

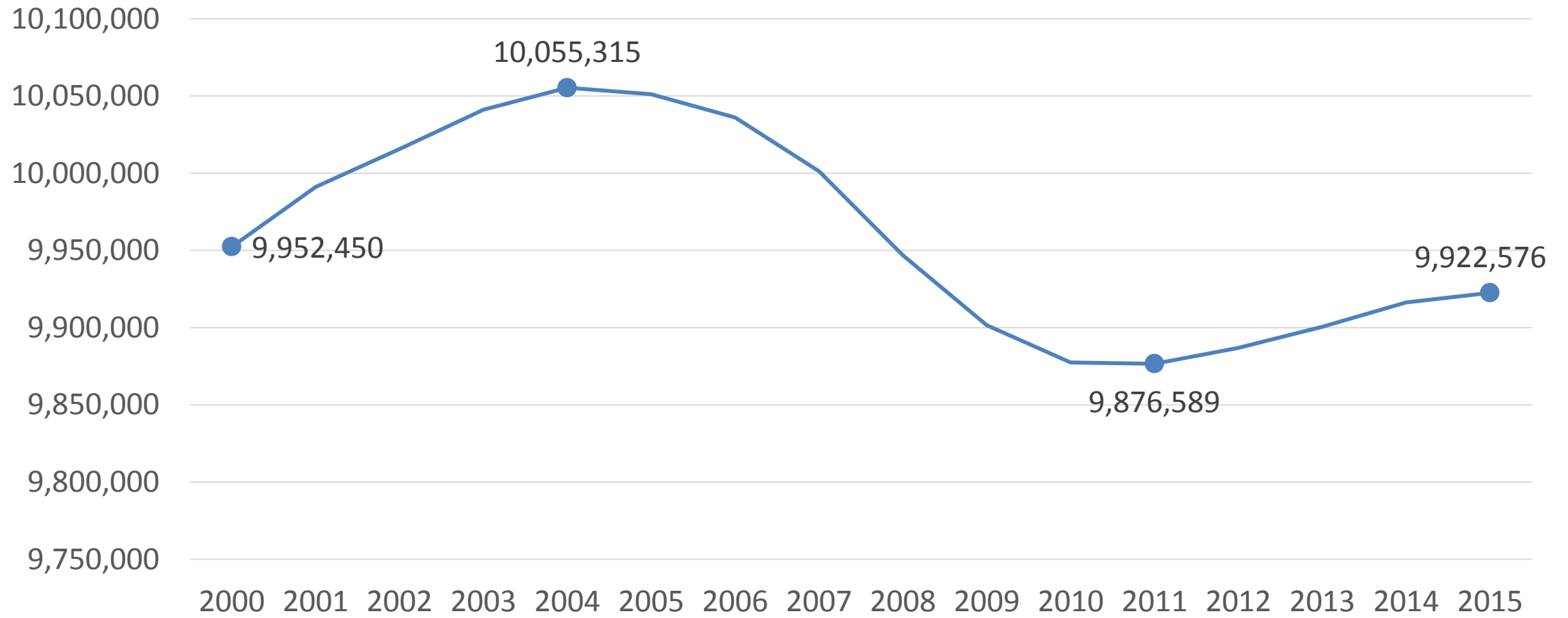
Demographic Trends in Michigan

Eric Guthrie, Michigan's State Demographer
Michigan Library Association, Executive Summit
June 2, 2017

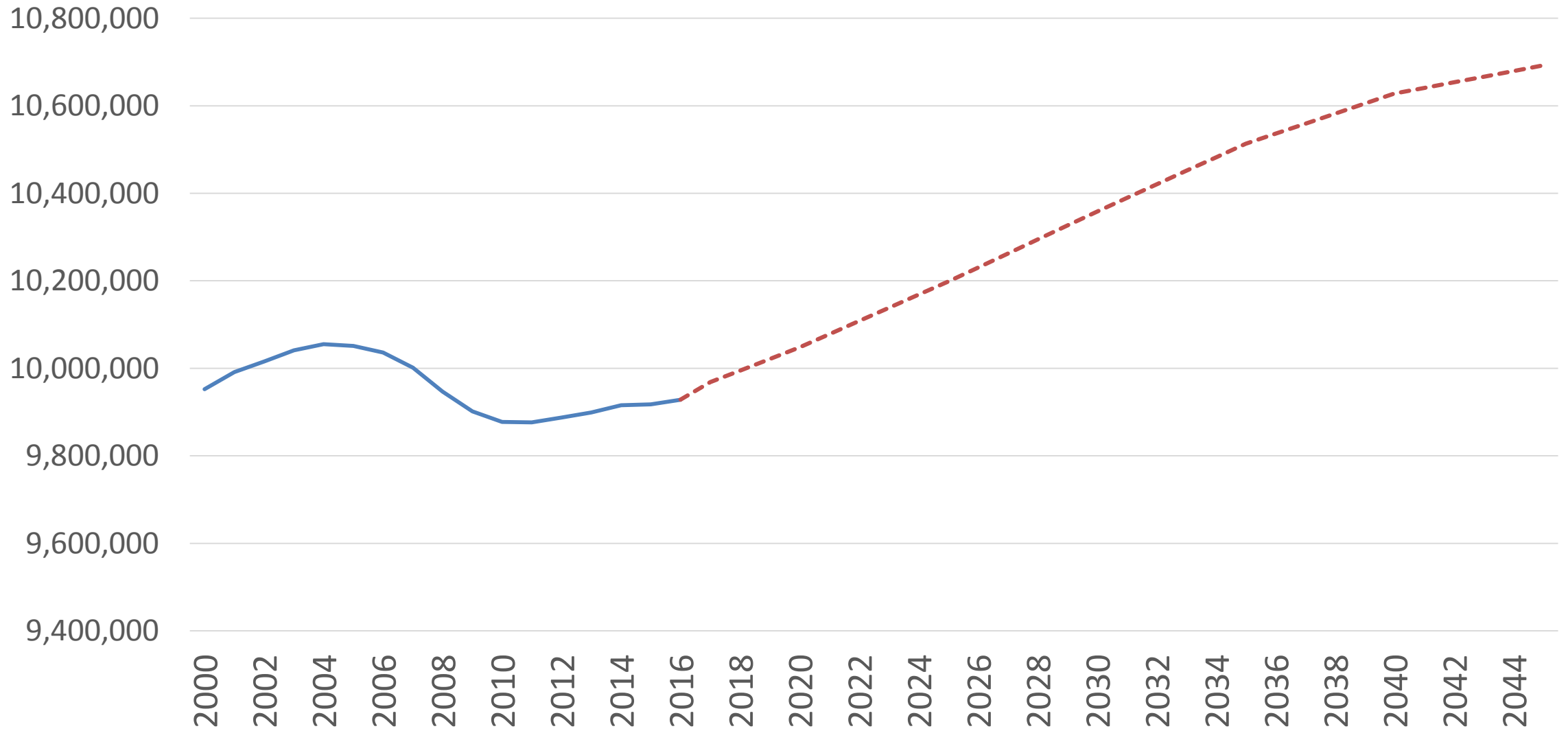
- Introduction
- State population trend
- How populations change
- Characteristics of library patrons:
 - Age distribution
 - Income and poverty
 - Educational attainment
 - Race/ethnicity
 - Rural/urban
- Conclusions

- Michigan's liaison with the U.S. Census Bureau for most programs including population estimates, projections, data dissemination and the decennial census
- Advisor to state leaders, businesses, non-profits, the media, and the general public on issues related to population and the Census
- Lead for the State Data Center (SDC)

Michigan's Population




Projected Population for Michigan

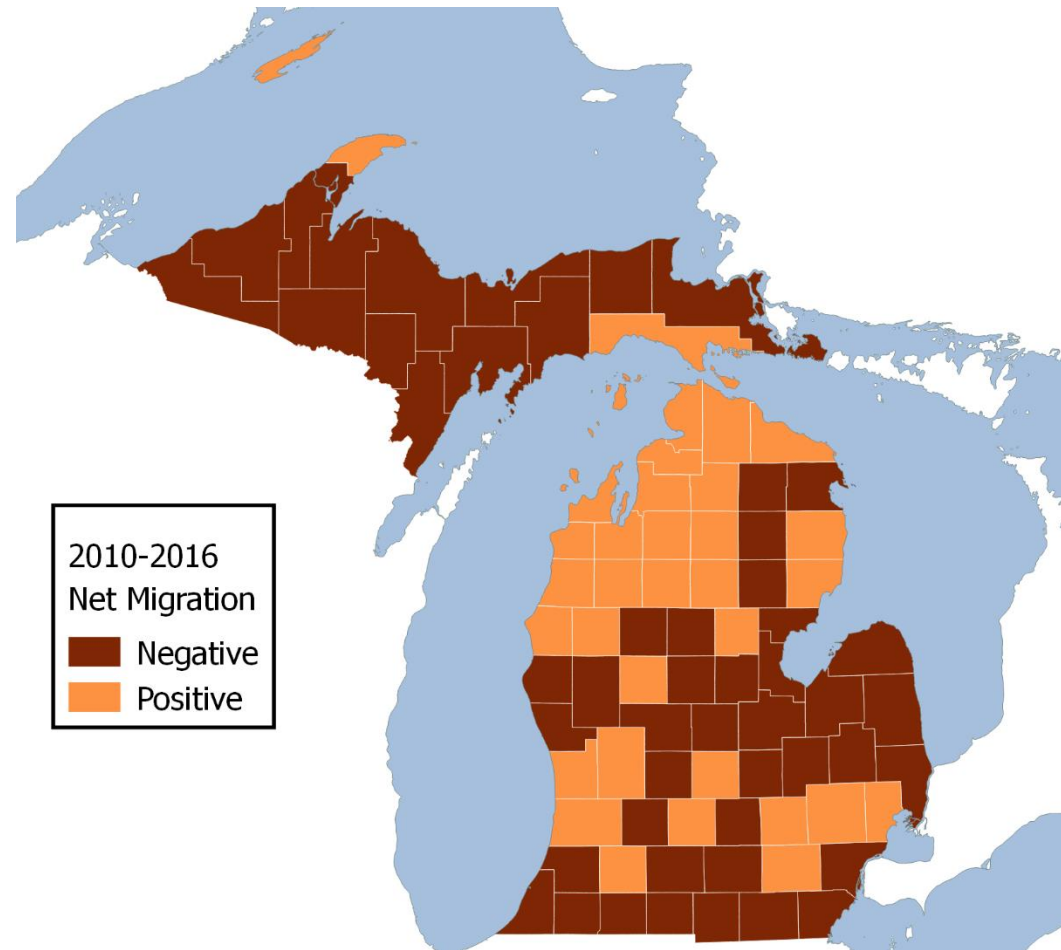


Why Does It Matter?

- There are only three things that affect a population size over time:
 - Births
 - Deaths
 - Migration

$$\text{Population}_2 = \text{Population}_1 + \underbrace{\text{Births} - \text{Deaths}}_{\text{Natural Change}} + \underbrace{(\text{In-migrations} - \text{Out-migration})}_{\text{Net Migration}}$$


Net Migration



Who Uses the Library?

Women and Those With Higher Levels of Education are More Likely to Have Used a Library Last Year

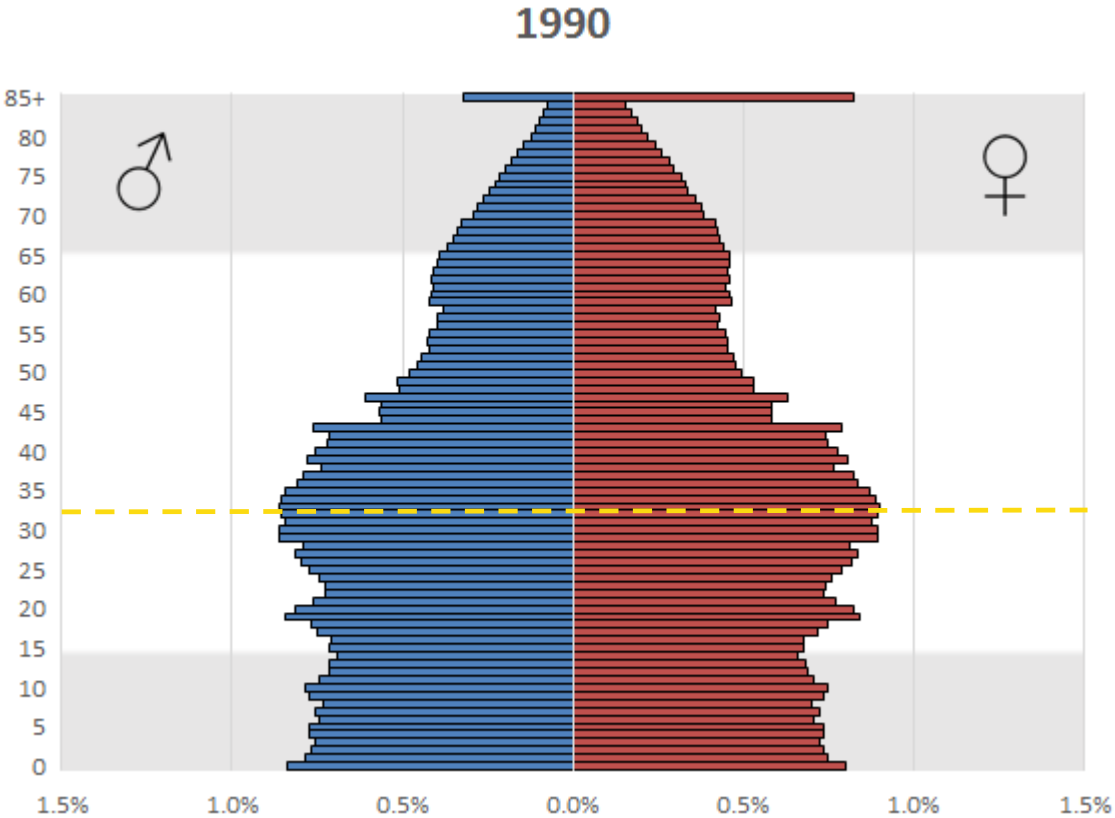
% of those ages 16+ who visited library or bookmobile in the past 12 months

	2012	2013	2015	2012-2015 Change
All	53%	48%	46%	-7
Gender				
Male	48	45	39	-9
Female	59	50	52	-7
Parental status				
Parents of minors	64	55	53	-11
Non-Parents	49	44	43	-6
Age				
16-29	58	50	52	-6
30-49	59	52	50	-9
50-64	51	46	42	-9
65+	40	39	34	-6
Household income				
\$75K+	57	52	50	-7
\$50K-\$74,999	56	51	48	-8
\$30K-\$49,999	58	46	52	-6
Less than \$30K	51	45	41	-10
Education				
College+	63	58	56	-7
Some College	58	51	49	-9
HS Grad	46	39	40	-6
Less than HS grad	43	40	30	-13
Race/Ethnicity				
White, non-Hispanic	53	48	45	-8
Black, non-Hispanic	55	47	45	-10
Hispanic	46	46	44	-2
Community type				
Rural	52	42	41	-11
Suburban	55	49	47	-8
Urban	53	48	45	-8

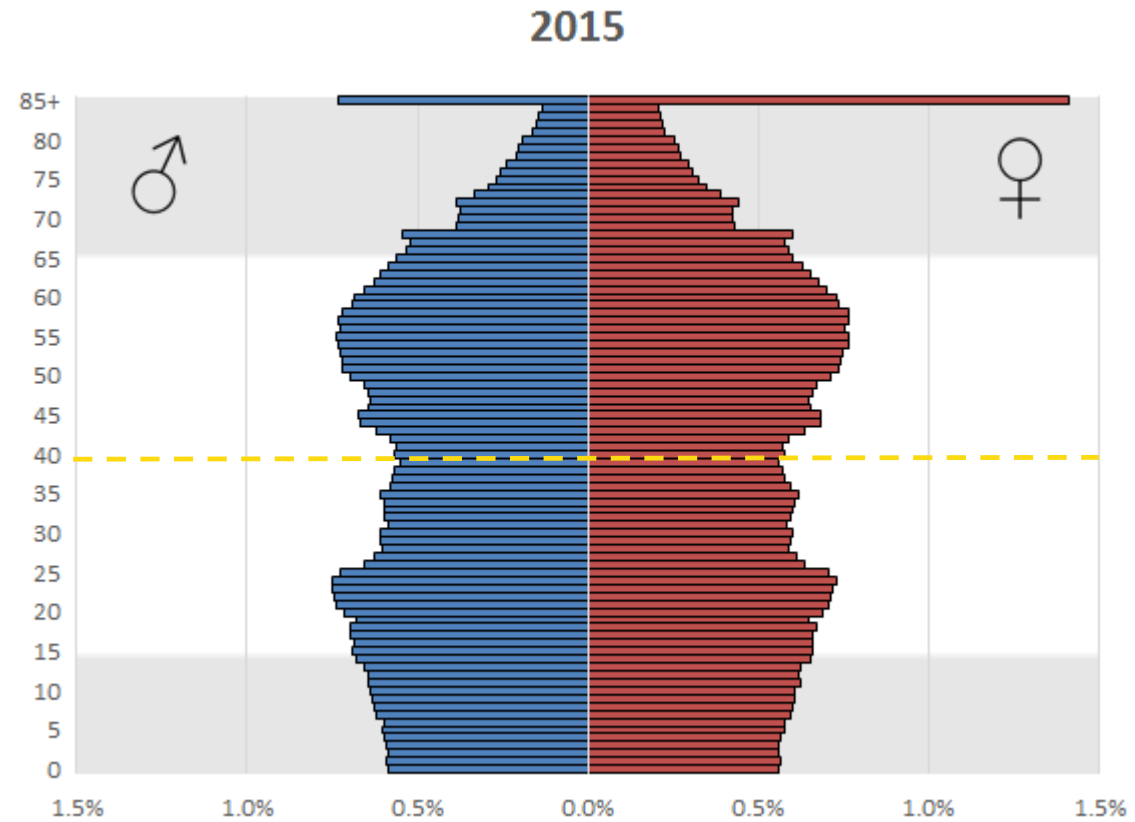
Source: Pew Research Center survey March 17-April 12, 2015. N=2,004 Americans ages 16 and older

PEW RESEARCH CENTER

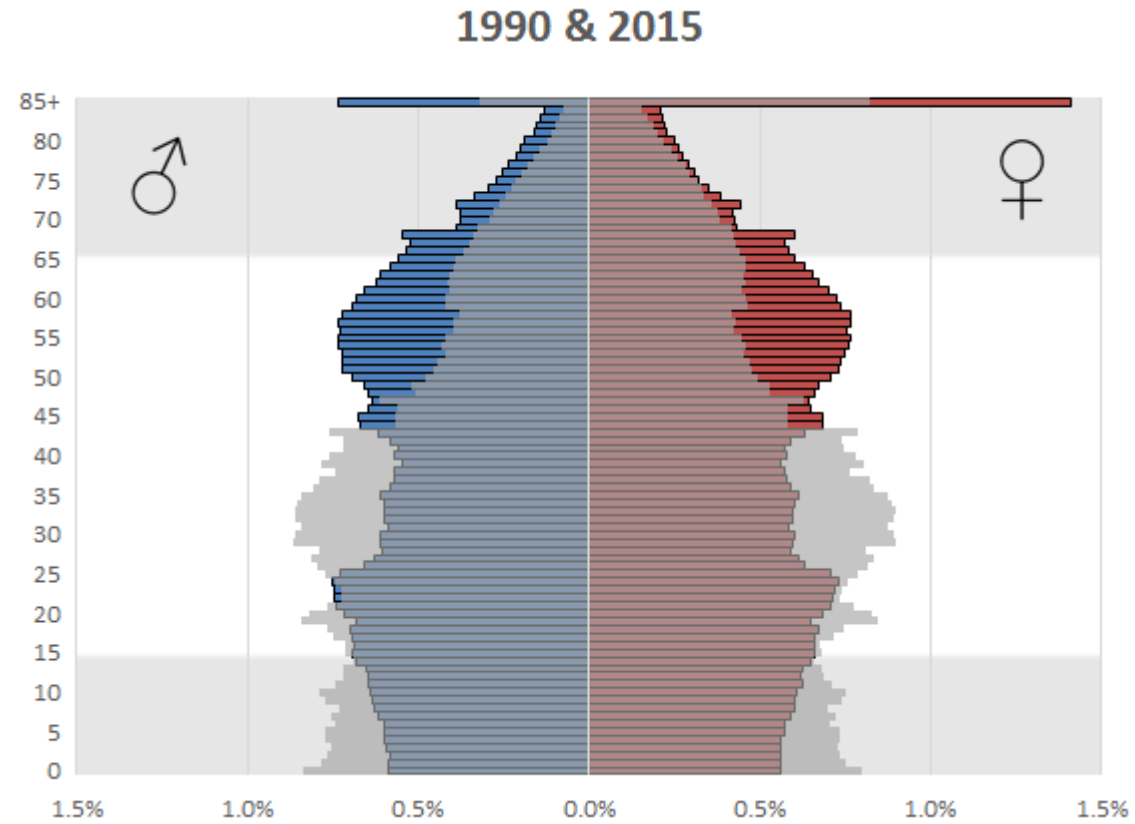
Michigan's Population Structure



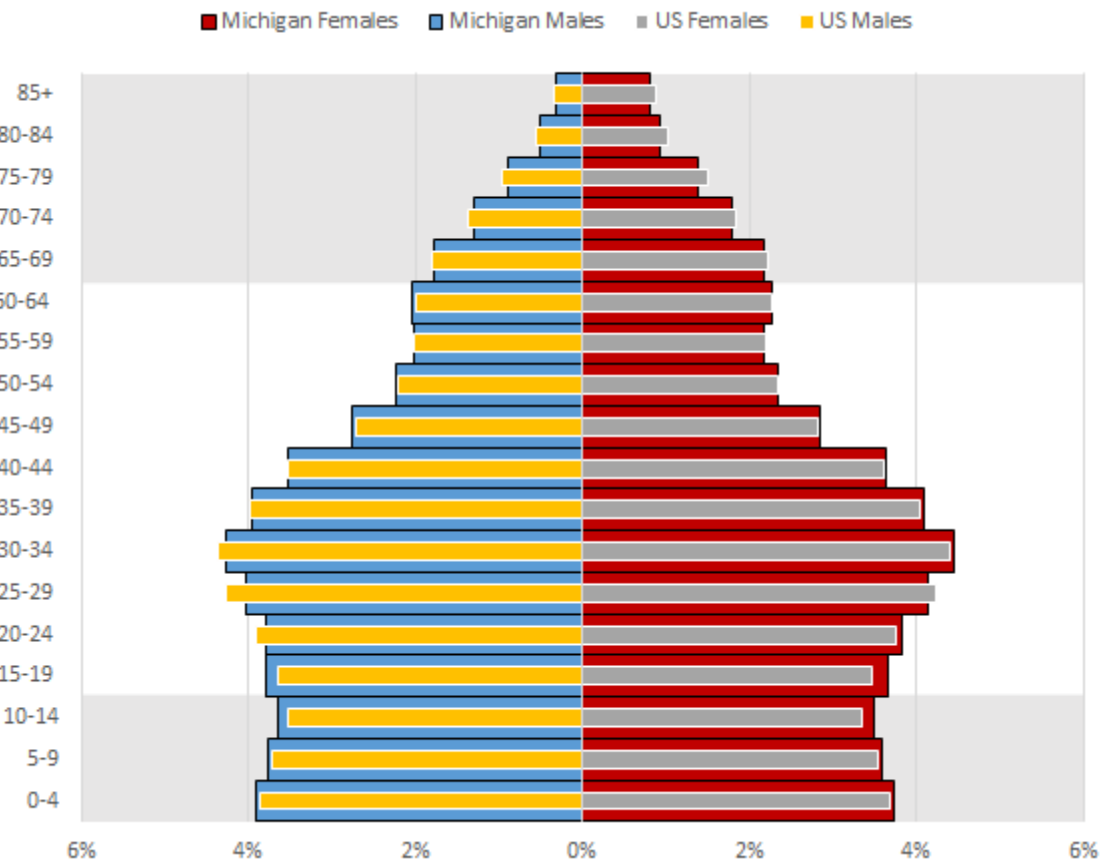
Michigan's Population Structure



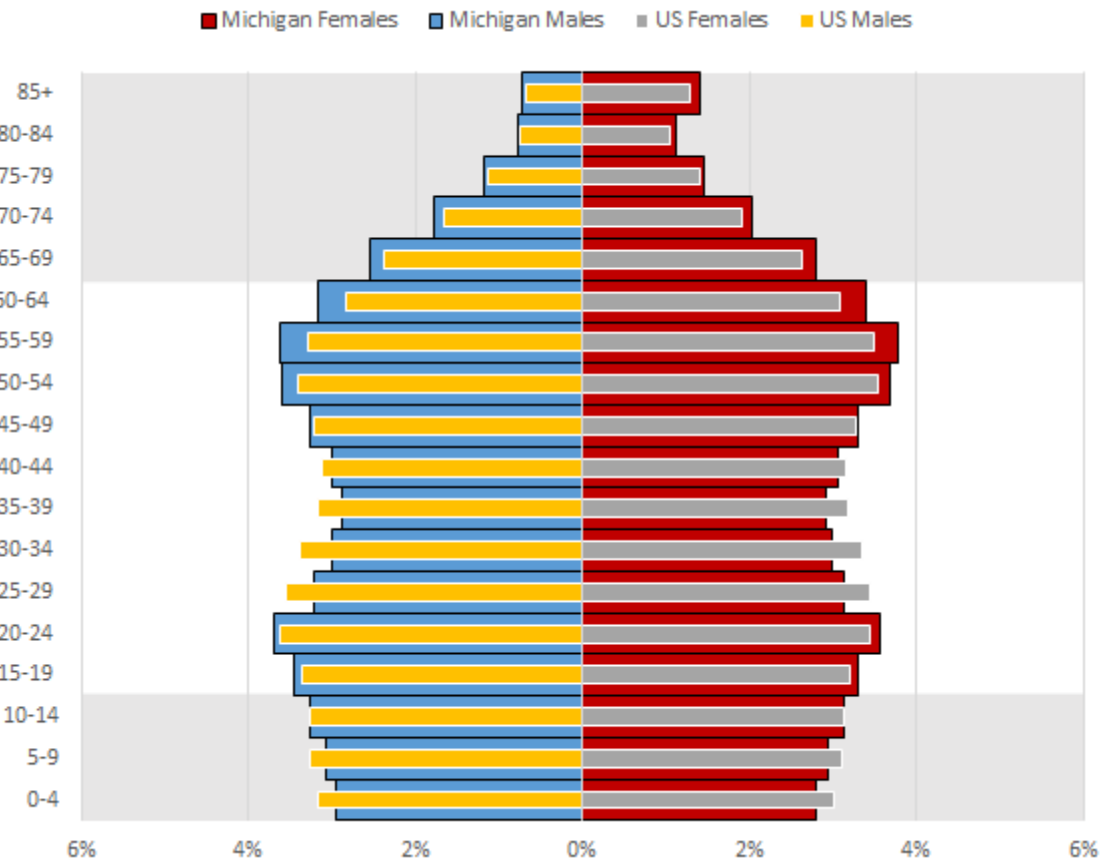
Michigan's Population Structure



Michigan and the U.S Structure in 1990



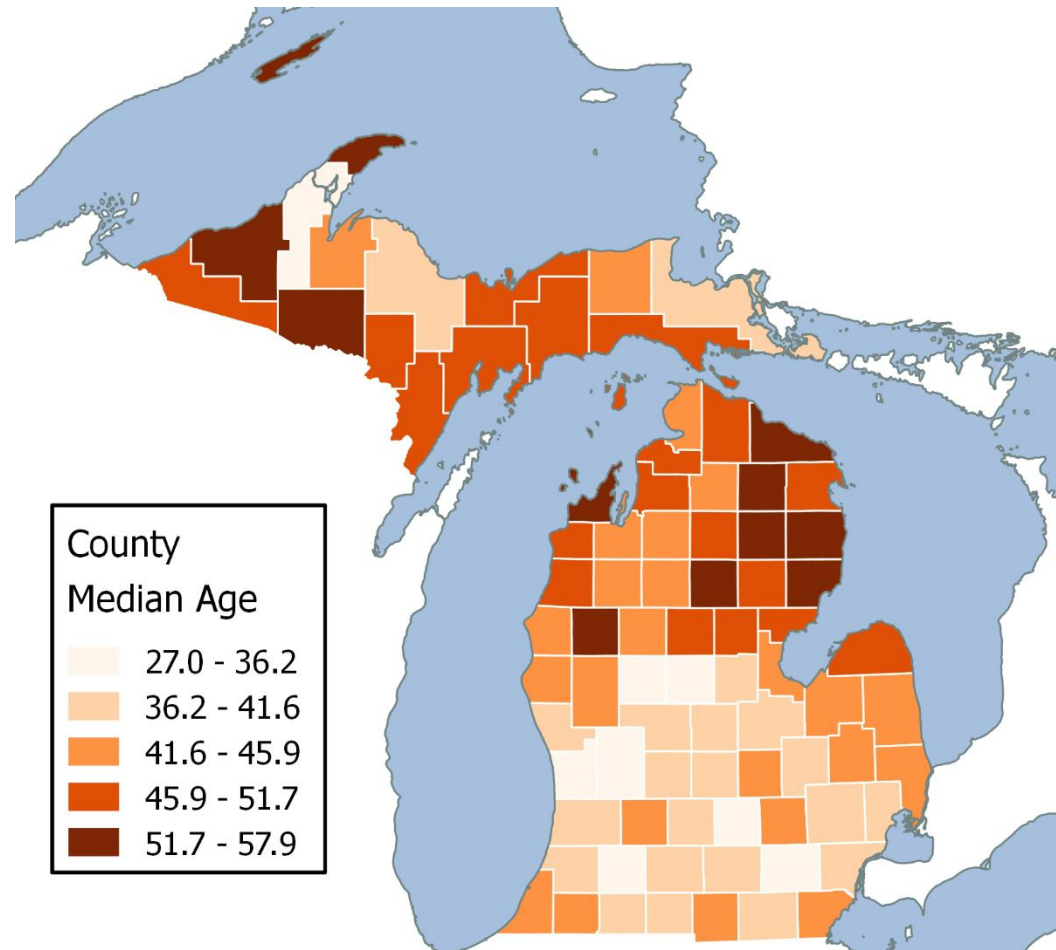
Michigan and the U.S Structure in 2015



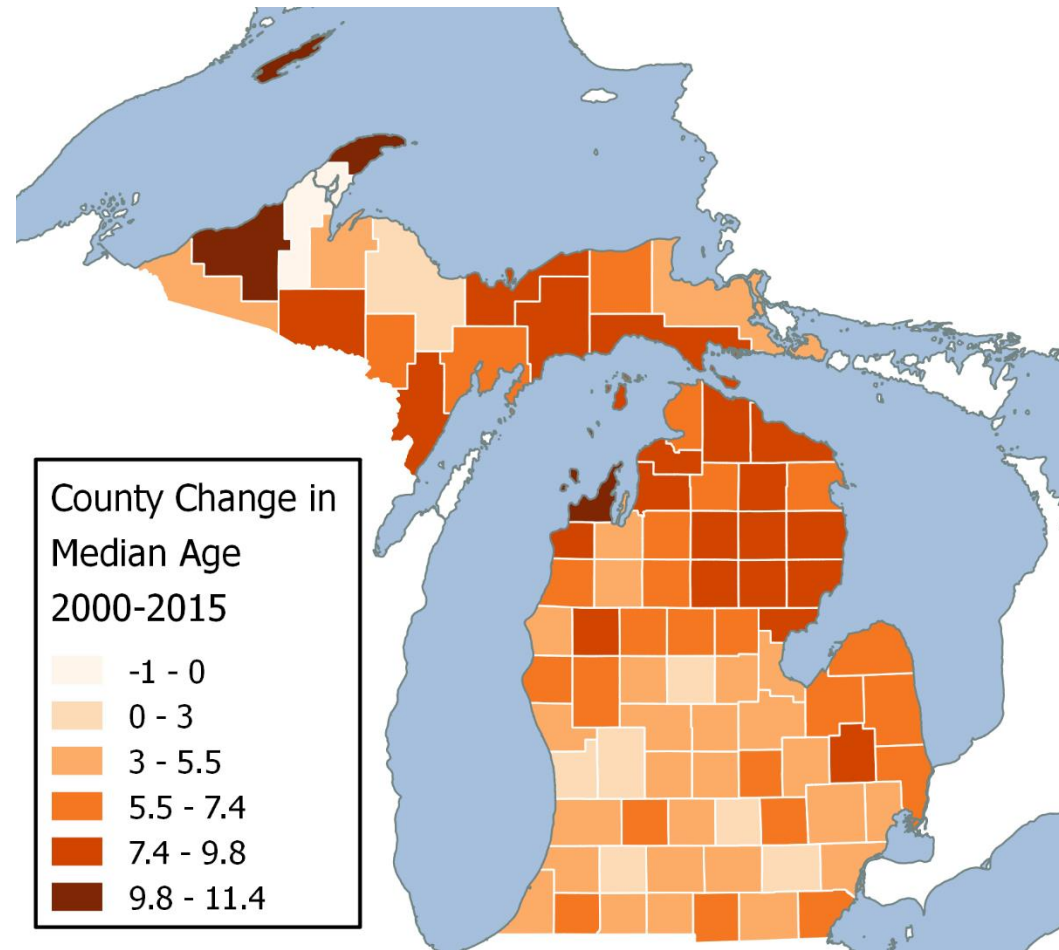
Michigan Population Change and Age Structure

- Michigan has been experiencing negative net migration in many counties and in the state overall
- Michigan is an aging state, and that high proportion of aging individuals is actually what will be driving medium term population increases
- Migration will not be a panacea for all communities. This will be an employment based migration, so places that have been struggling with unemployment will likely continue to struggle with migration
- These in-migrants will have a variety of backgrounds, but will most likely be younger and will bring children or have children when they arrive
- The fertility of these in-migrants will have an effect on the state's age structure moving forward.

County Age Distribution

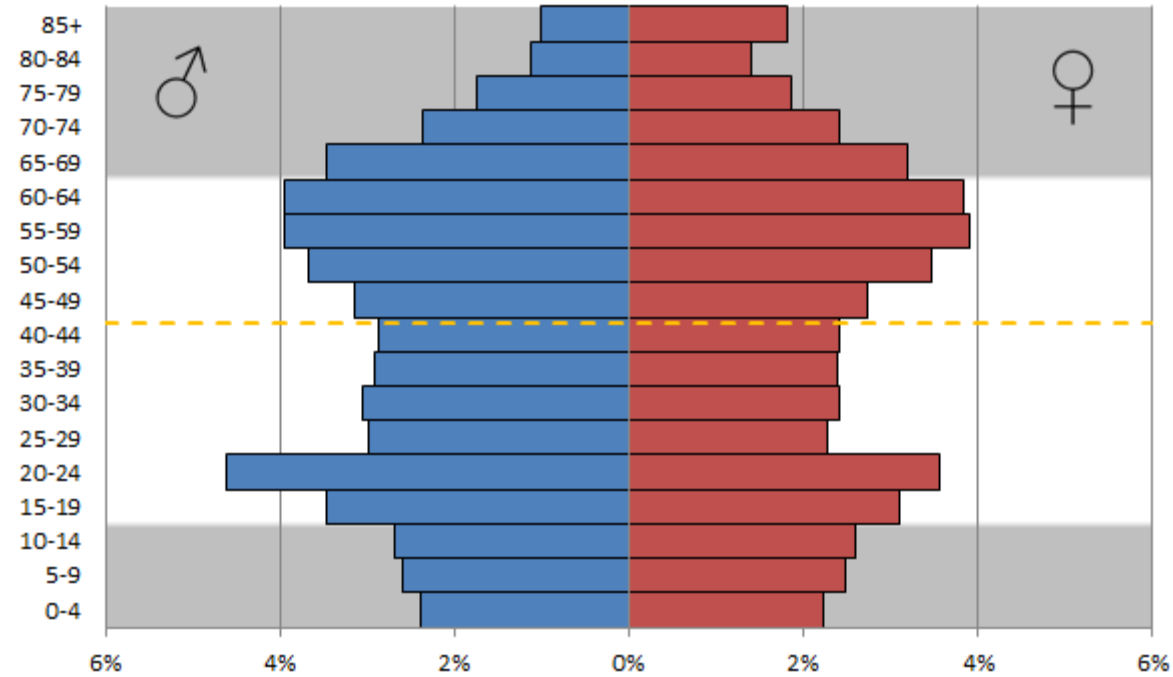


Period Change in County Median Age



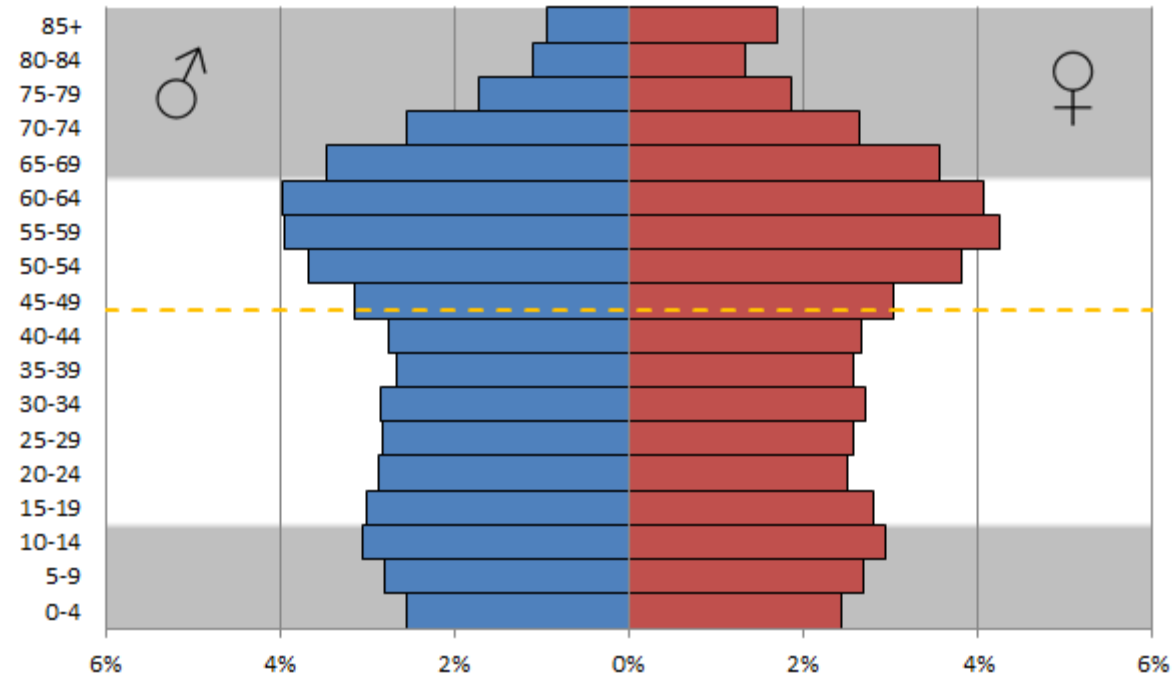
Regional Population Structure

Region 1 -- 2015



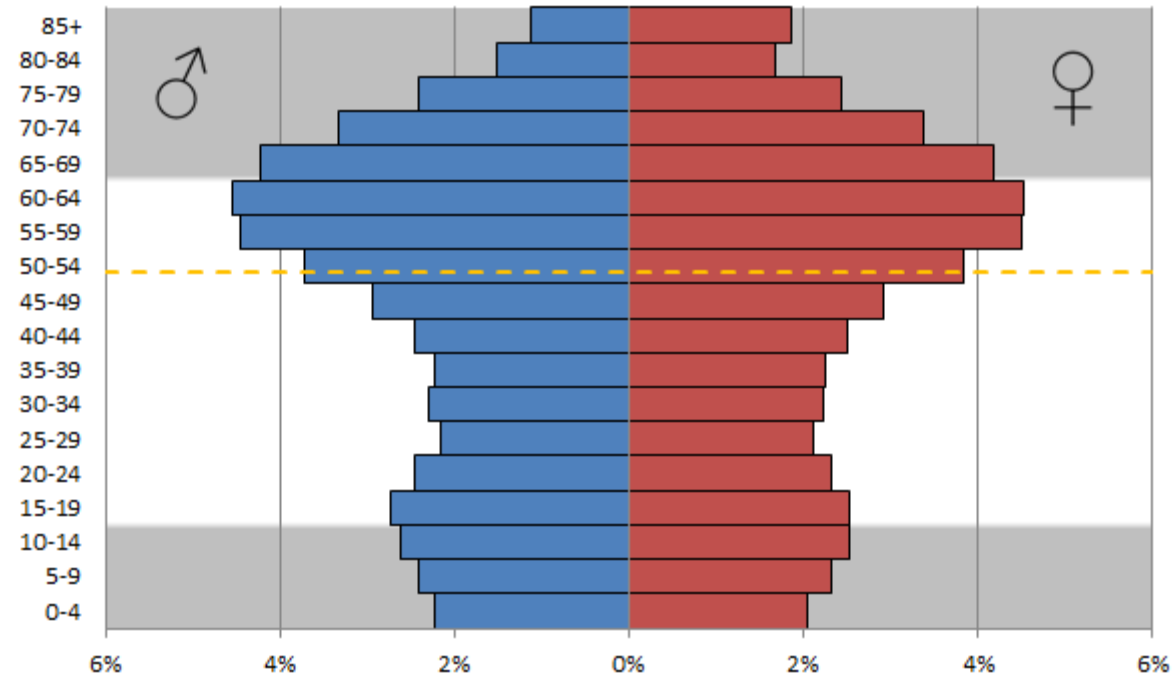
Regional Population Structure

Region 2 -- 2015



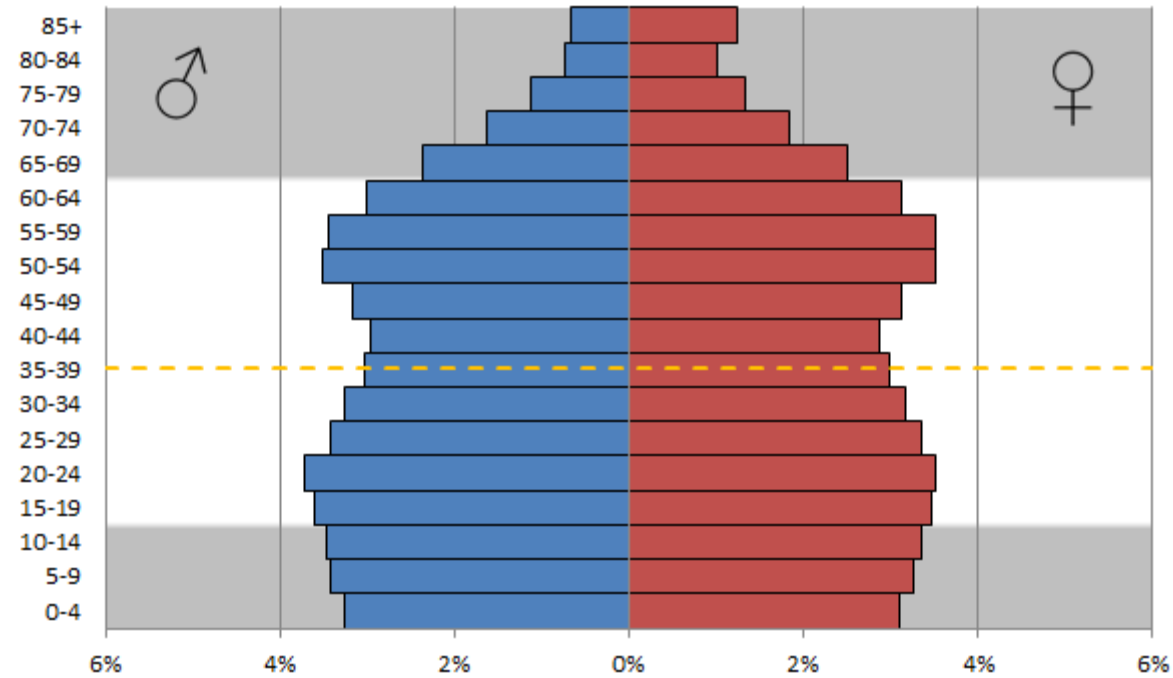
Regional Population Structure

Region 3 -- 2015



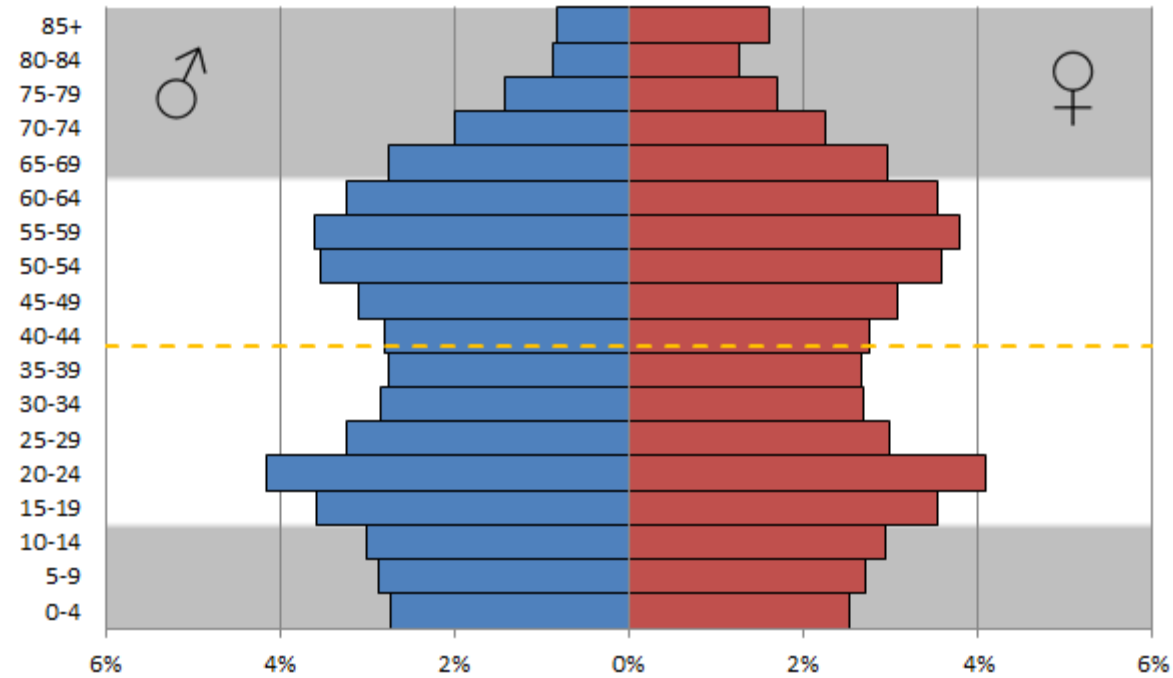
Regional Population Structure

Region 4 -- 2015



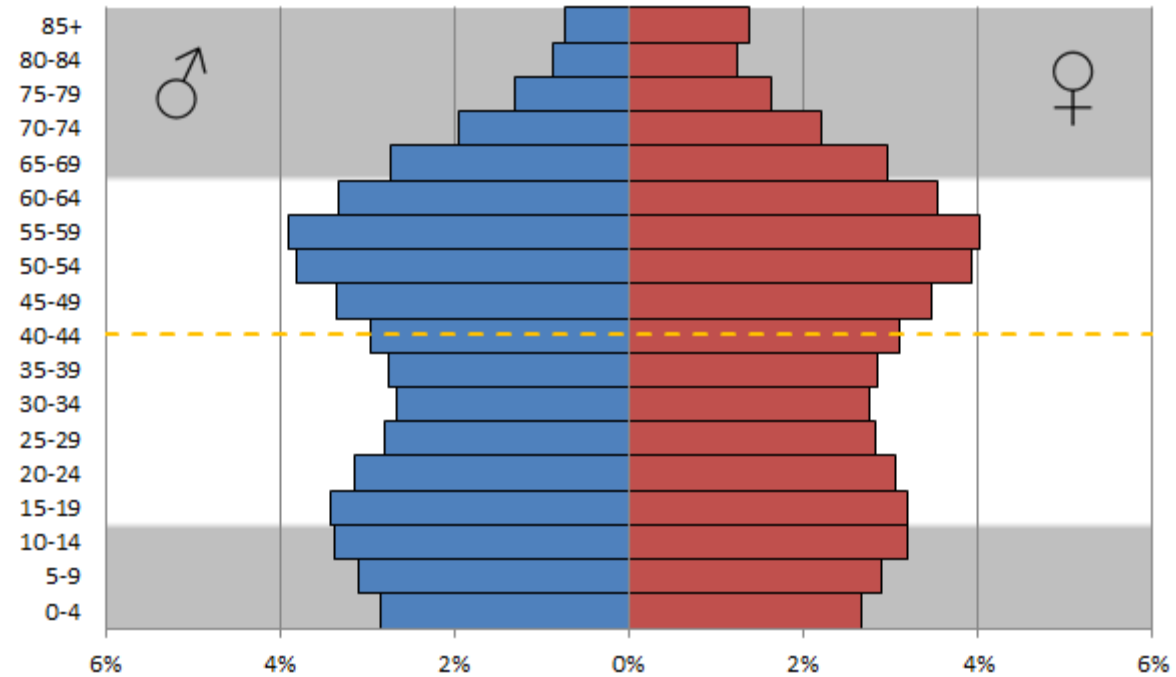
Regional Population Structure

Region 5 -- 2015



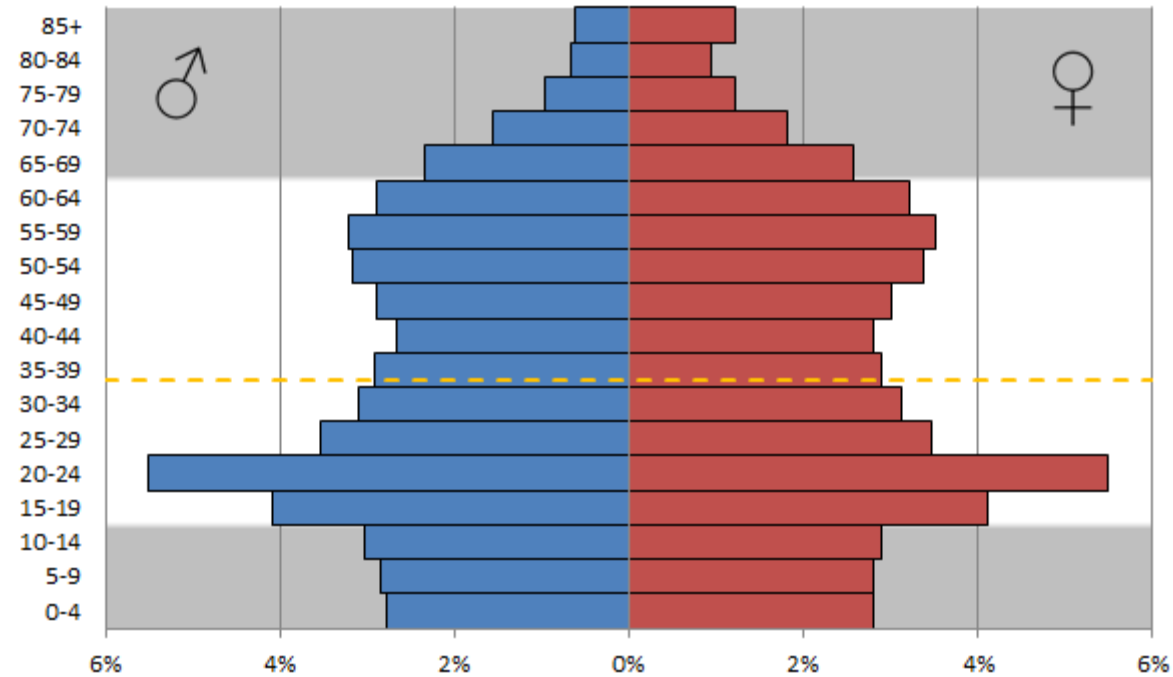
Regional Population Structure

Region 6 -- 2015



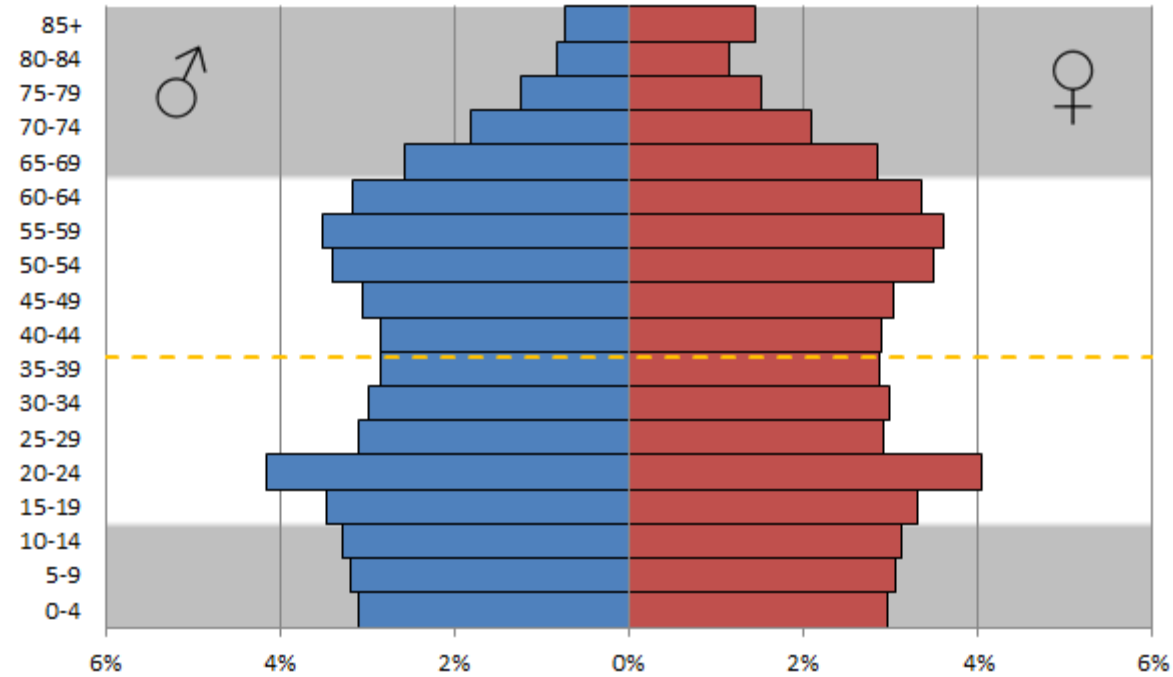
Regional Population Structure

Region 7 -- 2015



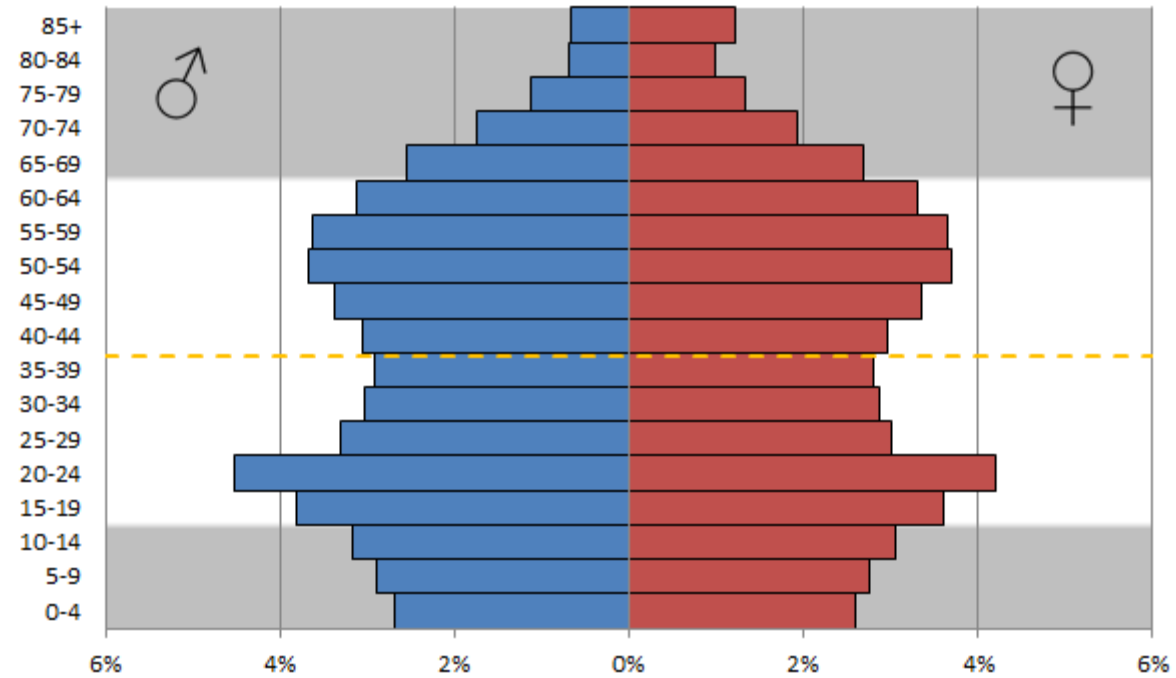
Regional Population Structure

Region 8 -- 2015



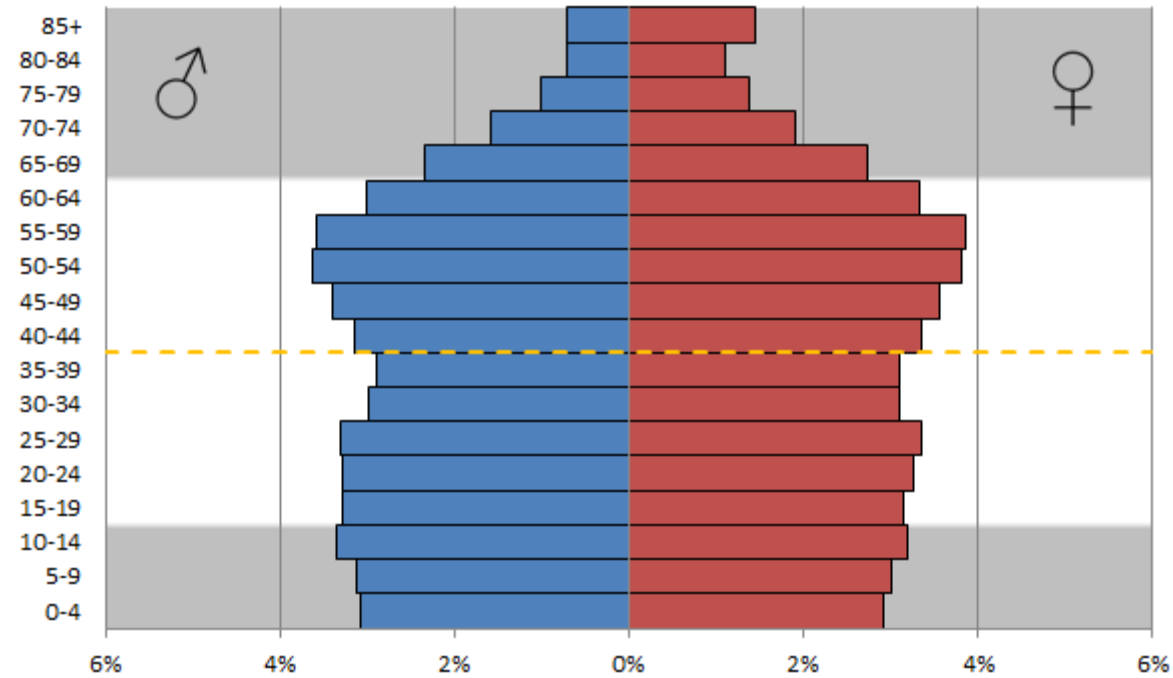
Regional Population Structure

Region 9 -- 2015



Regional Population Structure

Region 10 -- 2015



Regional Population Structure

- Population structures vary widely across the state
- Areas in the northern LP and UP tend to have much higher median ages and “top-heavy” pyramids
- The generally older population of the state as a whole will contribute to future population increases by freeing up job opportunities
- Places with large college/university populations are obvious in some of the pyramids
- The region that looks most like the state, from a structural perspective, is region 10, which makes sense when you consider that it accounts for nearly 40% of the state’s total population

Who Uses the Library?

Women and Those With Higher Levels of Education are More Likely to Have Used a Library Last Year

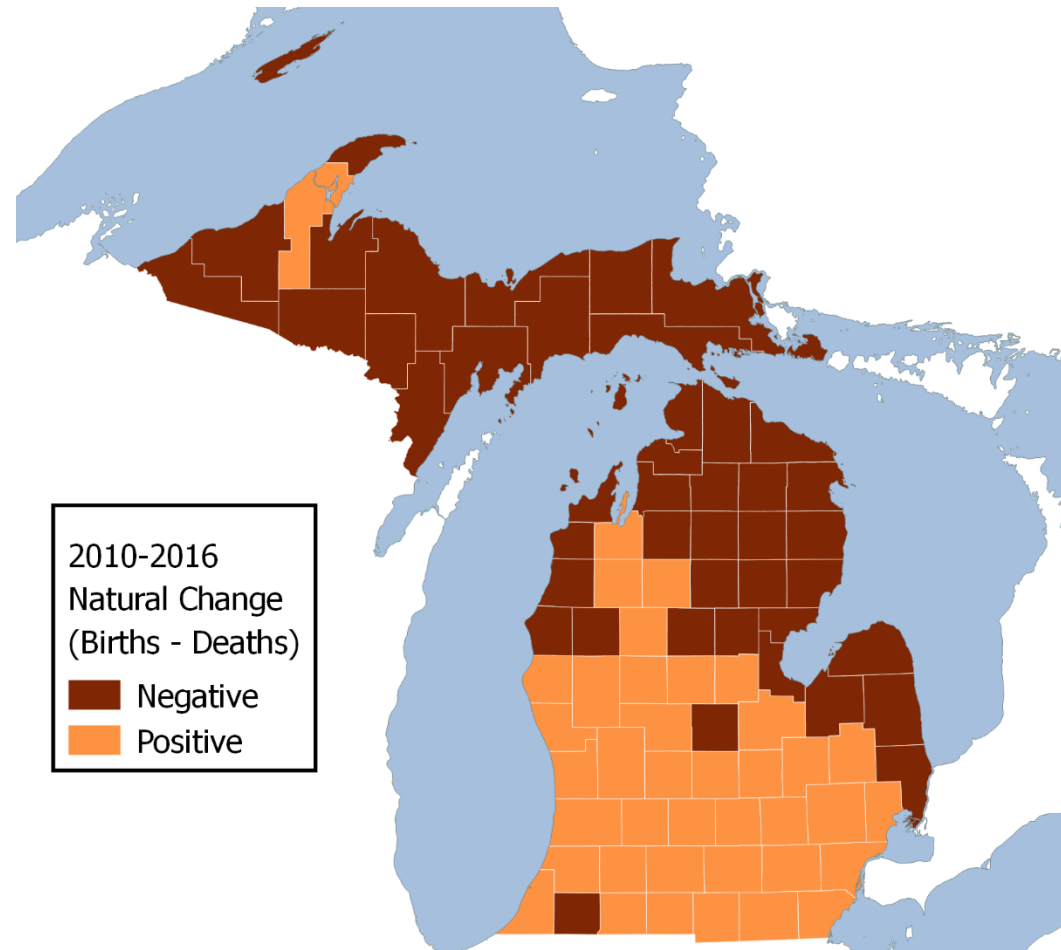
% of those ages 16+ who visited library or bookmobile in the past 12 months

	2012	2013	2015	2012-2015 Change
All	53%	48%	46%	-7
Gender				
Male	48	45	39	-9
Female	59	50	52	-7
Parental status				
Parents of minors	64	55	53	-11
Non-Parents	49	44	43	-6
Age				
16-29	58	50	52	-6
30-49	59	52	50	-9
50-64	51	46	42	-9
65+	40	39	34	-6
Household income				
\$75K+	57	52	50	-7
\$50K-\$74,999	56	51	48	-8
\$30K-\$49,999	58	46	52	-6
Less than \$30K	51	45	41	-10
Education				
College+	63	58	56	-7
Some College	58	51	49	-9
HS Grad	46	39	40	-6
Less than HS grad	43	40	30	-13
Race/Ethnicity				
White, non-Hispanic	53	48	45	-8
Black, non-Hispanic	55	47	45	-10
Hispanic	46	46	44	-2
Community type				
Rural	52	42	41	-11
Suburban	55	49	47	-8
Urban	53	48	45	-8

Source: Pew Research Center survey March 17-April 12, 2015. N=2,004 Americans ages 16 and older

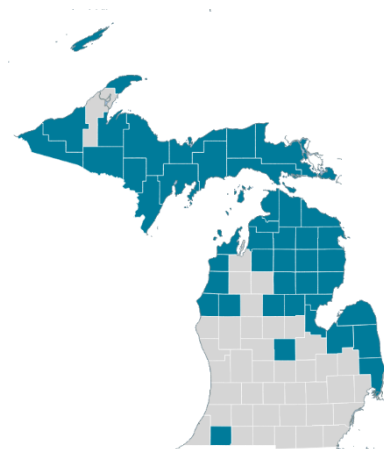
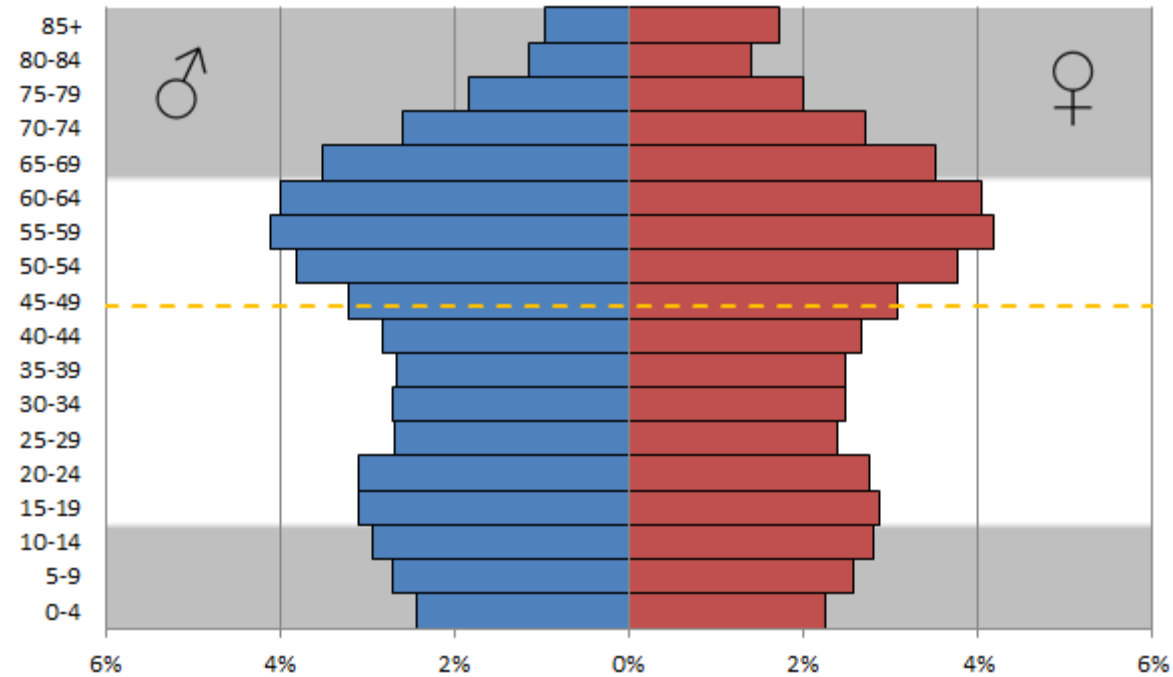
PEW RESEARCH CENTER

County Natural Change



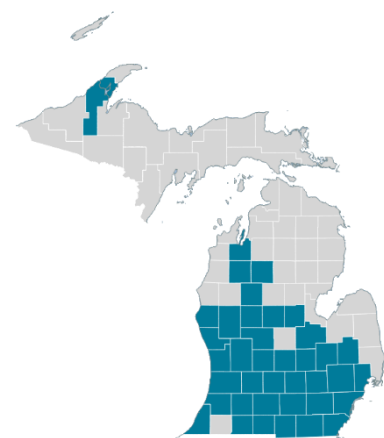
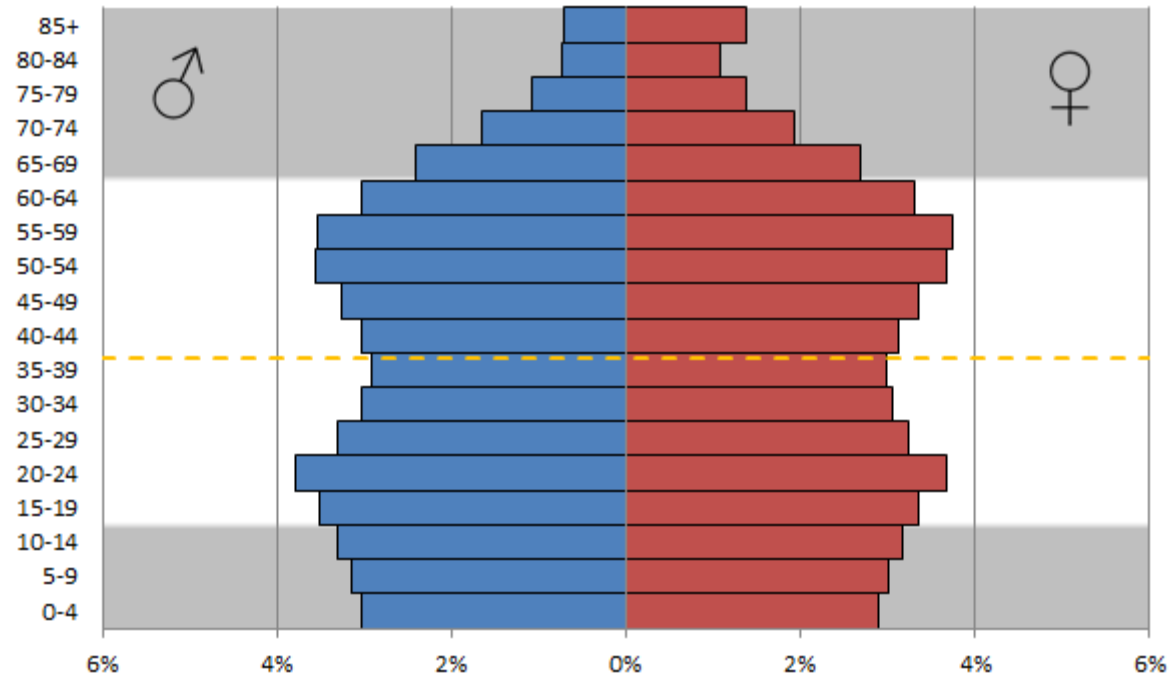
Structural Differences

Areas with Negative Natural Change -- 2015

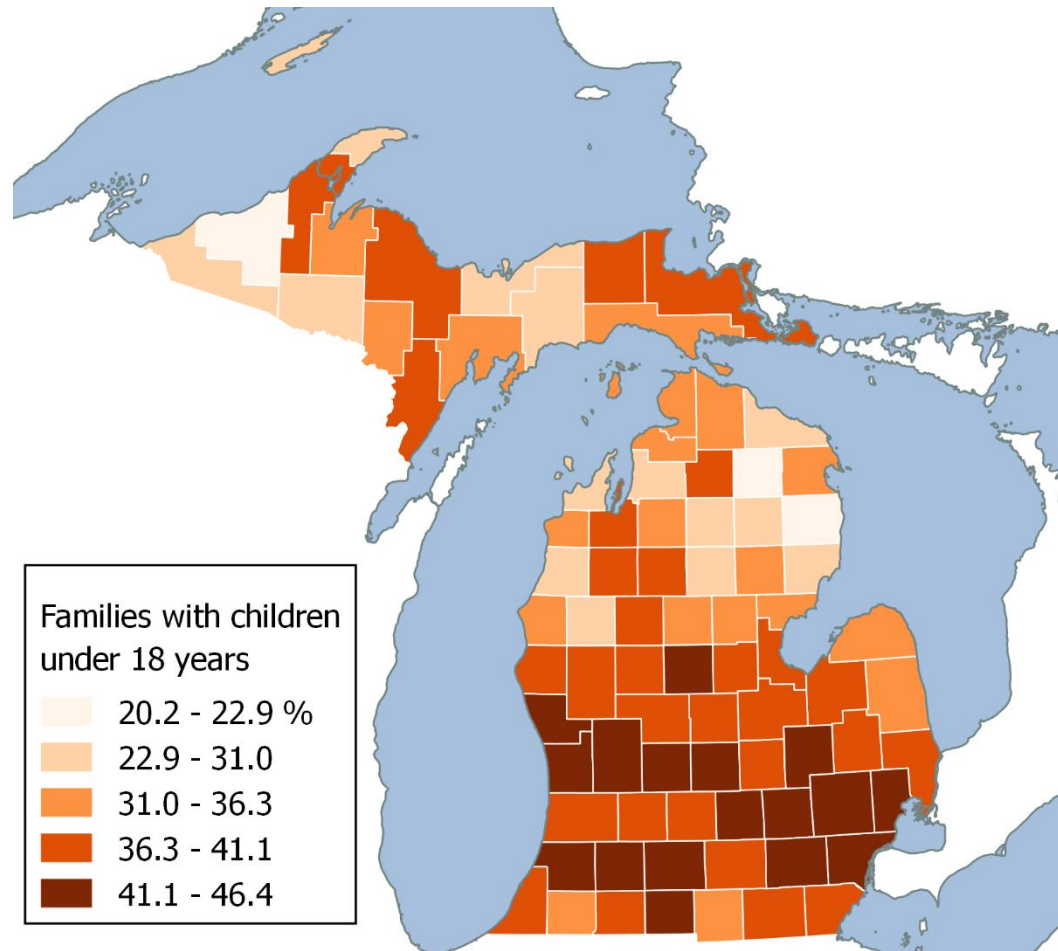


Structural Differences

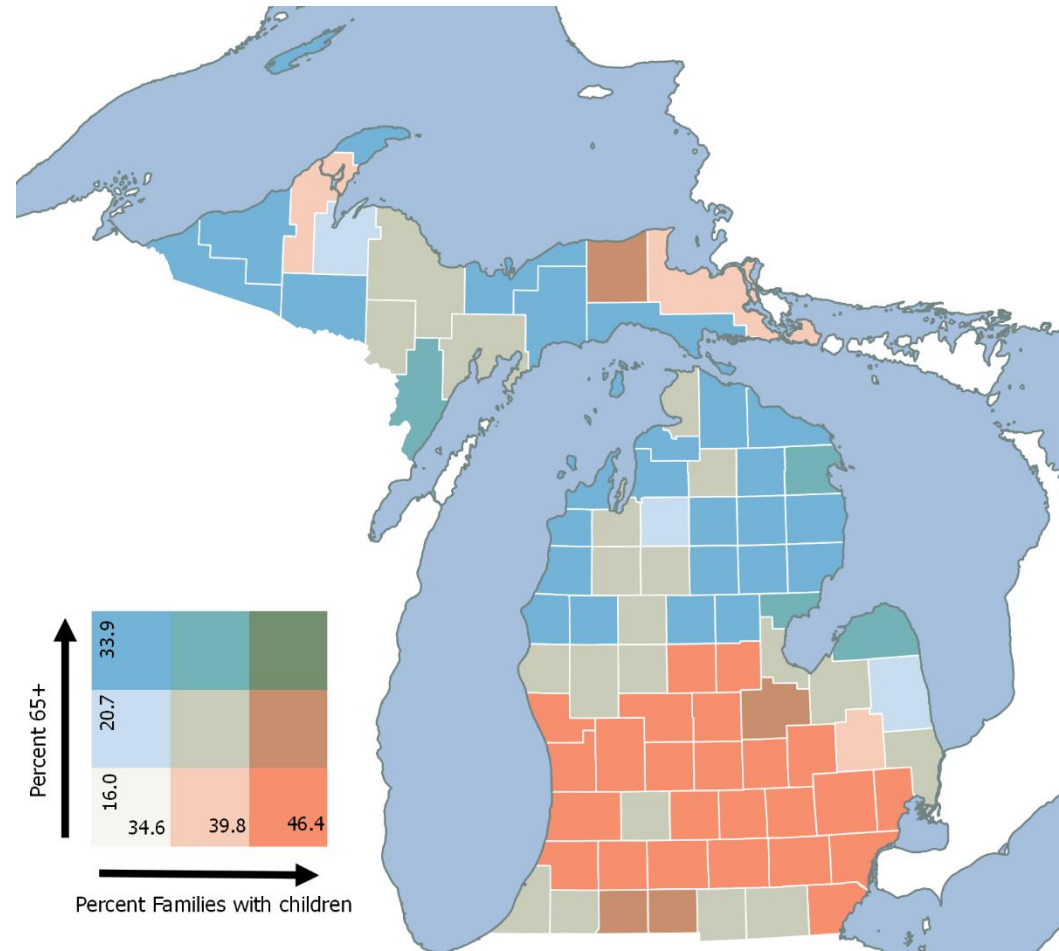
Areas with Positive Natural Change -- 2015



Families with Children



Families with Children & Proportion of Population Over 65 Years



- Fertility is continuing on a long-term downward trend
- Many areas are experiencing negative natural change, meaning they have more deaths than births
- The areas with negative natural change also tend to be older, i.e. they have a higher median age and a larger proportion of the population over 65 years
- The areas with the highest proportion of families with children tend to be in the more populous areas of the state, i.e. south of the Saginaw Bay
- Areas with the highest proportions of the 65+ population are in the Northeast Lower Peninsula and the Upper Peninsula.

Who Uses the Library?

Women and Those With Higher Levels of Education are More Likely to Have Used a Library Last Year

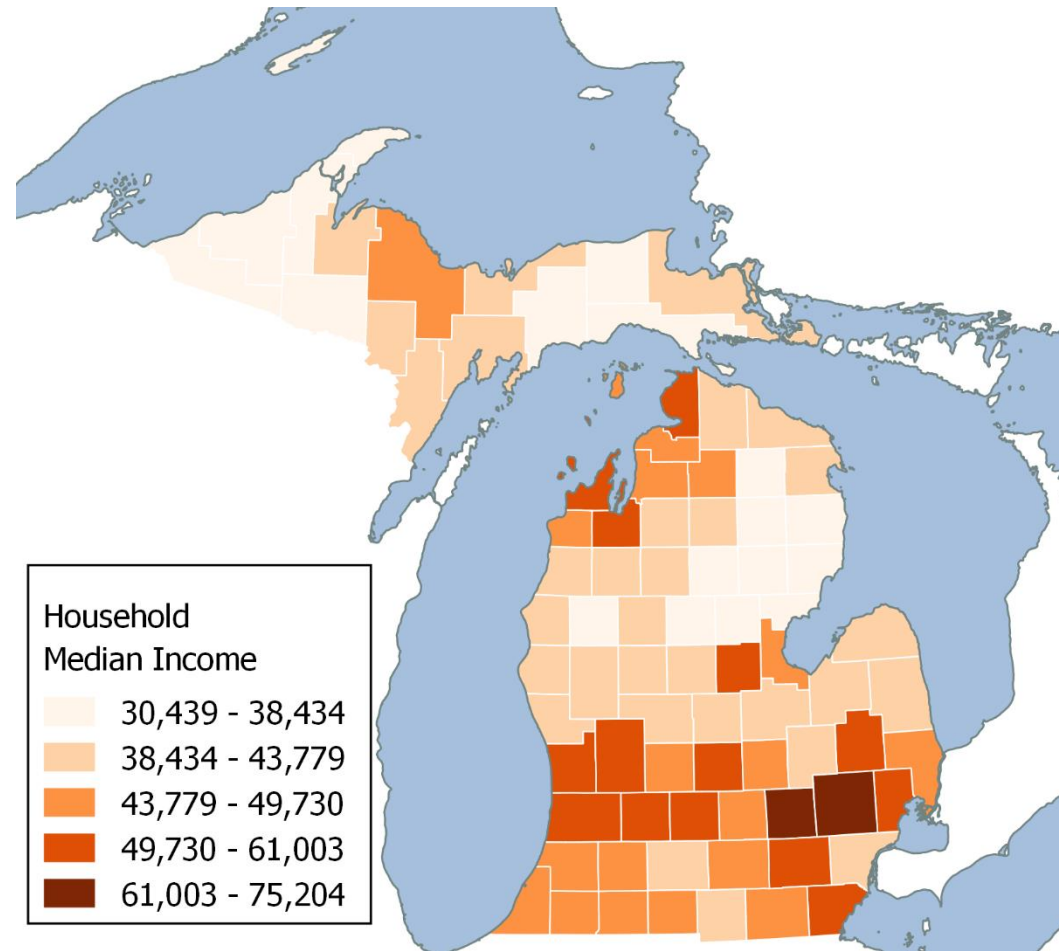
% of those ages 16+ who visited library or bookmobile in the past 12 months

	2012	2013	2015	2012-2015 Change
All	53%	48%	46%	-7
Gender				
Male	48	45	39	-9
Female	59	50	52	-7
Parental status				
Parents of minors	64	55	53	-11
Non-Parents	49	44	43	-6
Age				
16-29	58	50	52	-6
30-49	59	52	50	-9
50-64	51	46	42	-9
65+	40	39	34	-6
Household income				
\$75K+	57	52	50	-7
\$50K-\$74,999	56	51	48	-8
\$30K-\$49,999	58	46	52	-6
Less than \$30K	51	45	41	-10
Education				
College+	63	58	56	-7
Some College	58	51	49	-9
HS Grad	46	39	40	-6
Less than HS grad	43	40	30	-13
Race/Ethnicity				
White, non-Hispanic	53	48	45	-8
Black, non-Hispanic	55	47	45	-10
Hispanic	46	46	44	-2
Community type				
Rural	52	42	41	-11
Suburban	55	49	47	-8
Urban	53	48	45	-8

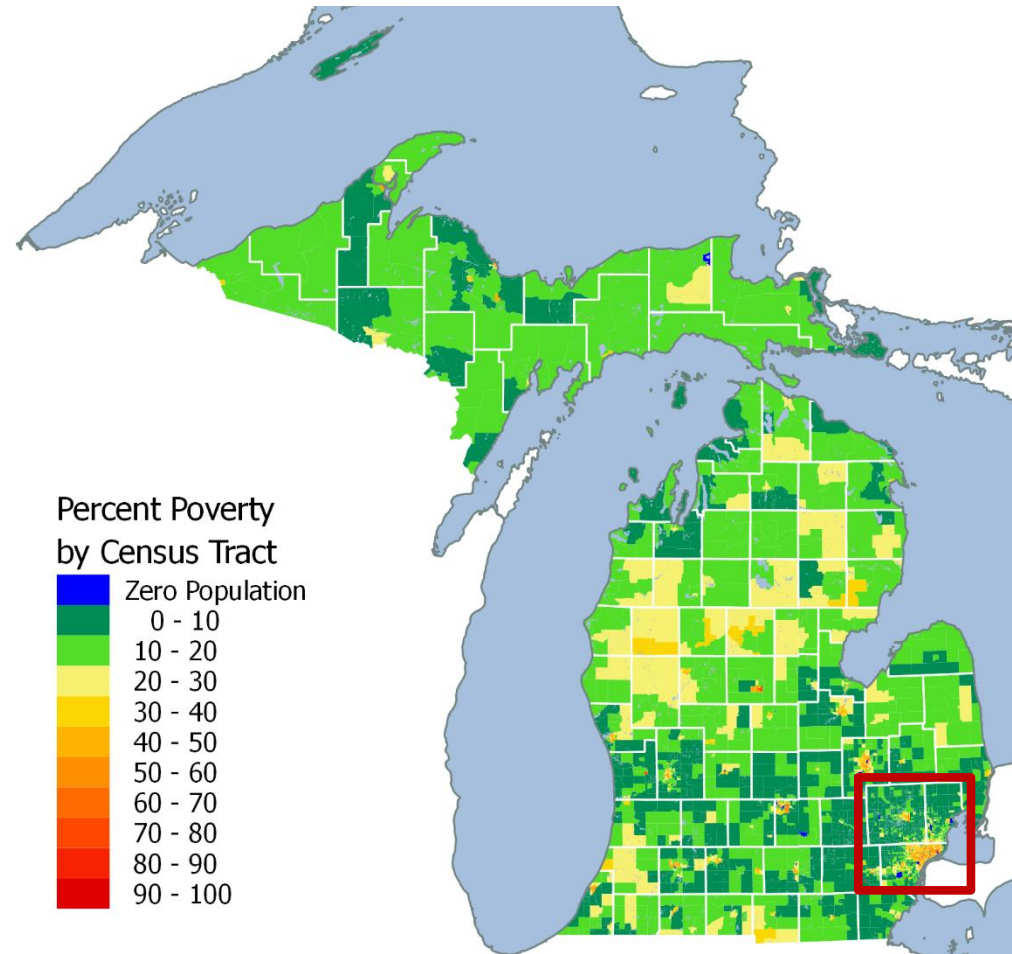
Source: Pew Research Center survey March 17-April 12, 2015. N=2,004 Americans ages 16 and older

PEW RESEARCH CENTER

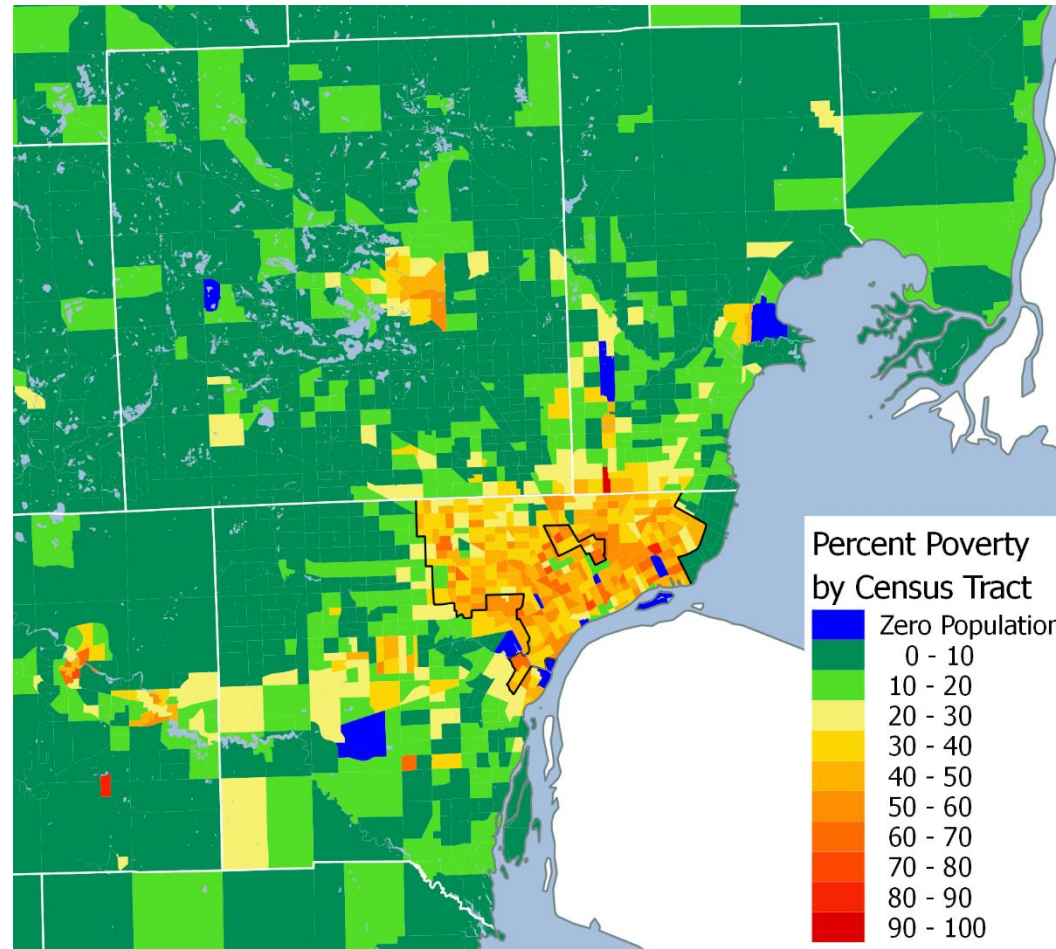
Median Household Income by County



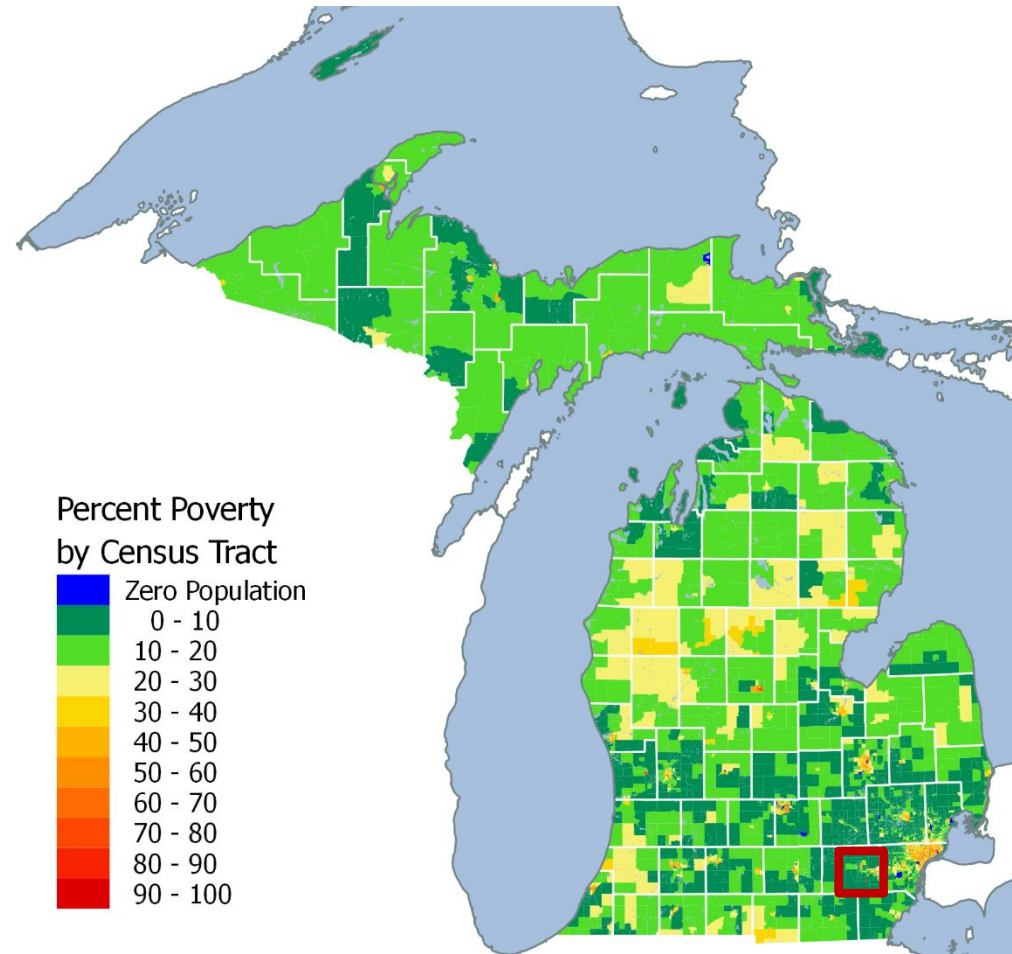
Poverty by Census Tract



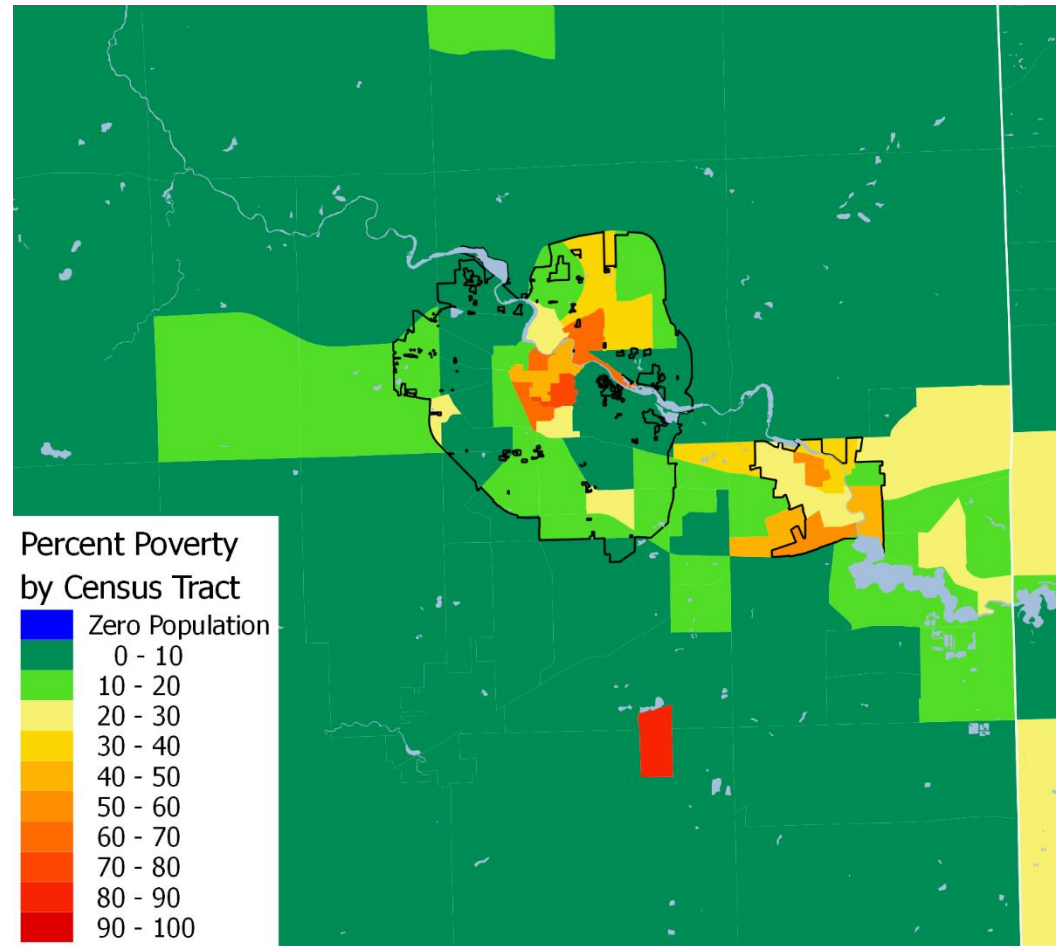
Concentrated Poverty – Detroit Area



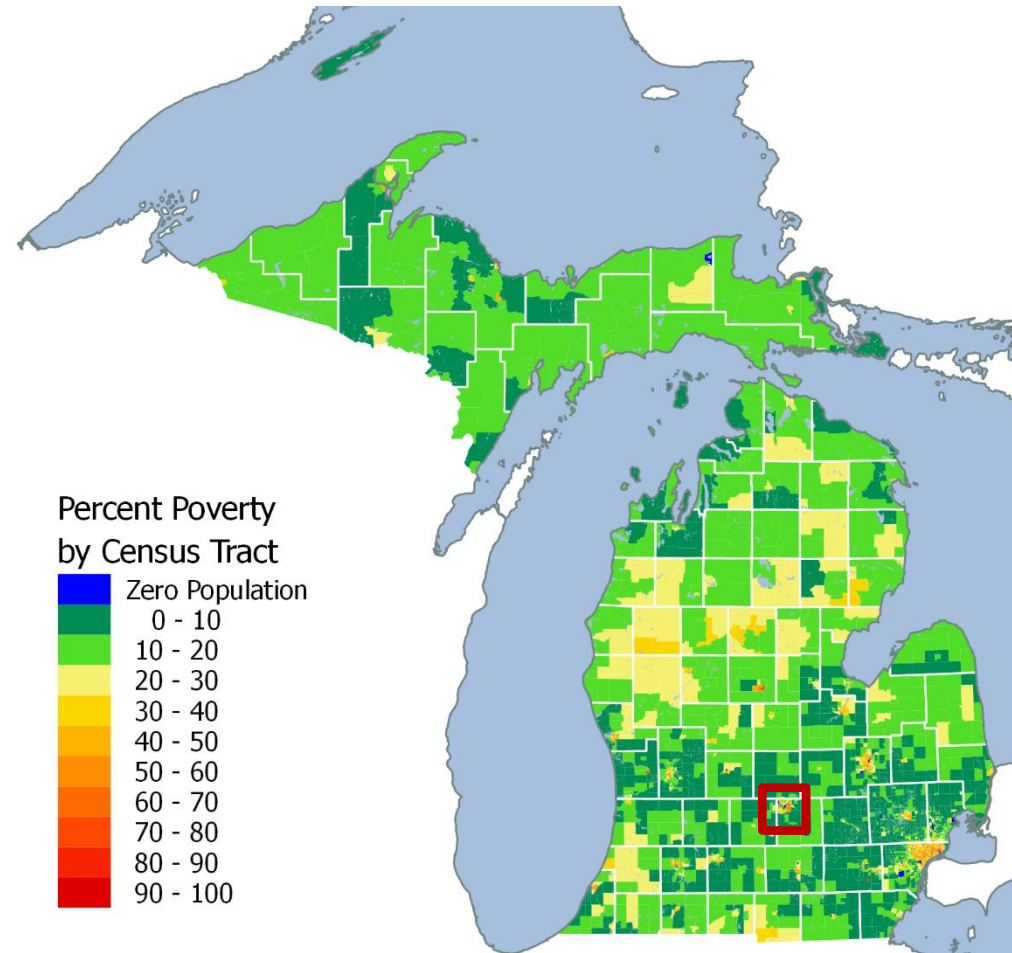
Poverty by Census Tract



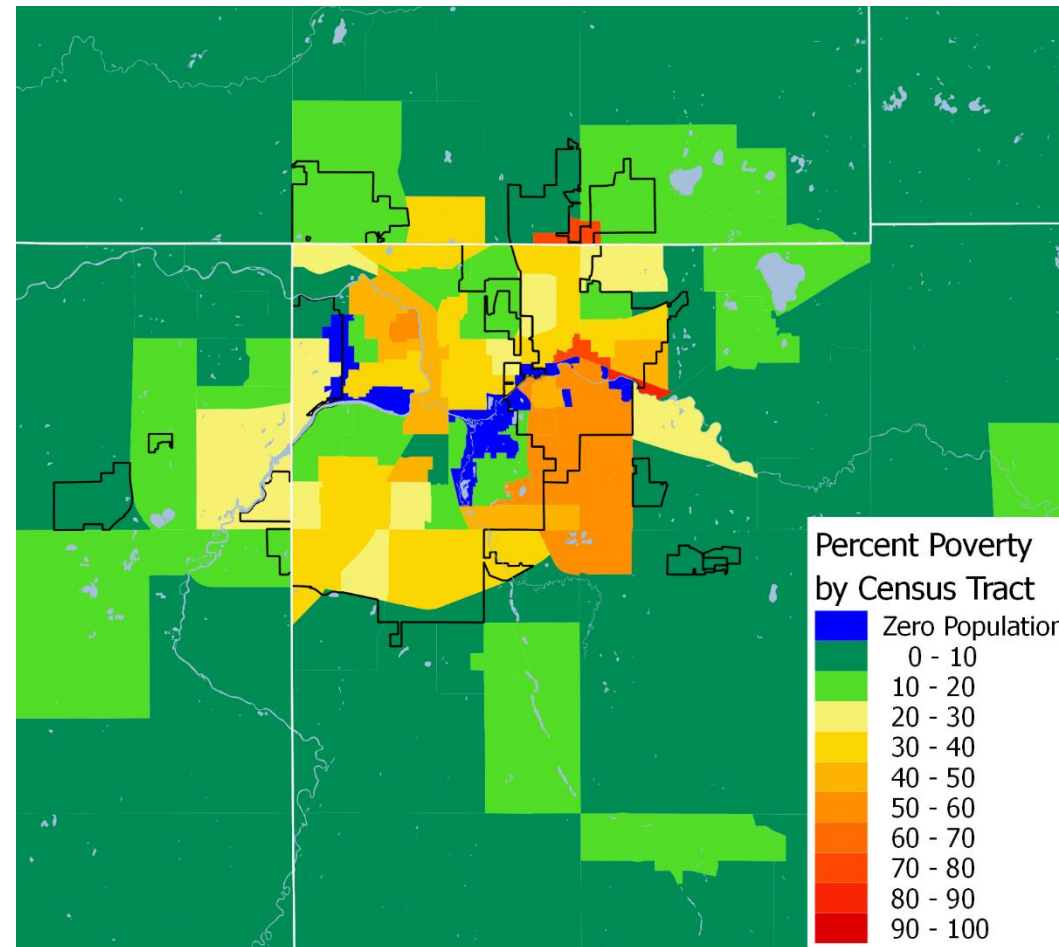
Concentrated Poverty – Ann Arbor



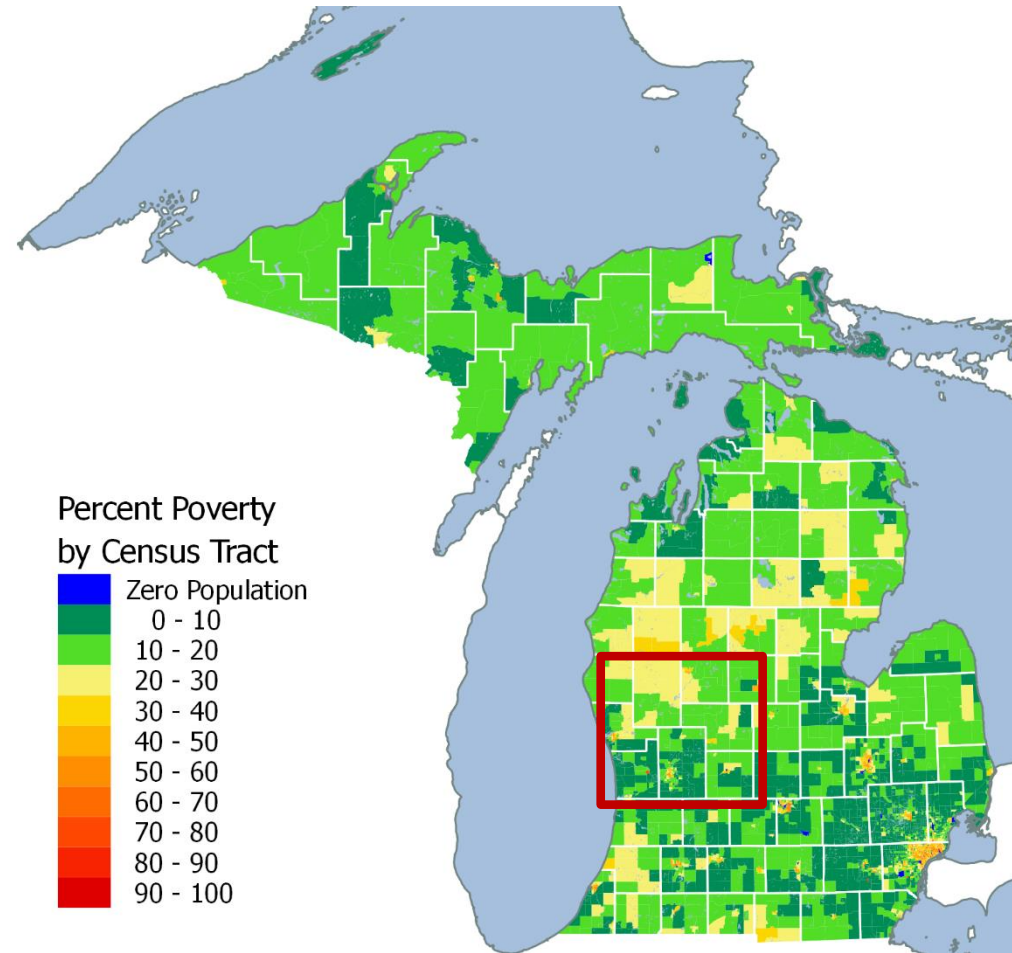
Poverty by Census Tract



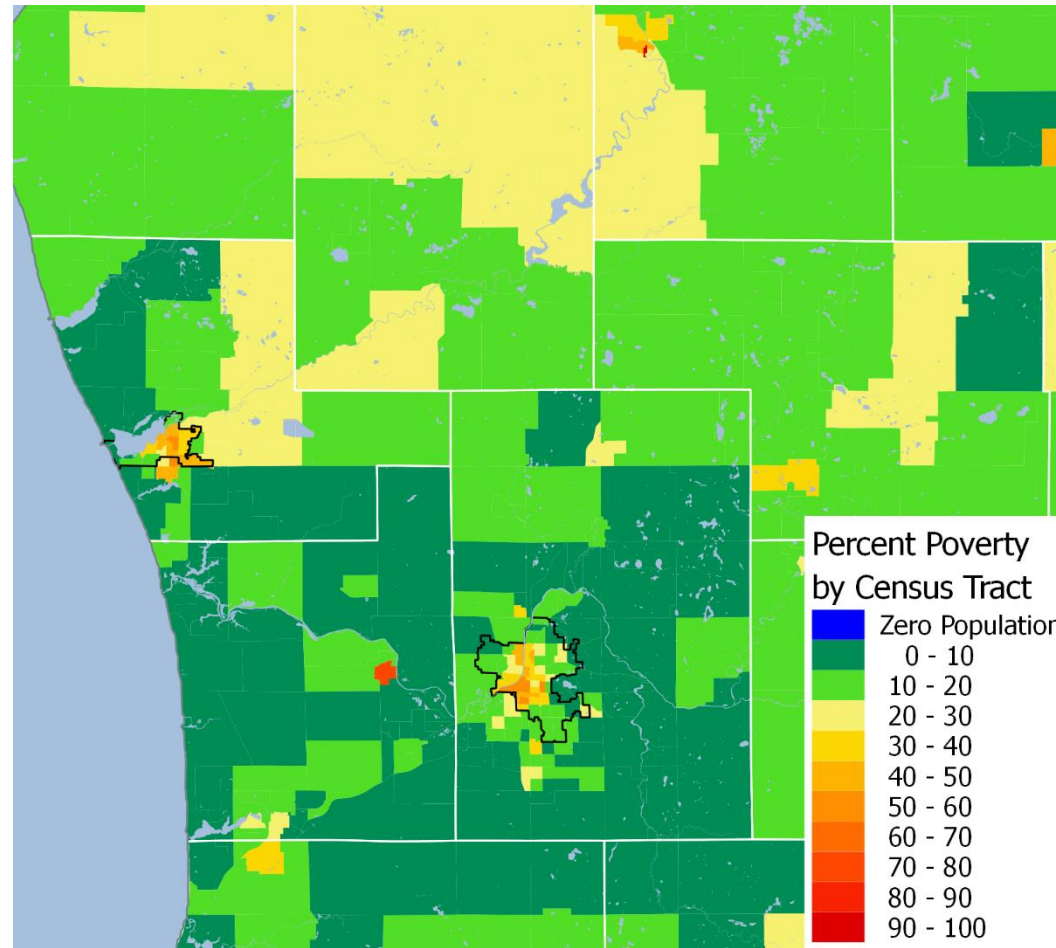
Concentrated Poverty – Lansing



Poverty by Census Tract



Income and Poverty



- Median household income is concentrated at higher levels in the southern parts of the Lower Peninsula
- There are large areas of low income in rural parts of the state, but the highest concentrations of poverty are in the urban areas of the state
- Special populations, like those in college and university towns, can confound the poverty data for definitional reasons
- Poverty exists in all parts of the state to some degree
- The context of the individual in poverty makes their experience of poverty vary and necessitates different approaches
 - Rural versus urban poverty
 - Youth versus elderly poverty, etc.

Who Uses the Library?

Women and Those With Higher Levels of Education are More Likely to Have Used a Library Last Year

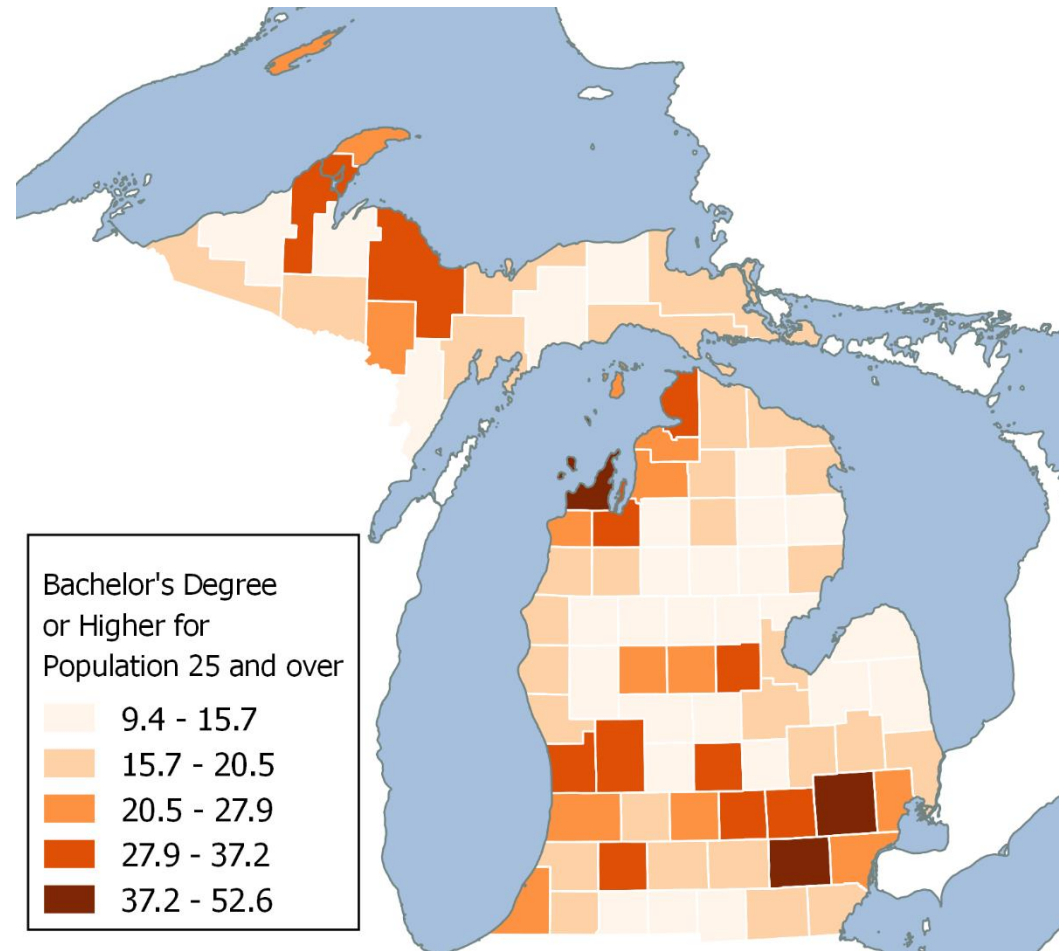
% of those ages 16+ who visited library or bookmobile in the past 12 months

	2012	2013	2015	2012-2015 Change
All	53%	48%	46%	-7
Gender				
Male	48	45	39	-9
Female	59	50	52	-7
Parental status				
Parents of minors	64	55	53	-11
Non-Parents	49	44	43	-6
Age				
16-29	58	50	52	-6
30-49	59	52	50	-9
50-64	51	46	42	-9
65+	40	39	34	-6
Household income				
\$75K+	57	52	50	-7
\$50K-\$74,999	56	51	48	-8
\$30K-\$49,999	58	46	52	-6
Less than \$30K	51	45	41	-10
Education				
College+	63	58	56	-7
Some College	58	51	49	-9
HS Grad	46	39	40	-6
Less than HS grad	43	40	30	-13
Race/Ethnicity				
White, non-Hispanic	53	48	45	-8
Black, non-Hispanic	55	47	45	-10
Hispanic	46	46	44	-2
Community type				
Rural	52	42	41	-11
Suburban	55	49	47	-8
Urban	53	48	45	-8

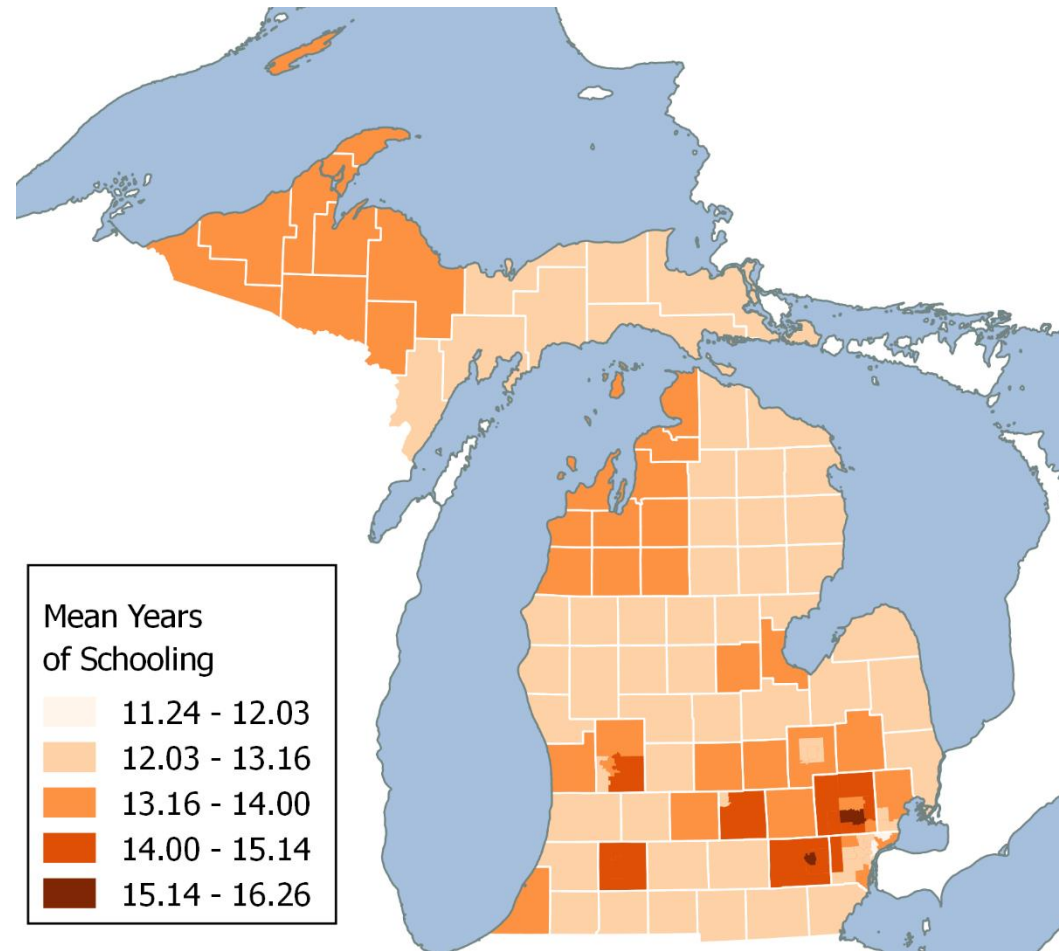
Source: Pew Research Center survey March 17-April 12, 2015. N=2,004 Americans ages 16 and older

PEW RESEARCH CENTER

Percent of Population 25 and Over with a BA or Higher



Average Years of Education for the Population 25 years and Over



Educational Attainment

- Levels of educational attainment vary widely across the state with a large proportion of the most highly educated clustering around post-secondary institutions and, more broadly, around population centers
- The median level of education is a high school diploma or equivalent
- Overall, 26.9% of the population 25 and over have a Bachelor's Degree or higher
- Areas in the Northwest LP show high levels of educational attainment, which in combination with their high median age point to possibly high numbers of retirees
- People with the highest levels of educational attainment tend to cluster in suburban areas

Who Uses the Library?

Women and Those With Higher Levels of Education are More Likely to Have Used a Library Last Year

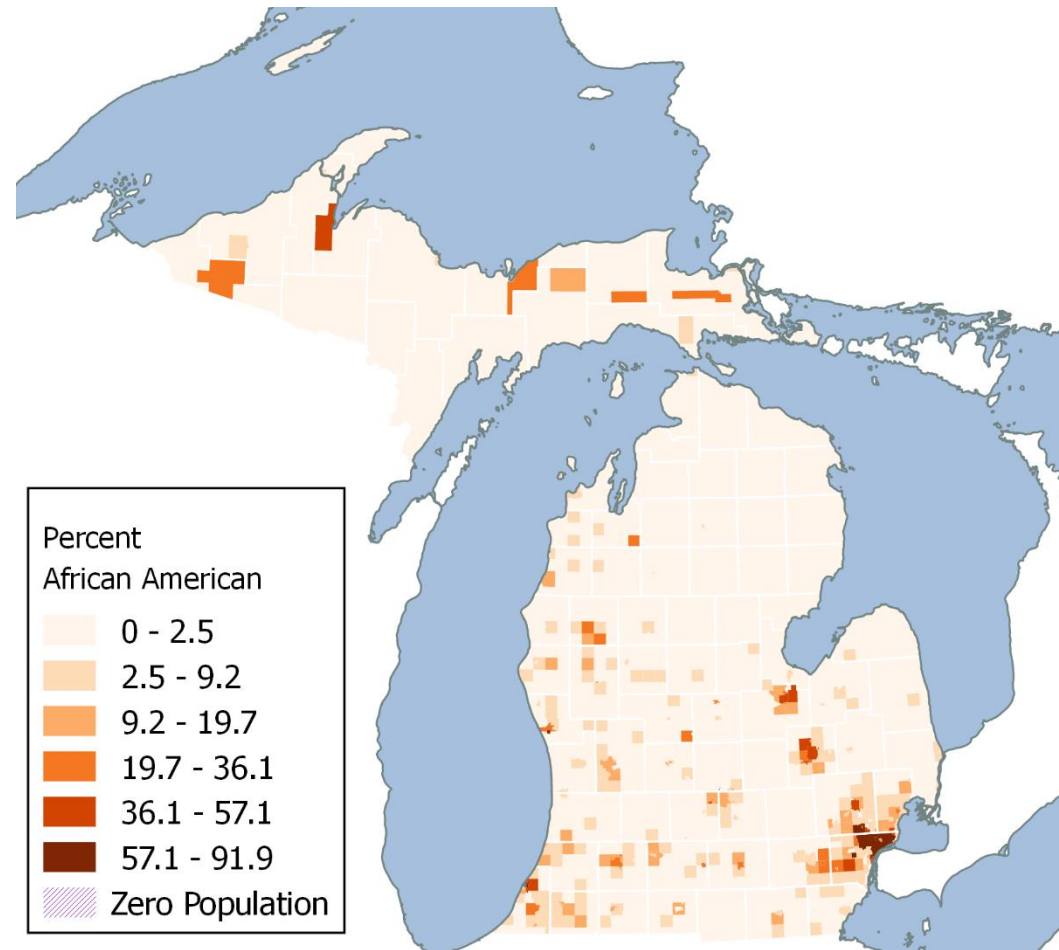
% of those ages 16+ who visited library or bookmobile in the past 12 months

	2012	2013	2015	2012-2015 Change
All	53%	48%	46%	-7
Gender				
Male	48	45	39	-9
Female	59	50	52	-7
Parental status				
Parents of minors	64	55	53	-11
Non-Parents	49	44	43	-6
Age				
16-29	58	50	52	-6
30-49	59	52	50	-9
50-64	51	46	42	-9
65+	40	39	34	-6
Household income				
\$75K+	57	52	50	-7
\$50K-\$74,999	56	51	48	-8
\$30K-\$49,999	58	46	52	-6
Less than \$30K	51	45	41	-10
Education				
College+	63	58	56	-7
Some College	58	51	49	-9
HS Grad	46	39	40	-6
Less than HS grad	43	40	30	-13
Race/Ethnicity				
White, non-Hispanic	53	48	45	-8
Black, non-Hispanic	55	47	45	-10
Hispanic	46	46	44	-2
Community type				
Rural	52	42	41	-11
Suburban	55	49	47	-8
Urban	53	48	45	-8

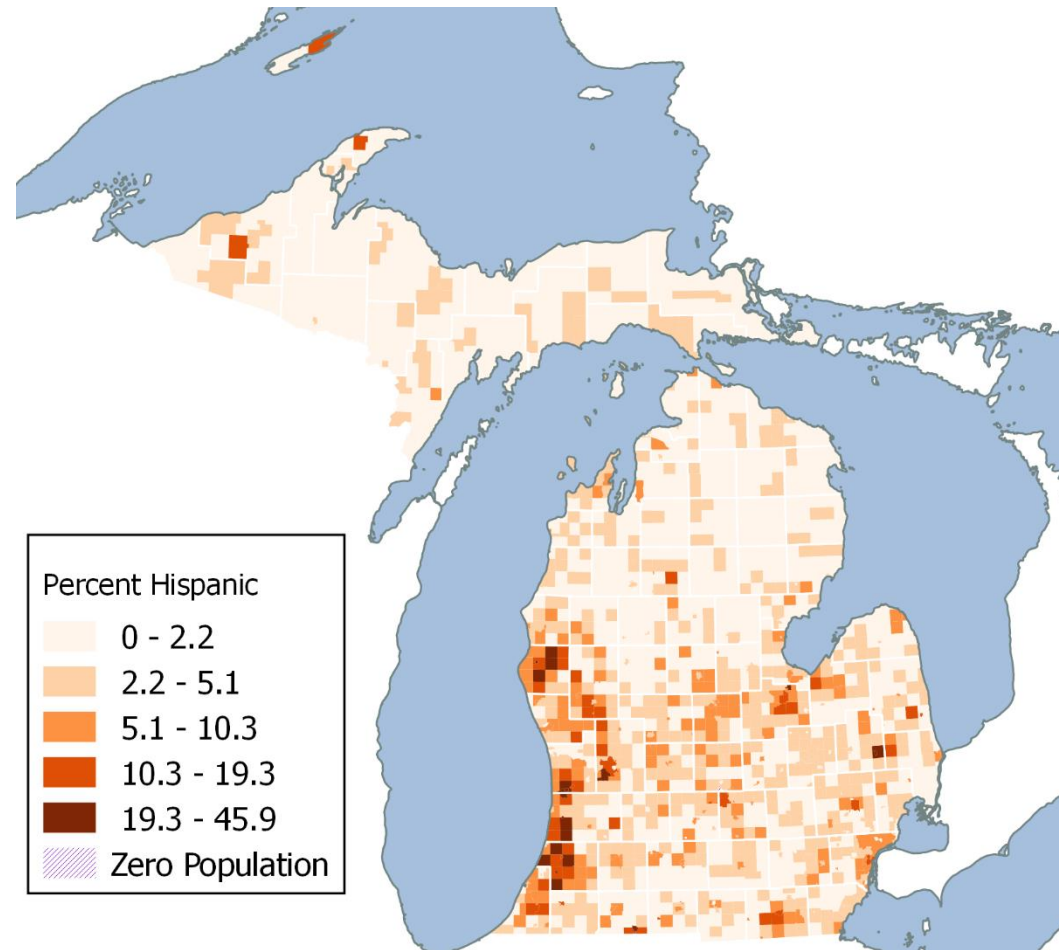
Source: Pew Research Center survey March 17-April 12, 2015. N=2,004 Americans ages 16 and older

PEW RESEARCH CENTER

Race and Ethnicity – African American



Race and Ethnicity – Hispanic or Latino



- The state is overwhelmingly white at 76.9%
- The state's next largest group is African Americans who make up nearly 14% of the state's population
- While being the state's second largest group, African Americans are concentrated in particular areas of the state, which tend to be the more urban parts of the state.
- Hispanic or Latinos are nearly 5% of the state's population
- Hispanics or Latinos are much more dispersed throughout the state than are African Americans despite being only slightly larger than a third of the African American population.

Who Uses the Library?

Women and Those With Higher Levels of Education are More Likely to Have Used a Library Last Year

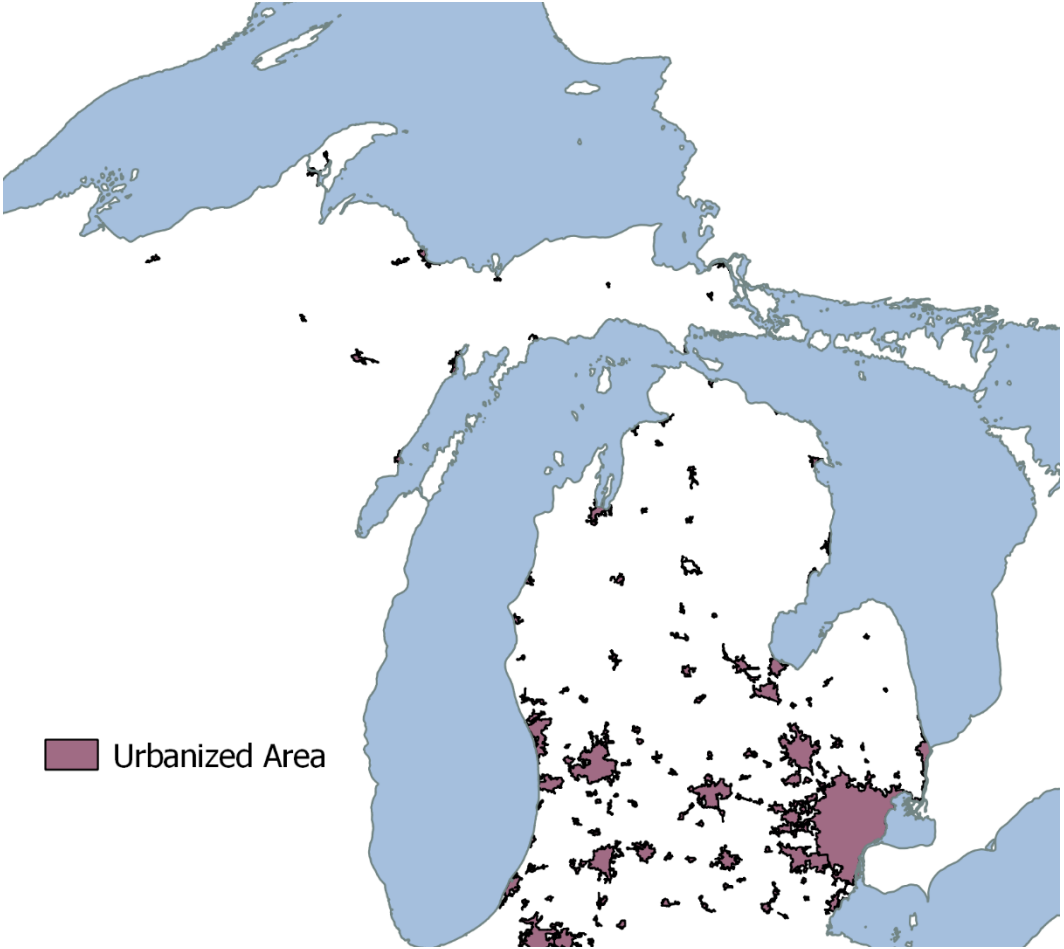
% of those ages 16+ who visited library or bookmobile in the past 12 months

	2012	2013	2015	2012-2015 Change
All	53%	48%	46%	-7
Gender				
Male	48	45	39	-9
Female	59	50	52	-7
Parental status				
Parents of minors	64	55	53	-11
Non-Parents	49	44	43	-6
Age				
16-29	58	50	52	-6
30-49	59	52	50	-9
50-64	51	46	42	-9
65+	40	39	34	-6
Household income				
\$75K+	57	52	50	-7
\$50K-\$74,999	56	51	48	-8
\$30K-\$49,999	58	46	52	-6
Less than \$30K	51	45	41	-10
Education				
College+	63	58	56	-7
Some College	58	51	49	-9
HS Grad	46	39	40	-6
Less than HS grad	43	40	30	-13
Race/Ethnicity				
White, non-Hispanic	53	48	45	-8
Black, non-Hispanic	55	47	45	-10
Hispanic	46	46	44	-2
Community type				
Rural	52	42	41	-11
Suburban	55	49	47	-8
Urban	53	48	45	-8

Source: Pew Research Center survey March 17-April 12, 2015. N=2,004 Americans ages 16 and older

PEW RESEARCH CENTER

Rural versus Urban



- Most of the state's population lives in urban areas, while most of the state's geographic area is rural and sparsely populated
- Urban and rural mean different things to different people and groups
- Metropolitan and Urban are not the same thing, and many areas in metropolitan areas are quite rural
- Rural is often defined by what it is not versus any intrinsic characteristic, e.g. rural is not urban
- Rural people drive long distances for goods and services that may be just around the corner in an urban area
- Urbanization is increasing despite periodic “rural rebounds”

What Other Factors Might Be Important?

- English Language Ability
- Disability Status
- Employment or Labor Force Status
- Multigenerational Families

- There are opportunities and challenges across the state, fortunately data are available to help plan for many of the challenges
- The changes in the population over the next 10-20 years will be coming from migration and will have an effect on the population structures of all areas of the state
- We can't predict the future, but we can project from the current state, and when we do, we see an increasing population that is more diverse and connected

Thank you

Questions?

Eric Guthrie

Michigan's State Demographer

Department of Technology, Management & Budget

Bureau of Labor Market Information & Strategic Initiatives

Victor Office Building

201 N. Washington Square

5th Floor

Lansing, MI 48913

(517) 241-8667

guthrie@michigan.gov