



# History & Overview of School Siting in Michigan

Smart Growth, School Siting from Municipal and School District Perspectives, Demographic Considerations, Safe Routes to Schools, Context Sensitive Design, and Complete Streets

Michigan Association of Planning  
June 14, 2012  
Webinar on SR2S Principles

# Presentation by:

- Mark A. Wyckoff, FAICP;
  - Director, Planning & Zoning Center at Michigan State University
  - Senior Associate Director, Land Policy Institute

310 Manly Miles Building

1405 S. Harrison Road

East Lansing, MI 48823-5245

517-432-2222; Fax 517-432-3222

wyckoff@msu.edu

# Reporting on Research by:

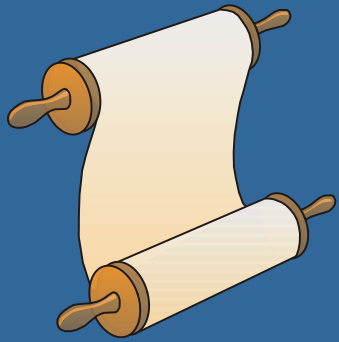
- Dr. Soji Adelaja; Melissa Armstrong, MS; Tyler Borowy, MS and Mark Wyckoff, FAICP of the Land Policy Institute at Michigan State University, East Lansing, Michigan
- Richard Norton, Ph.D., J.D., Assistant Professor of Urban Planning at the University of Michigan, Ann Arbor, MI

# Safe Routes to School

- The Michigan Safe Routes to School (SR2S) program goal is to enable and encourage students to *walk and roll* (i.e. bicycle, wheel, etc.) to school when the distance is reasonable and routes are safe.
- Requires *proactive planning* for new schools
- Requires *adaptive planning* for existing schools

# Siting New Schools

- **Planning** for Safe Routes to School should begin **before** schools are sited—not after they are built
- Creating safe routes to badly sited schools is a “no-win” proposition, i.e.
  - Schools “in the middle of nowhere”
  - Schools not near the children they serve
  - Schools without safe pedestrian and bike access
  - Schools without safe “kiss and drive” dropoff
- School sites and school routes should be based on Smart Growth principles in both new and adaptive situations.



# The Ten Smart Growth Tenets

1. Create a range of housing opportunities and choices.
2. **Create walkable neighborhoods.**
3. Encourage community and stakeholder collaboration.
4. Foster distinctive, attractive places with a strong sense of place.
5. Make development decisions predictable, fair and cost-effective.



# The Ten Smart Growth Tenets **(continued)**

6. **Mix land uses.**
7. Preserve open space, farmland, natural beauty, and critical environmental areas.
8. **Provide a variety of transportation choices.**
9. **Strengthen and direct development toward existing communities.**
10. **Take advantage of compact building design.**

For more information: :

[www.smartgrowth.org](http://www.smartgrowth.org) and  
[www.smartgrowthamerica.org](http://www.smartgrowthamerica.org)



# Walkable Communities

## What are walkable communities?

- Walkable communities develop and redevelop in ways that provide the infrastructure and amenities to make walking a practical, safe and attractive alternative to driving.



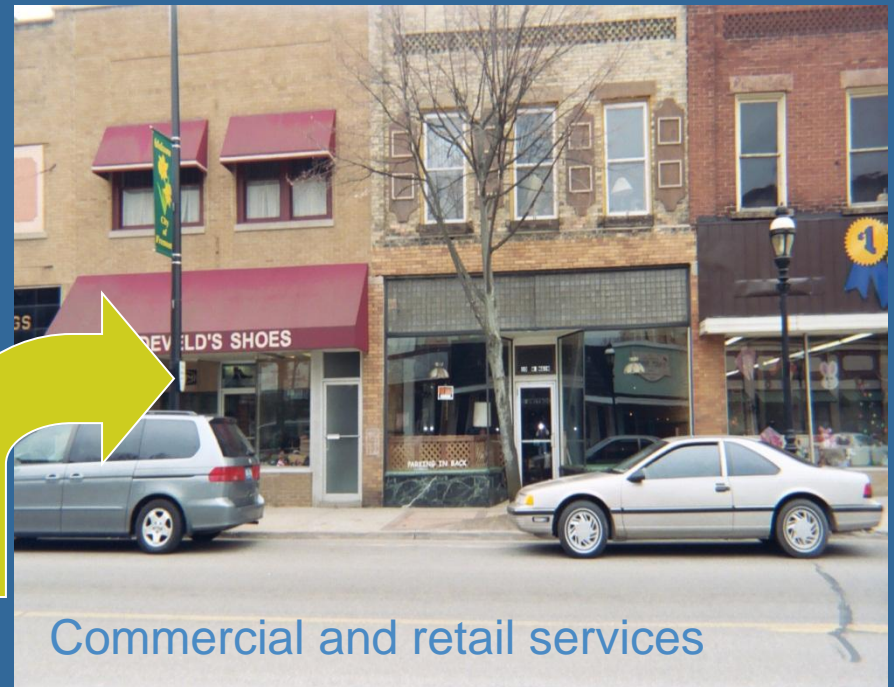
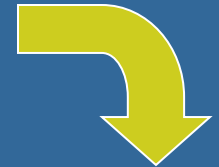


# Mix Land Uses

## What is Mixed-use?

- Mixed-use combines commercial, retail or services uses with residential or office uses in the same building, site or neighborhood (within walking distance).

Office or Apartments



Commercial and retail services

# Provide a Variety of Transportation Choices

What are a variety of transportation options?

- Equitable, healthy, cost-effective alternatives to automobile travel; including
  - Bus
  - Bike
  - Walk
  - Train, plane etc.



Providing public infrastructure (such as sidewalks and bikepaths) and connecting them to destinations is very important to making alternative transportation viable.

# Direct Development Towards Existing Communities

## What does it mean to direct development towards existing communities?

- Directing development towards areas that are already served by infrastructure and services is a fundamental component of Smart Growth.
- Seeks to maximize public investment for infrastructure such as water, sewer, roads and sidewalks.
- Multi-jurisdictional cooperation is vitally important to sustainable growth.



Fremont is a compact community which maintains many excellent development opportunities in the city and contiguous lands in adjoining townships to support more compact development and economic growth.



# Compact Building Design

## What is compact building design?

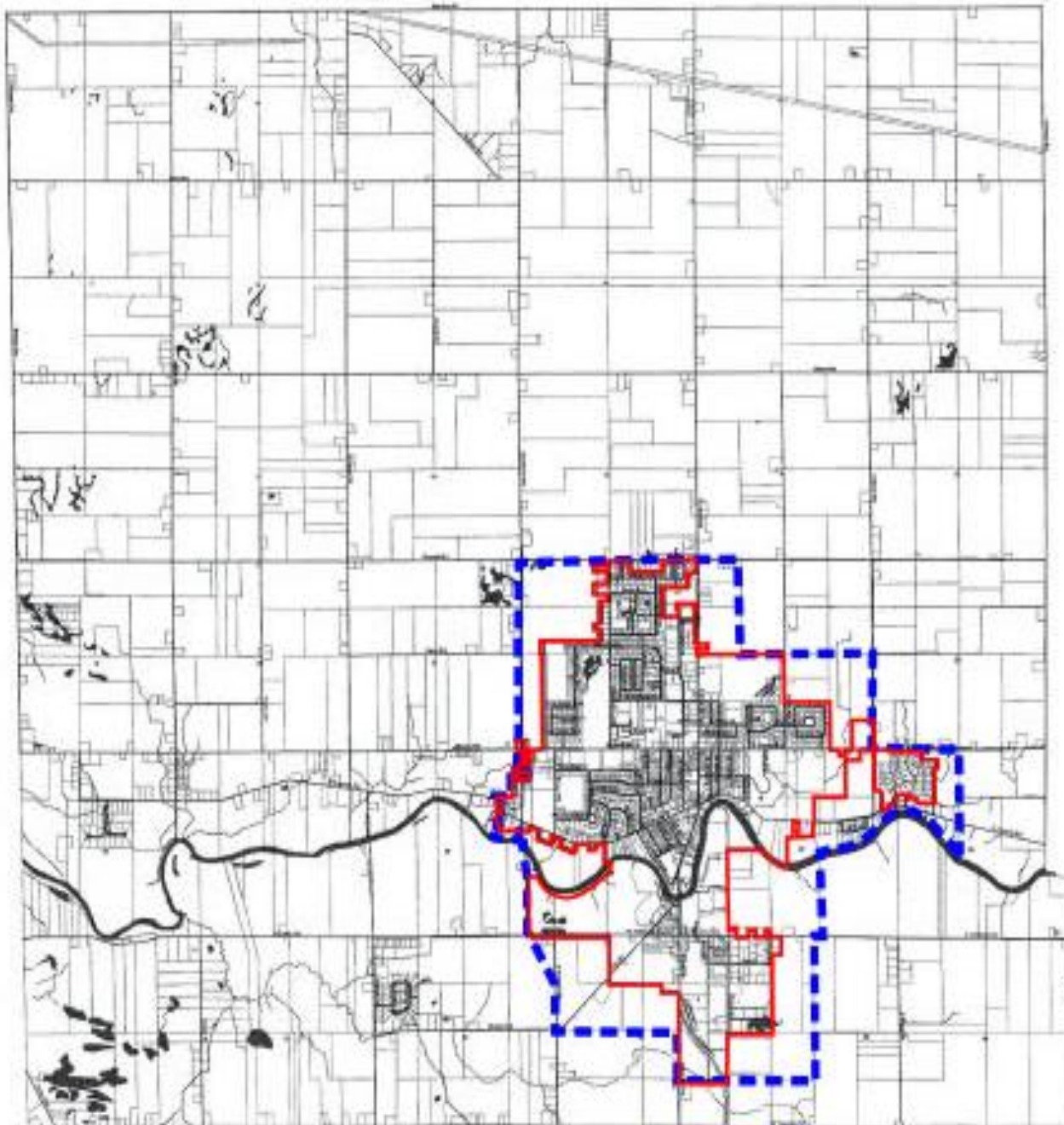
- Using the least amount of land for development and supporting infrastructure as feasible to accommodate a wide variety of living and business choices.






Cherry Hill Village in Canton Twp. uses principles of traditional neighborhood design to increase density and livability.

# Frankenmuth Township and City

## Urban Limit Line



### Legend

-  Frankenmuth City Limits
-  Urban Limit Line
-  Parcels



# Why is siting schools based on Smart Growth principles difficult?

- Independence of municipal planning & zoning and local school administration
- Municipal and school planning processes are separate and out-of-sync
  - Common municipal planning & zoning processes
  - Common school siting processes



# Independence of Municipal Planning & Zoning and Local School Administration

- Historically, most school districts in Michigan have made decisions about where to build new facilities independent of local governments
- Michigan has over 1850 units of local government and over 550 school districts—a lot to coordinate
- And, most school districts are in parts of many municipalities: making it difficult to coordinate
- Yet, local governments are responsible for planning and zoning for all land uses: public and private

- And, where a local school is built (or not built) has a great affect on abutting land uses over time
- And, safe routes to school are nearly impossible, if local governments and school districts do not coordinate their planning efforts—even before schools are built, rehabilitated, or expanded.

# Elements of Municipal Planning & Zoning Processes

- Once a municipality prepares a land use plan (*aka* master plan (MP) or comprehensive plan), by law every 5 years, it must be reviewed and if necessary updated by the local planning commission
- Local zoning is to be consistent with the plan
- Planning commission is also responsible for local capital improvement program (CIP) for new public infrastructure, and it must be updated annually
- New school sites are rarely included in either (MP or CIP) unless the district has obtained a new school site long in advance of need, and rarely is the site selected with municipal assistance
- Instead, the municipality and road authorities attempt to mitigate the negative effects of bad school siting after the fact

# Common School Siting Processes

- Schools typically work on a siting plan or facilities improvement plan when
  - Capacity problems arise
  - Demographic analysis suggests an upcoming enrollment problem
  - Maintenance problems have grown drastically
- This is not at regular intervals (e.g. every 5 years)
- School needs identification processes (especially for high schools) are often biased to new large sites away from developed areas because of
  - Desire to accommodate all community interests
  - Desire to out-compete adjoining districts
  - Accommodation of multiple athletic facilities
  - Architectural or recreation “standards”
  - Reduced land cost or free land

# Dr. Norton's Survey Research

- Dr. Richard Norton (U of M) examined the relationships between new school construction and community growth
- He randomly sampled 250 school superintendents (45% of school districts) and the key local government administrator in a subset of 100 of those districts
- About 50% of superintendents responded and 28% of local government officials

# Dr. Norton's Survey Research

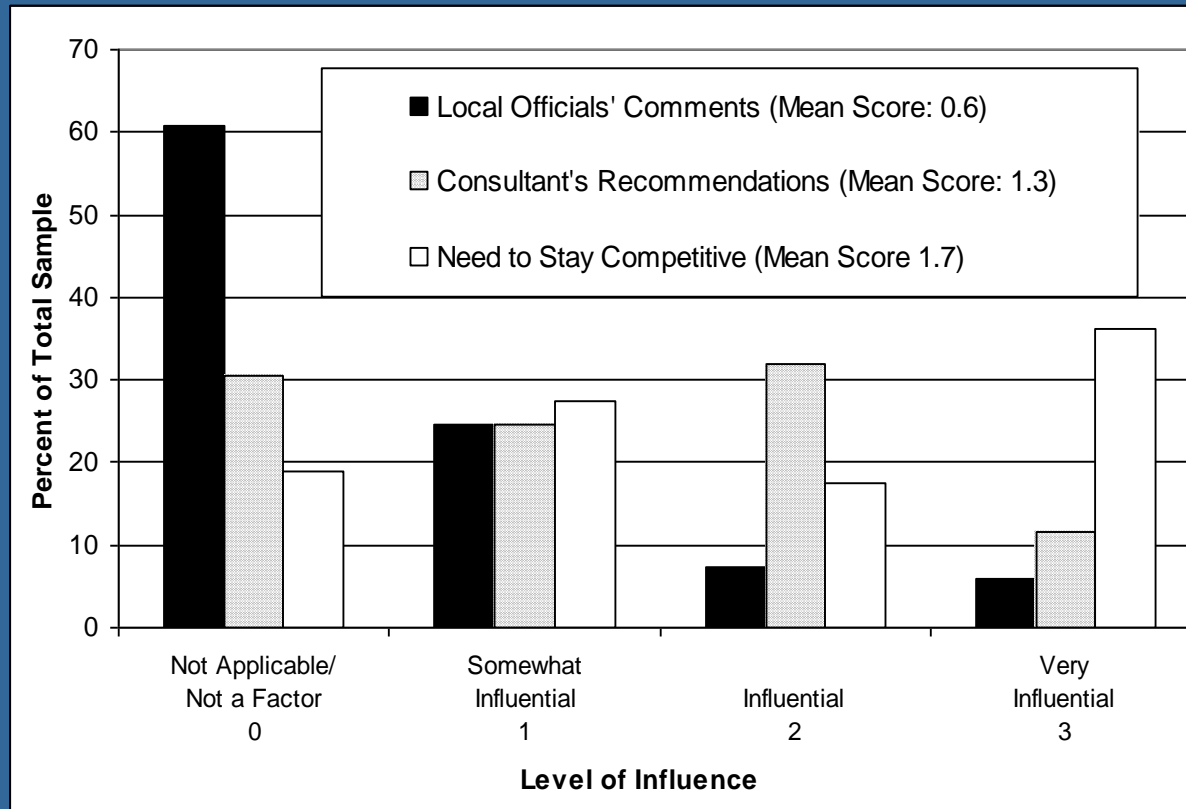
Key study findings include the following:

- Roughly half of the 552 public school districts across the state undertook some type of major facilities improvement initiative—defined as a major technology improvement project, major renovation project, and/or new school construction project—between 1999 and 2004.
- Of the initiatives reported by survey respondents, about half were renovation projects and about one-quarter were new school construction projects. Of those new schools, more than half were sited in urban locations or at existing school sites, while fewer than one-fifth were sited in exurban locations.

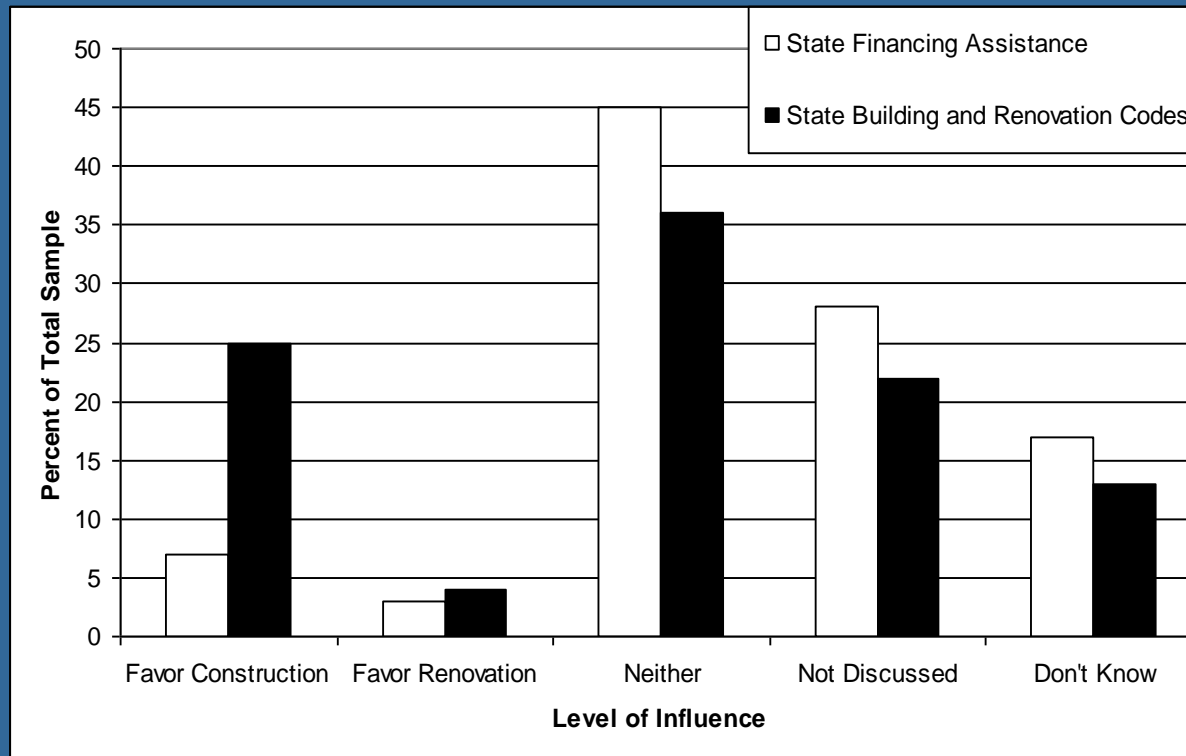


# Dr. Norton's Survey Research

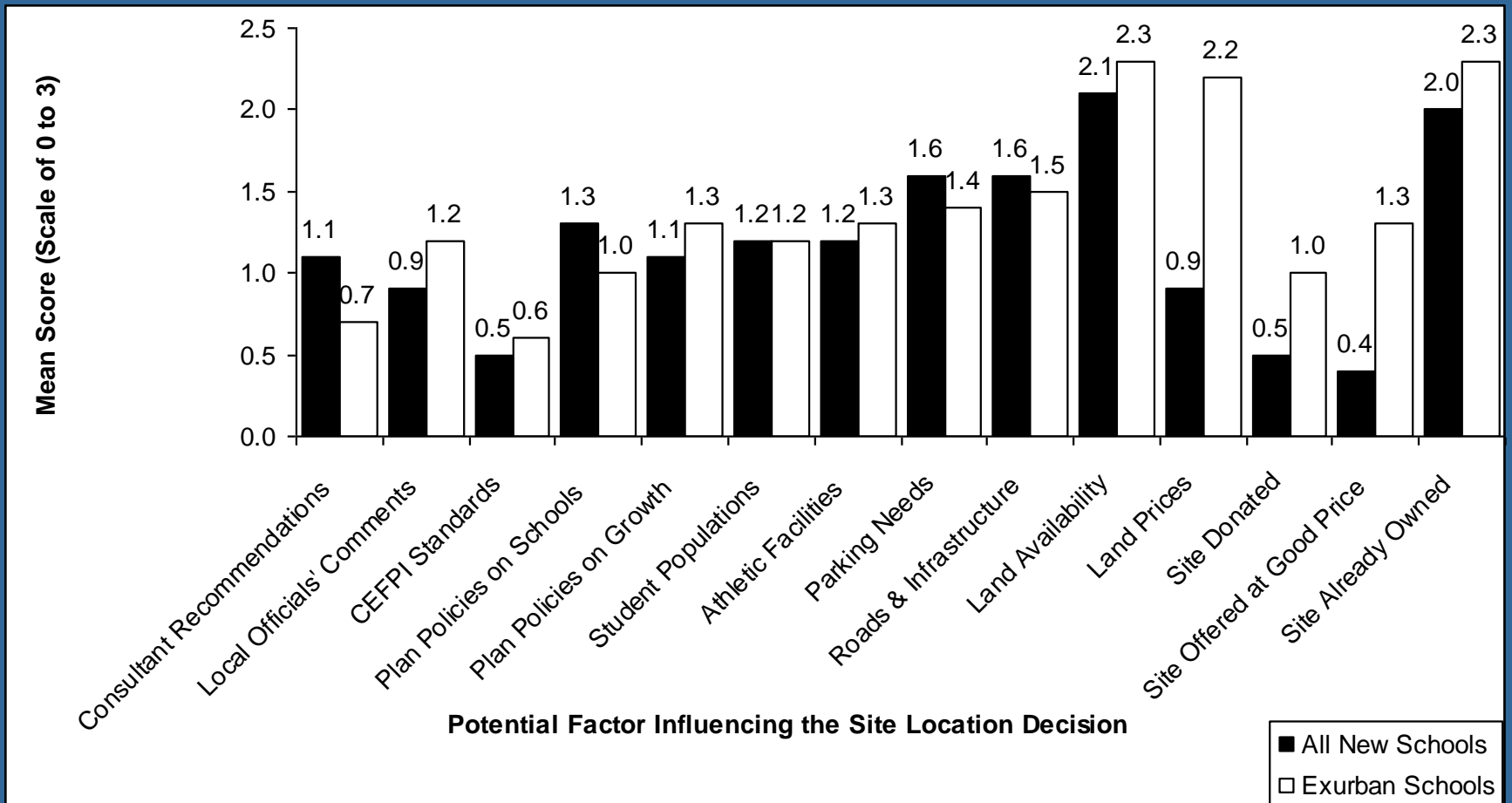
- In general, the factors that most influenced school district officials' decisionmaking in districts that decided to *undertake an initiative* were the following:
  - a sense of need to stay competitive with surrounding school districts for student enrollments;
  - facilities issues like overcrowding, aging, or the need for consolidation;
  - financial considerations; and
  - a sense that the school district's mission would be best served by the initiative.
  - Consultants' recommendations were moderately influential.
- School officials consulted with local government officials on about half of the initiatives undertaken. When they did so, local government officials' comments had little apparent influence on school board decisionmaking.



Level of influence for selected factors on school board decision-making



Level of influence from MI school financing assistance programs and building construction / renovation codes on the decision to build new or renovate.



Mean scores for factors influencing the decision on where to locate a new school:

0 = not a factor

1 = somewhat influential

2 = influential

3 = very influential

# Dr. Norton's Survey Research

- Conclusions:
  - **Education** of school administrators and citizens on compelling reasons for renovating or rebuilding in an urban vs. exurban location **is needed**.
  - There is **little meaningful communication taking place between school districts and local governments** on school sites, prior to decisions being made, and that local planning considerations have little influence on the outcome.
- For a copy of a summary article on Dr. Norton's research go to:

<http://www.closup.umich.edu/research/reports/pr-4-schools-sprawl.pdf>

# Michigan Situation

- Recent history of school siting in Michigan
- Changing location of schools
  - Change over time
  - Change in grade splits
- Demographic considerations
- Density considerations



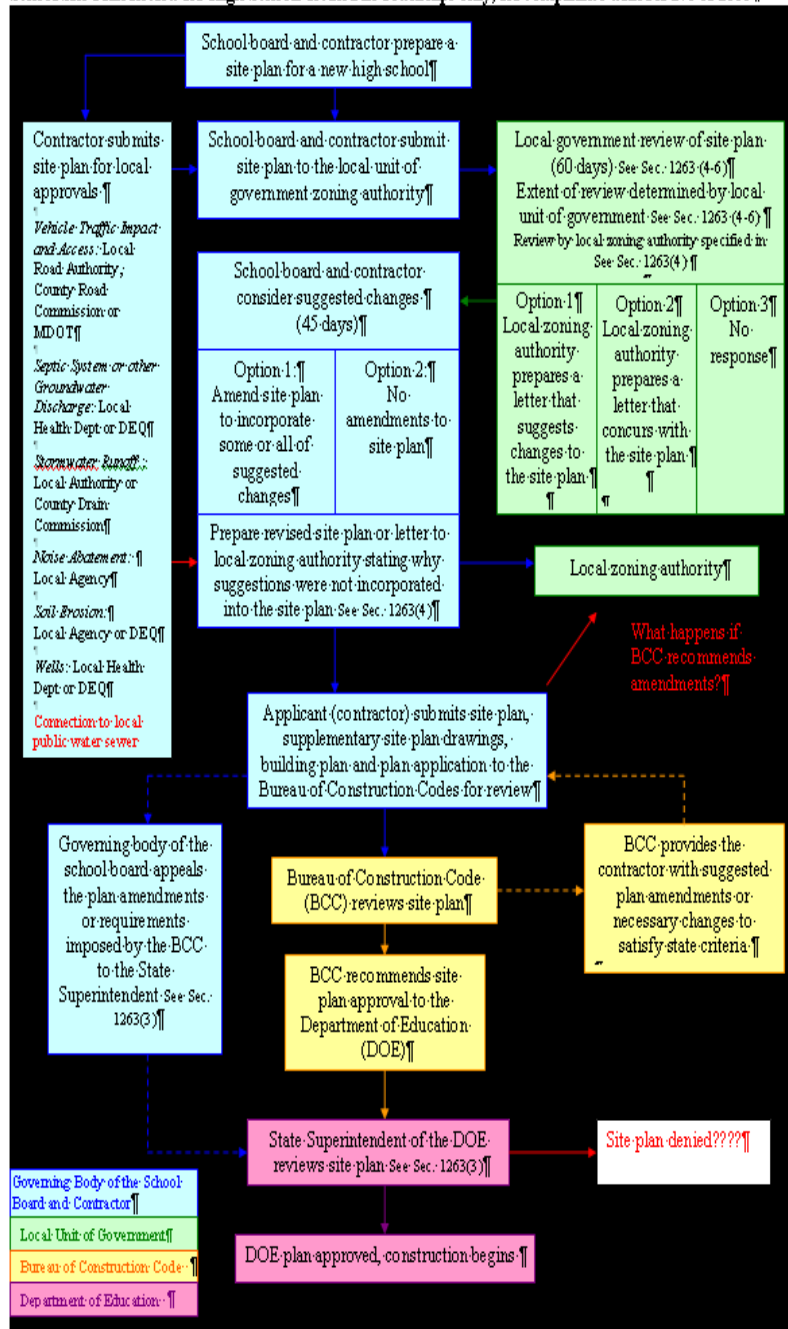
# History of School Siting in Michigan

- Michigan went through a massive consolidation of school districts in the 1950's. Many one room school districts were merged with districts in small towns and large cities.
- Until 1982 school districts and municipalities assumed that schools were not subject to local zoning or building codes as the state had to approve local school building plans. But a Royal Oak case demonstrated that schools and school facilities (like bus garages) were subject to local zoning because the legislature had not explicitly exempted them (Cody Park Association v. Royal Oak School District, 116 Mich App 103, 1982, lv. den. 417 Mich 985, 1983)

# History of School Siting in Michigan

- In 1990 (PA 159), the legislature enacted a law that said schools were not subject to local site plan review (an aspect of local zoning), but municipalities believed that other zoning requirements (like lot size and which zoning districts schools were allowed in) still applied.
- Finally the Michigan Supreme Court said schools were exempt from site plan review and **all other aspects** of local zoning in the Northville Twp. vs. Northville Public Schools, July 13, 2003, docket #120213.
- However, as regards to building codes the legislature finally made schools subject to them in 2002 (PA 628) and a required coordination provision related to site plans for high schools in townships was made state law by PA 276 of 2006.

# Procedure for Site Plan Review of High Schools in Michigan Townships...



...for Compliance with PA 276 of 2006

# History of School Siting in Michigan

- The Governor transferred authority over approval of school building construction, reconstruction, remodeling and site plans from the Superintendent of Public Instruction to the Department of Energy, Labor and Economic Growth, which already is responsible for enforcement of the Construction of School Buildings Act and the construction code (Ex. Order 2009-33).

# Changes in the Number, Type and Location of Schools

- Michigan is closing more schools than it is opening in the most urban and most rural locations
- Michigan is rearranging grades to accommodate changing demographics and to reduce the need to build new schools
- Michigan is moving students/families out to the suburbs resulting in the need for new elementary schools in suburbs and fewer schools in older urban districts

# Worst Case Examples

- At peak enrollment in mid-1960's, the Detroit Public School District had between 250-270,000 students, compared to 104,975 in 2008, this is a decrease of 145-165,000 students (about 60%). *[In 2011 was about 60,000 plus about 56,000 in charter schools.]*
- Flint Community Schools fell from 46,557 students in 1967 to 15,629 in 2008 (-30,928, 66.4%).
- Lansing Public Schools fell from 34,061 in 1971 to 14,860 in 2008 (-19,201, 56.4%)
- Grand Rapids Public Schools fell from just over 30,000 in the early 1980's to 19,885 in 2008 (-10,115, 33.7%)



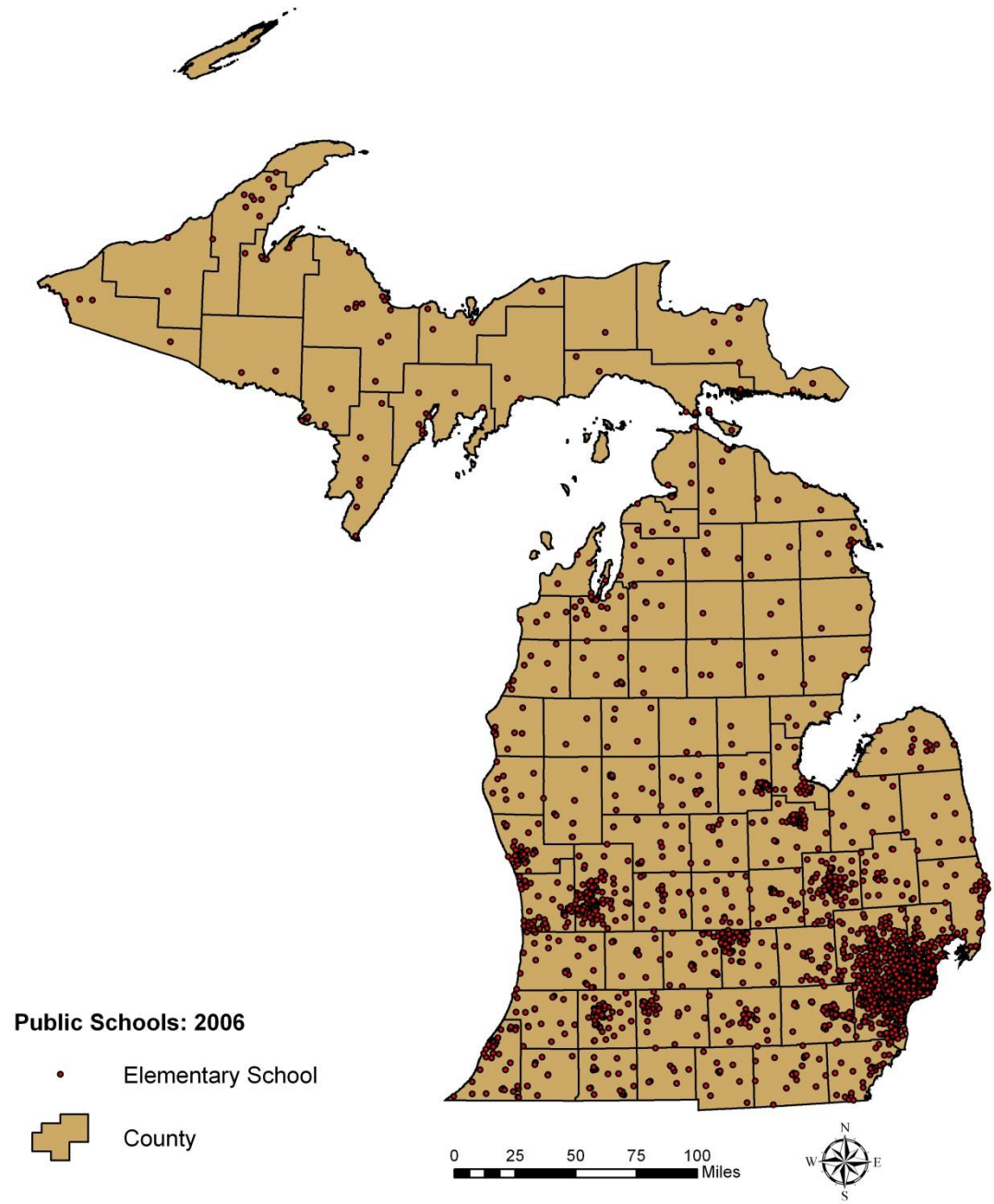
# Change in School Buildings and Enrollment from 1990-2006

- In urban areas there was a net increase of 39 schools (6% increase) and enrollment increased 5.4%.
- In suburban areas there was a net increase of 247 schools (26.5% increase) and enrollment increased 41.7%.
- In rural areas there was a net decrease of 346 schools (22% decrease) and enrollment decreased 24.2%.

# Location of Schools

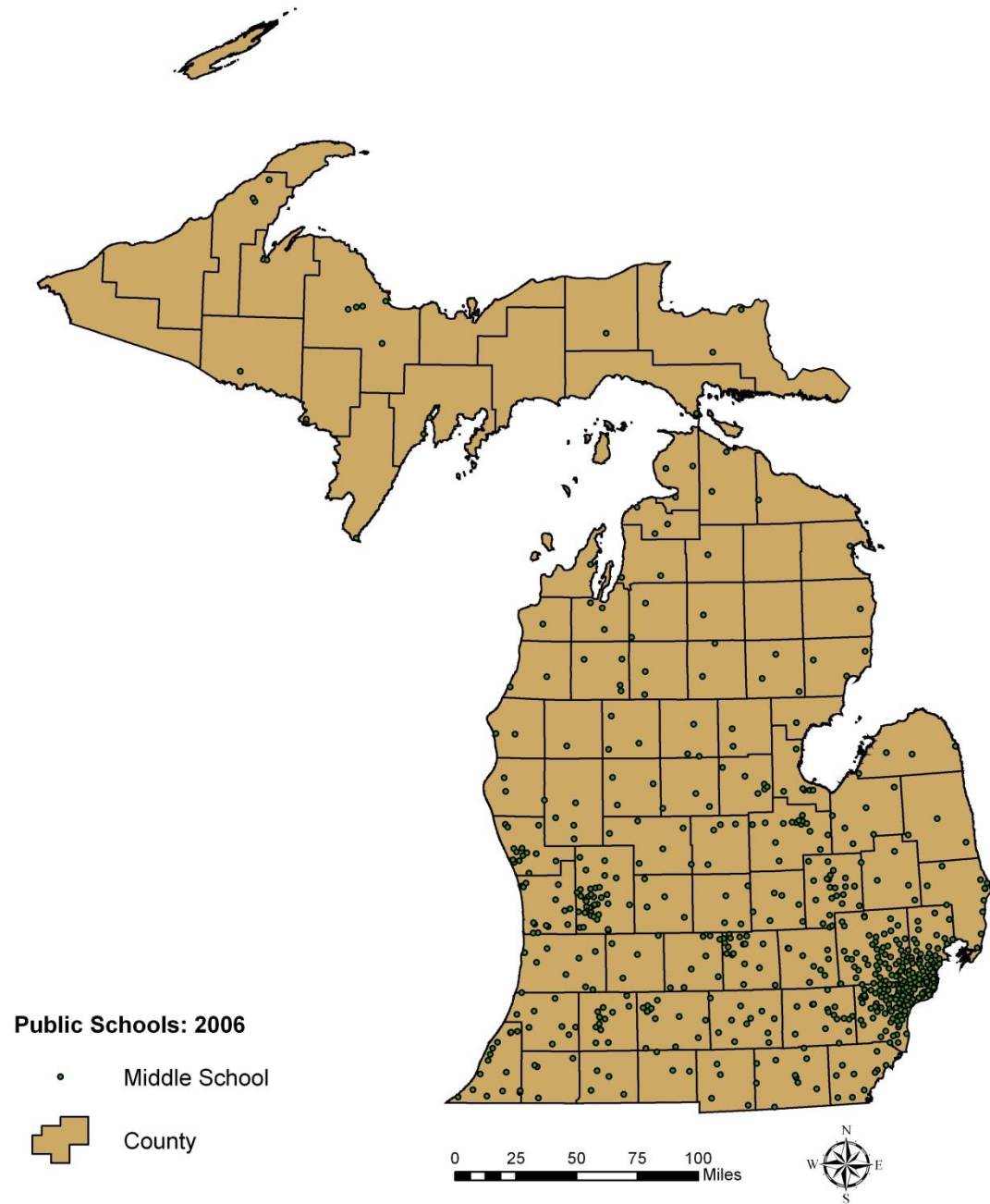
- Six maps follow (for non-charter schools)
  - Location of Elementary Schools in 2006
  - Location of Middle Schools in 2006
  - Location of High Schools in 2006
  - Closed & opened schools 1990 – 2006
  - District enrollment in 2006
  - % enrollment change 1990 – 2006

# Location of Elementary Schools in 2006

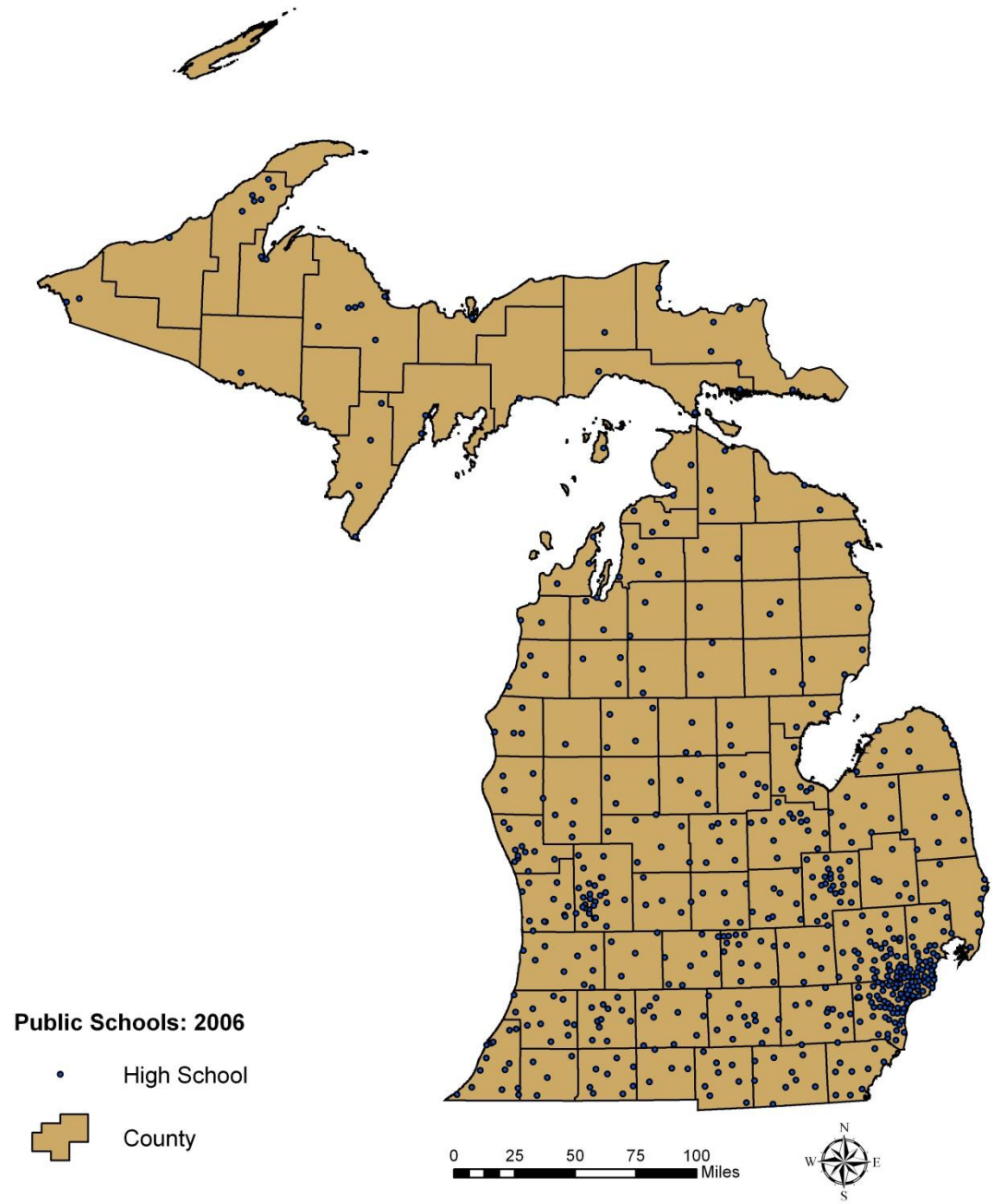


Prepared by the Hannah Professor Research Program at the Land Policy Institute, Michigan State University, 2008.  
Sources: Base map - Michigan Center for Geographic Information; Public Schools - National Center for Education Statistics, Center for Educational Performance and Information, Michigan Education Directory.  
Map and data analysis provided by the Hannah Professor Research Program.

# Location of Middle Schools in 2006



# Location of High Schools in 2006



## Public Schools: 2006

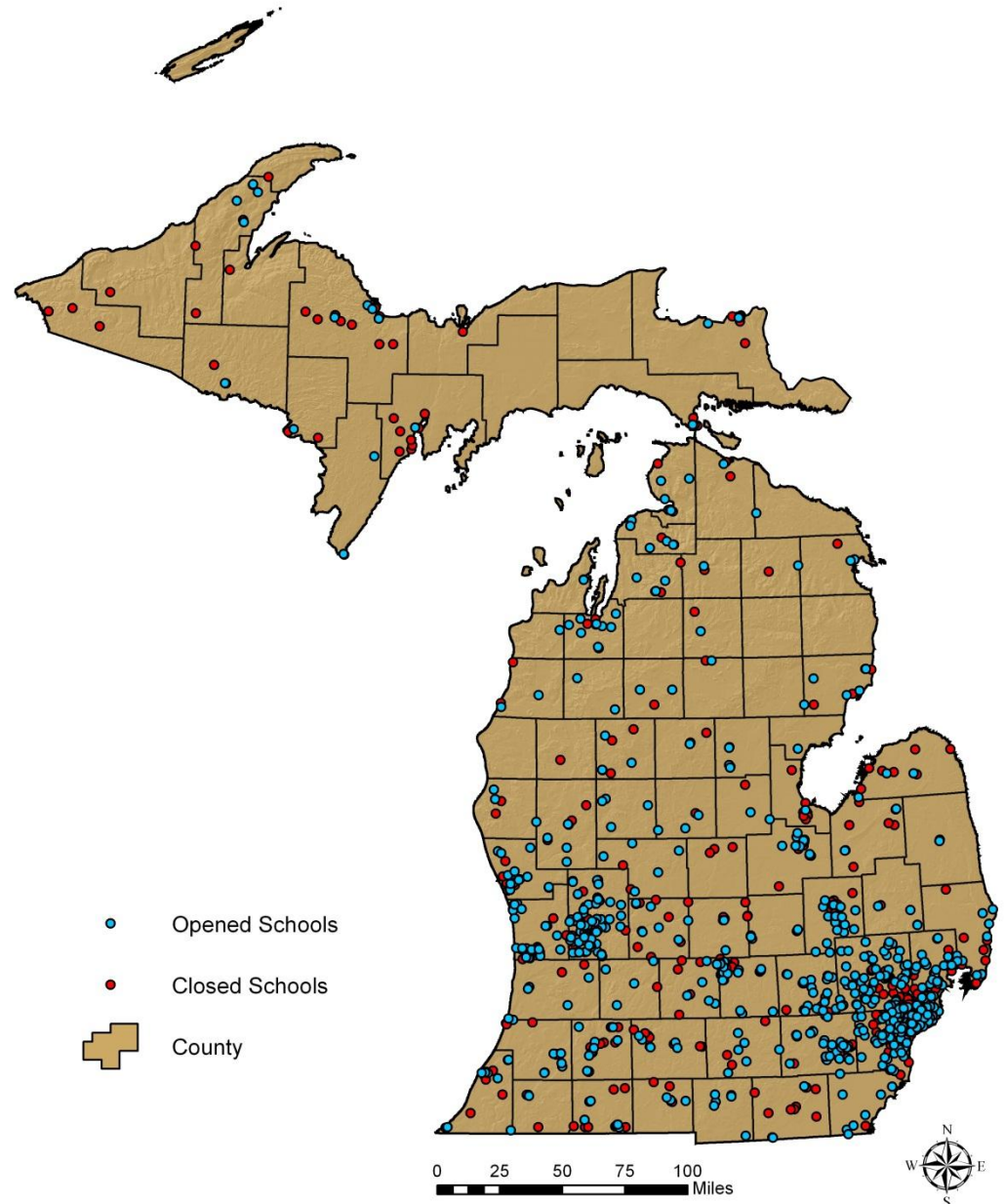
- High School
- County



Prepared by the Hannah Professor Research Program at the Land Policy Institute, Michigan State University, 2008.  
Sources: Base map - Michigan Center for Geographic Information; Public Schools - National Center for Education Statistics, Center for Educational Performance and Information, Michigan Education Directory.  
Map and data analysis provided by the Hannah Professor Research Program.

# Closed and Opened Public Schools 1990-2006

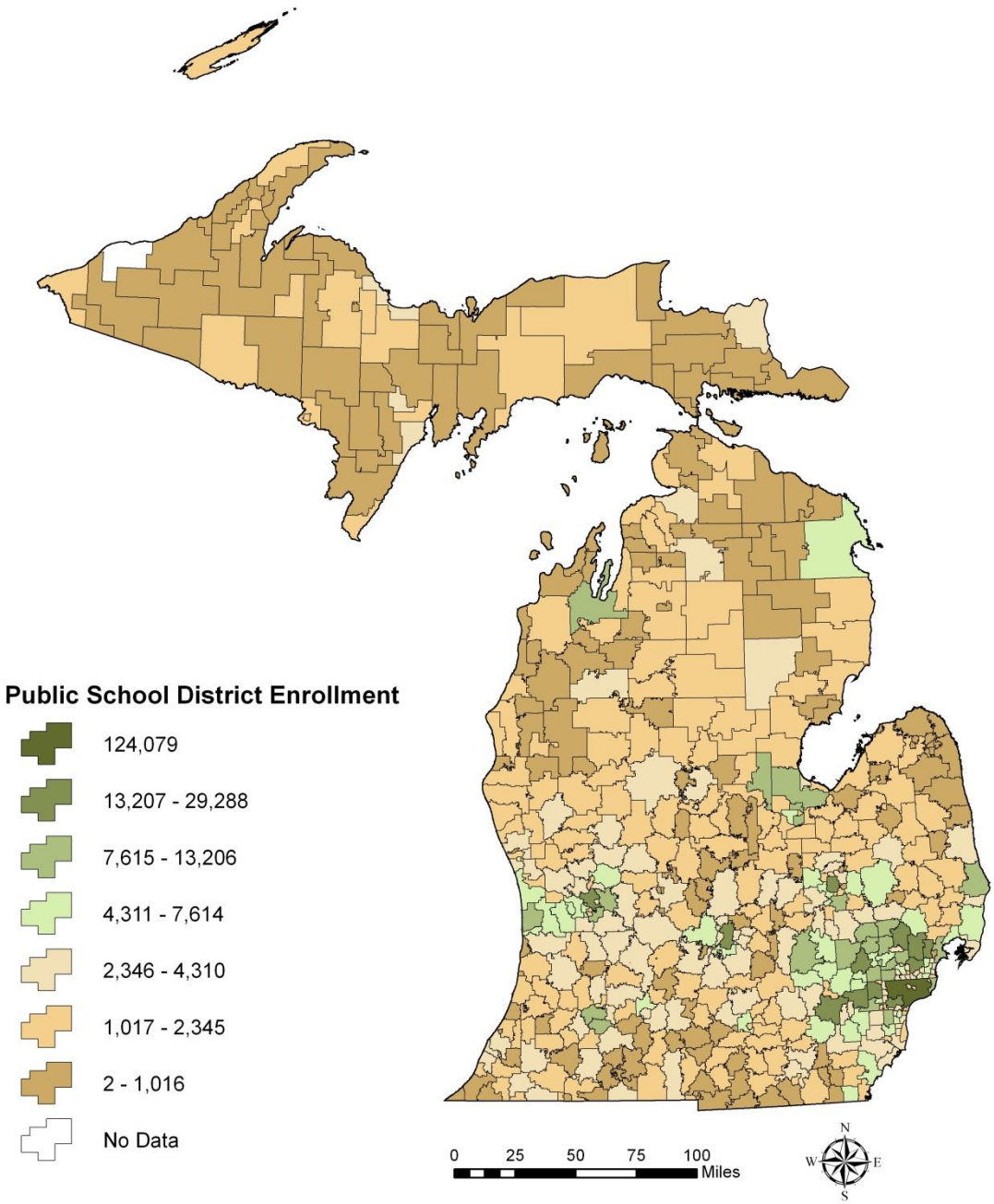
Note: Some dots cover other dots.



Units were clustered using the Natural Breaks algorithm and rounded for display purposes.  
Prepared by the Hannah Professor Research Program at the Land Policy Institute, Michigan State University, 2008.  
Sources: Base map - Michigan Center for Geographic Information; Demographic - US Census Bureau.  
Map and data analysis provided by the Hannah Professor Research Program.

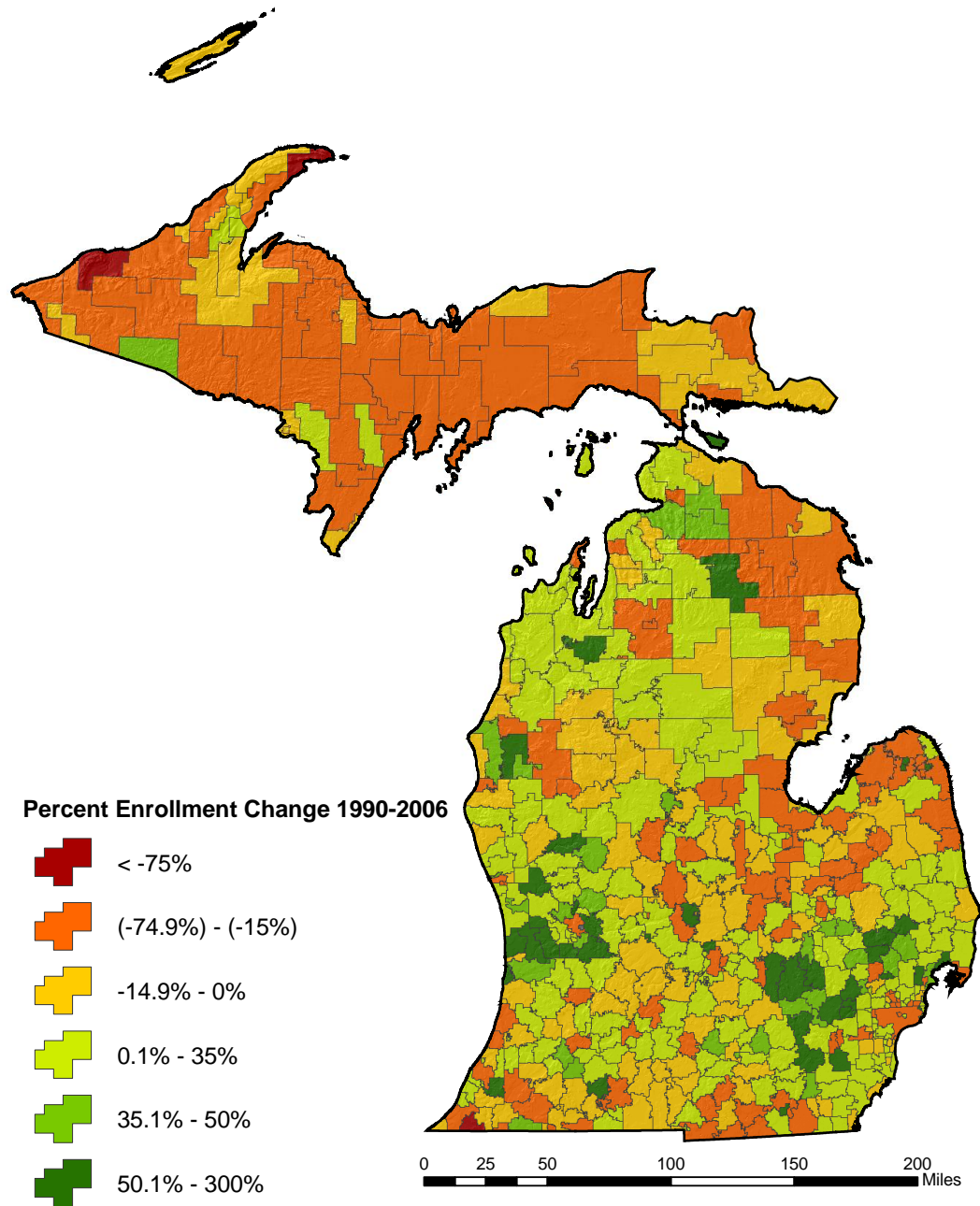


# School District Enrollment in 2006



Prepared by the Hannah Professor Research Program at the Land Policy Institute, Michigan State University, 2008.  
Sources: Base map - Michigan Center for Geographic Information; Public Schools - National Center for Education Statistics, Center for Educational Performance and Information, Michigan Education Directory.  
Map and data analysis provided by the Hannah Professor Research Program.

# % Enrollment Change 1990 – 2006



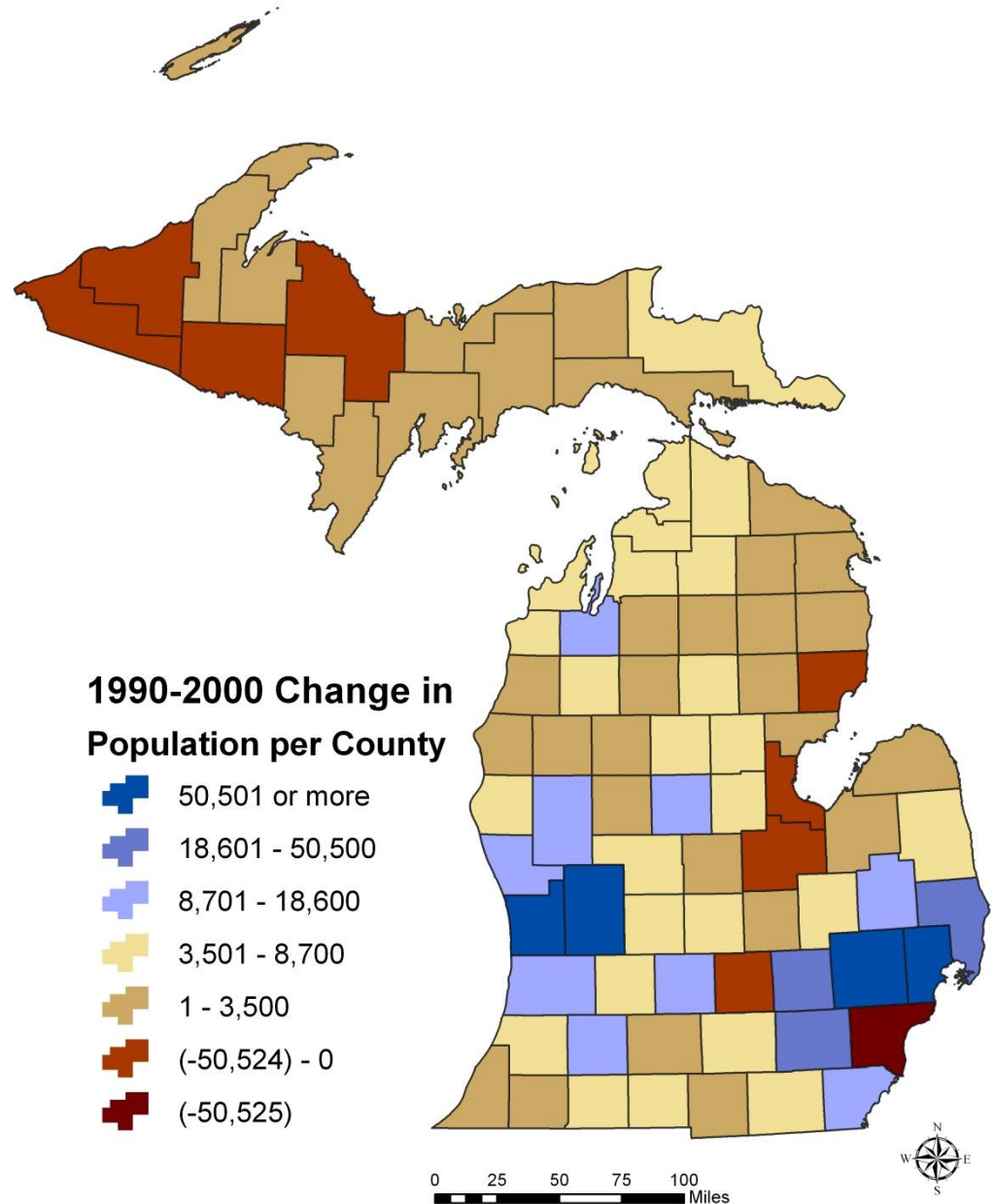
Sources: Base map - Michigan Center for Geographic Information; Demographic - US Census Bureau; School and Student data - Michigan Education Directory, the US Department of Education National Center for Education Statistics Common Core of Data, State of Michigan Center for Educational Performance & Information, LPI Survey of School Districts



# Demographic Considerations

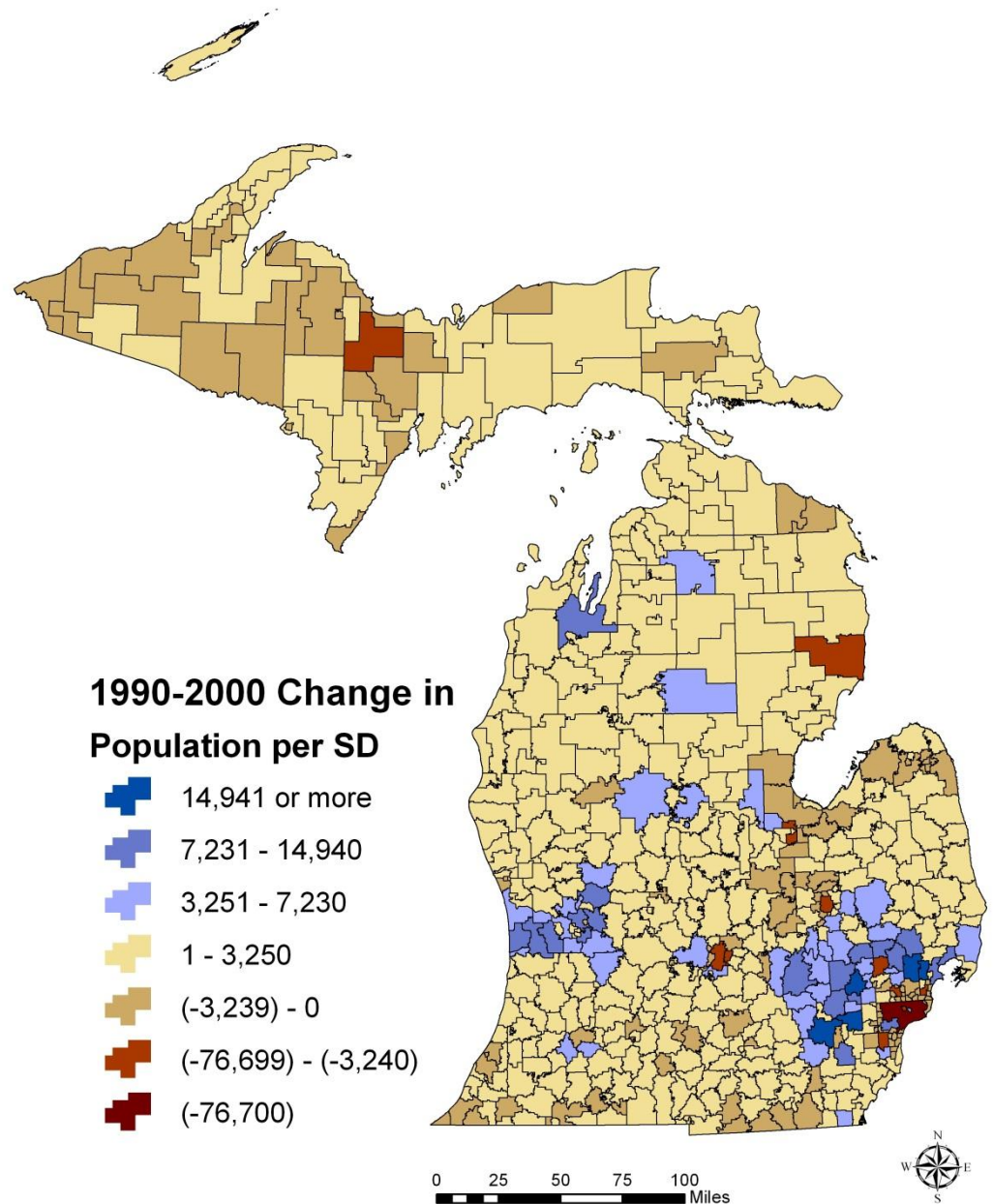
- Four maps follow:
  - Total population change by county 1990 – 2000
  - Total population change by school district 1990 – 2000
  - Change in school aged population by county from 1990 – 2000
  - Change in school aged population by school district from 1990 – 2000

# Total Population Change by County 1990 – 2000



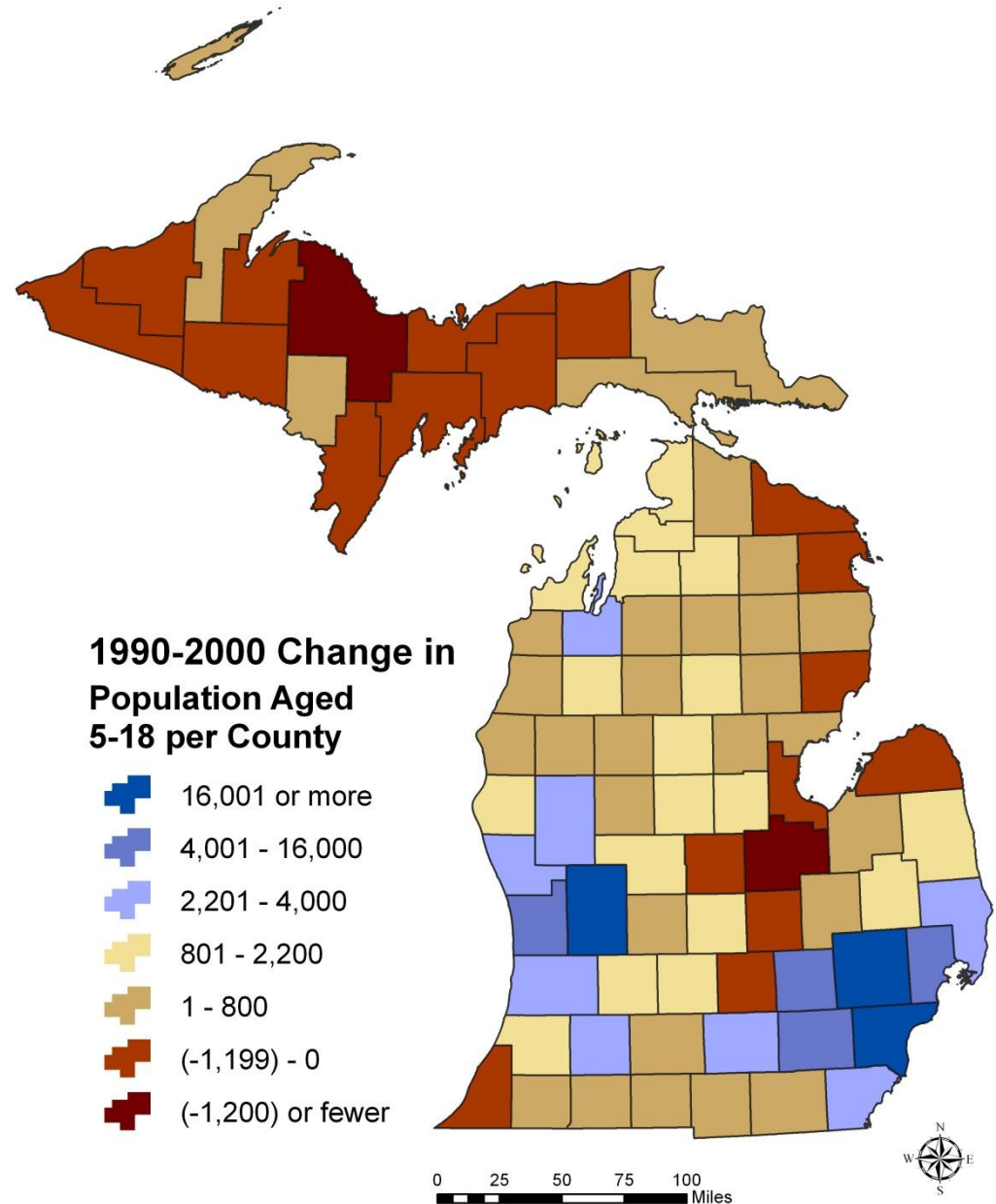
Units were clustered using the Natural Breaks algorithm and rounded for display purposes.  
Sources: Base map - Michigan Center for Geographic Information; Demographic - US Census Bureau.  
Prepared by the Hannah Professor Research Program at the Land Policy Institute, Michigan State University, 2008.

# Total Population Change by School District 1990 – 2000



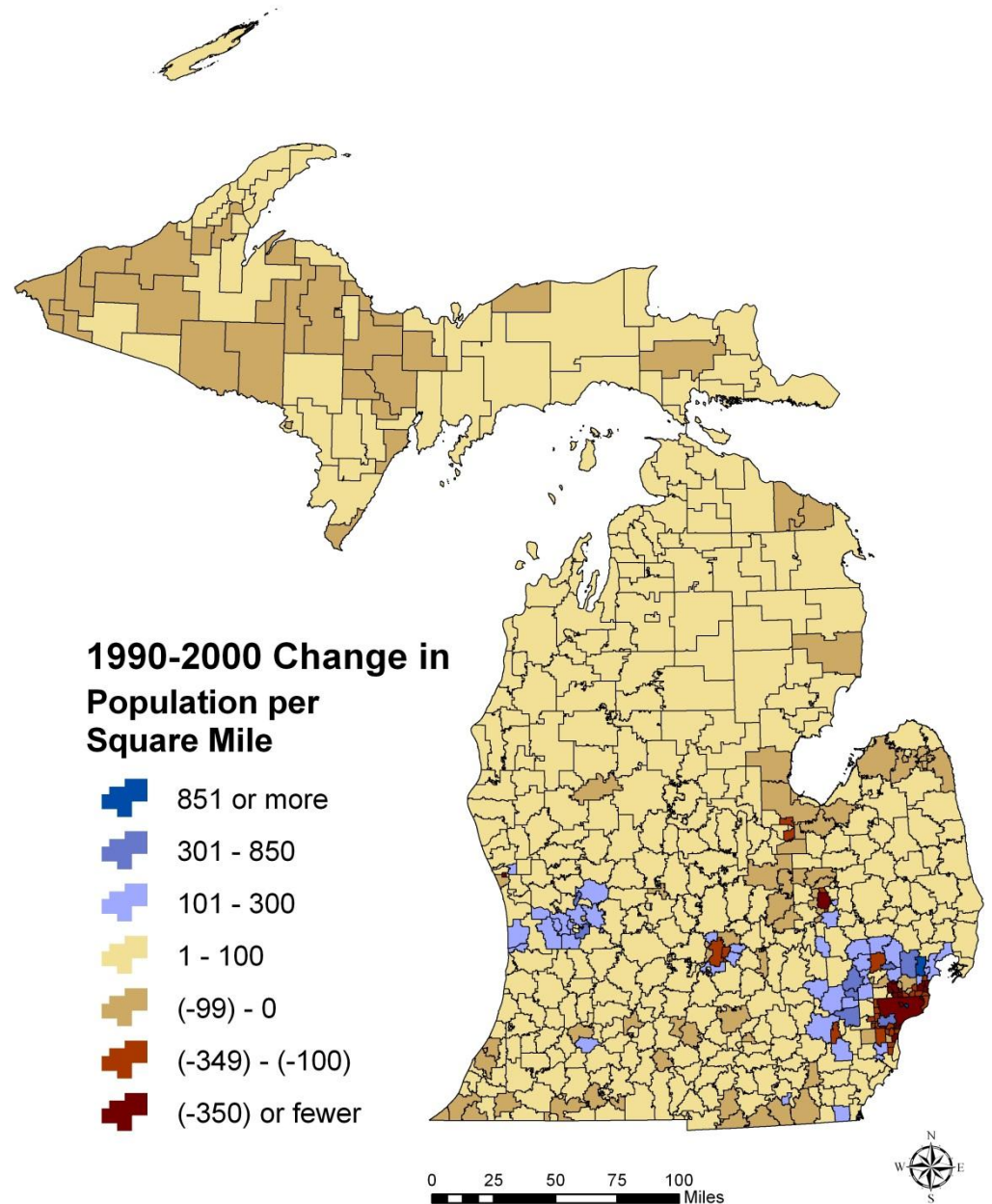
Units were clustered using the Natural Breaks algorithm and rounded for display purposes.  
Sources: Base map - Michigan Center for Geographic Information; Demographic - US Census Bureau.  
Prepared by the Hannah Professor Research Program at the Land Policy Institute, Michigan State University, 2008.

# Change in School Aged Population by County from 1990 – 2000



Units were clustered using the Natural Breaks algorithm and rounded for display purposes.  
Sources: Base map - Michigan Center for Geographic Information; Demographic - US Census Bureau.  
Prepared by the Hannah Professor Research Program at the Land Policy Institute, Michigan State University, 2008.

# Change in School Aged Population by School District from 1990 – 2000



Units were clustered using the Natural Breaks algorithm and rounded for display purposes.  
Sources: Base map - Michigan Center for Geographic Information; Demographic - US Census Bureau.  
Prepared by the Hannah Professor Research Program at the Land Policy Institute, Michigan State University, 2008.

# Observations

- The issues associated with school siting and building quality community communities consistent with Smart Growth principles are many and complex. They will be greatly influenced in the years ahead by demographic trends.
- The solutions will involve more research, considerable education, more voluntary cooperation and dialogue, and possibly new legislation—but will it be carrots, sticks or a combination of both?



# Questions that Need to be Researched Further

- What do we need to know to better understand the differences between fast and slow growth or declining districts?
- How do we better project demographic change at the municipal and school district level so it is useful for both?
- What will be the impacts of projected changes in enrollment based on projected demographic shifts?
- What are the real relationships between school location change and land use?
- What incentives would be effective to encourage schools to site using Smart Growth principles?
- How do we get schools and municipalities to jointly plan?
- How do we factor in Safe Routes to Schools better when new schools are first being considered?

# Context Sensitive Solutions

- *Context sensitive solutions (CSS) is a collaborative, interdisciplinary approach that involves all stakeholders in providing a transportation facility that fits its setting. It is an approach that leads to preserving and enhancing scenic, aesthetic, historic, community, and environmental resources, while improving or maintaining safety, mobility, and infrastructure conditions.*



# Context Sensitive Solutions

- ID context sensitive solutions related to schools:
  - Proper location,
  - Physical/aesthetic design compatible with surroundings,
  - Design that integrates well with surroundings (bikes, pedestrian trails, car and bus drop off, etc.)

# Context Sensitive Solutions

## Phoenix, AZ “Waiting Pad”

Before



After



[http://www.saferoutesinfo.org/guide/case\\_studies/case\\_study.cfm?CS\\_ID=CS650&CHAPTER\\_ID=C353](http://www.saferoutesinfo.org/guide/case_studies/case_study.cfm?CS_ID=CS650&CHAPTER_ID=C353)

## Birmingham, MI Bulbouts



[http://tech.contextsensitivesolutions.org/content/images/bulbouts-birm-31996?size=md&preview\\_p=1](http://tech.contextsensitivesolutions.org/content/images/bulbouts-birm-31996?size=md&preview_p=1)

# Complete Streets

- *An approach to design that ensures that transportation planners and engineers consistently design and operate the entire roadway with all users in mind—including bicyclists, public transportation vehicles and riders, and pedestrians of all ages and abilities.*
- A lot of Michigan streets have gone on a “diet” to meet “complete streets” principles

# Complete Streets

- Michigan Complete Streets Coalition (<http://michigancompletestreets.wordpress.com/>)
  - League of Michigan Bicyclists and Michigan Environmental Council
- Complete Streets requirements are now in local planning and zoning enabling acts. PA 110 of 2006 and PA 33 of 2008.

# Complete Streets

- Lansing is the first Michigan community to adopt a complete streets ordinance.
- Jackson and Flint have both adopted complete streets resolutions.



<http://www.flickr.com/photos/leagueofmichiganbicyclists/3742487297/in/pool-micompletestreets>



<http://michigancompletestreets.wordpress.com/>



# Complete Streets

- *"A community with a complete streets policy considers the needs of children every time a transportation investment decision is made."* But they also consider a host of other needs as well.
- Schools as key activity nodes
- Siting of schools should consider complete streets principles
- Access (motorized and nonmotorized)

# In Summary: Key Policy Issues

- School facilities exempt from local zoning and siting is not coordinated with local planning
- Large number of jurisdictions & districts
- Many municipalities & districts are small and lack much in professional staff capacity
- No incentives for coordination, and who is supposed to coordinate with whom?

# Key Policy Issues

- Older municipalities often have schools sited based on Perry Neighborhood Theory doesn't work well with Charters
- Many older communities still under court ordered "bussing" plans
- Proposal A – state pays for per pupil operating costs but not facilities costs so is disparity in quality of school buildings
- No guidance from State Supt. of Instruction on location issues



# If you want to know more...

- **The Michigan Demographic Atlas**, LPI 2009
- **The Michigan Public Schools Location Atlas**, LPI 2009; [www.landpolicy.msu.edu](http://www.landpolicy.msu.edu)
- **School Siting and Healthy Communities: Why Where We Invest in School Facilities Matters** , MSU Press, 2011; <http://msupress.msu.edu/bookTemplate.php?bookID=4268>
- *"Intergovernmental Zoning Conflicts Over Public Facilities Siting: A Model Framework for Standard Acts States,"* Gary Taylor and Mark Wyckoff, ***Urban Lawyer***, Vol. 41, No. 4, Fall 2009