

Health Impact Assessment of Adding a Grocery Store in the Meadows Community

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Acknowledgement

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- Partners:
- Marion County Public Health Department
 - Sandy Cummings MSW Co-PI
- Avondale Meadows Community



Overview

- How is health defined?
- What is a Health Impact Assessment (HIA)?
- What did the HIA find about placing a full service grocery store in the Meadows community?



How is health defined with health impact assessments?

- WHO definition:
- Health is a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity.



Factors Responsible for Population Health



Genetics 20-30%; Health Care 10%

Social, environmental and behavior 60-70%



What is a health impact assessment?

- A systematic process
 - using data sources
 - analytic methods
 - input from stakeholders
 - to determine the potential effects of a proposed policy, plan or project
 - on the health of a population

HIA Purpose

Through HIA report and communications

Judge health effects of a proposed project, plan or policy

Highlight health disparities

Provide recommendations

Raise awareness among decision makers and the public

Make health impacts more explicit

Through the HIA process

Engage & empower community

Recognize lived experience

Build relationships & collaborations

Improve the evidence

Improve transparency in decision making



Steps of HIA

HIA Step	Description
Screening	Determines the need and value of an HIA
Scoping	Determines which health impacts to evaluate, methods for analysis, and a work plan
Assessment	Provides: 1) a profile of existing health conditions 2) evaluation of potential health impacts
Recommendations	Provide strategies to manage identified adverse health impacts and maximize benefits to health
Reporting	Includes: 1) development of the HIA report 2) communication of findings & recommendations
Monitoring/Evaluation	Tracks: 1) impacts on decision-making processes and the decision 2) impacts of the decision on health determinants

Principles and Values of HIA

HIA Principle	An HIA should . . .
Democracy	Involve and engage the public, and inform and influence decision-makers
Equity	Consider distribution of health impacts, pay attention to vulnerable groups and recommend ways to improve proposed decisions for affected groups
Sustainable Development	Judge short- and long-term impacts of a proposal
Ethical Use of Evidence	Use evidence to judge impacts and inform recommendations, not set to support or refute a proposal; be rigorous and transparent
Comprehensive Approach to Health	Be guided by the wider determinants of health



Completed HIAs

Year	Topic	Partners
2011	Potential bus expansion on physical activity, obesity and diabetes	Indy Connect Health by Design
	Safe Routes to School	Binford Redevelopment Group and Lawrence Township Schools
2012	Potential impact of a full service grocery store on the Meadows Community	Marion County Public Health Department Meadows Community City Councillor Stark
2013	Northwest Community Quality of Life Plan	Northwest Community Group
2014	Brownfield redevelopment project	City Metropolitan Development Dept Marion County PH Dept Keramedia



HIA project

- What is the potential health impact of a full service grocery store in the Meadows community (which is a food desert)?

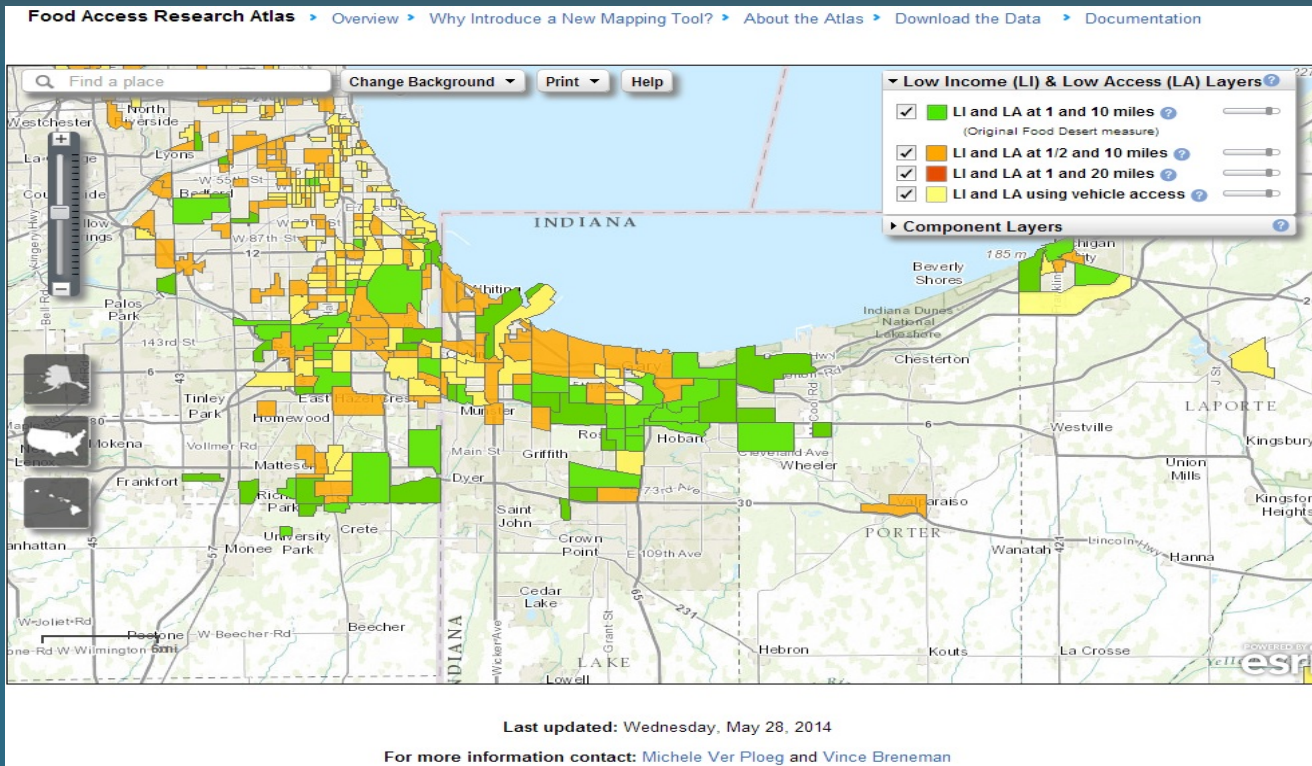


What is a food desert?

- U.S.D.A.: Urban: area without access to fresh healthy and affordable food.
 - Low income: 20% or greater at poverty rate
 - 500 persons or 33% of census tract live more than one mile from a large grocery store
- Food Desert Atlas:
www.ers.usda.gov/data/fooddesert
- Walk Score Report:
<http://blog.walkscore.com/2014>



Gary Food Deserts



<http://www.ers.usda.gov/data-products/food-access-research-atlas/go-to-the-atlas.aspx#.U62iD7EdYqU>



Meadows HIA project

- Started in November 2012 completed in June 2013
- Avondale Meadows community - Northeast area of Indianapolis (just east of State Fair grounds)



Neighborhood views of project site



Assessment Step for this project

- Literature Review
- Primary data collection
 - Key informant interviews
 - Community survey
 - Retail food environment survey-NEMS
- Community health profile



Review of literature

- The presence of supermarkets is associated with a lower prevalence of obesity, overweight, and hypertension
- The presence of convenience stores is associated with higher rates of obesity and overweight especially among adolescents (Morland, 2005)



Key Informant Interviews and Stakeholder Meeting Findings

- Residents want a full service grocery store
- People drive too far to get to grocery store
- People want to know why healthy food is important and how to cook it
- Price and quality of food in a new store are important to residents
- Cub Foods closing left a lasting impression



Review of literature - cost of diabetes

	U.S.*	Indiana**
Total cost of diabetes	\$245 billion	\$4 billion
Cost for direct medical care	\$176 billion	
Cost of reduced productivity	\$69 billion	
Average medical cost per person with diabetes	\$11,744	
Average medical cost per person without diabetes	\$2,935	
Largest component of direct costs inpatient hospital care	50%	
Length of hospital stay with diabetes	4.8 days	4.9 days

Source* American Diabetes Association 2013

Source ** Indiana State Department of Health 2011



Retail Food Environment (NEMS-S)

- NEMS-S convenience stores - 10 of 11 stores
 - Only one sold fresh fruits and vegetables
 - One other stores sold only apples or oranges
 - Fresh items sold for \$0.99 each vs. in a grocery store where a pound of bananas may be \$0.60
 - All grocery stores being surveyed had 100% of the healthy items on the NEMS-S tool
 - There were concerns about some of the stores' cleanliness and quality of produce



Neighborhood Survey

- Demographics of sample N=344
 - Age 18-92 mean age 48.08
 - Most were females 74%
 - Majority had households with children 55%
- Outcomes
 - 80% felt they could get all the groceries they need
 - 64% selected 12 or more healthy options



Hospital and Emergency Dept. Discharges 2009-2011

	Hospitalization rates Meadows	Hospitalization rates County	ED rates Meadows	ED rates County
Total (all causes)	1,277	1,175	6,044	4,325
Diabetes	29.8	20.1	49.1	29.1
Hypertension	30.9	14.5	63.3	34.3
Ischemic Heart Disease	42.7	38.0	8.9	7.9
Cerebrovascular Disease	42.9	29.1	5.6	5.1

Average annual rate 2009-2011 (rates per 10,000)

Source: Marion County Resident & Hospital Discharges 2009-11, Principal diagnosis
Marion County Emergency Department Encounter Data, 2009-11, Principal diagnosis



Mortality Data Meadows and Marion County for 2008-2012

Cause of Death	Meadows	Marion County
Total (all causes)	920.76	756.11
Diabetes	25.03	17.78
Hypertension	30.12	17.76
Ischemic Heart disease	105.81	96.59
Cerebrovascular disease	47.82	37.57

Average annual rate 2008-12 (rates per 100,000)

Source: Marion County Public Health Department Resident Death Certificate Analytic Dataset, 2008-12, Official Cause of Death



Prevalence of Heart Disease, Diabetes and Hypertension: Meadows vs Marion County - with Annual Individual Expenditure Estimates

	Meadows estimated % with disease ¹	Marion Co. estimated % with disease ¹	Avg estimated annual expenditure incurred per adult
Heart disease	6.5%	7.7%	\$4279 (2009) ²
Diabetes	19%	14%	\$7900 (2012) ³
Hypertension	41%	31%	\$733 (2010) ⁴

¹ Disease Prevalence Data:

Marion County Community Health Assessment, Marion County Public Health Department, 2012 (Meadows area defined by zip codes 46205, 46218, 46226); figures are 95% confidence intervals

Expenditure Data:

²Agency for Healthcare Research and Quality (AHRQ), Medical Expenditure Panel Survey (MEPS), 2012

³American Diabetes Association, Diabetes Care, March 2013

⁴AHRQ/MEPS, April 2013



Recommendations

- Seek out partners to offer more healthy food in existing convenience stores
- Support expanded transit and sidewalks
- Share data with stakeholders to continue to support a TIF or other economic development
- Secure the right “foot print” for a grocery store that is not too large or too small
- Negotiate with the new grocery store to explore amenities such as cooking classes, a pharmacy, labeling of healthy foods
- Provide nutrition education



Reporting

- Report submitted to funder
- Presented project to funder's stakeholder meeting
- Distributed paper to project stakeholder group members
- Report on IU website and RWJF Health Impact Projects website
- Shared at local, state and national meetings



Monitoring/Evaluation

- Included in report to stakeholders by Meadows' developer, Strategic Growth Partners
- Used by City of Indianapolis in “New Market Tax Credit” grant application
- Continue to discuss periodically with Avondale Meadows Representatives and City Council member



Conclusions - A full service grocery store could...

- Increase the frequency that residents would shop
- Increase the amount of healthy foods residents would consume
- Decrease the incidence of obesity, diabetes, and cardiovascular disease
- Decrease the cost of obesity, diabetes, and cardiovascular disease
- Improve economic well-being of the area



Questions?

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