



The Urban Community as an Obesogenic Environment

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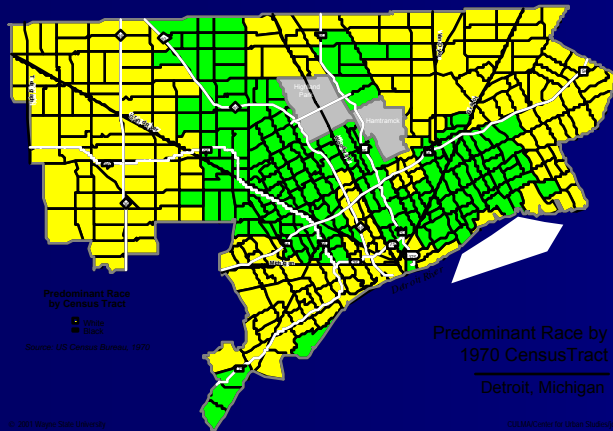
Objectives

- Describe the obesogenic environment of a Latino community with excess rates of childhood obesity
- Identify environmental factors that potentially moderate PA and healthy eating behaviors
- Recommend programmatic approaches that target behavioral contexts as well as individuals

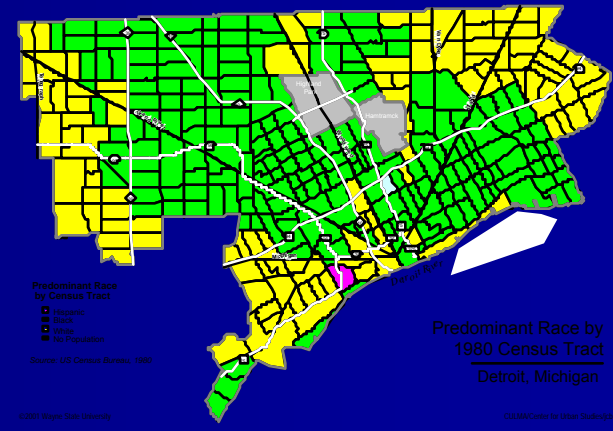
Background

- Adolescent obesity rates have quintupled since 1970s
- Medical consequences of obesity in the US cost an estimated \$100 billion a year
- Long term effects of behavioral interventions have been disappointing
- A better understanding of environmental moderators (physical and social) is critical

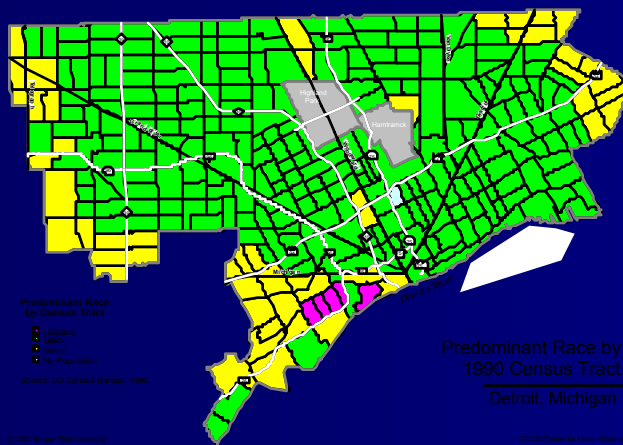
Detroit's Growing Hispanic Community: 1970-2000



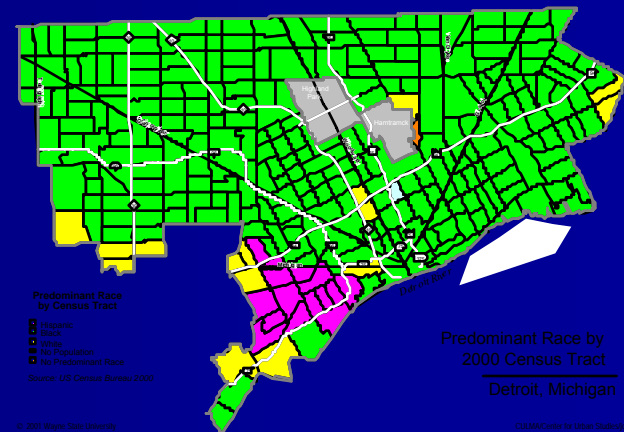
Predominant Race by
1970 Census Tract
Detroit, Michigan



Predominant Race by
1980 Census Tract
Detroit, Michigan



Predominant Race by
1990 Census Tract
Detroit, Michigan



Predominant Race by
2000 Census Tract
Detroit, Michigan

Methodology

Focus Groups: Mothers & Children	16 parents 30 children
Interviews: School & Community Leaders	7 principals 6 community
Phone Survey: Parents of overweight children	N=300
Questionnaires: Parents & Children	N=86
Participatory-Observation: School; Community	12 months

Focus Group Questions: Children

Questions addressed

Routines, habits related to eating or being physically active at home, school, neighborhood

Beliefs about peers', parents' expectations for these behaviors

Variation in season, time of day, day of week, holidays

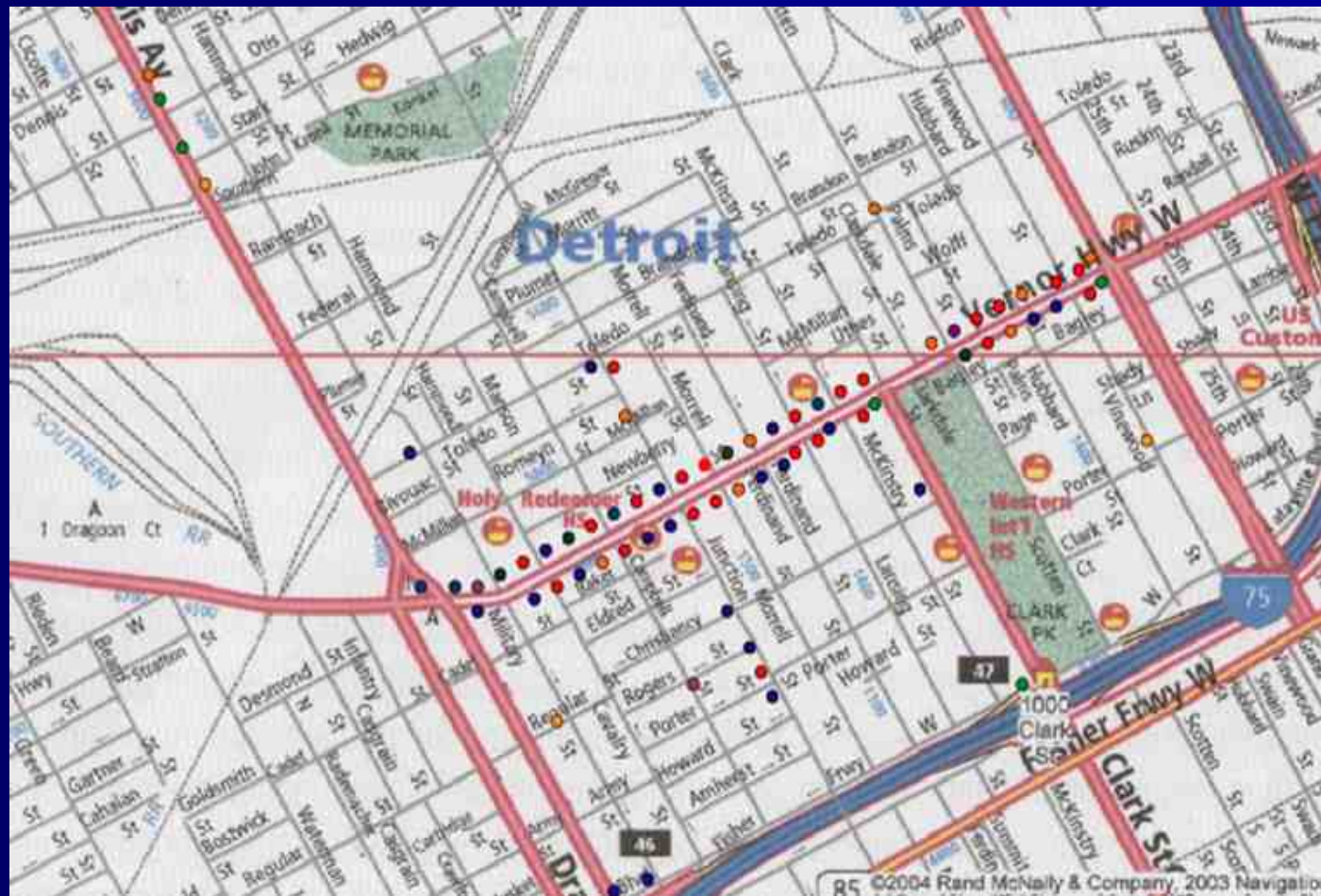
Survey Demographics (N=86)



Family Characteristics	%; M(SD)
■ 2 Parent Household	60
■ Total Adults/ Total Children	2 (.86) 3 (1.4)
Primary Language: Spanish	64
Highest Household Education: HS	55
Employed Adult	60
Target Children	
■ Gender F/M	50/50
■ Age	12.7 (1.5)
■ BMI %ile	97 (2.6)
■ Total cholesterol: \geq 170 mg/dl	35
■ Blood Pressure : \geq 90% ile	25
■ Kid's Self-assessed Health: Fair or Poor	37

Findings

Community Mapping: 84 Food Sources within 1 mile



Neighborhood Behavioral Context



Perceived Neighborhood Barriers

SAFETY

"How often do you feel your child is safe at ____?"

[Never=1; Sometimes=2; Usually=3; Always=4]

	<u>Mean</u>	<u>(SD)</u>
- Home	3.73	(.63)
- School	2.96	(.84)
- Neighborhood	2.48	(.90)

NEIGHBORHOOD COHESIVENESS

"We help each other" 2.19 (.92)

"We watch out for each other" 2.03 (1.0)

"There are people I can count on" 1.90 (.92)

SOCIAL INFLUENCES

2.29 (1.2)

" There are people who might be a bad influence on my child"

[1= Definitely agree; 2- Somewhat agree; 3= Somewhat disagree; 4= Definitely disagree]

School Eating Environment

Middle school children	<p>"You don't want to eat in school."</p> <p>"We buy chips and soda."</p> <p>"It is embarrassing if your lunch looks too homemade."</p> <p>"I hate it when the guard looks into your lunch bag at the door."</p> <p>"We wait and eat as soon as we get home."</p>
Parents	<p>"Our children don't want to carry their lunch because they get teased. They wait until they get home"</p> <p>"I wish that there was a healthier lunch at school."</p>
Lunchroom Staff	<p>"Between 50-60% of kids don't eat at lunch time."</p> <p>"Some kids overeat. They collect uneaten items from other kids, extra milks, hamburgers. We know that these kids are the ones with no food at home."</p>

Home Eating Environment

Children	"A good meal is when there is meat."
Mothers	"My kids come home hungry so I have dinner ready when they get home." "Our children will not accept healthy meals. It becomes a great struggle..." "I wish my kids would eat more fruit and vegetables."
Family	"We usually don't eat together during the week" "On weekends we go out to eat at a restaurant." "Sunday is family time. We go out to dinner after church."

Behavioral Risk Factors: Children

- 12% report no days of activity
- 60% Never involved with structured sports
- 20% Screen time >6 hrs/day
 - 50% of kids have TV's in their rooms
 - ≥ 3 TVs/ household
- 2 cans of pop, sweetened drinks /day

Conclusions

Potential Behavioral Moderators

- Eating behavioral contexts
 - Seamless availability of high calorie/low nutrient, foods in all settings: home, street, school
 - Strong social influences reinforce no eating or unhealthy eating during the school day
 - Unsupervised, unstructured eating reduces parental opportunity for modeling and support

Potential Behavioral Moderators

- Physical Activity behavioral contexts
 - Neighborhood danger isolates kids in backyard or bedroom spaces for PA
 - Transportation, time, costs limits access to PA resources beyond immediate neighborhood
 - PA opportunities in schools reinforce sedentariness in girls v. boys

Recommendations

- Federal and State leadership is needed to restructure subsidized lunch program to increase access to palatable, healthy food
 - Parent-Community advisory board
- Comprehensive school-level intervention must address food culture as well as food policies

Recommendations

- Family-level intervention should develop parent's support and modeling skills for healthy eating and lifestyle PA
- Schools are an underutilized community asset for safe PA in disadvantaged urban neighborhoods