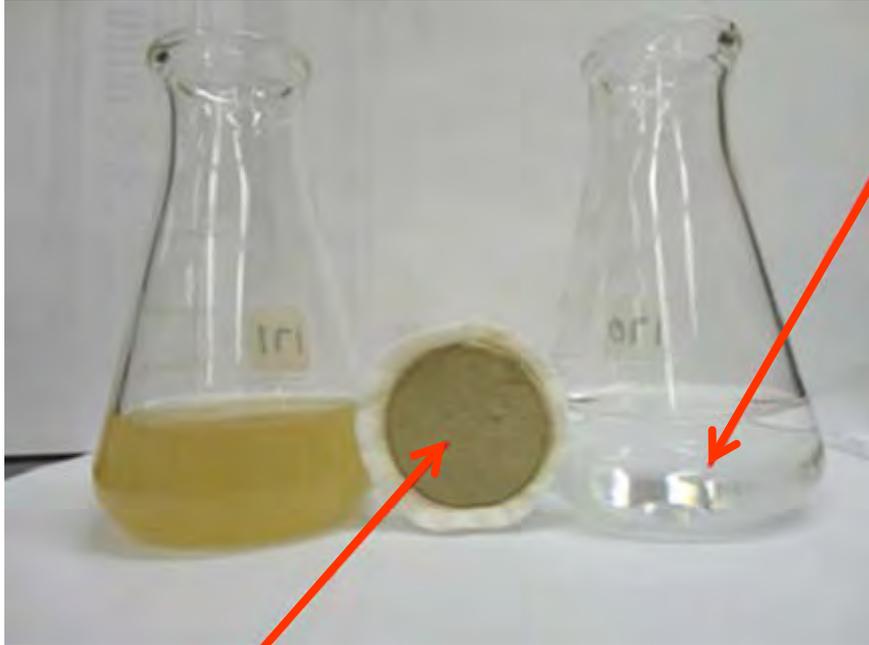


# Lake Erie Total P Loads by Source



Journal of Great Lakes Research, Volume 40, Issue 2, 2014, 226 - 246

# Phosphorus in Water



## Dissolved P

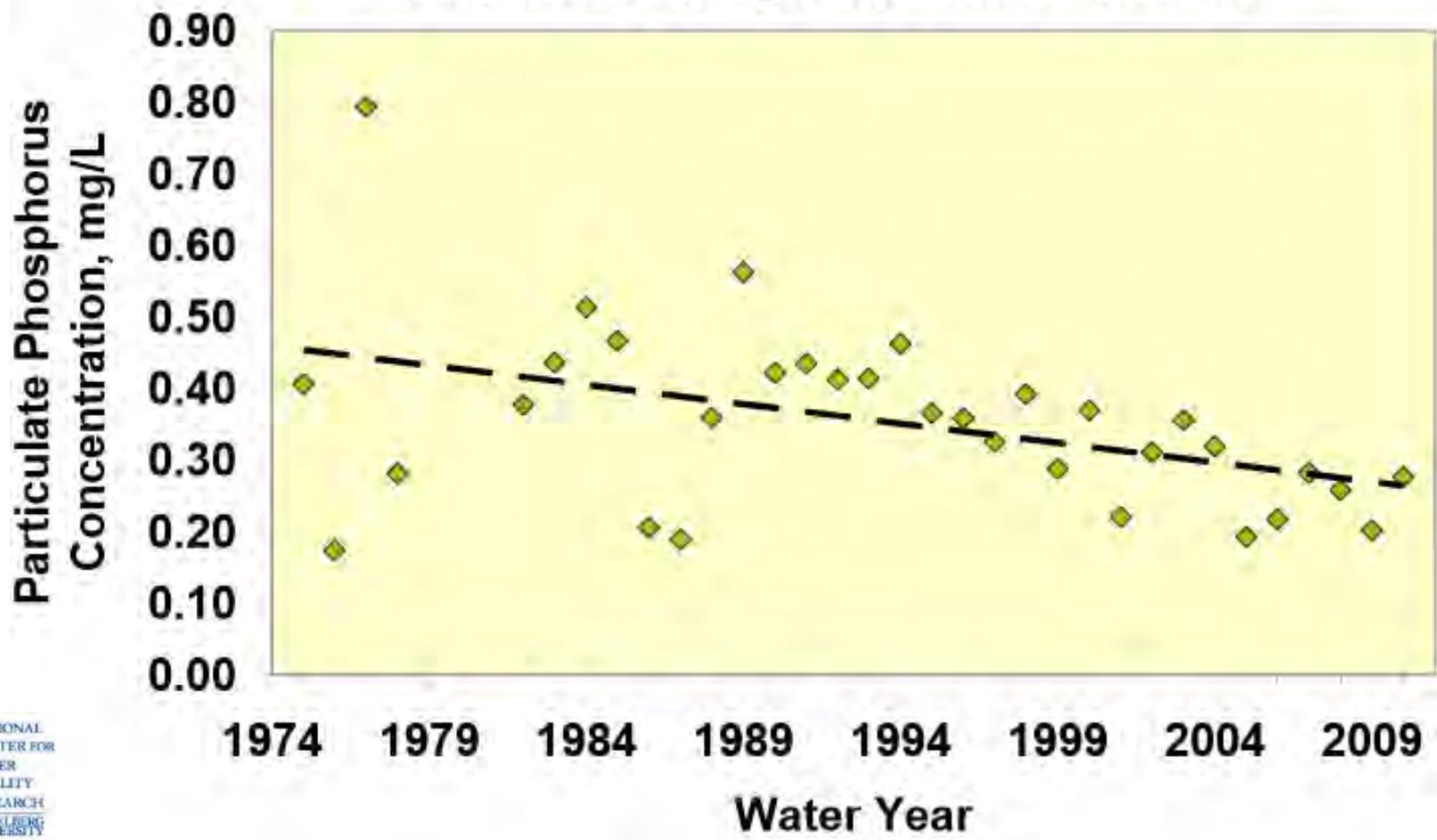
- 90% is Dissolved Reactive P
- DRP is 100% bioavailable
- Remains in suspension

## Particulate P

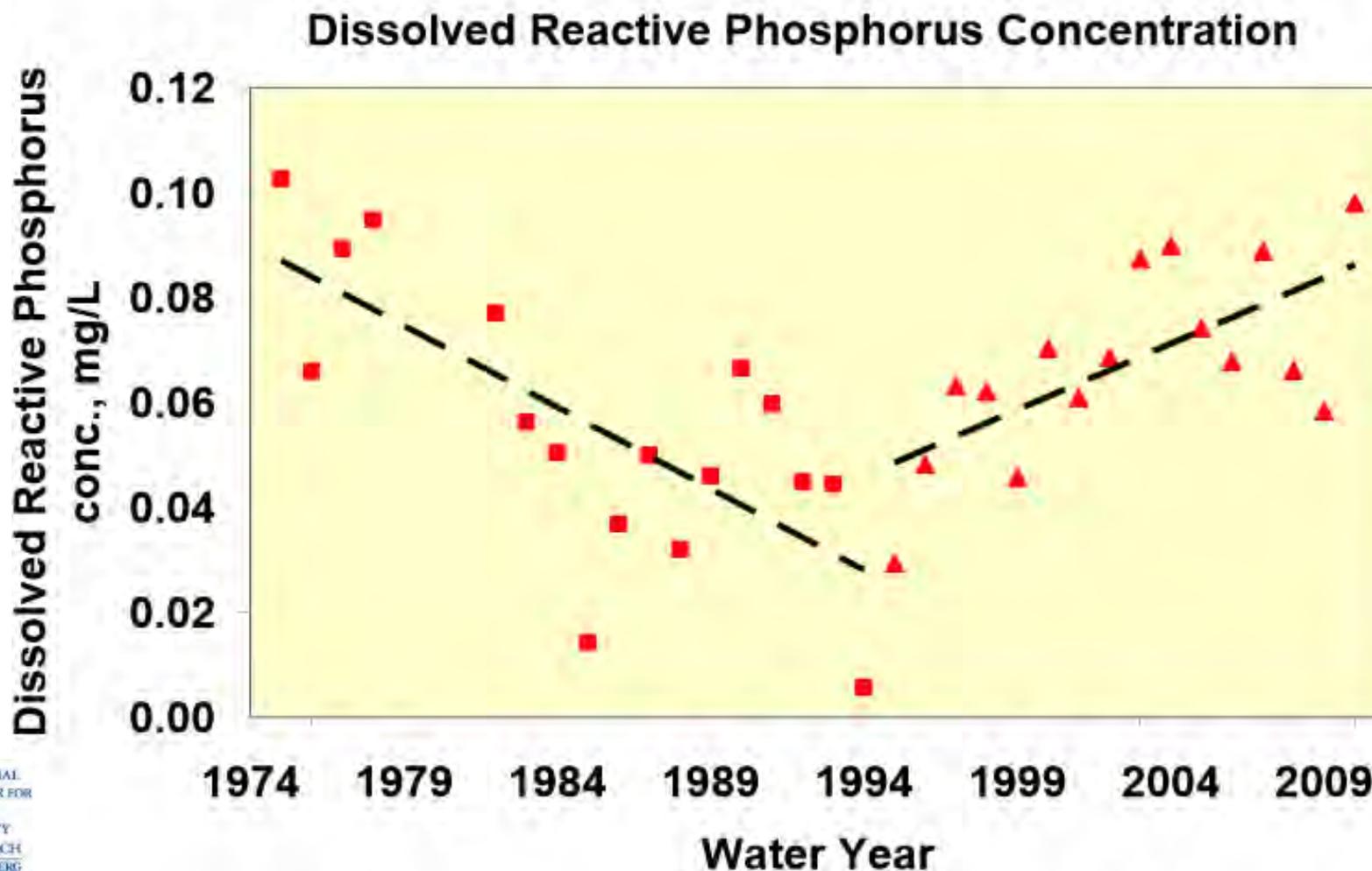
- ~30% bioavailable
- Attached to inorganic sediments
- Falls out of solution

# Maumee River Flow Weighted Mean

## Particulate Phosphorus Concentrations



# Maumee River Flow Weighted Mean



# Water and Agricultural-Chemical Transport in a Midwestern, Tile-Drained Watershed: Implications for Conservation Practices

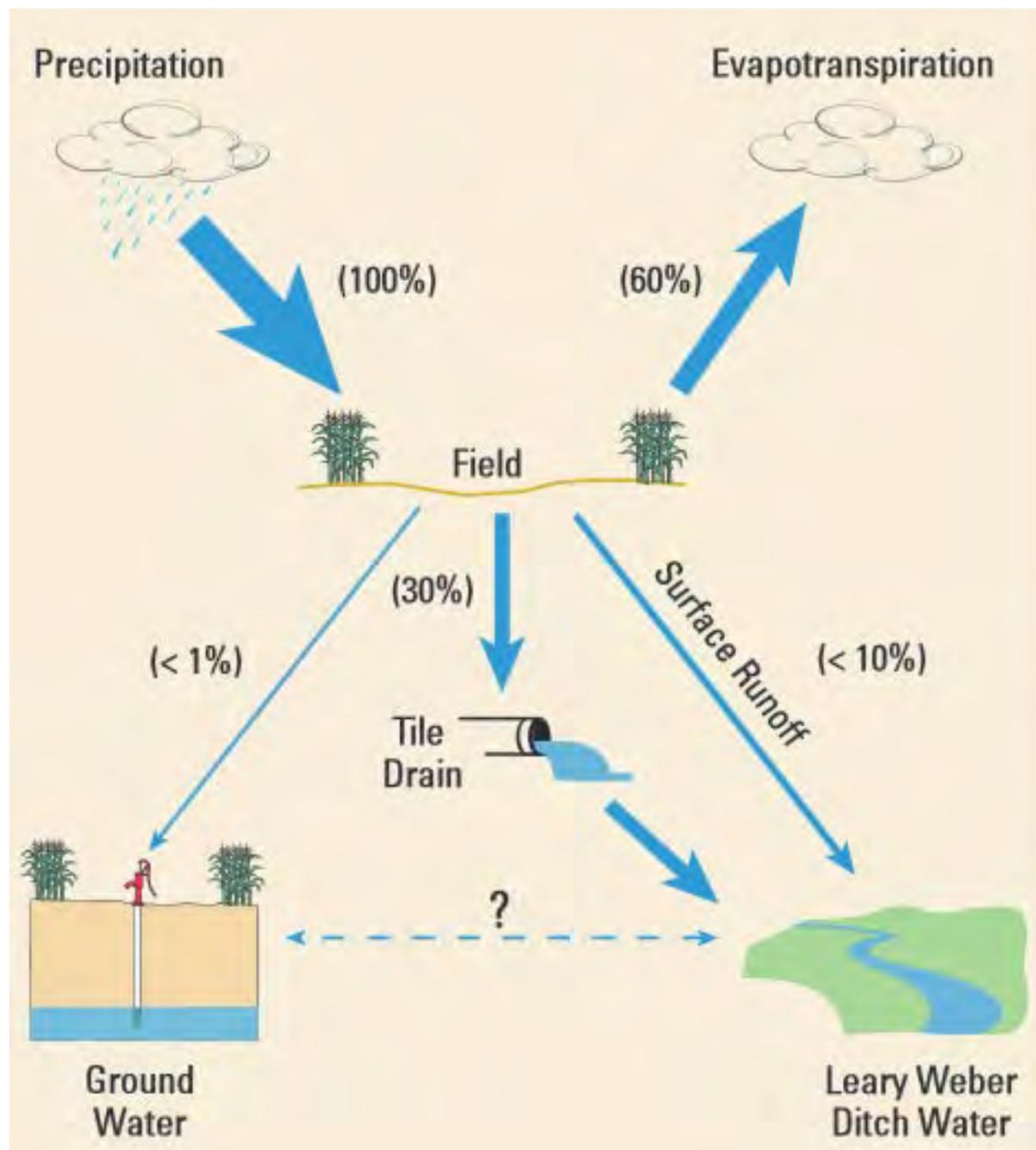


## Leary Weber Ditch Watershed

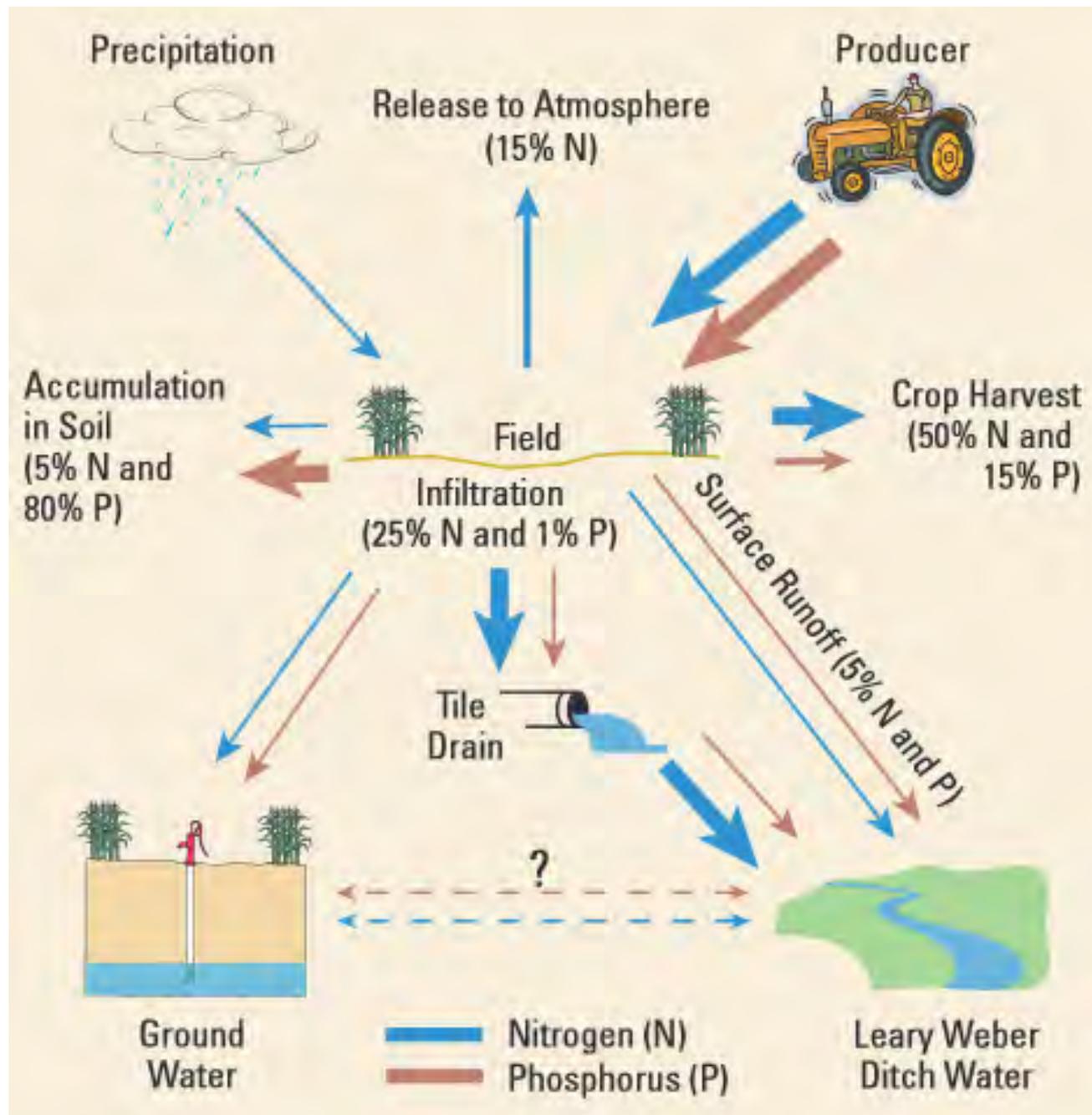
Brookston silt clay loam, 0-2% slope

Crosby silt loam, 0-2% slope

# Water Transport Pathways



# Nutrient Transport Pathways



# Runoff and Erosion- Water



# Runoff and Erosion- Wind



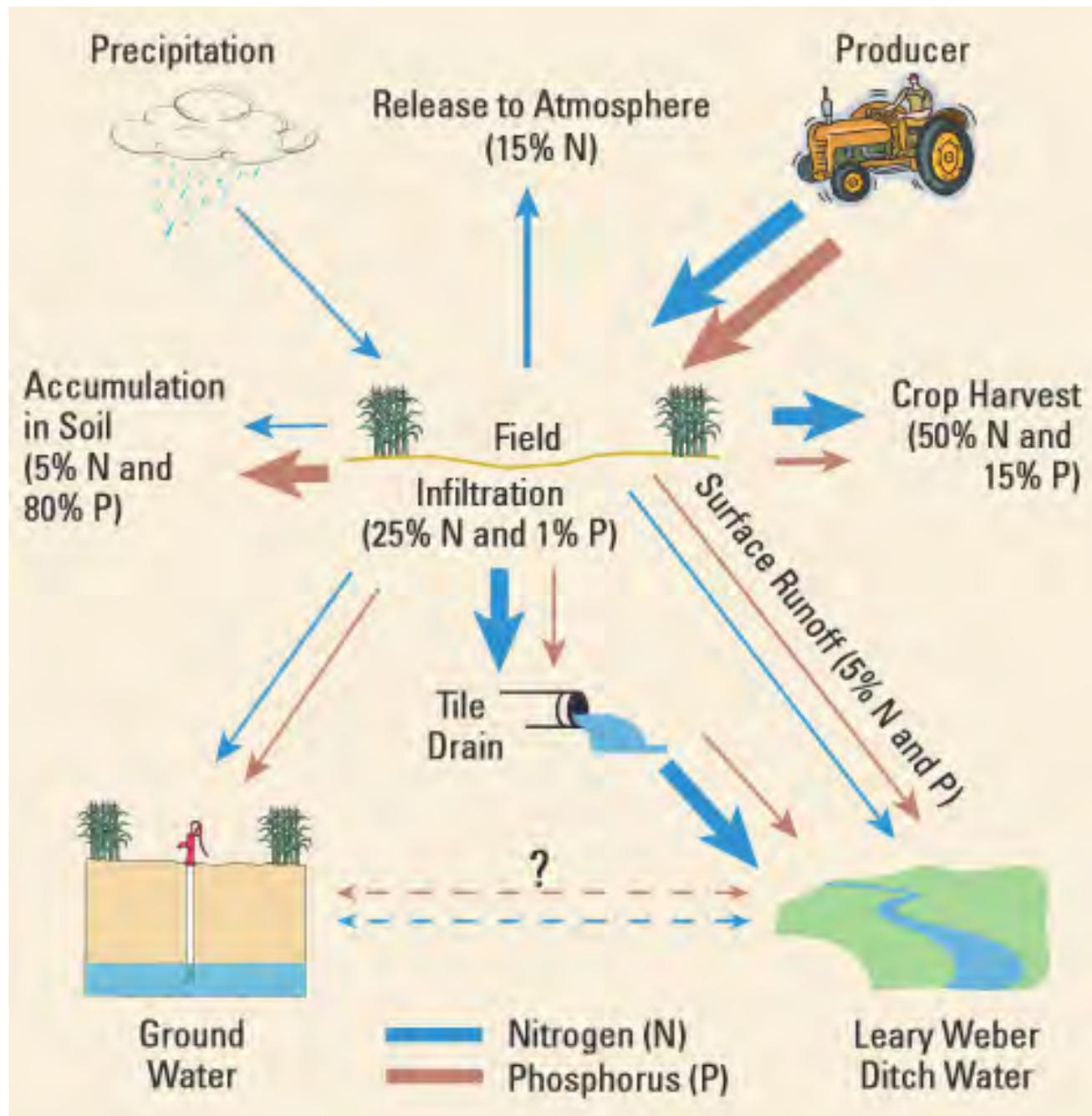
OMAFRA



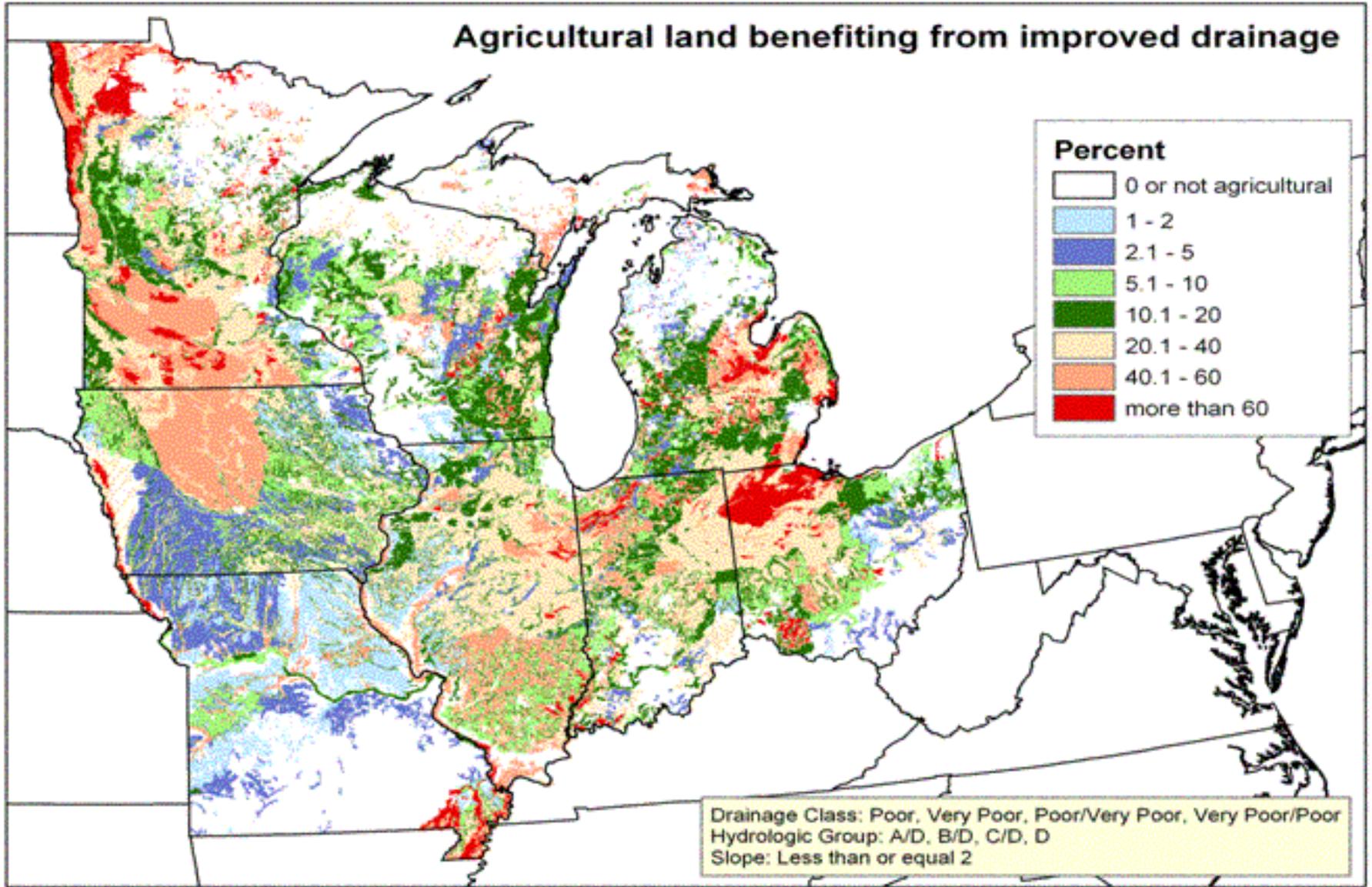
Joe Basset



# Nutrient Transport Pathways



# Agricultural land benefiting from improved drainage



# P Tile Drainage Loss

Tile P loss is typically well under 1 ppm

- Less than 2% of applied rate
- \$1-2/ac

Up to 50% of P loss through tile

0.03 ppm is acceptable level

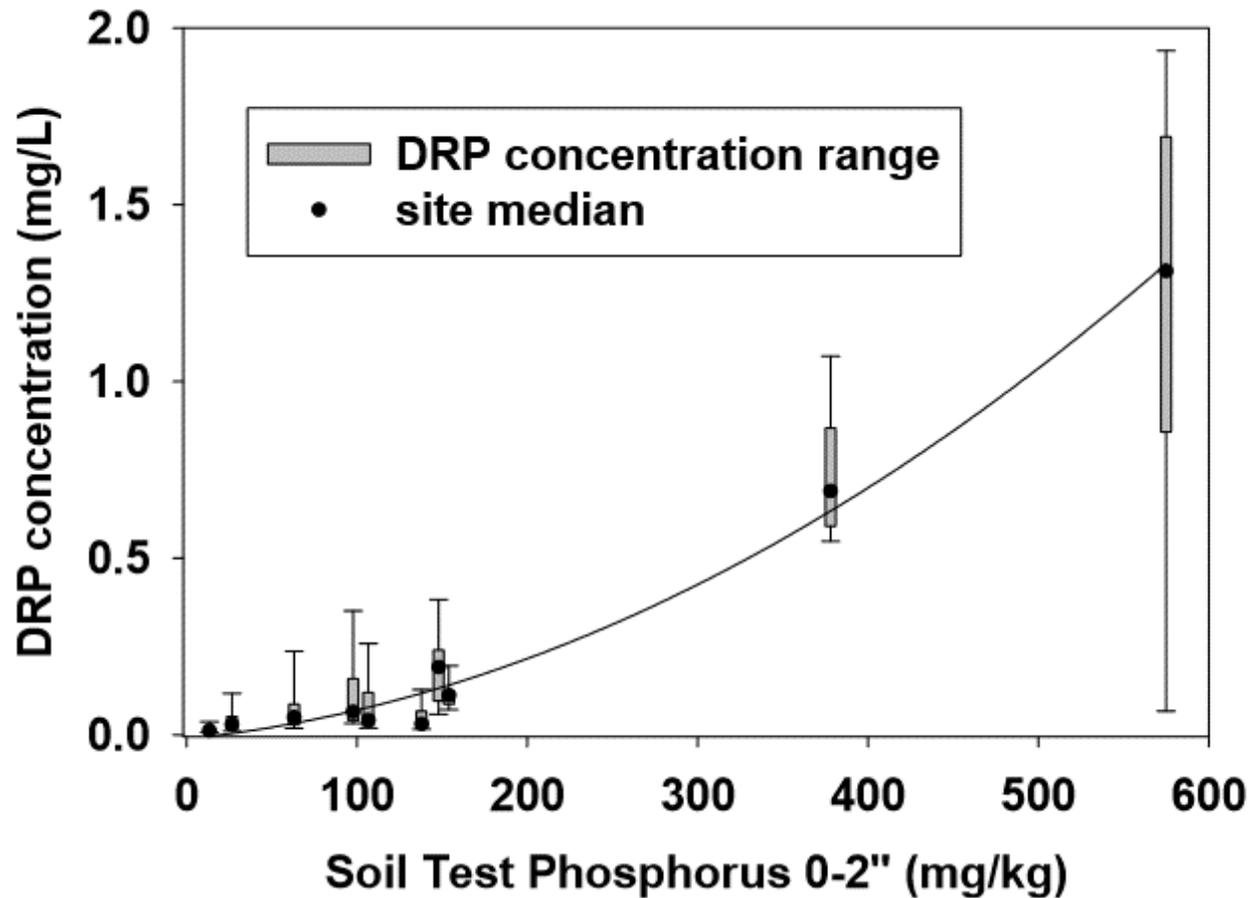


## How much Phosphorus does it take to grow plants?

Solution phosphorus concentration to support plants in different media.

Situation	Note	Concentration of P
Crops optimal soil solution	Maximizing crop production	~ 0.20 mg/L (or ppm)
Flowing Water	Algae grow stimulated	~ 0.01 – 0.10 mg/L (or ppm)
Lake	Higher resident or contact time results in lower concentration	~0.01 – 0.04 mg/L (or ppm)

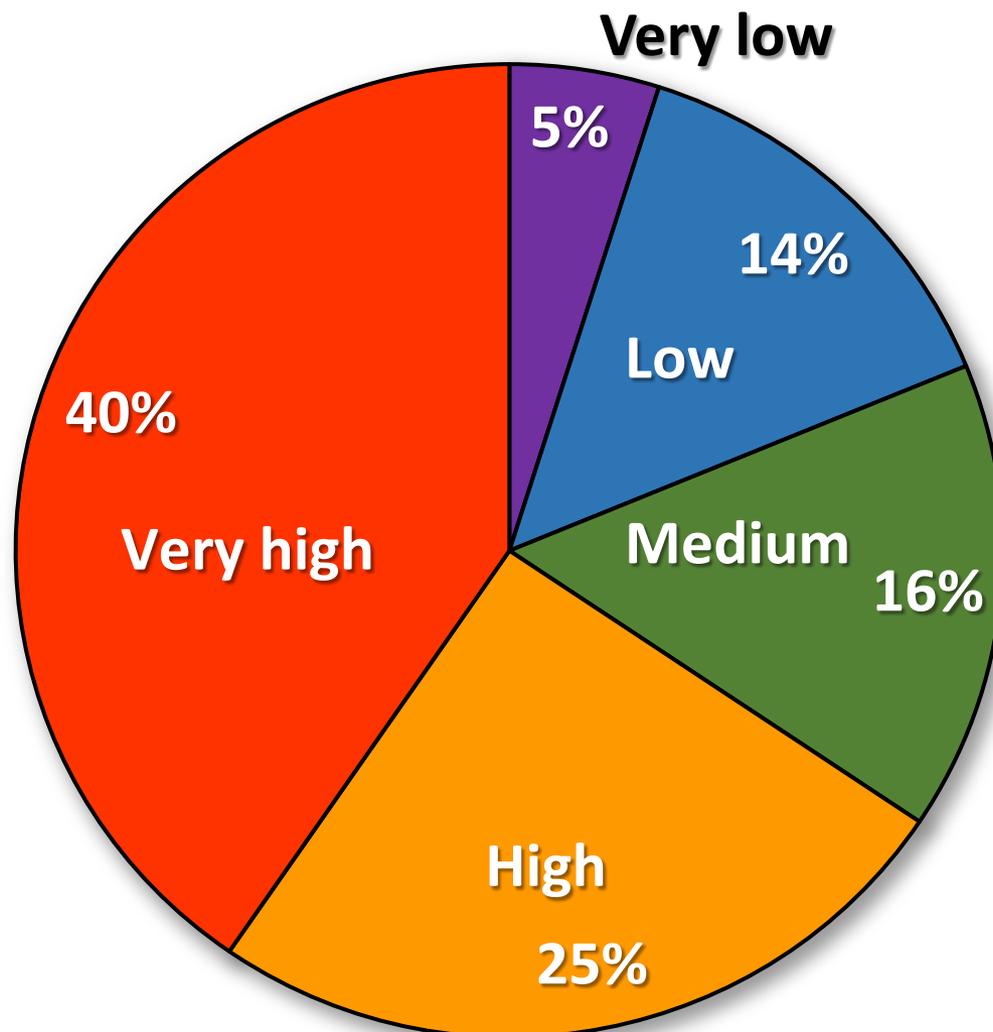
# Tile Drain P Concentration



Kevin King, USDA-ARS

# Michigan 2012 Soil Test P (STP)

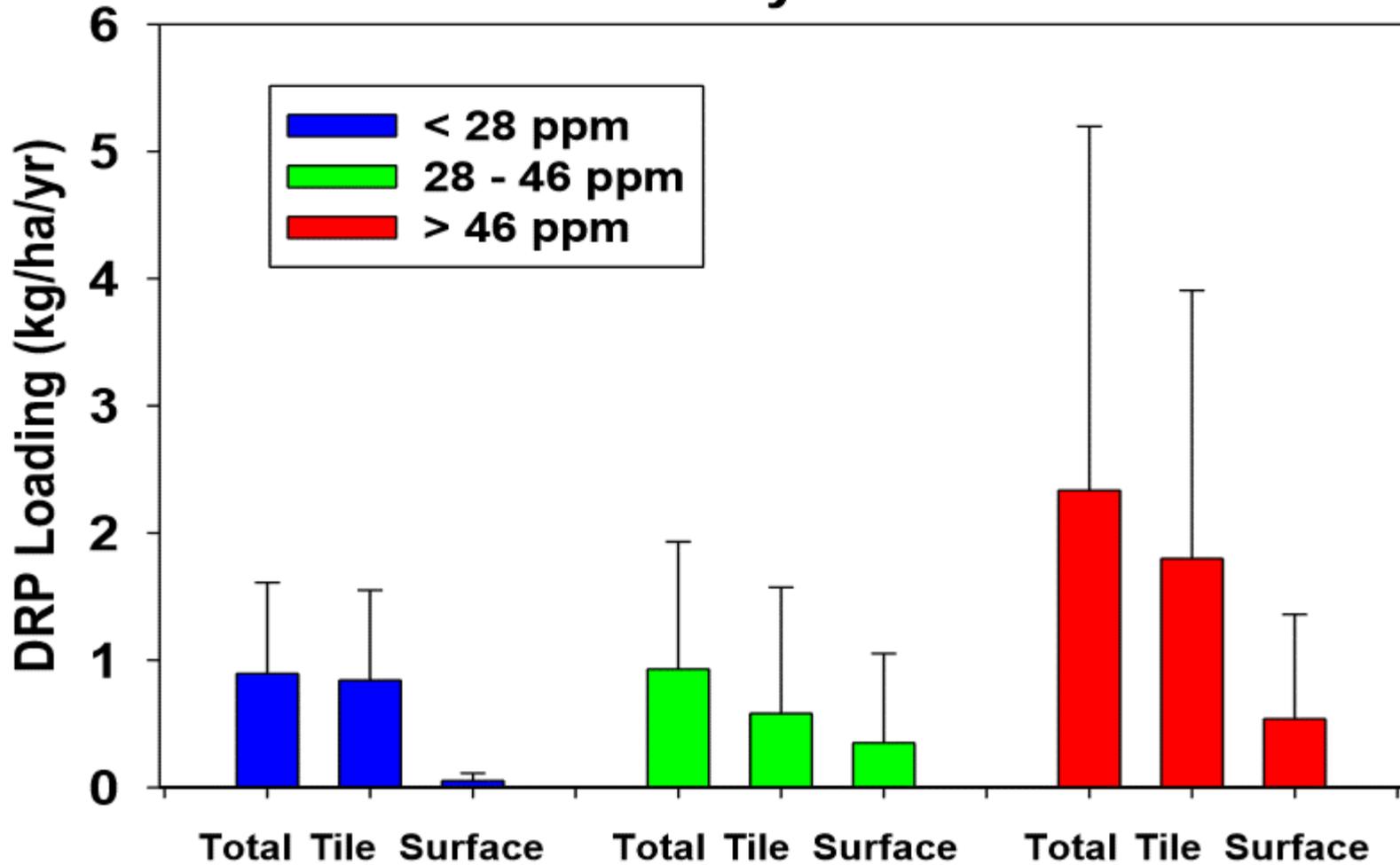
Soil Test Category	Response Frequency
Very High	<1%
High	5%
Medium	25%
Low	65%
Very Low	80%



A&L Great Lakes Laboratories

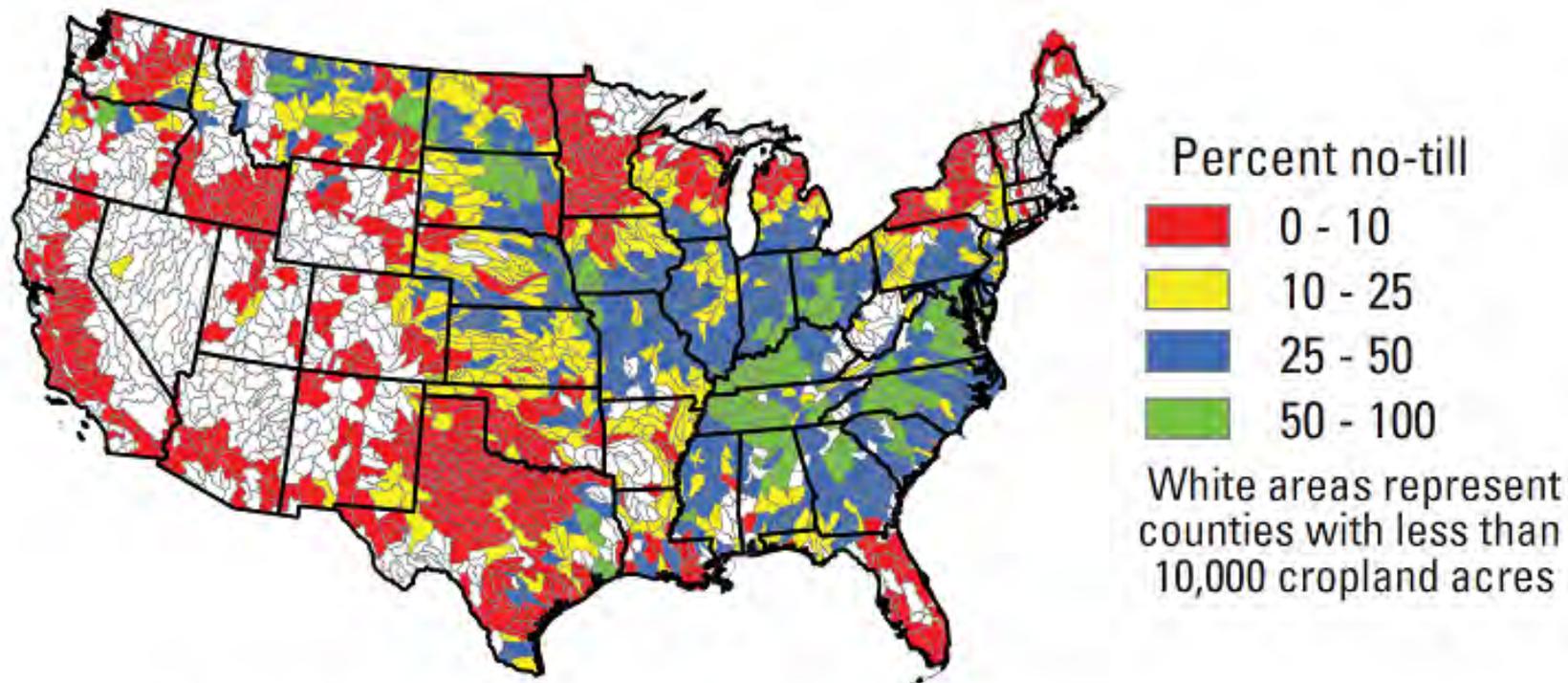


## DRP Load by STP Level



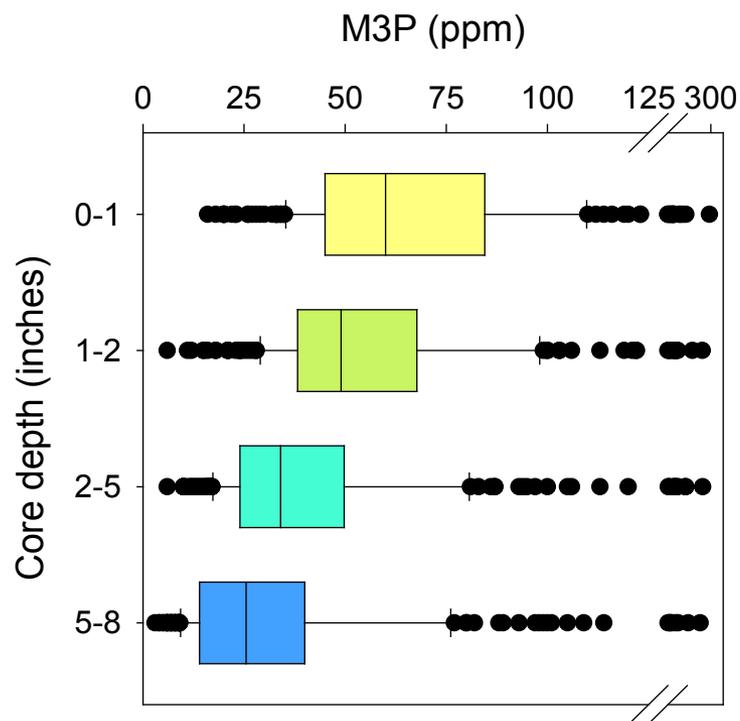
Eric Schwab, Ohio NRCS State Agronomist

# No-till Adoption



Percent No-Till for All Crops, 2004

# 4-Part Stratification



Median

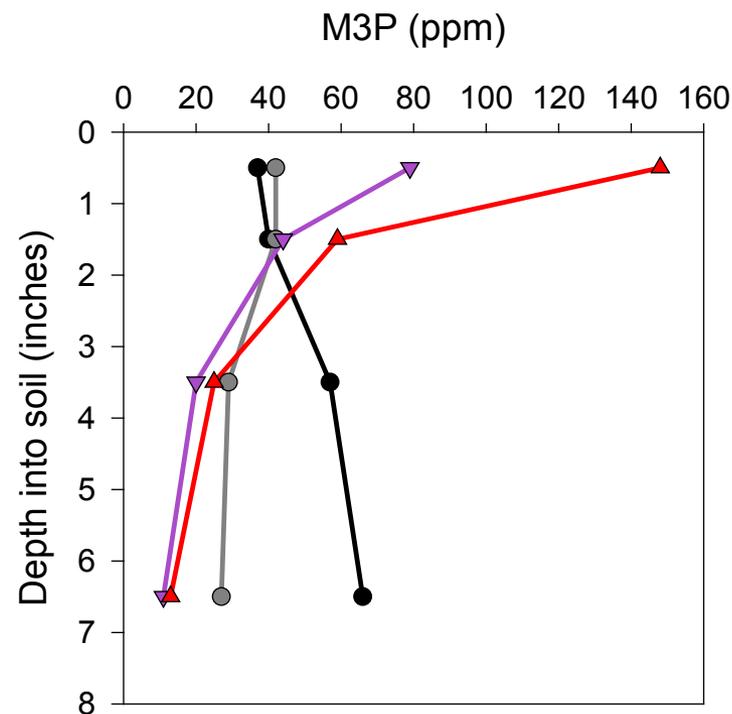
60

54.5

49

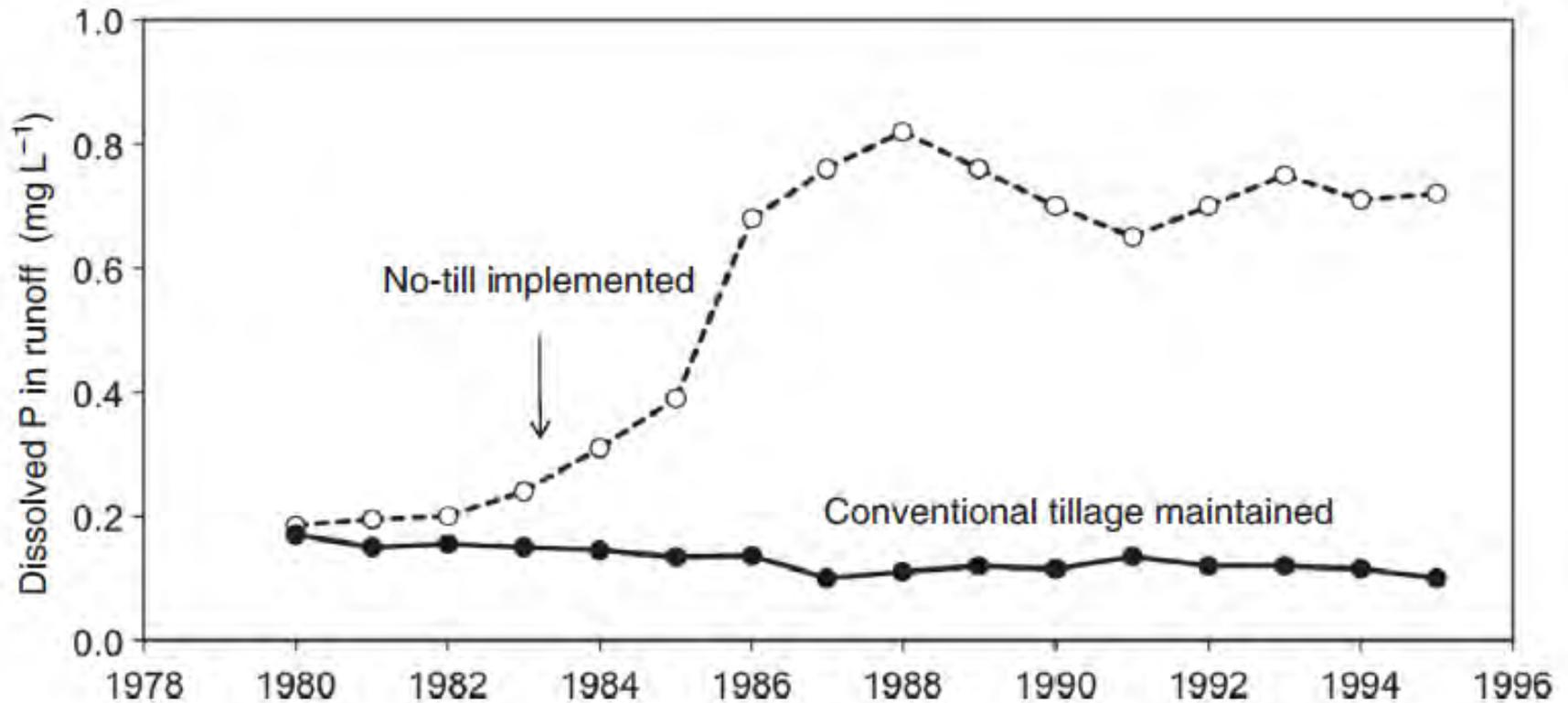
34

26



- Stratification evident even in the top 1" of soil
- Although the degree of stratification varied some...
- 85% of the samples had some degree of stratification

# Dissolved P Runoff



Average annual dissolved P concentrations in runoff from two wheat fields in Oklahoma, US. Both were tilled until 1984, when one was converted to no-till.

Kleinman et al., 2011

# Contributing Factors in Lake Erie

- Extensive tile drainage
- High soil test P
- No-till P stratification



*Ohio response- Increasingly regulated approach*

# Phosphorus Management

## Intensive soil sampling

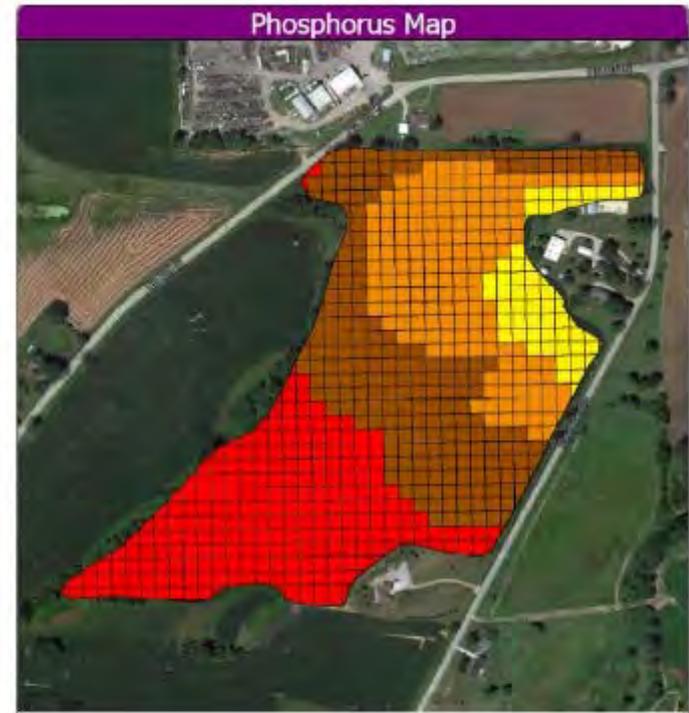
Michigan- 86%

Ohio Erie Basin- 42%

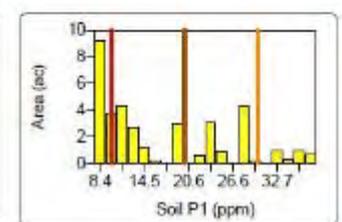
## Variable rate P application

Michigan- 53%

Ohio Erie Basin- 33%



Soil P1 (ppm)		
Above 70	( 0.0 ac - 0.0%)	
60-70	( 0.0 ac - 0.0%)	
50-60	( 0.0 ac - 0.0%)	
40-50	( 0.0 ac - 0.0%)	
30-40	( 2.9 ac - 8.1%)	
20-30	( 9.2 ac - 25.3%)	
10-20	(11.5 ac - 31.6%)	
Below 10	(12.8 ac - 35.0%)	



# Improving P Management

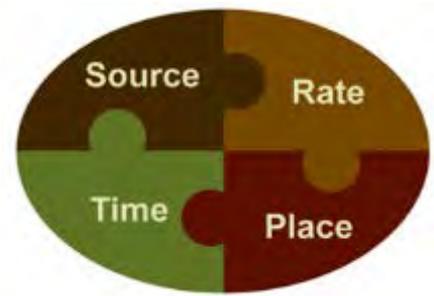
## Managing surface losses

- Erosion of soil and fertilizer

## Managing tile drain water

- Quantity and timing of drainage
- Soil solution P

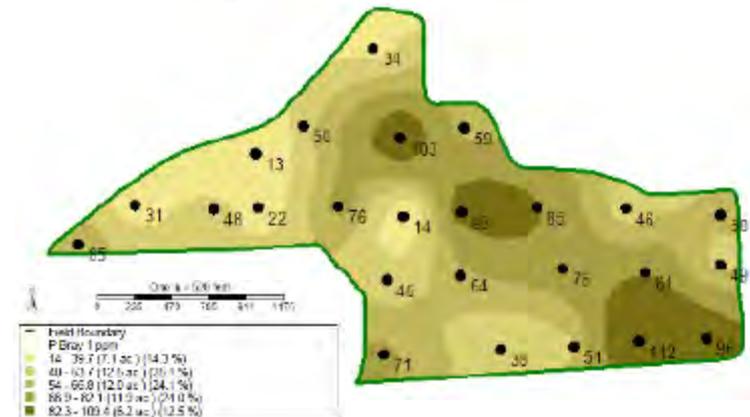
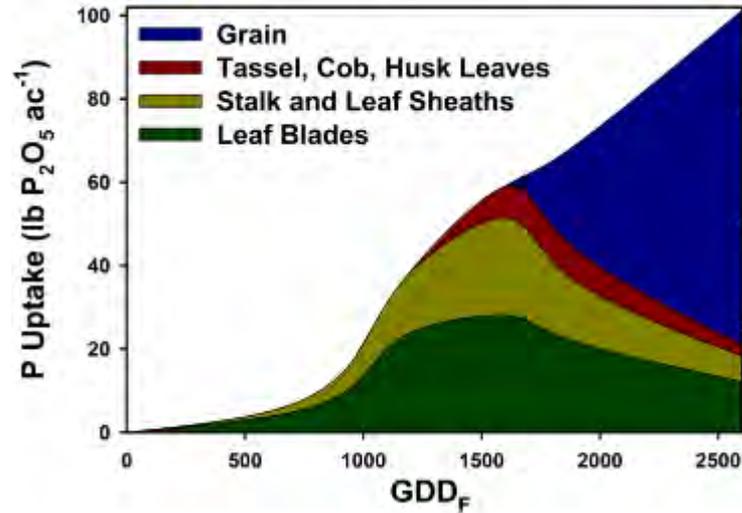




# Improving P Management

## 4R Management

- Source
- Rate
- Place
- Time





Thank You





# Transportation & the Dairy Industry

DRESSER

- Continental Dairy Facilities LLC located in Coopersville, Michigan is a dairy processing facility owned by Select Milk Producers Inc. a Dairy Farmer Co-op.
- The 92 Co-Op members are located in Michigan, Indiana, Ohio, Texas and New Mexico. They currently produce approximately 6 billion pounds per year or 329 – 6,000 gallon tankers per day.
- 5<sup>th</sup> largest milk Co-Op in U.S.
- 25 Producers – in the Michigan area
- Approximately 5 million lbs. of raw milk per day

Select Milk

CONTINENTAL  
DAIRY FACILITIES, LLC

Producers, Inc.  
Setting a Higher Standard.

# Transportation Needs

- Transportation is critical to Dairy producers from input to final product shipping.
- Inputs – Grain, feed, animals.
- Output – milk delivered to the processing plant from the farm.
- Final product – finished products from the processing plant, NFDM, Cream and Condensed.

# Setting Standards

Achieving Gold Star Quality

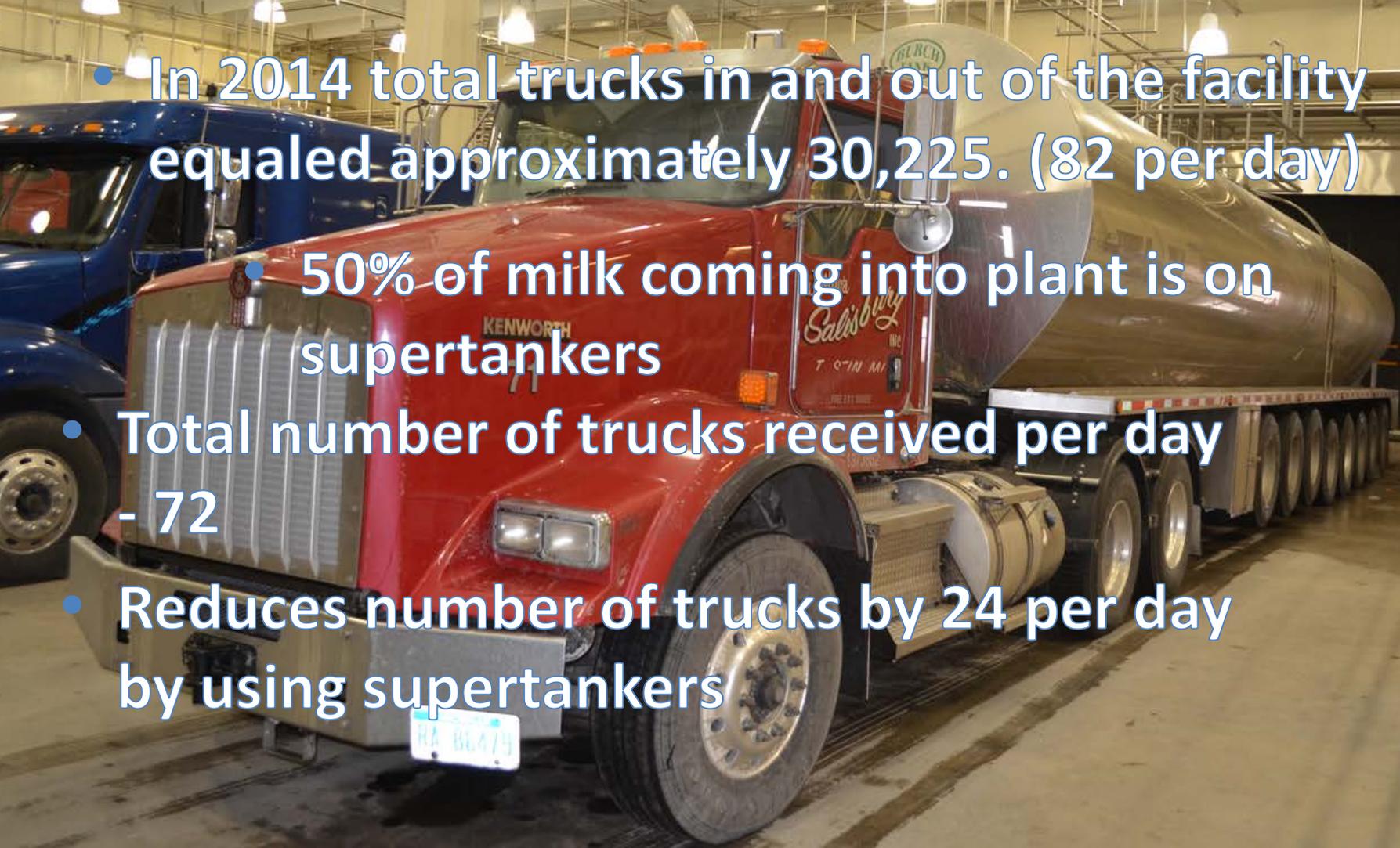
	2012	2013	Percent Increase	2014	Percent Increase
<b>Condensed Produced</b>	26,377,000 lbs. = 550 tanker loads	44,736,000 lbs. = 932 tanker loads	69.6%	53,862,729 lbs. = 1,122 tanker loads	20.4%
<b>Cream Produced</b>	61,155,000 lbs = 1,274 tanker loads	91,248,000 lbs. = 1,901 tanker loads	49.2%	119,509,483 lbs. = 2,490 tanker loads	31.0%
<b>Non-fat Dried Milk Production</b>	51,434,000 lbs= 1,152 truck loads	74,356,000 lbs. = 1,665 truck loads	44.6%	98,083,009 lbs. = 2,196 truck loads	31.9%

- The plant started operations in March 2012.

- Plant receives 5 million lbs. of milk daily and produces Nonfat Dry Milk, condensed and cream

# Continental Dairy Facilities, LLC

- In 2014 total trucks in and out of the facility equaled approximately 30,225. (82 per day)
- 50% of milk coming into plant is on supertankers
- Total number of trucks received per day - 72
- Reduces number of trucks by 24 per day by using supertankers



# Exports

- Non-fat dry milk was marketed domestically in 2012 with some exports to Mexico.
- In 2013 the export market grew at a rapid pace due to various market and production related conditions. The majority of the non-fat produced went to exports.
- 63,916,000 lbs. 70.7 % of sales.
  - Middle east and North Africa – 36,366,000lbs. (40.2%)
  - Mexico – 17,632,000 lbs. (19.5%)
  - S.E. Asia - 9,918,000 lbs. (11%)



# S.E. Asian Exports

- Why are the Michigan road laws important to these exports?
- S.E. Asian exports ship from West Coast ports.
- The majority of U.S. NFDM is produced on the West Coast (Calif., Wash., Id.)
- Due to distance cost of freight from Michigan is prohibitive.



# Thinking Outside The Box

- Freight to S.E. Asia booked as a package that includes drayage, trucking and ship.
- Michigan's weight limits translates into more product on container.
  - Equalizes freight rate on a per pound basis.
  - Allows Michigan dairy plants to compete with West Coast plants in S.E. Asia marketplace.



# Thinking Green

- Sustainable supplier of Raw Materials Certification from Unilever
- Business owner's are leaders in Sustainability
- CNG Transport 42 trucks
- CNG fleet removes 12 million miles of diesel per year.
- Fuel efficiency of supertankers
- Fuel savings of 105,000 gallons Per year





# **CONTINENTAL** **DAIRY FACILITIES, LLC**

*Farms, People and  
Technology  
Achieving Gold Star  
Quality*



# Transportation Revenue and Sales Tax Ballot Proposal



Director Kirk Steudle



# What would the proposed changes do?

*All taxes paid at the pump would go to transportation and sales tax goes to schools & cities.*



# Enacted

 May 5th Ballot

## 2015 Transportation Package



- Fuel tax increase
  - Tax Rate for Gasoline & Diesel the same at 14.9%, although prices vary
    - Gasoline : 19 to 41 cents
    - Diesel fuel: 15 to 46 cents
  - New Diesel-equivalent tax on CNG
  - Remove 6% sales tax from fuel
- Registration fee increase of about 30% for:
  - New cars starting in 2016
  - Trucks over 26,000 lbs.
  - Takes effect over 3 to 14 years

# Impact for Transportation Agencies

✓ May 5th Ballot



- \$1.2 billion/year more for MTF
  - 39% to county roads; 22% to city streets
- Grows with consumer prices; not more than 5¢/year
- Road-agency distributions rise by 60% in 2018
- \$112 million/year for CTF by 2018
- No change to formula

# Impact for Other Public Agencies

- \$300 million/year more for School Aid Fund
- \$100 million/year more for revenue sharing
- \$20 million/year more for DNR marinas and ORV trails
- Additional funding for community colleges



# Impact for Individual Taxpayers

- Sales tax rises from 6 to 7%
- Fuel tax increases; sales tax removed from fuel
  - Tax at pump rises up to 12¢/gallon in Oct. 2015
- Earned-income tax credit increased from 6 to 20% of federal credit; eligibility is broadened
- Registration fee increase of about 30% on new cars starting in 2016
- Registration fee on hybrid-drive cars increased by \$25/year
- Registration fee on electric cars & plug-in hybrids increased by \$75/year



# Impact for Businesses



- Diesel fuel tax is increased; sales tax is removed from Diesel fuel
  - Total tax on Diesel fuel rises 12¢/gallon in October, 2015
- No registration fee increase on medium trucks
- Registration fee rises by \$600/year on typical heavy truck
- Sales tax rises on retail purchases
- Enlarged assistance to small-business development

# Taxpayer Protection & Transparency



- Increase use of pavement warranties by local agencies, where possible
- County road agencies required to use competitive bidding for projects of a certain size
- Townships contributing more than 50% to cost of county road project may require competitive bid
- Performance-driven maintenance contracting by 7 largest road agencies

All proposed changes are tied to the outcome of the sales tax ballot referendum.



# MDOT Communication Tools

- [www.michigan.gov/roadfunding](http://www.michigan.gov/roadfunding)
- [www.michigan.gov/realitycheck](http://www.michigan.gov/realitycheck)

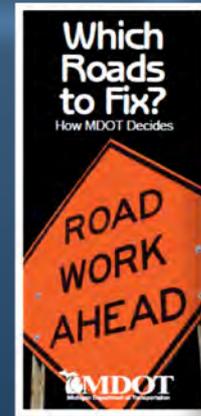


The screenshot shows the MDOT website with a search bar at the top. The main content area features a news article titled "Transportation Funding: No Easy Fix" with a sub-headline "Time for Action on Infrastructure". The article text discusses the deteriorating condition of Michigan's roads and bridges and the need for additional funding. A sidebar on the right contains "Quick Links" for various services like "Toll VI", "Federal Government", and "Tribal Governments".

The screenshot shows the MDOT website with a search bar at the top. The main content area features a section titled "Reality Check" with a sub-headline "Transportation Reality Check takes on some of these myths, and explains why MDOT does things the way they do." The section lists several myths (Myth #1 through Myth #4) and provides links to "See the Reality Check Story" for each. A sidebar on the left contains navigation links for "Roads and Travel", "Rail and Public Transit", "Bridges, Tunnels and Ferries", "News and Information", "Media Relations", "Legislation", "History & Culture", "Projects and Programs", "Maps", "Reports, Publications and Speeches", "About MDOT", "Doing Business", and "Announcements".

# Brochures

- Making Michigan Move: Our Roads, Mobility & Economy
- How Michigan Funds Transportation
- Michigan Gas Tax Revenue
- Pavement – Designing, Building, and Maintaining Michigan State Highways
- Which Roads to Fix?
- Making Michigan Soar, Our Airports Connecting Michigan to the World
- Truck Weights in Michigan
- MDOT Efficiencies



# White Papers

- Plain Facts about MDOT's Revenue, Cost-Cutting & Investment
- Special Message on Revitalization of Michigan's Deteriorating Infrastructure
- Fast Facts
- Michigan's Truck-Weight Law & Truck-User Fees

**MICHIGAN DEPARTMENT OF TRANSPORTATION**  
**Fast Facts 2014**  
OVERVIEW

The Michigan Department of Transportation (MDOT) has jurisdiction over:

<b>9,656</b> route miles (M, US or I routes) 31,002 lane miles	<b>4,703</b> highways, railroad and pedestrian bridges	<b>665</b> state-owned airports	<b>4</b> state-owned airports (Detroit, Linden, Plymouth-Canton, Poughkeepsie-Lewis)
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MDOT also provides technical and/or technical assistance to systems of transportation systems owned and operated by others including local transit systems, airports, state and local, etc.

**Highways and Roads**

- Michigan's road system is one of the most extensive in the nation, with over 9,656 route miles (31,002 lane miles) and 4,703 bridges.
- MDOT's system of more than 132,000 miles of public roads is:
  - 98% paved in the nation.
  - 25th largest state highway system.
- Michigan's road network is the nation's:
  - 10th largest by total system.
  - 21st largest by total miles as of 2012 (FHWA statistics).
  - 4th largest by total road system.
  - 38th largest by total miles as of 2012 (FHWA statistics).

**Local Transit Systems**

MDOT provides a variety of services for the local bus transit system, which consists of 37 agencies serving more than 100 million passengers annually.

- Annual local public transit provided more than 100 million passenger trips in 2013.

**Michigan Transportation Statistics**

- Highway growth 17.8 percent from 2005 to 2009 (highway growth from other bus systems nationwide).
- Local transit services contributed nearly \$700 million in economic and other benefits to Michigan communities based on 2010 data.
- About 50 percent of the cost of operating local transit comes from state transportation funds.

**Passenger Fleet**

- A total of 304,927 passengers traveled on three Amtrak routes in Michigan in 2013, setting a new record. Ridership has increased more than 47 percent in the last 10 years.
- Revenue from the three routes also set a record of \$38.4 million in 2013.
- There are 22 other passenger routes in Michigan, 14 of which are multi-modal, serving passenger rail as well as freight bus and truck.
- Amtrak operates three hourly passenger rail routes in Michigan:
  - The Wolverine operates three daily round-trips between Detroit, Ann Arbor, and Chicago, IL.
  - The Blue Water operates a single daily round-trip between Flint, Ann Arbor, and Chicago, IL.
  - The Pere Marquette operates a single daily round-trip between Gray's Trace, Ann Arbor, and Chicago, IL.
- Amtrak's Thruway Bus services provide bus connections between Michigan Amtrak routes and communities around the state. There are also a Thruway Bus line between the Blue Water and Wolverine services which connects to Tustin, Ohio, with Amtrak long-distance routes to the east coast.

**RICK SNEYDER**  
GOVERNOR

**3115 W. MICHIGAN**  
**EXECUTIVE OFFICE**  
LANSING

**WHADE COLLIER**  
COMMISSIONER

October 26, 2011

A Special Message from Governor Rick Snyder:  
Reinvigorating Michigan's Infrastructure, Better Roads Drive Better Jobs  
To Michiganders and the Michigan Legislature:

**I. Introduction**

Over the past ten months, we have taken important steps to turn Michigan's economy around. But as too many in Michigan know we still have a long way to go. Today we take yet another bold step forward to help ensure our economic prosperity, now and in the future.

**Reinvigorating Michigan's Infrastructure: Better Roads Drive Better Jobs**

A sound and modern infrastructure is vital to attracting and retaining jobs. The state that put the world on wheels needs to continue to be a transportation leader in order to stay competitive in today's global economy. We need a modern transportation system that moves people and goods safely, reliably, and efficiently in order to increase productivity and our quality of life. We need a multi-modal system that will have the investments of a new, more robust, more technology, and more advanced generation. We need water and sewer systems that support and protect Michigan's rich environment and water resources. We need to integrate our longstanding telecommunications network and connect every business and every household to the internet.

The challenge is simple. Michigan's infrastructure is deteriorating from a lack of investment, if we are going to reinvent Michigan's economy, we have to reinvent Michigan's infrastructure.

For the first time ever transportation revenues are declining. Simply put, better fuel economy and higher gas prices lead to lower road revenues from the fuel tax that is the lifeblood of Michigan's infrastructure. And the state's cost of materials and labor continue to rise, seriously undermining our ability to keep up.

In 2006, a Transportation Funding Task Force recommended doubling Michigan's transportation investment, and warned strongly that doing nothing was unacceptable. At the time, members of the State Legislature made proposals for increased funding for transportation, and found support on all sides of the political spectrum, but nothing happened. And this year, a bipartisan House Transportation Committee workshop implemented those findings, concluding once again that while doing nothing is a decision, it is the wrong one. The following graph illustrates the deterioration of our system at today's level of investment.



# Questions?



# Proposal 1: The facts

## Voters will decide road funding fate

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The fate of the transportation funding proposal agreed upon by the governor and state lawmakers, and supported by Farm Bureau, now relies on Michigan voters approving a 1 percent increase to the state's sales tax on the May 2015 ballot.

All told, the proposal is expected to rejuvenate Michigan's failing infrastructure by generating an estimated \$1.3 billion annually in transportation funds.

**Agriculture depends on a sound transportation system to transport products.** Farm Bureau members have long advocated for an increase in investments to our transportation infrastructure.

Visit the MFB website for details: <http://bit.ly/MFBSafeRoadsYes>

MFB Contact: Matt Kapp, government relations specialist  
[mkapp@michfb.com](mailto:mkapp@michfb.com) (517) 679-5338

## Safe Roads Yes coalition

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Michigan Farm Bureau is a member of the Safe Roads Yes Coalition. Check out their resources available to encourage others to vote yes on the ballot proposal.

 [www.facebook.com/saferoadsyes](http://www.facebook.com/saferoadsyes)

 @SafeRoadsYES

[www.saferoadsyes.com](http://www.saferoadsyes.com)



## What does Proposal 1 accomplish?

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### Allocates all state tax revenue collected at the pump to the roads

- Roughly one-third of the taxes currently collected at the pump are diverted to schools and local government and do not go to transportation.
- This would be a \$1.3 billion increase for road funding.
- Farm Bureau policy supports diverting 100 percent of the tax collected on motor fuel to provide for additional road funding.

### Raise the state's sales tax 1 percent; from 6 to 7 percent

- This increase will offset the loss of revenue collected at the pump for schools and local governments.
- This would provide an increase of \$300 million to schools and \$94 million local governments.
- Farm Bureau policy supports the use of a 1 percent increase in the general sales tax to offset the loss of revenue.

### Vehicle registration changes

- Creates a fee for hybrid vehicles, which currently do not pay fuel taxes.
- Assess a user fee on Michigan's heavier trucks.
- End of the three-year depreciation schedule drivers currently receive when renewing tabs.
- These registration changes will add \$95 million to road funding.
- Farm Bureau policy supports taxing gasoline alternative vehicles at an equitable rate.
- Farm Bureau policy supports user taxes when new revenue is needed for roads and bridges.

### Warranties and increased efficiencies

- Requires competitive bidding and performance-based systems for road construction projects based on quality and price.
- Establishes requirements related to road project warranties.
- Farm Bureau policy supports the use of a bidding process for road projects.



**MICHIGAN COMMISSION OF AGRICULTURE AND RURAL DEVELOPMENT**

**RESOLUTION IN SUPPORT OF  
INVESTMENT IN MICHIGAN'S TRANSPORTATION INFRASTRUCTURE SYSTEM**

WHEREAS, the Michigan Commission of Agriculture and Rural Development recognizes the importance of the state and local transportation network to the food and agriculture sector and our rural communities. The sector is dependent on a sound transportation system to move inputs, raw materials, ingredients, and products along the food and agriculture supply chain and on to consumers; and

WHEREAS, improving Michigan's transportation system will create jobs, attract business, and strengthen our overall economy. We believe state and local road agencies should be adequately funded so they are able to properly fund routine maintenance and ensure safe and efficient roadways to all motorists, including businesses; and

WHEREAS, a sound and modern infrastructure is vital to attracting and retaining jobs. Michigan put the world on wheels. The state needs to continue to be a transportation leader in order to maintain its competitive edge in today's global economy. A modern transportation system that moves people and goods safely, reliably, and efficiently is critical to our economic competitiveness and to our quality of life; and

WHEREAS, the deteriorating condition of Michigan's roads and bridges is an issue in every part of the state. Years of under-investment, coupled with increased fuel efficiency, has eroded the funding available for transportation and accelerated the decline in pavement and bridge condition; and

WHEREAS, both state and local road agencies have taken steps to improve asset management, increase the effectiveness of existing investment, reduce costs, and employ innovative approaches that make the most of their limited funding; and

WHEREAS, despite these efforts, it is clear that without significant additional investment, our roads and bridges will only continue to worsen, resulting in delays and increased costs to the food and agriculture sector. Michigan's road and highway maintenance budgets have regularly seen funding shortfalls over the last several years, and these funding deficiencies are growing due to the rising maintenance costs coupled with increases in automotive fuel economy.

NOW, THEREFORE BE IT RESOLVED the Commission of Agriculture and Rural Development urges investment in Michigan's transportation infrastructure system, and encourages all residents of the state to become involved in conversations on how to improve Michigan's transportation infrastructure.

Adopted March 18, 2015  
East Lansing, Michigan



Trever Meachum