



# “If We Build It...”: Promoting Greenway Use to Increase Physical Activity

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On behalf of the Healthy Environments Partnership

American Public Health Association Meeting,  
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Washington, DC.

# Objectives

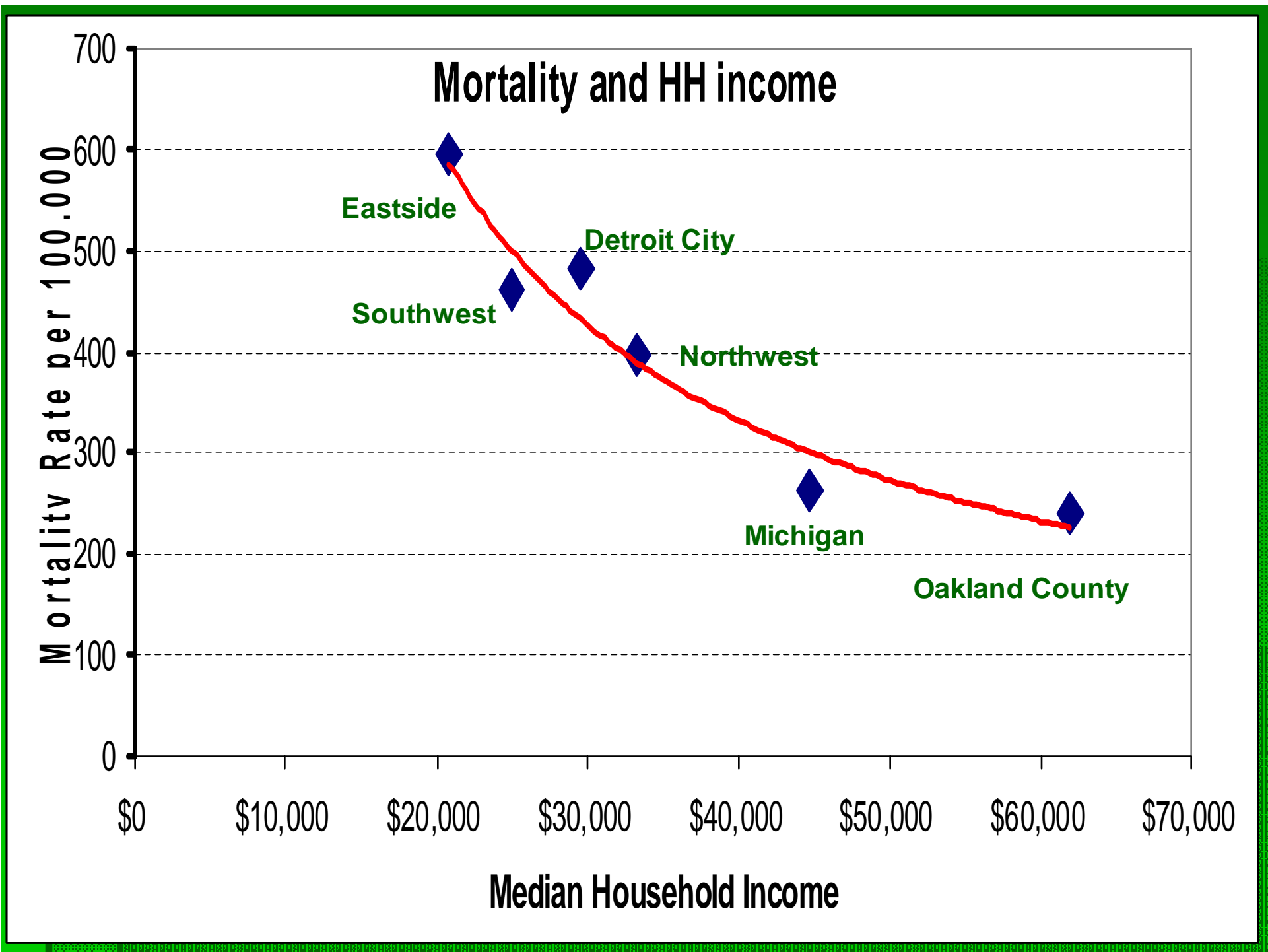
- Describe Lean and Green in Motown (LGM)
- Describe CBPR Process used to develop, implement and evaluate LGM
- Discuss lessons learned and implications for multilevel interventions to reduce obesity and promote cardiovascular health

# Healthy Environments Partnership 2000-2007

- Partners:
  - Brightmoor Community Center
  - Detroit Department of Health & Wellness Promotion
  - Detroit Hispanic Development Corporation
  - Friends of Parkside
  - Henry Ford Health System
  - Rebuilding Communities Incorporated
  - University of Michigan School of Public Health
- Community-based participatory research (CBPR)
- Promote heart health in Detroit.

# Community Based Participatory Research (CBPR)

- All partners engaged in decisions about:
  - Research Questions
  - Study Design
  - Data Collection
  - Interpretation of Results
  - Use of Results to Inform Community Change



# HEP Groundwork 2000-2005

- HEP SC: Ongoing participation and influence
- Multi-method study of CVD in 3 Detroit Neighborhoods
- Selected Results:
  - SEP → Stress → multiple risk factors for CVD
  - Airborne particulate matter (PM) → BP
  - Effects of PM on BP increased for those with BMI > 30

# Define Research Questions: Meetings With Greenway Groups (2004)

- Community Foundation of Southeast Michigan
- Local Groups Develop Plans & Lead Greenway Development
  - Detroit Eastside Community Collaborative (DECC)
  - Corktown CDC
  - Northwest Detroit Neighborhood Development CDC

# Define Research Questions: Meetings with Greenway Groups

- Greenway Groups: Focus on Fundraising, Planning, Building
- Local Investment in Greenway Development
- Questions:
  - Will people use it? How many? Who?
  - What will promote & support use (e.g., programs, physical conditions)?
  - What difference will it make (e.g., economic, health)?



# Define the Research Questions: LGM Proposal

- What characteristics of the built environment are associated with:
  - physical activity generally
  - greenway use in particular?
- Do changes in the environment (e.g., greenway improvements) in conjunction with informational and psychosocial interventions, increase physical activity among residents?

# Shaping the Study Design: Modifications of built environment & behavioral interventions



Northwest Greenway: Planned Route



# Shaping the Study Design: Focus Groups: What Encourages Physical Activity?

Outdoor community events – music, dancing, activities for youth AIDS walks.

Trails and parks that are easy to get to.



More trails all over the neighborhood; having the pathway connect to other areas of the city ...

“If I saw more people walking I would be more involved.”



# Shaping the Study Design: Promote Greenway Use & Heart Healthy Diets

## Activities in your Area

### Market Days at Eastern Market

At **Detroit's Historic Eastern Market** you can get your fresh fruits and vegetables as well as fresh fish and seafood. The produce is freshest on Saturdays when you can buy directly from the farmers. Saturday is not the only day to enjoy the market. The market is open Monday –Saturday, 7 a.m. to 5 p.m. Eastern Market is located at 2934 Russell Street.

### Starting Your own Vegetable Garden

If you are interested in starting a community or neighborhood vegetable garden, **Greening of Detroit** can help you get started! They offer education on gardening, tree planting and training for both adults and kids. If interested you can contact Ashley Atkinson at (313)237-8736 or you can visit their website at [www.greeningofdetroit.com](http://www.greeningofdetroit.com)



## Vegetable of the Season

Did you know that a cucumber can be 20° colder than the outside temperature? This is because of the high water content in a cucumber, thus the phrase: "Cool as a cucumber." Cucumbers belong to the same family as zucchini, watermelon, pumpkins and other squashes. All of which are great for your health. We hope you enjoy this "cool cucumber" recipe.

### CUCUMBER



**Cucumber and Tomato Topping**  
Number of Servings: 4

#### Ingredients:

- 2 medium cucumbers, peeled, seeded and chopped
- 1 Tbsp white vinegar
- 1 Tbsp parsley, fresh, chopped
- 2 Tbsp basil, fresh, chopped or ½ tsp dried
- 1 ripe tomato, chopped
- 1 clove garlic, minced

## Top Five Ways To Walk for Exercise

1. Form a walking club. Walking clubs are a great way to stay fit while getting to know your neighbors.
2. Build walking into your daily routine. Walk to work, to the store, or to your place of worship.
3. Make exercise a family affair: go for a walk together, make taking the dog for a walk a family event, or walk around the block together each evening.
4. Walk with family and friends to explore



## Promote Physical Activity -- Greenway Design, Walking Groups, & Information Collaborate With Greenways: Promotional Events

If you want to become a certified



# Shaping the Study Design: Promote Greenway Use & Heart Healthy Diets



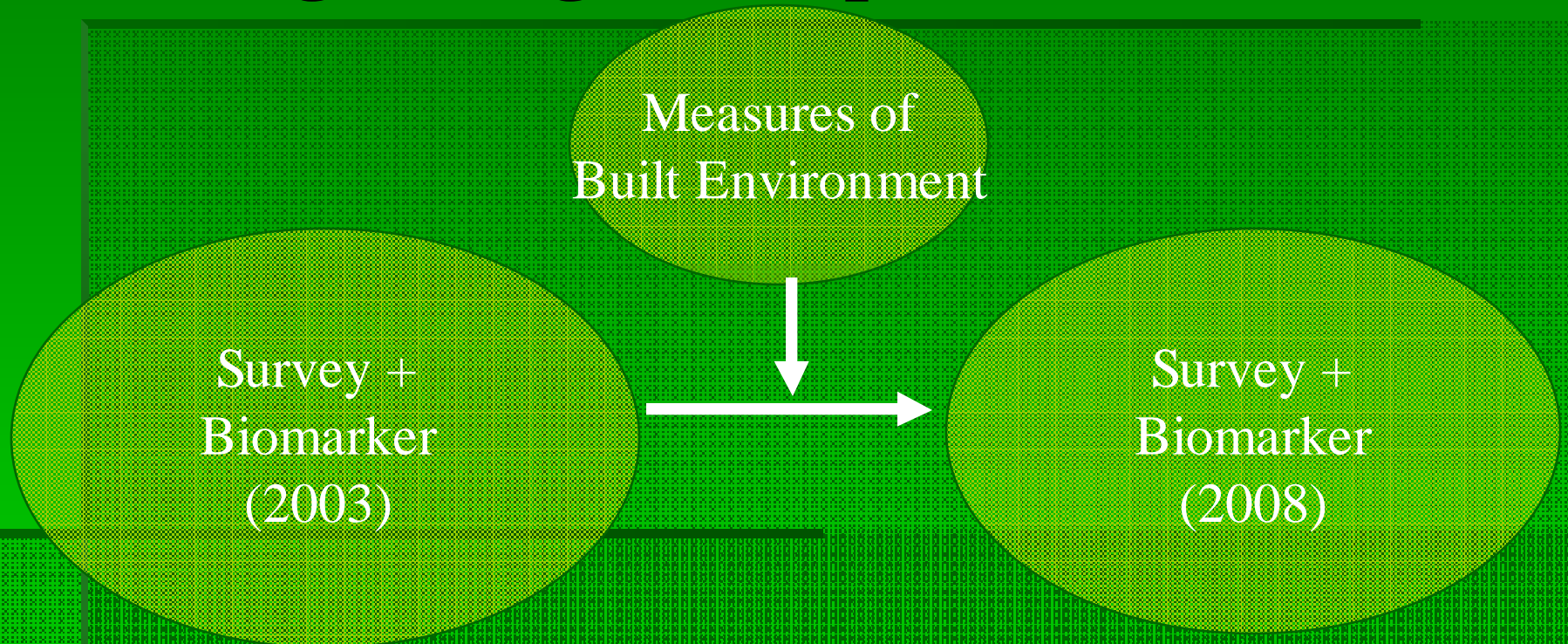
*BRIGHTMOOR'S LYNDON GREENWAY: CATALYST FOR COMMUNITY REVIVAL*

*June 2007*

Healthy Environments Partnership

Brightmoor Community Center	DHD and Wellness Promotion
Detroit Hispanic Development Corporation	Friends of Parkside
Henry Ford Health System	Rebuilding Communities Inc.
University of Michigan Schools of Public Health	Taubman College of Architecture and Urban Planning

# Shaping the Study Design: Assessing Change & Implications for Health



Assess Change Among Area Residents  
Linked to Built Environment Characteristics



# Shaping the study design: Assess Change in Greenway Characteristics & Pedestrian Use



Southwest Greenway:  
Planned Route

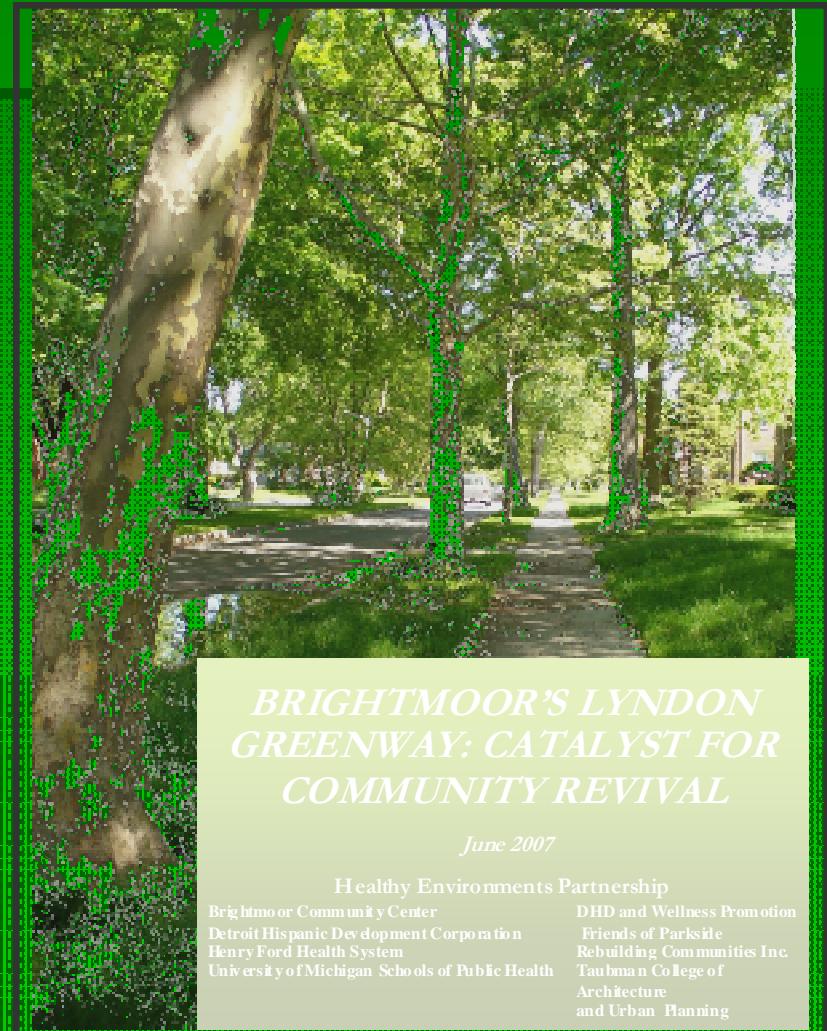
Monitor observed characteristics  
of greenways & pedestrian use,  
2006-2009



Observation of  
Characteristics

# Application of Findings to Inform Community Change

- Dissemination of Greenway Reports to policy makers
- Develop additional walking groups & encouraged to use Greenway
- Continue to work with Greenway Groups to promote Greenways
- Evaluate use over time





# Summary

- CBPR process engaged community members in:
  - Identifying the research questions
  - Shaping the intervention activities and study design
  - Decisions about data collection
  - Interpretation of results and application to inform community change (e.g., meetings with policy makers, proposals for next steps)

# Lessons Learned

- Community “engagement” takes different forms, with different levels of influence
  - Steering Committee: Ongoing participation & oversight
  - Focus Groups: Input but not ongoing oversight
  - Greenway Groups: Participation and influence on short term basis: active partners in change efforts

# Lessons Learned

- Engaging community representatives in all stages of the process enhances relevance of research questions & relevance of findings
- Diverse partners bring diverse perspectives & expertise
  - Greenway groups: Expertise in land use, planning local change
  - HEP: Expertise in health perspective, interventions & local communities
  - Urban planners: Expertise in land use measurement and planning

# Acknowledgements

- Healthy Environments Partnership Steering Committee: J. Timothy Dvonch, Causandra Gaines, Sonya Grant-Pierson, Barbara Israel, Murlisa Lockett, Angela Reyes, Paul Max, Zachary Rowe, Denise White Perkins.
- Other Key Collaborators: Margi Dewar, Donna Erickson, Eric Duweeke, Cindy Gamboa, Deedee Varick, James House, Larissa Larson, Robert Marans, Graciela Mentz, Patricia Miranda, Sharon Sand, Diaan Van der Westhuizen, Jean Wineman, Sachiko Woods, Shannon Zenk.

# THE END

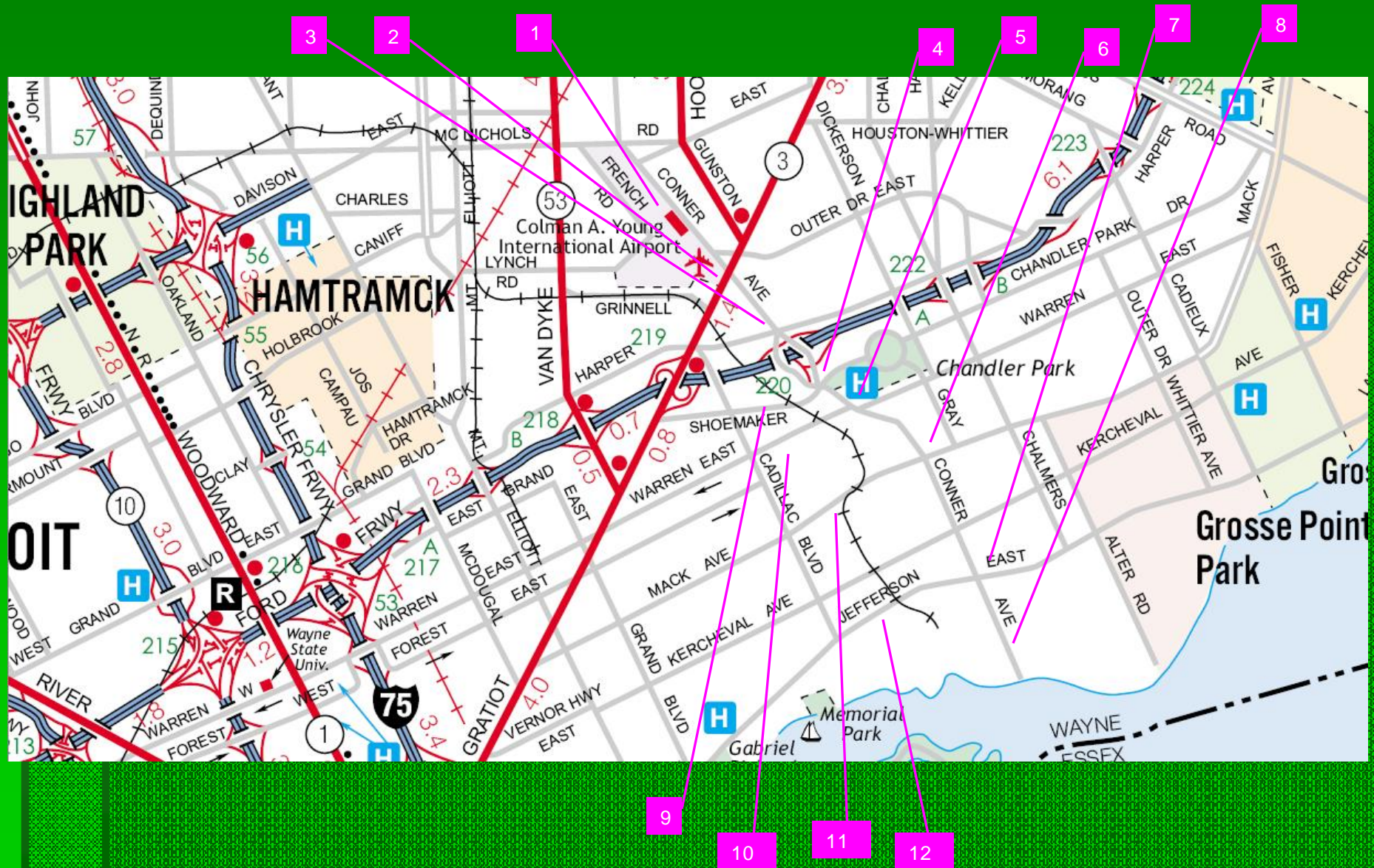


## **Aim 3: Assess Change in Physical Activity, Dietary Intakes & Obesity**

- **10 community residents hired & trained as observers**
- **Inter-rater reliabilities: each observer required to attain adequate IRR before beginning observations**
- **Retraining and re-certification with IRR**
  - **Video training**
- **Data collection 4 times/day, 4 days/week, one week/month May-October**



# Aim 3: HEP-LGM Eastside Detroit Observation Stations





HEP-LGM Pedestrian Characteristics Form (Revised 6/23/06)

Start Time \_\_\_\_ Date \_\_\_\_ / \_\_\_\_ / \_\_\_\_ Observer ID # \_\_\_\_ Target Area \_\_\_\_ Station # \_\_\_\_

Type of Day:  Weekday  Weekend Time of Day:  7-10am  10:30am-1:30pm  2-5pm  5:30-8:30pm

Gender		Group Status			Primary Activity								Age Group				Race/Ethnicity				Activity Level			
Male	Female	A	P	G	W	B	J/R	RS	P	LSS	S	Child	Teen	Adult	Old	L	B	W	O	S	M	V		



# HEP LGM Greenway Characteristics\*

- Monthly assessment of, e.g.:
  - Surface characteristics
  - Visibility
  - Buffer between path and road
  - Sidewalk/path continuity
  - Access points
  - Trees/shade
  - Cars/traffic



\*Items derived from BEAT & SOPARC  
Police presence

# Aim 4: Dissemination

Presentations



Intervention/Design



Community Forums



**Healthy Environments Partnership**

## Lean and Green In Motown

EASTSIDE SUMMER EDITION 2006

### What is the HEP Lean and Green in Motown Project?

The Healthy Environments Partnership (HEP) is a group of local organizations (see side bar for list of partners) that has been working together since 2000 to improve heart health in three communities in Detroit. Together, we continue to work to better understand how features of the environment influence the heart health of residents in eastside, southwest and northwest Detroit. Our goal is to promote safe and healthy neighborhoods to increase options for physical activity and better availability of healthy foods, and improved air quality. All of these are associated with heart health. This quarterly newsletter will include information about local activities and events related to promoting heart healthy environments. You can also visit our website at [www.hepdetroit.org](http://www.hepdetroit.org) for more information.

### What is HEP doing in your community?

**Focus Groups:** In January and February 2006 HEP conducted a series of focus groups with Detroit residents. The purpose of these focus groups was to learn how neighborhood conditions impact residents' physical activity and the foods they eat. The knowledge and views Detroit residents shared in these focus groups is helping HEP to develop ways to improve heart health among Detroit residents. Please contact us if you would like to receive a copy of our Focus Group summary.

**Youth Project:** Twenty-four youth are using photography to explore aspects of their neighborhoods that affect heart health. Youth will describe in their own words what their photos represent and their relationship to heart health. This HEP program is based at the Detroit Hispanic Development Corporation (DHDC).

### Word Has It...

The Conner Creek Greenway is being built in Eastside Detroit! Henry Guthard, from Detroit Eastside Community Collaborative (DECC) Greenway Project Director, describes the greenway as "a network of open spaces and trails designed to encourage walking, jogging, biking and rollerblading." The greenway will be constructed in phases and will eventually stretch from 8 Mile south to the Detroit River, tracing the original Conner Creek which once flowed through the area. "We will provide interpretive signage that explains the history and culture of the area as well as install landscaping, walking routes, and access to recreational spaces and parks." The first phase of the greenway will be 1.3 miles long and will be inaugurated on **August 4th at the Conner Playfield Park, starting at 11:00 a.m.** All community residents are welcome to attend. For more information you can contact Henry Guthard at DECC at (313)571-2800.

*Funded by The National Institute of Environmental Health Sciences 1R01 ES014234 and The National Center for Minority Health and Health Disparities 1R24*

*Brightmoor Community Center*

*Detroit Department of Health and Wellness Promotion*

*Detroit Hispanic Development Corporation*

*Friends of Parkside*

*Henry Ford Health System*

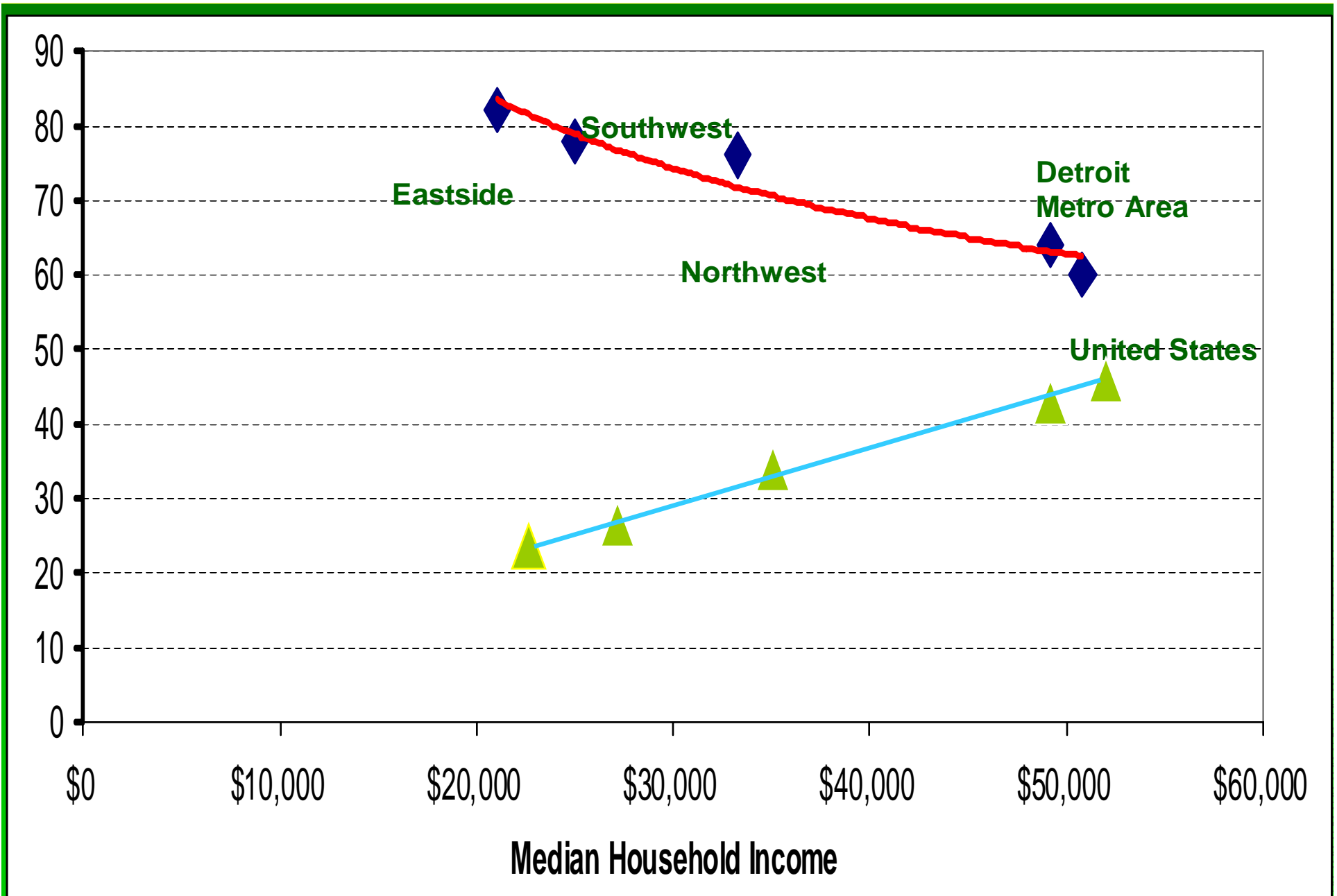
*Rebuilding Communities Inc.*

*Southwest Solutions*

*University of Michigan School of Public Health and A. Alfred Taubman College of Architecture and Urban Planning*

Newsletters/Local Newspapers

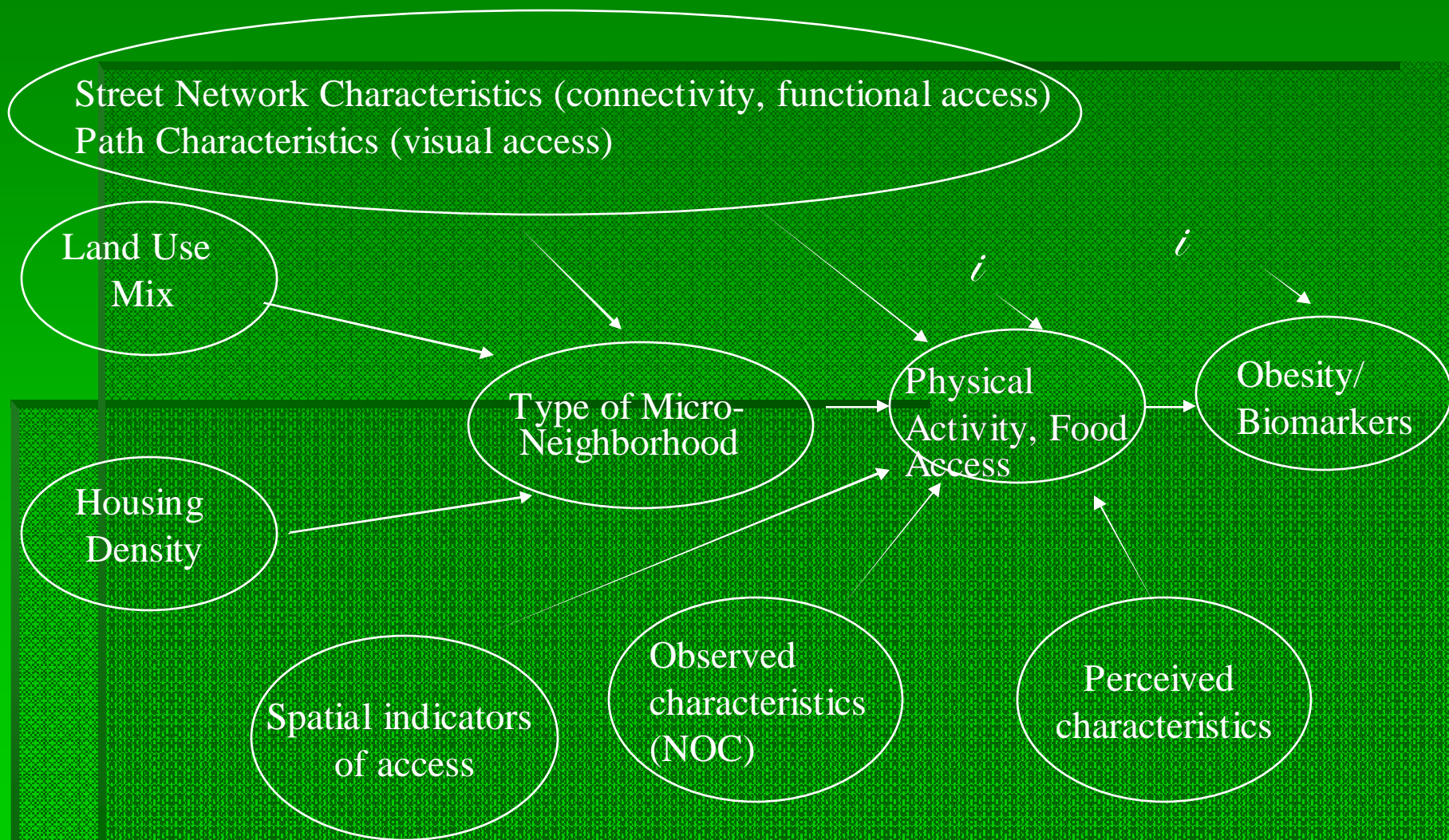
Peer Reviewed Publications



▲ % Adequate physical activity

— % Overweight/obese

# Assess contributions of five methods of assessing characteristics of the built environment for understanding pathways linking built environment & obesity



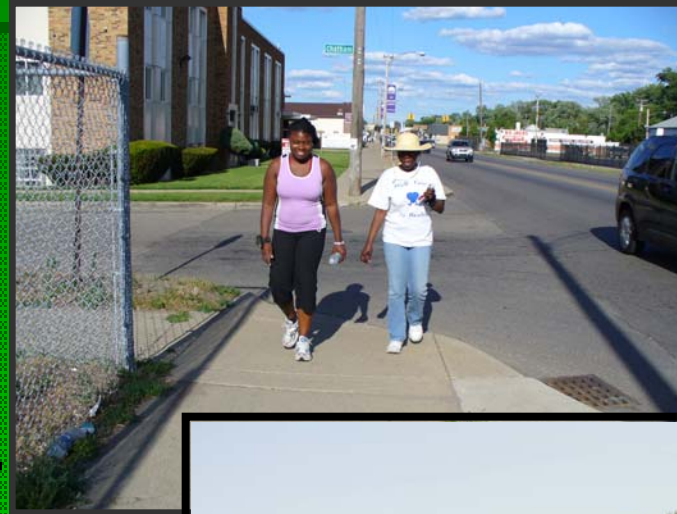
# Shaping the research method: Assess Change in Physical Activity, Dietary Intakes & Obesity

- **Currently planning 2<sup>nd</sup> wave data collection (Summer/fall 2008)**
  - **2<sup>nd</sup> wave survey and biomarker data**
    - **SC engagement**
    - **Revised/expanded physical activity measures**
    - **Piloted use of pedometers & GPS for potential use with subset of wave 2 survey participants**
    - **Piloted use of 24 hour recalls**
  - **Mapping all food stores and restaurants**
  - **Direct observation of availability, selection, quality and price of food options for a wider range of food groups (e.g., produce, dry goods, dairy, fresh meat)**



# Next steps: Promotional Activities

- Continued support of walking groups
- Greenway activities/events
- New grant proposal: builds in funds for mini-grants to promote greenway activities
- New grant proposal: walking groups & training of local leaders



# Next steps: Evaluation

- Analysis of observational data along greenway
- Wave 2 data collection
- Analysis: what characteristics of neighborhoods influence greenway use?
- Analysis: what characteristics of neighborhoods influence physical activity?

