



ACCESSING AND UNDERSTANDING SECONDARY DATA ON FOOD ACCESS

Shared Measurement Training Series • April 28, 2016

MICHIGAN STATE
UNIVERSITY

Center for
Regional Food Systems

TODAY'S SPEAKERS

Lisa Uganski

Dietitian / Health Educator
Ottawa County Department of
Public Health



Courtney Pinar

Research Scientist, Gretchen
Swanson Center for Nutrition

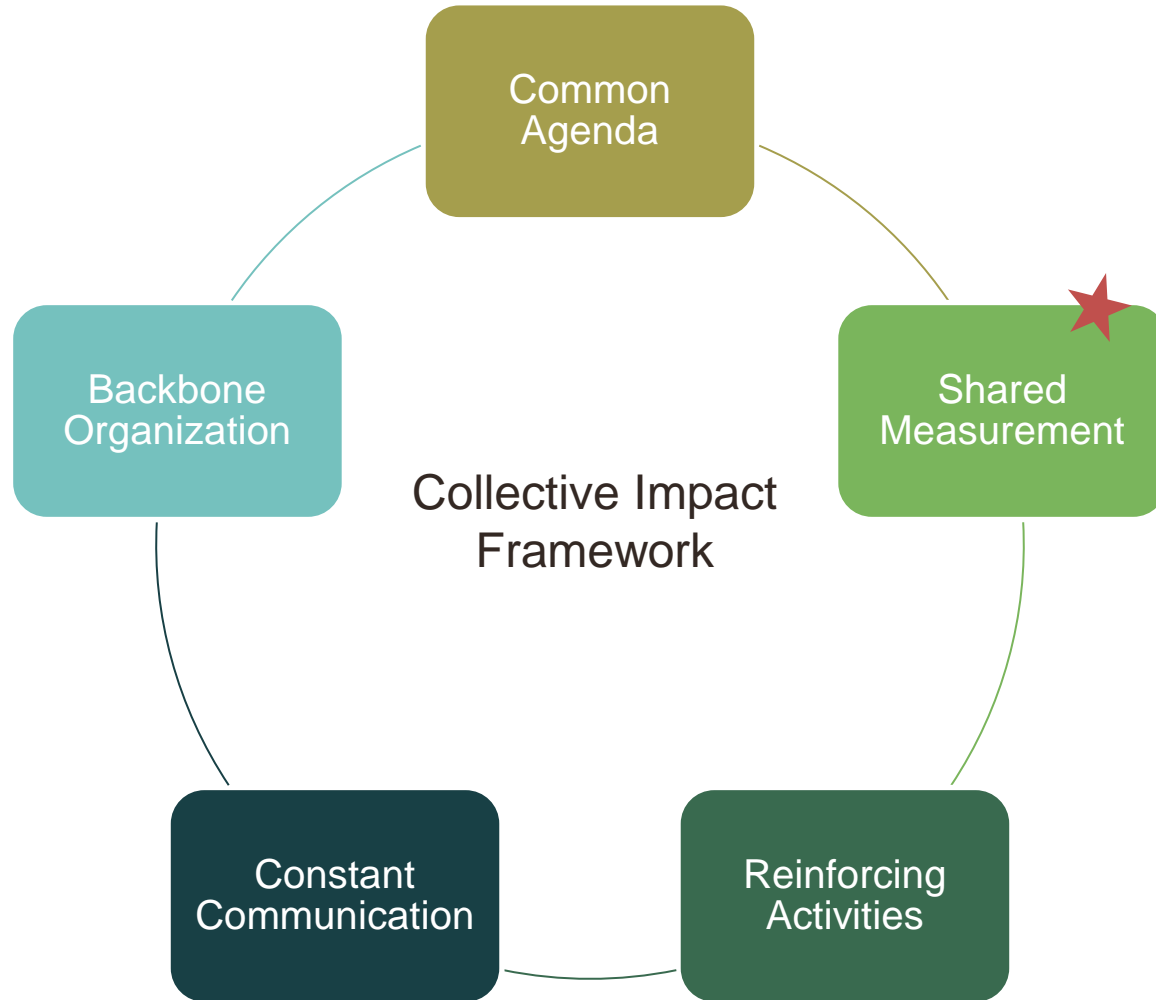


Kathryn Colasanti

Specialist
MSU Center for Regional Food
Systems



WHY SHARED MEASUREMENT?



PRIORITY AREAS

Institutional
Procurement



Economic Impact



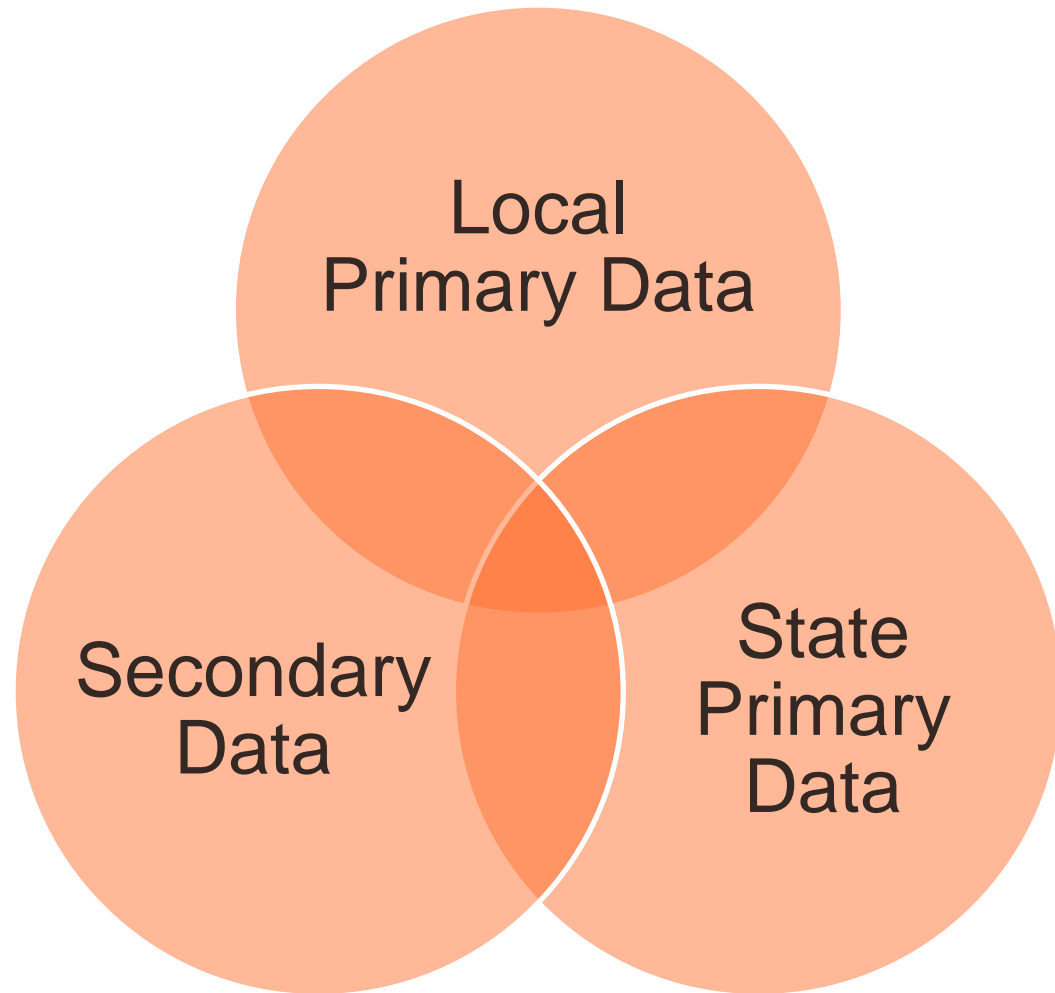
- Build capacity

Healthy Food
Access



- New survey tool

MEASURING FOOD ACCESS





PREVIOUS TRAININGS OFFERED

1. Overview of Program Evaluation

- November 16, 2015

1. Overview of the Research Process

- December 11, 2015

3. Evaluating Economic Impacts of Local Food Systems

- December 14, 2015

4. Introduction to a Food Access Survey

- March 15, 2016

<http://foodsystems.msu.edu/resources> → Select “Webinars”

OVERVIEW OF SECONDARY DATA

- **What is it?**
 - Collected by someone other than the user
 - Sometimes publicly available
 - Example of sources:
 - County health departments
 - Vital statistics (birth, death)
 - Hospital, clinic, school records
 - Private and foundation databases
 - City and county governments
 - Surveillance data from government departments



PROS/CONS TO SECONDARY & PRIMARY DATA

Secondary	Primary
PROS	
Readily available and inexpensive	Tailored information to answer specific questions
Less hassle and expertise needed to collect	Control the quality of the data
CONS	
Type of data collected not determined by you	Deciding why, what, how, when to collect <ul style="list-style-type: none"> • Designing quality instruments
Obtaining additional data to clarify not possible	Obtaining funding, resources, staff, etc.
Technical skills in analyzing and interpreting	Ethical considerations (e.g., consent)



DISCLAIMER

- **No ownership**
- **No vested interests**
- **Users just like you**
- **Not an exhaustive list**



OCFPC STRATEGIC PLANNING

- **The Ottawa County Food Policy Council (OCFPC) has completed two strategic planning processes (in 2012 and 2015).**
- **Both times, the OCFPC used primary and secondary data sources to help guide the planning process.**
- **Started with secondary data analysis; then collected primary data**

SECONDARY DATA SOURCES

- **Ottawa County Behavioral Risk Factor Survey (BRFS)**
- **Greater Ottawa County United Way Household Survey**
- **County Health Rankings**
- **Feeding America Map the Meal Gap**
- **Feeding America Hunger Study 2013**
- **USDA Food Desert Locator**

OTTAWA COUNTY BRFS

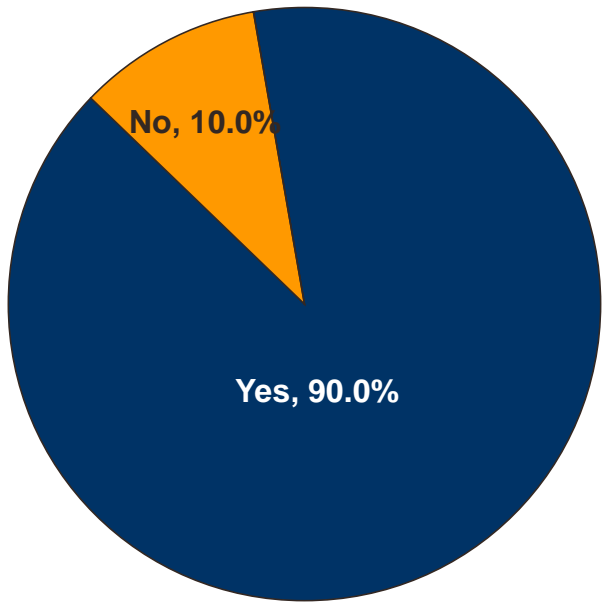
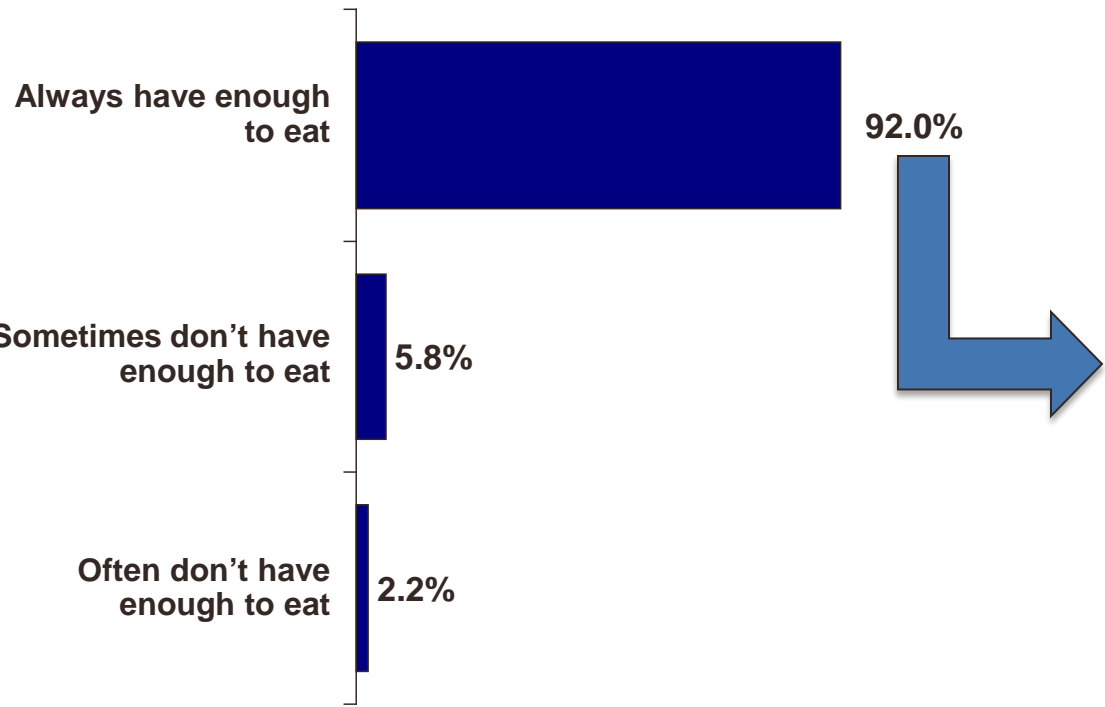
- **Conducted every three years on the broader adult population in Ottawa County.**
- **BRFS respondents were reached through randomly sampled land line and mobile phone numbers. Their results were compared across five geographic sections within the county: NW, NE, Central, SW and SE.**
- **This data allows the OCFPC to determine where to focus its specific efforts.**

Nine in ten adults (92.0%) say they always have enough to eat and are able to eat the foods they want (90.0%).

Food Access and Sufficiency

Food Sufficiency

Access to Foods Wanted



(n=2003)

(n=1907)

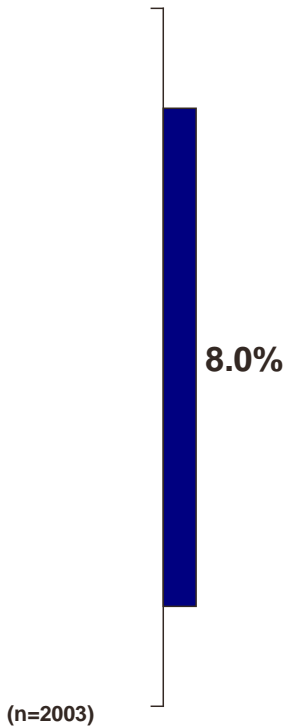
Q17.1: Which of the following statements best describes the food eaten in your household within the last 12 months? Would you say that...
Q17.2: Were these foods always the kinds of foods that you wanted to eat?



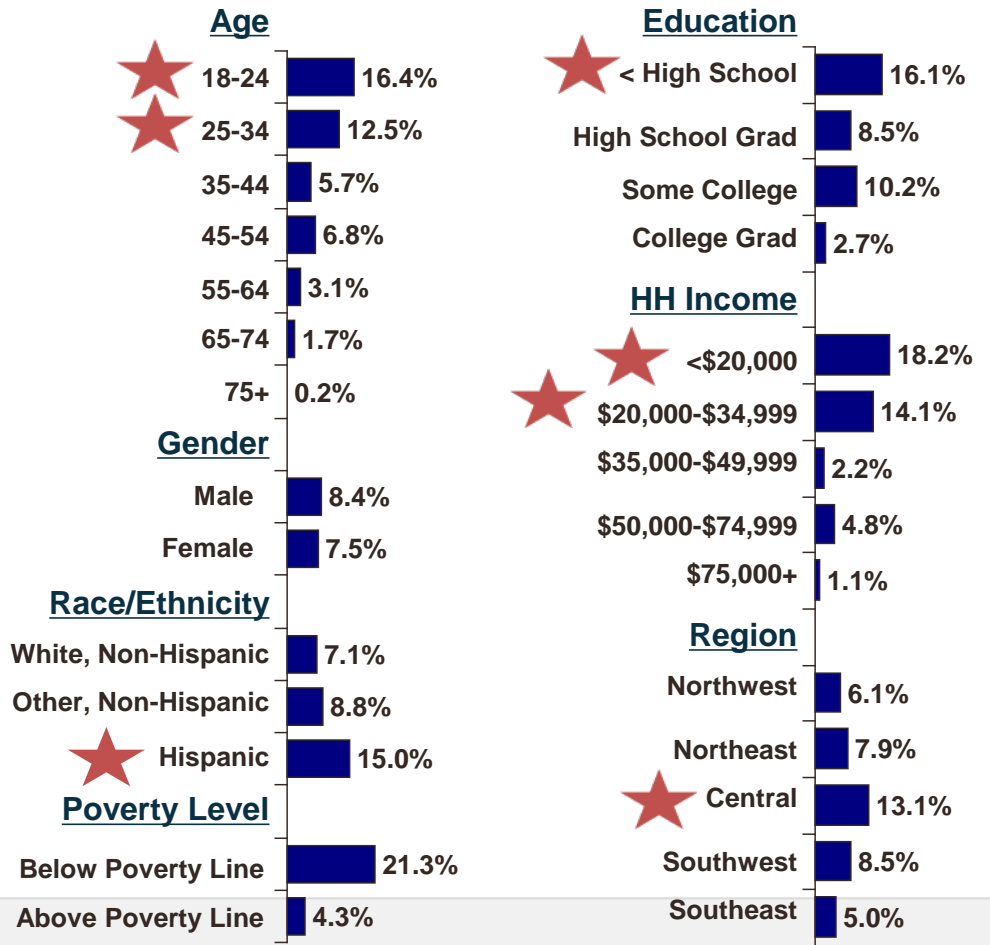
Among Ottawa County adults, the groups most likely to experience food insufficiencies are: younger (< age 35), Hispanic, those with less than a high school education, impoverished (incomes less than \$35K), and living in the central region.

Food Sufficiency

Sometimes/Often Don't Have Enough to Eat* (Total Sample)



Sometimes/Often Don't Have Enough to Eat by Demographics

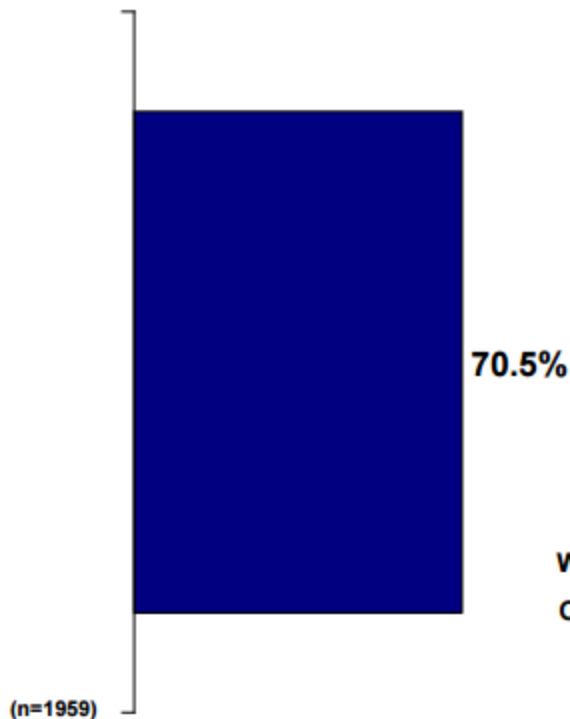


*Among all adults, the proportion who reported consuming five or more drinks per occasion (for men) or four or more drinks per occasion (for women) at least once in the previous month.

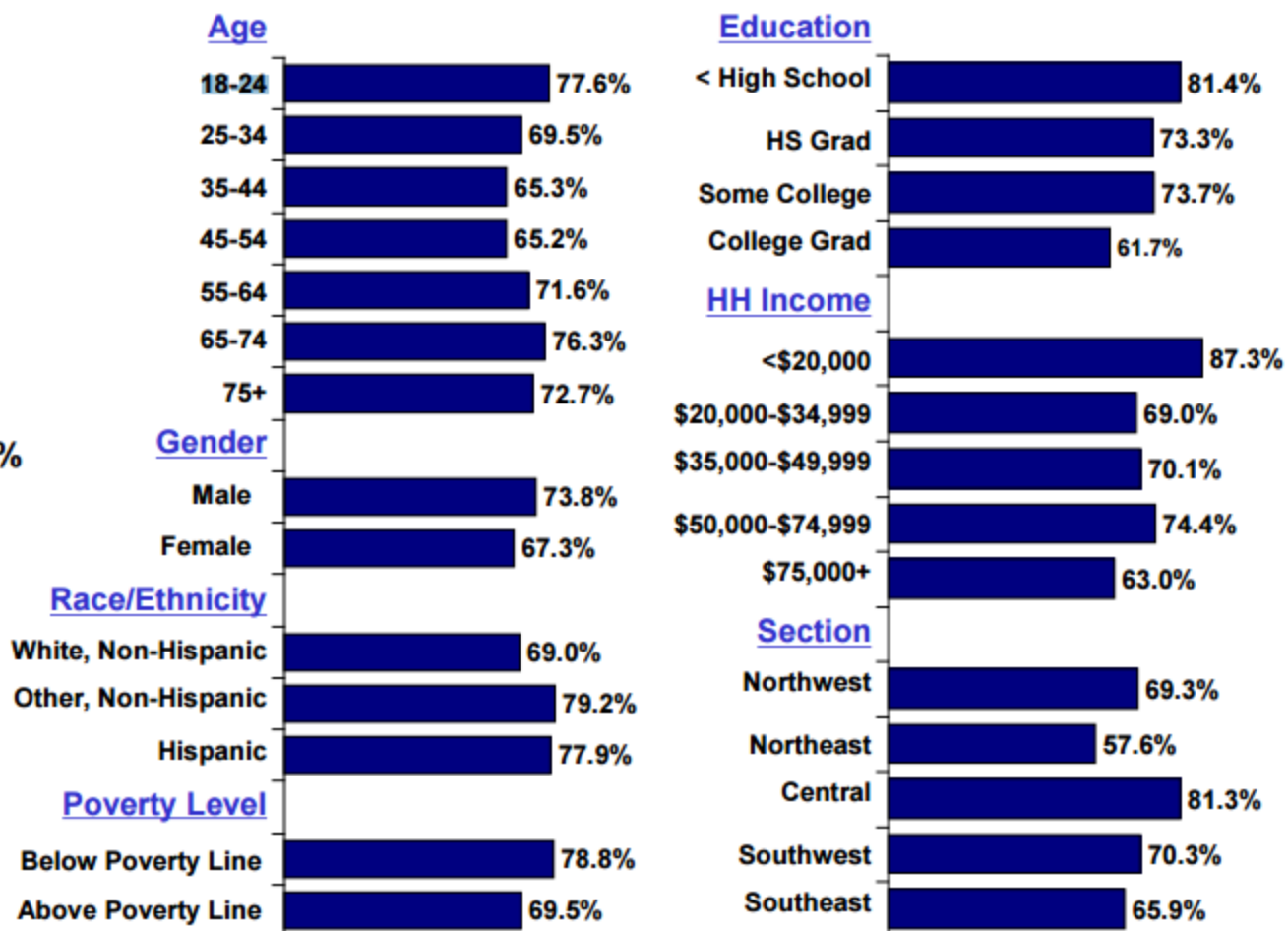
Inadequate fruit and vegetable consumption is common in Ottawa County, but much better than three years ago. Still, 70.5% of adults consume fruits or vegetables less than five times per day. Adequate fruit and vegetable consumption is directly related to education and income, although the proportions of inadequate consumption are still high for all demographic subgroups. Fewer men and non-Whites consume adequate quantities of fruits and vegetables compared to women and Whites, respectively.

Fruit and Vegetable Consumption

Inadequate Fruit and Vegetable Consumption* (Total Sample)



Inadequate Consumption by Demographics



*Among all adults, the proportion whose total frequency of consumption of fruits (including juice) and vegetables was less than five times per day.

GREATER OTTAWA COUNTY UNITED WAY HOUSEHOLD SURVEY

- Data available in the 2015 Community Assessment for Ottawa County
- Published every 3 years
- Four focus areas: Education, Financial Stability, Health and Basic Needs
- Provides benchmarks to gauge progress, and foster community engagement around meeting the community's needs.
- <http://www.ottawaunitedway.org/community-assessment>

BASIC NEEDS

2015 HOUSEHOLD SURVEY QUESTIONS

In the last 12 months, did you or others in your household ever cut the size of your meals or skip meals because there wasn't enough money for food?

Yes	No
12.2%	87.8%

Of those who answered yes to cutting the size of or skipping meals:

- › 16.9% had a high school or lower education, vs. 5.7% that attended college
- › 32.1% earn less than \$25,000 per year, vs. 15.3% who earn \$25,000-\$50,000
- › They are more likely to live in the northeast section of the county

Of those who answered yes to cutting the size of or skipping meals:

- › 52.4% stated that it happened almost every month
- › 57.1% said that they used a food pantry in the last 12 months

Of those who said they didn't use a food pantry, they didn't go for the following reasons:

- › 39.7% cited lack of knowledge/awareness of food pantries
- › 22.7% cited embarrassment/stigma
- › 15.3% didn't want to

General Population:

- › 21% worry about running out of money for food at some point in the year
- › 12% have actually cut the size of, or skipped, meals due to lack of food

COUNTY HEALTH RANKINGS

- <http://www.countyhealthrankings.org/>
- The *Rankings* are based on a model of population health that emphasizes the many factors that, if improved, can help make communities healthier places to live, learn, work and play.
- Building on the work of [America's Health Rankings](#), the [University of Wisconsin Population Health Institute](#) has used this model to [rank the health of Wisconsin's counties](#) every year since 2003.
- Uses many secondary data sources



County Demographics +

Rank ▼	County
1	Ottawa (OT)
2	Leelanau (LL)
3	Livingston (LI)
4	Clinton (CN)
5	Emmet (EM)
6	Grand Traverse (GT)
7	Washtenaw (WA)
8	Midland (MD)
9	Charlevoix (CH)
10	Barry (BR)
11	Ionia (IO)
12	Allegan (AE)
13	Houghton (HO)
14	Gogebic (GO)
15	Oakland (OK)
16	Kent (KN)
17	Missaukee (MI)
18	Eaton (EA)
19	Lapeer (LP)
20	Alger (AG)
21	Marquette (MQ)
22	Cheboygan (CE)

	Ottawa County	Trend	Error Margin	Top U.S. Performers^	Michigan	Rank (of 83)
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Health Outcomes

Length of Life

Premature death	4,500		4,200-4,800	5,200	7,200	1
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Quality of Life

Poor or fair health**	10%		10-11%	12%	16%	2
Poor physical health days**	3.0		2.9-3.2	2.9	3.9	
Poor mental health days**	3.4		3.2-3.5	2.8	4.2	
Low birthweight	6%		6-7%	6%	8%	

Additional Health Outcomes (not included in overall ranking) +

Health Factors

Health Behaviors

Adult smoking**	15%		14-16%	14%	21%	
Adult obesity	26%		23-29%	25%	31%	
Food environment index	7.8			8.3	7.1	
Physical inactivity	19%		17-22%	20%	23%	



MICHIGAN

2015



Overview

Rankings

Measures

Downloads

Compare Counties

Select a county



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Help

Select a Measure:

HEALTH FACTORS

FOOD ENVIRONMENT INDEX



Food environment index

Index of factors that contribute to a healthy food environment, 0 (worst) to 10 (best). [Learn more about this measure.](#)

Map | Data | Description | Data Source | Policies

Ranking Methodology

Summary Measure: Health Factors - Health Behaviors (Diet and Exercise)

Weight in Health Factors: 2%

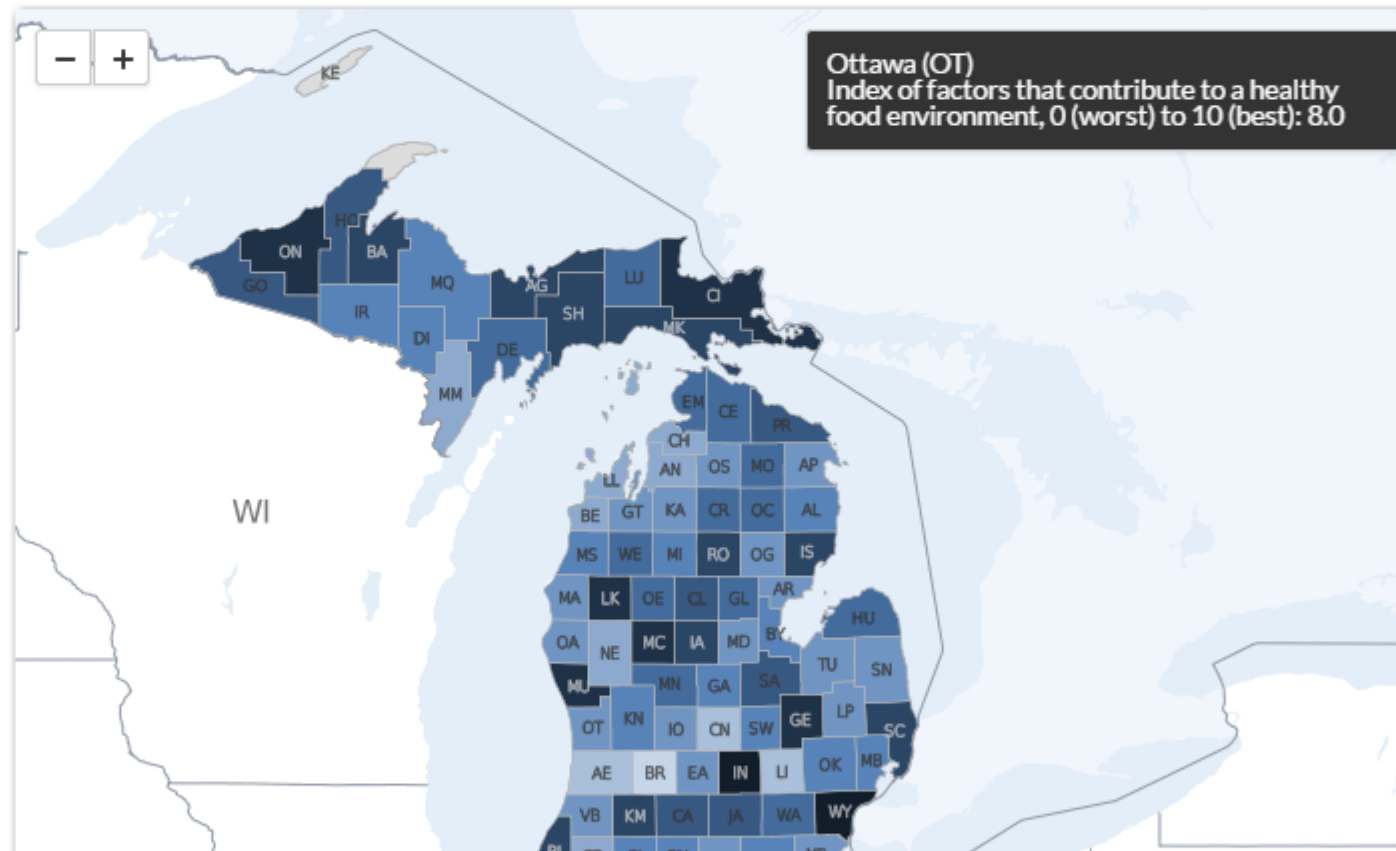
Years of Data Used: 2012

Summary Information

Range in Michigan (Min-Max): 6.1-8.9

Overall in Michigan: 7.2

Top U.S. Performers: 8.4 (90th percentile)



FEEDING AMERICA MAP THE MEAL GAP

- <http://map.feedingamerica.org/county/2013/overall>
- **Map the Meal Gap generates two types of community-level data:**
 - County-level food insecurity and child food insecurity estimates by income categories
 - An estimate of the food budget shortfall that food insecure individuals report they experience.



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The Impact of Hunger

Real Stories of Hunger

Our Research

News and Updates

Map the Meal Gap



HOW WE GOT THE MAP DATA

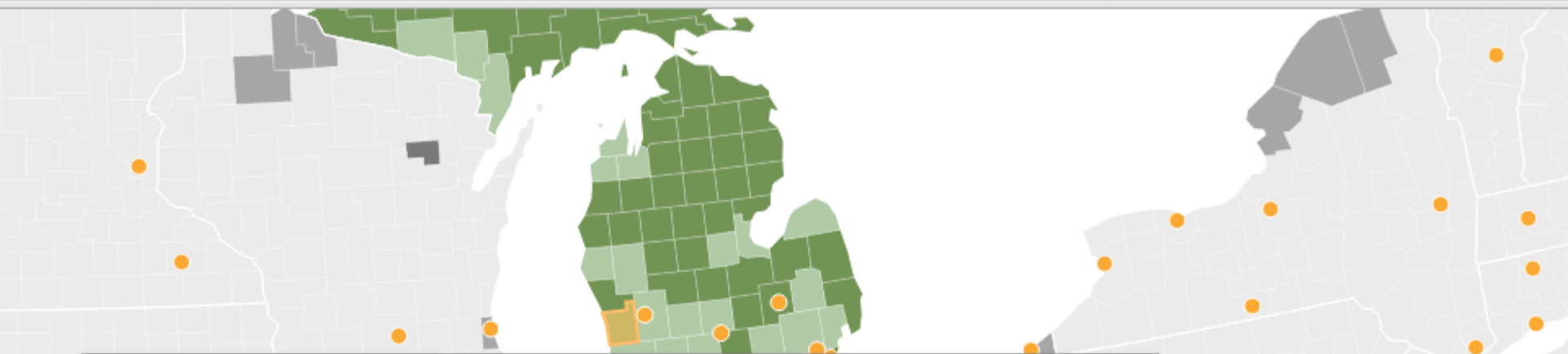
OVERALL EXECUTIVE SUMMARY

The maps below reflect 2011 - 2013 data, and will be updated every year with new data. Select a year and your state in our interactive map below and start learning more about the residents struggling with hunger in your community and the food banks that serve them.

Feeding America first published the Map the Meal Gap project in early 2011, with the generous support of the [Howard G. Buffett Foundation](#) and [Nielsen](#), to learn more about the face of hunger at the local level. In August, 2011, with the support of the [ConAgra Foods Foundation](#), child food insecurity data was added to the project.

- [Child Food Insecurity - Executive Summary](#)
- [Data by County in Each State](#)

Food Insecurity in The United States



OTTAWA COUNTY FOOD INSECURE PEOPLE: 29,400

<p>FOOD INSECURITY RATE</p> <p>11.0%</p>	<p>ESTIMATED PROGRAM ELIGIBILITY AMONG FOOD INSECURE PEOPLE</p> <p>33% Above SNAP, Other Nutrition Programs threshold of 200% poverty</p> <p>67% Below SNAP, Other Nutrition Programs threshold 200% poverty</p>	<p>AVERAGE COST OF A MEAL</p> <p>\$2.55</p> <p>ADDITIONAL MONEY REQUIRED TO MEET FOOD NEEDS</p> <p>\$13,274,000</p>
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CLICK A COUNTY TO VIEW DETAILS

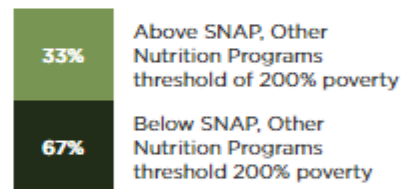
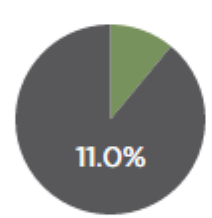
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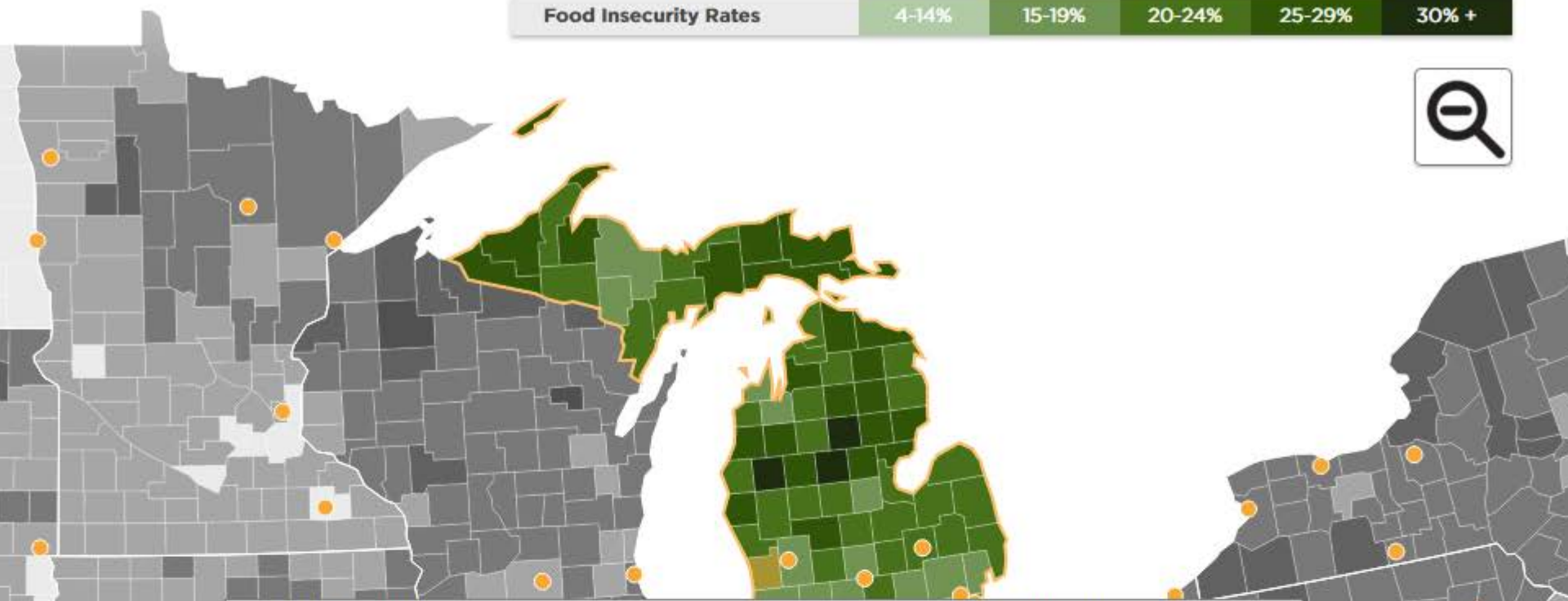
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AVERAGE COST OF A MEAL IN OTTAWA COUNTY **\$2.55**

ADDITIONAL MONEY REQUIRED TO MEET FOOD NEEDS **\$13,274,000**



OTTAWA COUNTY **FOOD INSECURE CHILDREN: 11,420**

FOOD INSECURITY RATE (OVERALL)	FOOD INSECURITY RATE (CHILD)	ESTIMATED PROGRAM ELIGIBILITY AMONG FOOD INSECURE CHILDREN
<p>11.0%</p>	<p>16.6%</p>	<p>34% Likely ineligible for federal nutrition programs (incomes above 185% of poverty)</p> <p>66% Income-eligible for nutrition programs (incomes at or below 185% of poverty)</p>

[CLICK A COUNTY TO VIEW DETAILS](#)



2013

Food Insecure Children in Michigan

480,490




FEEDING AMERICA “HUNGER IN AMERICA 2014” STUDY

- Provides comprehensive demographic profiles of people seeking food assistance through the charitable sector and in-depth analyses of the partner agencies in the Feeding America network.
- Conducted every 4 years
- The most recent involved 60,000 clients (client surveys) and 32,000 partner agencies (agency surveys)
- The OCFPC partners with Feeding America West Michigan, and they were able to share data specific to Ottawa County.
- This was the first time the study has been used to generate county-specific data.

Table A1 Agency and Program Characteristics

Characteristic	Count	Percentage	
		Estimate	Margin of Error (+/-)
with agency			
Staff from food bank	0	0%	0%
Staff from Farm Bureau or Cooperative extension	0	0%	0%
Staff from local colleges/universities	0	0%	0%
Someone else	4	33.3%	30.8%
Agency Obstacles to Distribution of Healthier Foods			
Client reasons (unwillingness to eat, inability to store, etc.)	29	45.5%	12.4%
Too expensive to purchase healthier foods	39	60.0%	12.1%
Inability to store/handle healthier foods	26	40.0%	12.1%
Lack of knowledge about healthier foods	6	9.1%	7.2%
Healthier food not a priority	17	27.3%	11.1%
Inability to obtain healthier foods from other donors/food sources	36	55.6%	12.3%
Agency Services Related to Government Programs			
Agencies that provided any SNAP-related services	10	15.6%	8.9%
Screening for eligibility	6	8.9%	7.0%
Application assistance	6	8.9%	7.0%
Education about the program	9	13.3%	8.4%

Table A4 Clients Use of Food Assistance

Characteristic	Count	Percentage	
		Estimate	Margin of Error (+/-)
Households participating in at least one child nutrition program			
One program	4,216	41.0%	3.2%
Two or more programs	1,500	14.6%	3.7%
Strategies for Food Assistance			
I usually wait to come to this program until I run out of food	6,401	63.4%	6.8%
I plan to get food here on a regular basis	3,689	36.6%	6.8%
Total excluding nonresponse	10,089	100.0%	.
Top Products Desired by Clients but Not Currently Receiving at Program 			
Beverages such as water or juice	822	8.2%	4.4%
Dairy products such as milk, cheese or yogurt	4,263	42.3%	2.1%
Fresh fruits and vegetables	7,312	72.6%	11.9%
Grains such as bread or pasta	++	++	++
Non-food items like shampoo, soap, or diapers	2,264	22.5%	1.9%
Nothing	++	++	++
Other foods or products	2,060	20.5%	5.7%
Protein food items like meats	5,753	57.1%	11.4%
This is my first time coming to this program	1,759	17.5%	5.3%

USDA FOOD ACCESS RESEARCH ATLAS

- **Presents a spatial overview of food access indicators for low-income and other census tracts using different measures of supermarket accessibility**
- **Provides food access data for populations within census tracts**
- **Offers census-tract-level data on food access that can be downloaded for community planning or research purposes.**



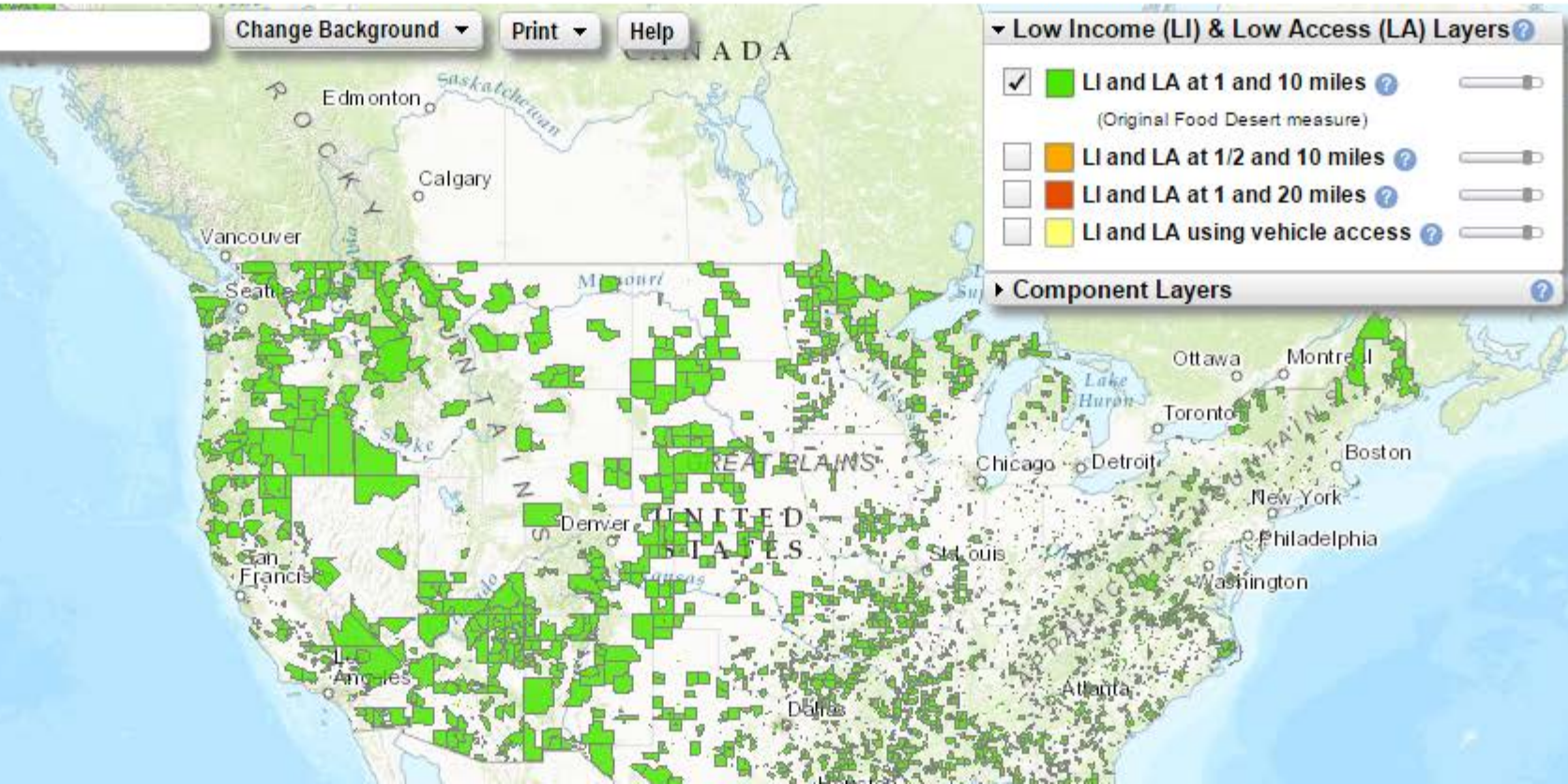
- Topics
- Data
- Publications
- Newsroom
- Calendar

You are here: Home / Data Products / Food Access Research Atlas / Go to the Atlas

Stay Connected

Food Access Research Atlas > Overview > Why Introduce a New Mapping Tool? > About the Atlas > Download the Data > Documentation

- Change Background
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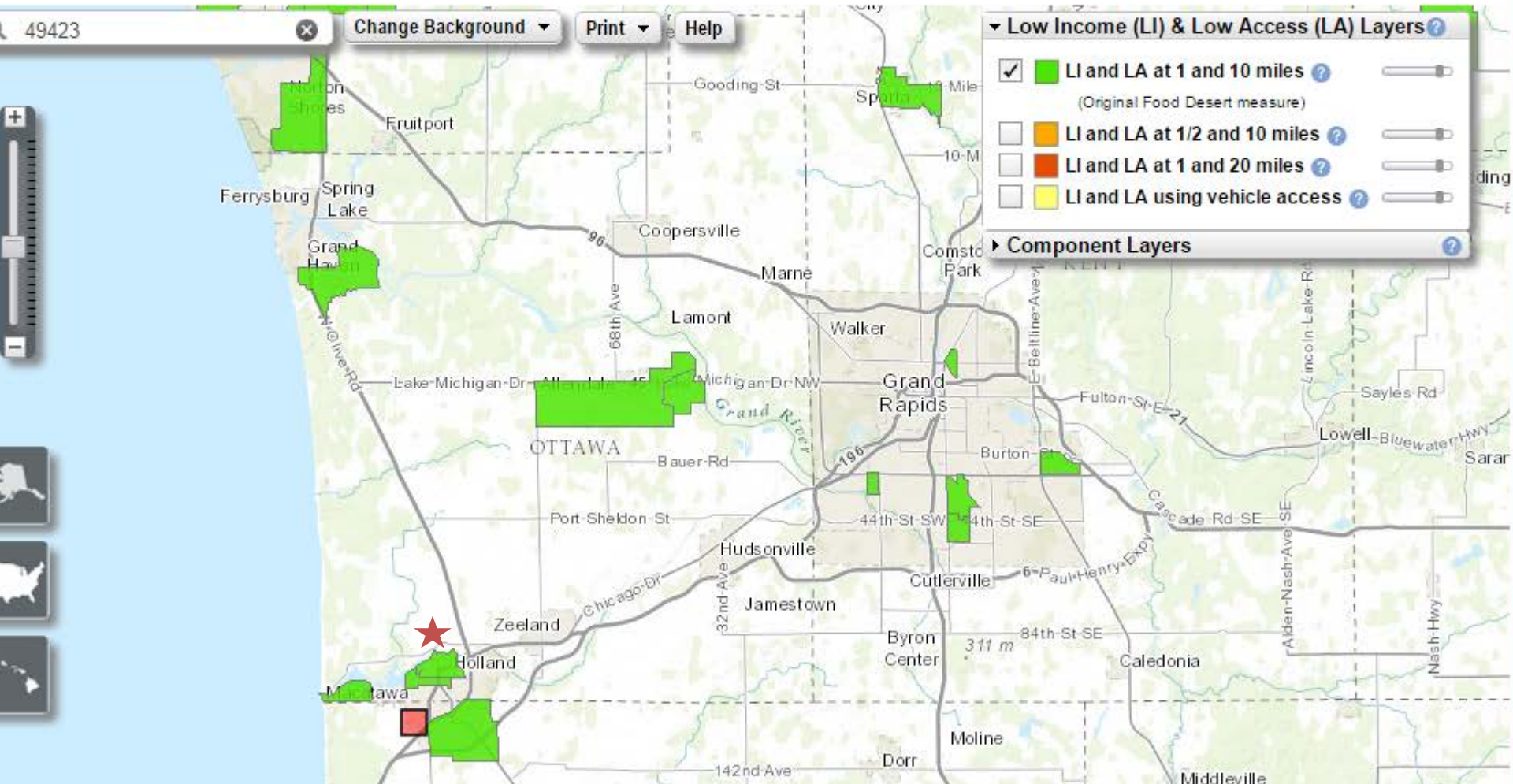


Low Income (LI) & Low Access (LA) Layers

- LI and LA at 1 and 10 miles** (Original Food Desert measure)
- LI and LA at 1/2 and 10 miles**
- LI and LA at 1 and 20 miles**
- LI and LA using vehicle access**

Component Layers





VALUE AND IMPACT OF SECONDARY DATA

- **It is much less expensive to collect secondary data than to obtain primary data.**
- **Can save a lot of time.**
- **Helps define the problem and focus efforts.**
- **Larger sample sizes**
- **Prevents unnecessary efforts-secondary data might be sufficient to solve the problem.**
 - For this reason, a search of secondary data sources should always come before primary research!

BRFSS

- **Behavioral Risk Factor Surveillance System**
- Adults living in households in the US
- Began in 1984, conducted annually
- Available free online in ASCII and SAS formats

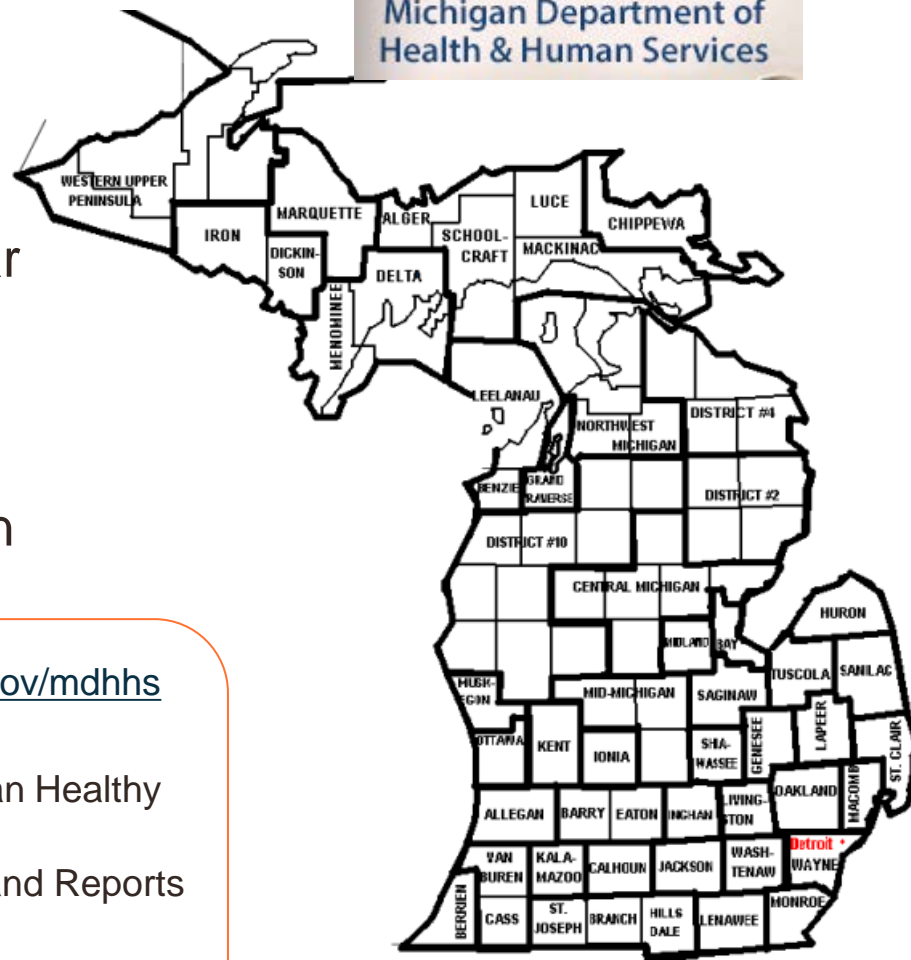


Certain data points incorporated into user friendly database (e.g., County Health Rankings)

MICHIGAN BRFSS



- State-level data reported annually
- Local and regional data based on 3-year averages
- Fruit and vegetable consumption questions included in odd years



www.michigan.gov/mdhhs



Keeping Michigan Healthy



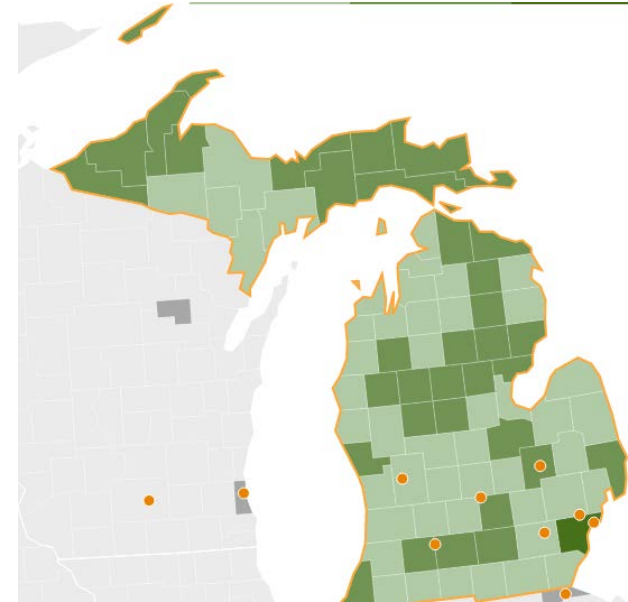
Health Statistics and Reports



MiBRFSS

FEEDING AMERICA MAP THE MEAL GAP

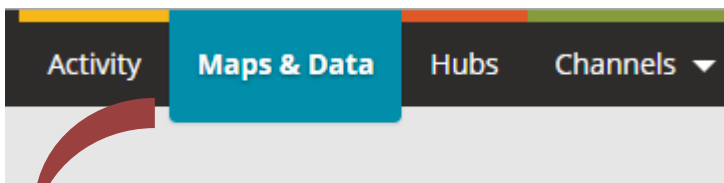
- **Composite of secondary data**
- **Search by county or congressional district**
- **Food insecurity estimated based on calculation**
 - Poverty rates, unemployment rates, median income, race/ethnicity, home ownership
 - American Community Survey, Bureau of Labor Statistics
 - Multi-year averages (2009-2013)
- **Money required to meet food needs**
 - National average of \$16.28 per person per week
 - County-specific cost of food index based on Nielsen data





COMMUNITY COMMONS

- www.communitycommons.org
- Free but requires personal login



Food



Examine food access, affordability, and security.

Food Environment Report

Create a report examining select indicators related to your local food environment.

Food Access Gallery

Find food deserts, food access points and more in these maps created by users

SNAP and Race/Ethnicity

Access locations of SNAP retailers with predominant race/ethnicity

Supermarket Locations

Locations of supermarkets and other food retailers.



COMMUNITY COMMONS

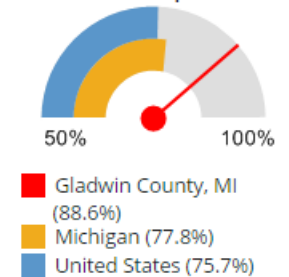
Inadequate Fruit/Vegetable Consumption (Adult)

In the report area an estimated 18,547, or 88.6% of adults over the age of 18 are consuming less than 5 servings of fruits and vegetables each day. This indicator is relevant because current behaviors are determinants of future health, and because unhealthy eating habits may cause of significant health issues, such as obesity and diabetes.

[Download Data](#)

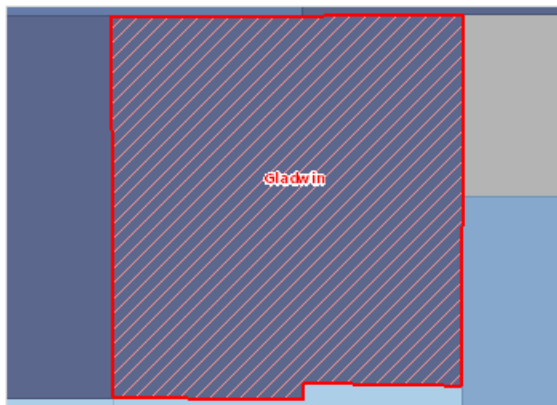
Report Area	Total Population (Age 18+)	Total Adults with Inadequate Fruit / Vegetable Consumption	Percent Adults with Inadequate Fruit / Vegetable Consumption
Gladwin County, MI	20,933	18,547	88.6%
Michigan	7,600,237	5,912,984	77.8%
United States	227,279,010	171,972,118	75.7%

Percent Adults with Inadequate Fruit / Vegetable Consumption



Note: This indicator is compared with the state average.

Data Source: Centers for Disease Control and Prevention, [Behavioral Risk Factor Surveillance System](#). Accessed via the [Health Indicators Warehouse](#). US Department of Health & Human Services, [Health Indicators Warehouse](#). 2005-09. Source geography: County



Inadequate Fruit/Vegetable Consumption, Percent of Adults Age 18+ by County, BRFSS 2005-09

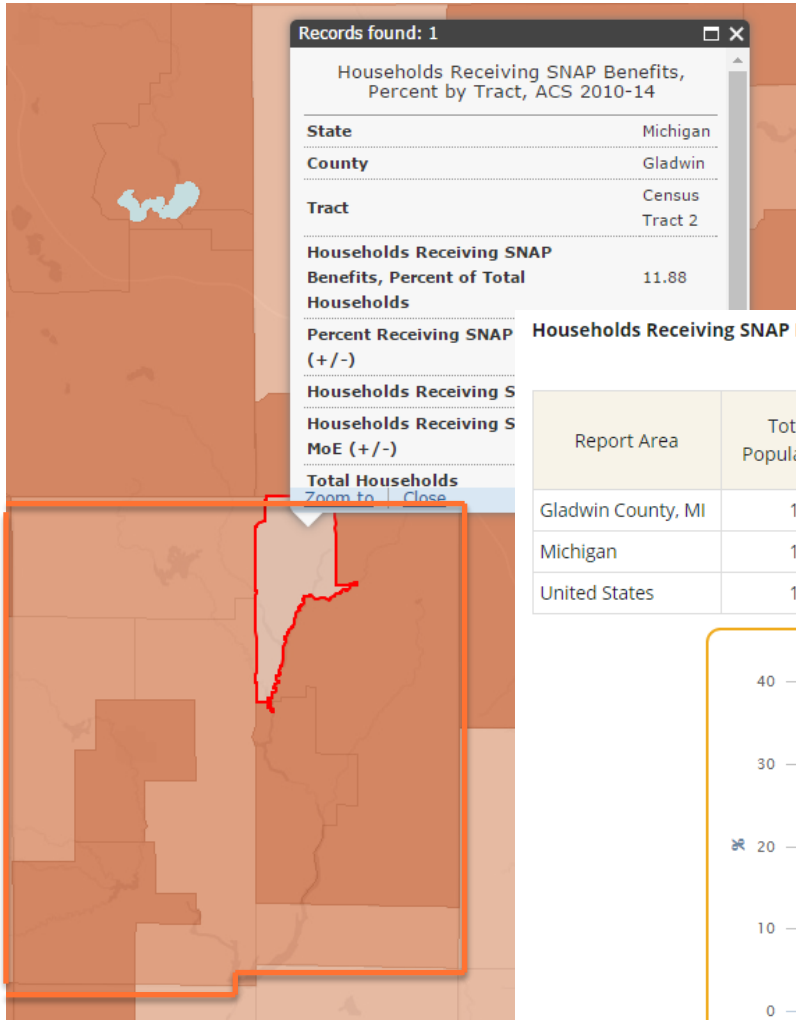
- Over 85.0%
- 80.1 - 85.0%
- 75.1 - 80.0%
- Under 75.1%
- No Data or Data Suppressed
- Report Area

Start by selecting a state and a county or multi-county area.

[View larger map](#)



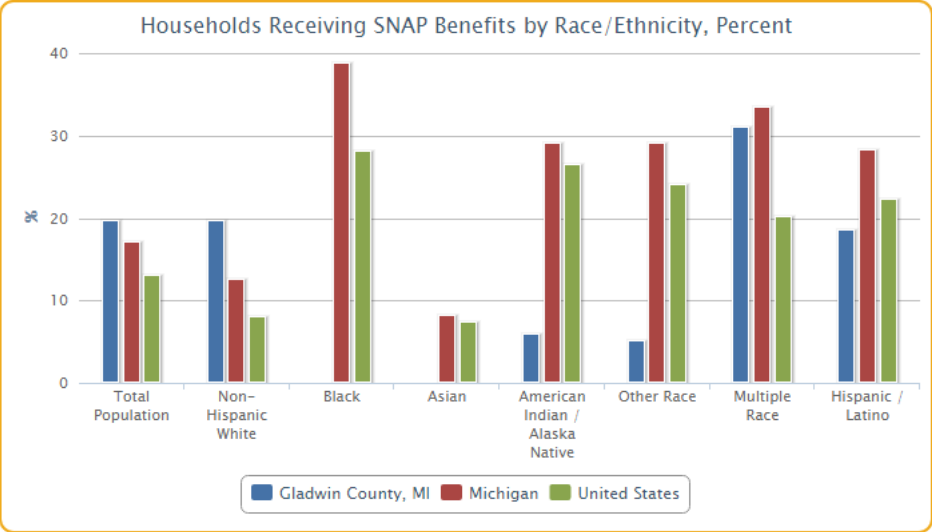
Households receiving SNAP benefits available by census tract and by race/ethnicity.



Households Receiving SNAP Benefits by Race/Ethnicity, Percent

[Download Data](#)

Report Area	Total Population	Non-Hispanic White	Black	Asian	American Indian / Alaska Native	Other Race	Multiple Race	Hispanic / Latino
Gladwin County, MI	19.65%	19.6%	0	0%	5.88%	5.13%	31.08%	18.56%
Michigan	17.08%	12.62%	38.78	8.17%	29.02%	29.03%	33.43%	28.24%
United States	12.98%	7.99%	28.07	7.42%	26.45%	24.04%	20.23%	22.24%



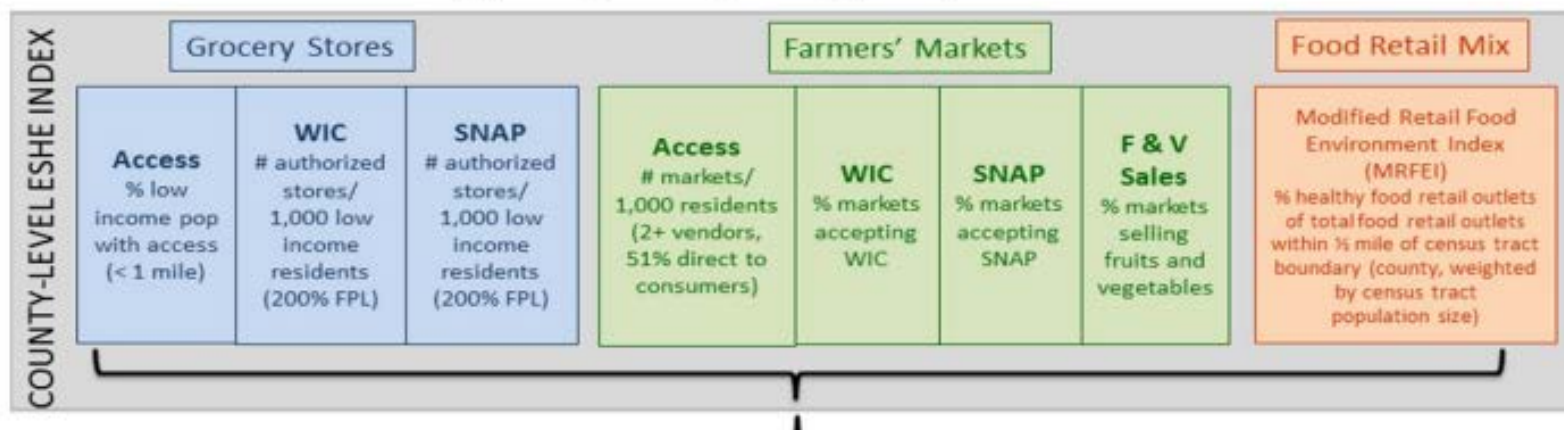
ENVIRONMENTS SUPPORTING HEALTHY EATING INDEX (ESHE)

- <http://www.communitycommons.org/groups/childhood-obesity-gis/eshe/>

State-Level ESHE Index

- Sales tax for chips and soda at vending machines
- Sales tax for chips and soda at retail stores
- Quality of meals at child care
- Quality of school meals
- A la carte items in schools
- Nutrition education in schools
- Commercial advertising in schools

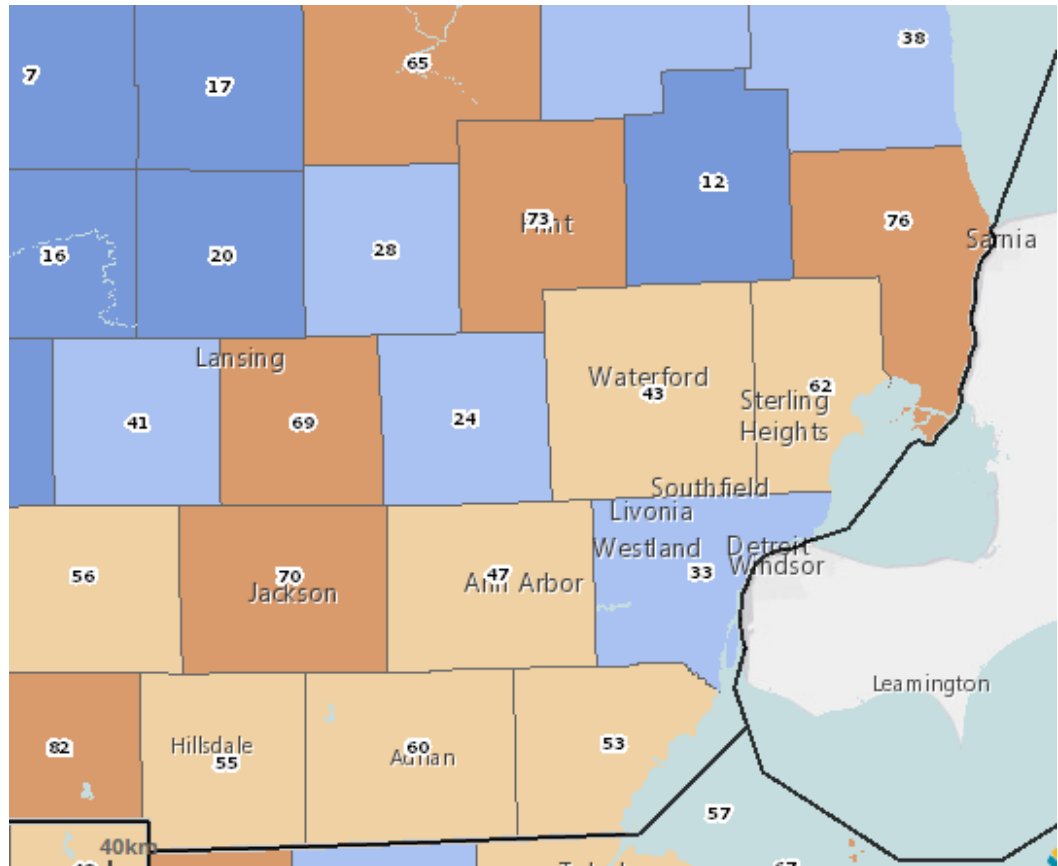
Environments Supporting Healthy Eating (ESHE) Index Assessment Process



ENVIRONMENTS SUPPORTING HEALTHY EATING INDEX (ESHE)

Ingham County

- Ranks 69 of 83 among Michigan counties
- Ranks 15 of 29 among peer counties nationally



NATIONAL EQUITY ATLAS

- www.nationalequityatlas.org
- **Regions included:**
 - Ann Arbor, MI: Washtenaw
 - Detroit City
 - Detroit-Warren-Livonia, MI: Wayne, Lapeer, Livingston, Macomb, Oakland, St. Clair
 - Flint, MI: Genesee
 - Grand Rapids-Wyoming, MI: Barry, Ionia, Kent, Newaygo
 - Kalamazoo-Portage, MI: Kalamazoo, Van Buren
 - Lansing-East Lansing, MI: Clinton, Eaton, Ingham
 - South Bend-Mishawaka, IN-MI: St. Joseph, Cass (MI)
- **Updating and expanding**

Indicators

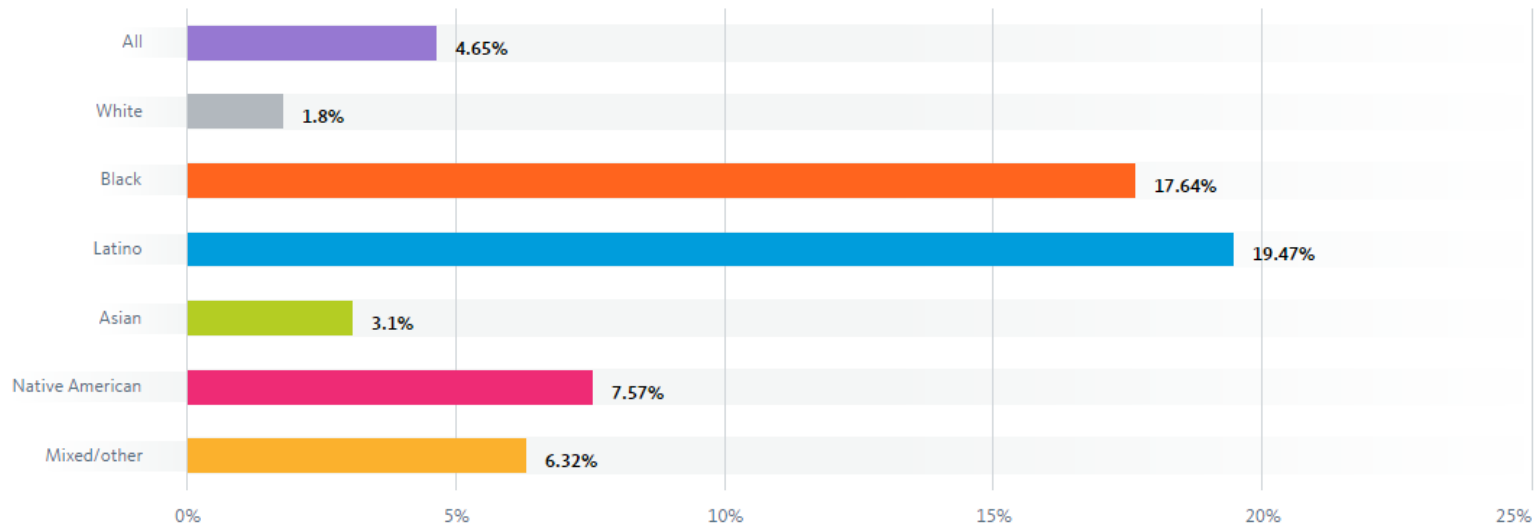
Select an indicator from the menus below: Demographics ▾ Equity ▾ Economic Benefits ▾

Enter a state, region, or city name: [Explore](#)

Nighborhood poverty [?](#) Grand Rapids-Wyoming, MI Metro Area

Breakdown:

Percent living in high-poverty neighborhoods by race/ethnicity: Grand Rapids-Wyoming, MI Metro Area, 2012



U.S. Census Bureau; GeoLytics, Inc.

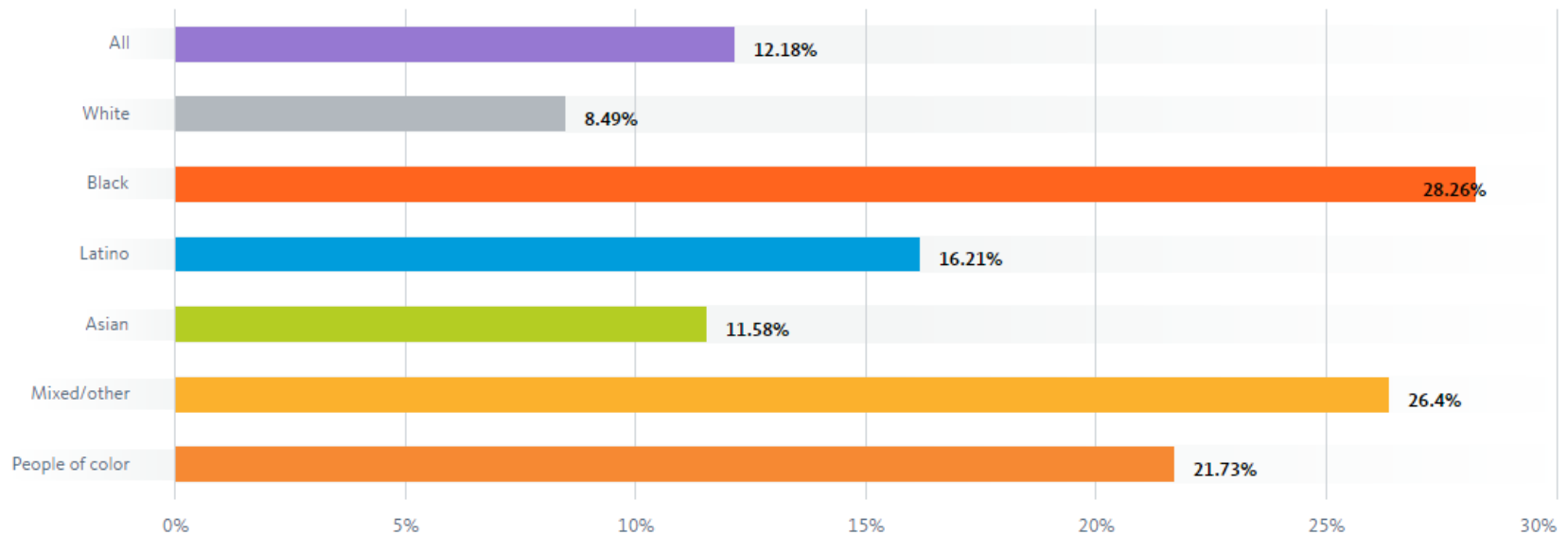
Year(s):

National Equity Atlas

Disconnected youth [?](#) Grand Rapids-Wyoming, MI Metro Area

Breakdown:

Percent of 16 to 24 year olds not working or in school: Grand Rapids-Wyoming, MI Metro Area, 2012



IPUMS

Filter options

Search

Text Contains

Level

- Individual: (53)
- Household: (16)
- School: (8)
- Community: (17)
- Macro/Policy: (13)
- Other: (17)

Scope

- Local: (37)
- State: (41)
- National: (94)

Key Variables

- Diet related: (83)
- Physical activity related: (51)
- Weight related: (40)
- Geocode/Linkage: (83)

Age Groups

- Infants: (47)
- Preschool children: (47)
- School age children: (62)
- Teenagers/Adolescents: (69)
- Adults: (73)

Racial/Ethnic Groups

- Asian/Pacific Islanders: (24)
- Blacks: (44)
- Hispanics: (44)
- Native Americans/Alaskan Natives: (12)
- Whites: (51)

Design

- Panel/longitudinal: (20)
- Cross-sectional: (64)
- Other: (23)

Cost

- Some/all public use data free: (86)
- Fee based: (19)

NCCOR – CATALOGUE OF SURVEILLANCE SYSTEMS



Health Information National Trends Survey (HINTS)

At A Glance

Sampling

Key Variables

Data Access & Cost

Geocode/Linkage

Selected Publications

Resources

Demographic

Name	Methods of Assessment
Age	Interview/questionnaire
English fluency	Interview/questionnaire
Household income	Interview/questionnaire
Household size (number of related and unrelated members)	Interview/questionnaire
Race/ethnicity	Interview/questionnaire
Sex	Interview/questionnaire
Whether respondent has children younger than age 18 years	Interview/questionnaire
Whether respondent was born in the US; if not, what year came to US	Interview/questionnaire
Whether respondent rents or owns home	Interview/questionnaire
Whether respondent is able to save money each month	Interview/questionnaire
↑ Collapse	

Diet-Related

Name	Methods of Assessment
Amounts of fruits and vegetables respondent believes should be consumed each day for good health	Interview/questionnaire
Awareness of, attention to, beliefs about, and response to new nutrition recommendations	Interview/questionnaire
Frequency of fruit consumption (includes daily servings)	Interview/questionnaire
Frequency of vegetable consumption (includes daily servings)	Interview/questionnaire
Frequency of drinking 100% fruit juice	Interview/questionnaire
Sources of information about diet	Interview/questionnaire
↑ Collapse	

KEY TAKE-AWAYS

- **Secondary data is readily available and very useful**
- **Measurement is never perfect**
- **The smaller the region and the smaller the sub-population, the higher the margin of error**
- **Remember to consider what is NOT represented**
- **Let's learn together!**

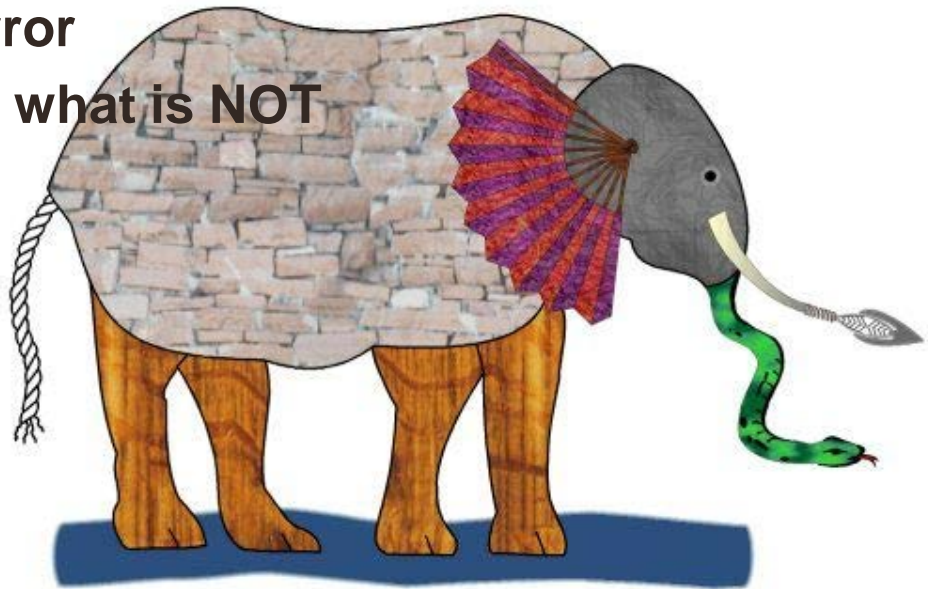


Image courtesy of http://www.noogenesis.com/pineapple/blind_men_elephant.html

Questions?

