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USING A HEALTH IN ALL POLICIES APPROACH TO ADDRESS SOCIAL DETERMINANTS OF SEXUALLY TRANSMITTED DISEASE INEQUITIES IN THE CONTEXT OF COMMUNITY CHANGE AND REDEVELOPMENT

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Using a Health in All Policies Approach to Address Social Determinants of Sexually Transmitted Disease Inequities in the Context of Community Change and Redevelopment

"Today's Playground" photo by Joshua Peltier

May 2012

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Acknowledgments

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- HOK
- Georgia Stand Up
- City of Atlanta Planning Department
- Atlanta Regional Commission
- Georgia Department of Public Health STD Program

Executive Summary

Objectives. A Health in All Policies (HiAP) framework was utilized to determine what data, policy, and community efficacy opportunities exist for improving sexual health and reducing sexually transmitted diseases (STDs) in an area experiencing change and redevelopment.

Methods. Methods include literature review; consultation with experts; identification and mapping of social determinants in the community; key informant interviews with community leaders to explore policy solutions; Photovoice with community members to identify neighborhood assets; and sharing of data with all stakeholder groups to solicit engagement for next steps.

Results. HiAP-relevant determinants of STD inequities were identified in the literature: education, employment, male incarceration, drug and alcohol marketing, and social capital. Quantitative data confirmed challenges in education, employment, and male incarceration in the area. Interviews identified policy opportunities such as: educational funding ratios; Community Hire Agreements; code and law enforcement; addiction and mental health resources; lighting for safety; and a non-emergency public safety number. Photovoice participants identified community assets to protect such as: family-owned businesses; green spaces; gathering places; public transportation resources; and historical sites and architectural elements. Stakeholder feedback provided numerous opportunities for next steps.

Conclusions. This project contributes to the HiAP literature by providing an innovative mixed methods design that locates social determinants of STDs within a geographic context, identifies policy solutions from local leaders, highlights community assets through the lens of place attachment, and engages stakeholders in identification of next steps within the context of redevelopment. Findings from this project could inform other redevelopments, other community-based studies of STDs, and other HiAP efforts.

Introduction

Many studies have demonstrated that incidence of sexually transmitted diseases (STDs) is associated with socioeconomic status, race/ethnicity, poverty and substance abuse (Ellen, Jennings, Meyers, Chung, & Taylor, 2004; Fox et al., 1998; Hahn, Magder, Aral, Johnson, & Larsen, 1989; Holtgrave & Crosby, 2003; Kilmarx et al., 1997; Lacey, Merrick, Bensley, & Fairley, 1997; Moran, Aral, Jenkins, Peterman, & Alexander, 1989; Nakashima, Rolfs, Flock, Kilmarx, & Greenspan, 1996). Rates of chlamydia, gonorrhea, syphilis, and HIV/AIDS among blacks range from 5.4 to 17.8 times the rates of whites (Barrow, Newman, & Douglas, 2008).

Lack of resources and inequity of resource distribution has been found to lead to risky sexual behavior, lack of health care and rising STD rates (Hogben & Leichliter, 2008). Cultural norms and expectations and neighborhood characteristics also seem to play a role in prevalence of STDs. Cohen et al. found a strong association between deteriorated physical conditions of local neighborhoods and gonorrhea, suggesting that the physical environment is correlated with high-risk sexual behaviors (2000). Results from another study examining alcohol outlets and gonorrhea indicate there is a geographic relationship between alcohol outlet density and gonorrhea rates at the census tract level (Scribner, 1998).

Some of the highest incidence of chlamydia, gonorrhea, and syphilis in Georgia are located in the area surrounding a 488-acre Army base in Atlanta, GA (see Figure 1). Data from the Federal Reserve of Atlanta show that the four zip codes surrounding Fort McPherson have much higher rates of home foreclosures than the Fulton-DeKalb County average (Figure 2). In September 2011 the base ceased to function as a military installation, through the Department of Defense's Base Realignment and Closure (BRAC) program. Redevelopment of the land has potential to impact the health and wellness of not only the new residents, but the surrounding communities as well. Social and economic changes from the base closure, such as abandoned buildings, could further exacerbate these vulnerabilities. Improving or maintaining community conditions—especially during this opportune time of redevelopment—may lead to positive changes in health outcomes, such as decrease in incidence of STDs.

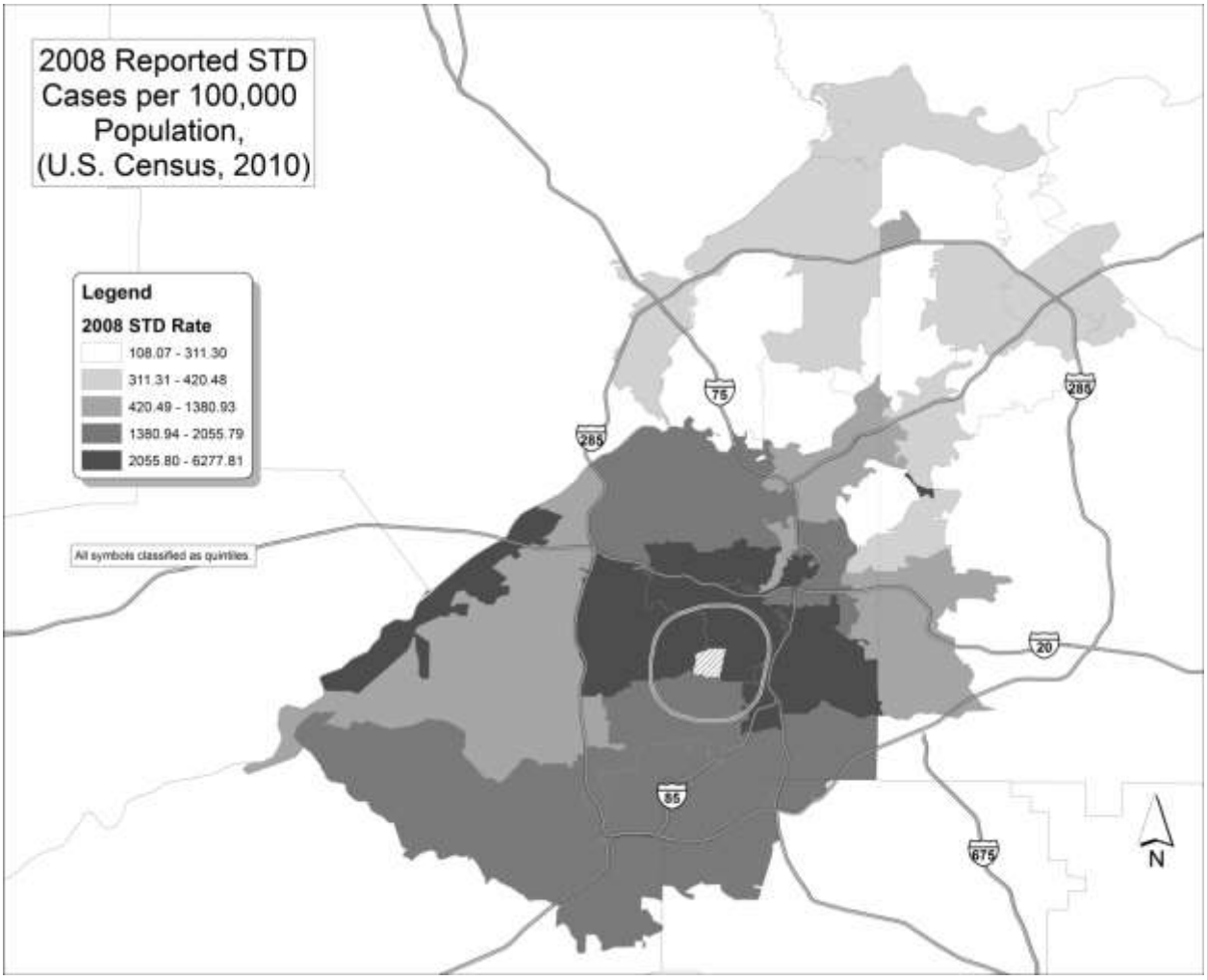

Figure 1. 2008 Reported STD Cases per 100,000 Population, U.S. Census, 2010

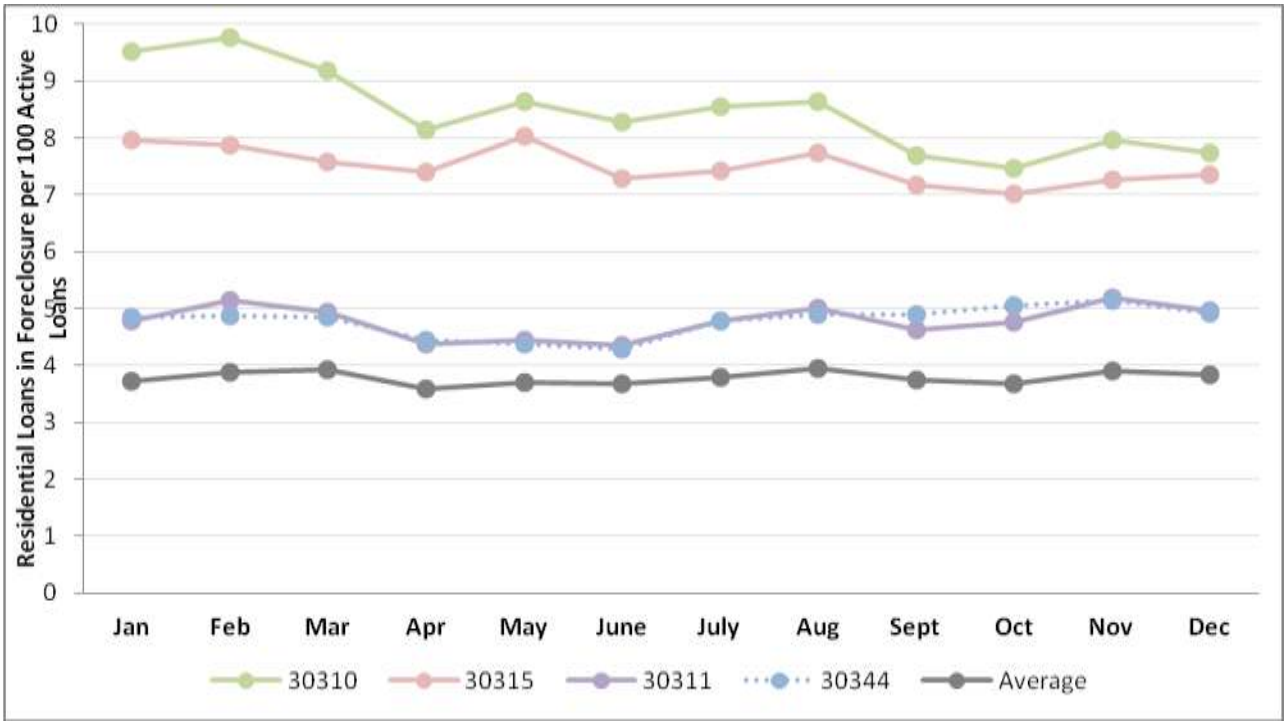

Figure 2. Foreclosure Trends, 2010, in Four Zip Codes Surrounding Fort McPherson Compared to Fulton-DeKalb County Averages
Source: Federal Reserve of Atlanta

In 2011, the National Network of Public Health Institutes engaged the Georgia Health Policy Center, through a cooperative agreement with the Centers for Disease Control and Prevention, in a Health in All Policies (HiAP) approach to addressing STDs in the area surrounding the Fort McPherson Army base. Health in All Policies is a concept that strengthens the link between health determinants and policies from other sectors such as housing, transportation, education, employment, and land use to create an environment that enables people to lead healthy lives (Puska, 2007). As Marmot (2005) states in his article on the Social Determinants of Health Inequities, "action on the social determinants of health …will have the broader aim of improving the circumstances in which people live and work" (p.1099).

The purpose of this project was to use a HiAP framework to answer the following question: What policy, data, and community efficacy opportunities exist for improving sexual health and reducing STDs in the area surrounding Fort McPherson? This project contributes to the Health in All Policies literature by providing an innovative mixed methods design that locates publicly available data on the social determinants of STDs within a geographic context and identifies policy solutions and community assets to address those challenges.

Background

Health in All Policies Approach

Incorporating health-supporting policies alters many systemic structures that affect the determinants of health equity. The iceberg is one metaphor used to think about the systems behind various health issues (Figure 3). Just like an iceberg, a lot of the root causes or contributing factors of health conditions are hidden below the surface. In order to understand and effectively address these issues, the different levels under the iceberg need to be examined. In the case of infectious diseases like STDs, addressing sexual behaviors, and environmental factors that affect sexual behaviors, will help elevate the importance of healthy environments for all.

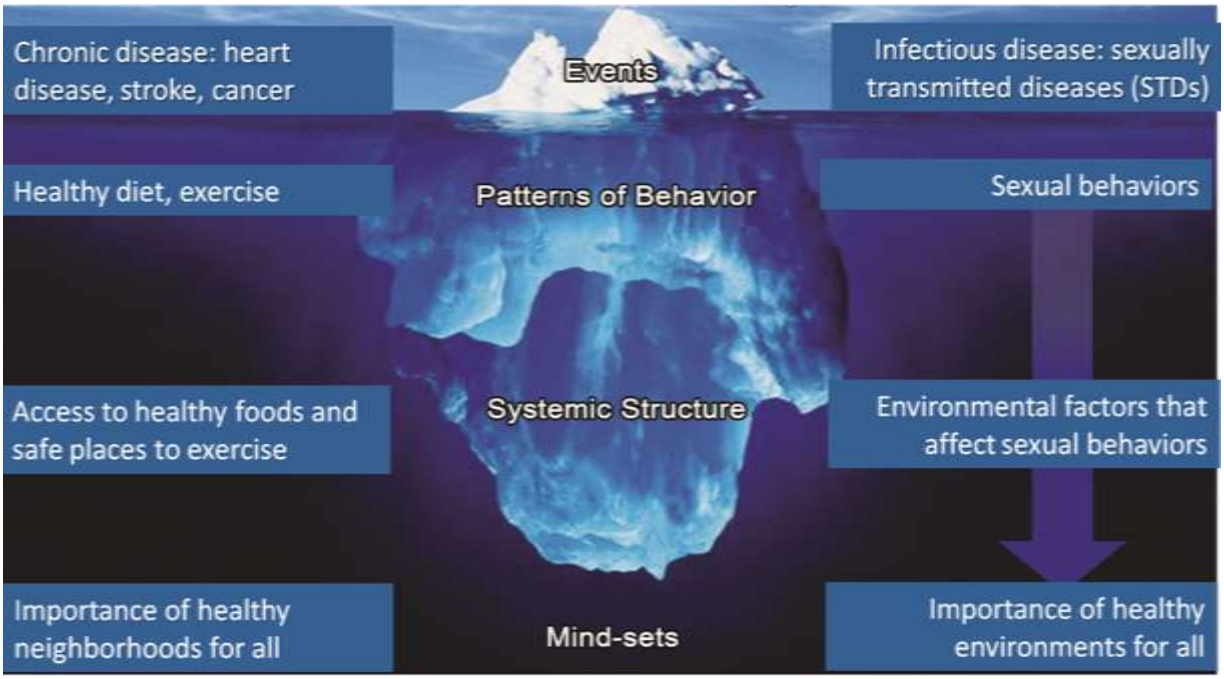

Figure 3. The Systems Thinking Iceberg

Health results from the choices that people are able to make in response to the options that they have. Conditions in the social and physical environments determine the range of options that are available, their attractiveness, and their relative ease or difficulty of use. Many studies have shown that environmental factors influence health (see, for example, Bell & Rubin, 2007). Using a HiAP approach allows researchers to meaningfully address foundational socioeconomic factors and make an impact in improving population health (Frieden, 2010).

The Farley Model of Social Determinants of STD Inequities

A literature review identified a conceptual model that specified the social determinants of STD inequities. Farley (Farley, 2006) posits that black/white racial disparities in STDs reflect deeper group-level social and environmental factors for which race is a marker. He proposed a model of 13 predictor variables to explain elevated rates of STDs in African-Americans (Figure 4). Baker and colleagues state, "A … challenge faced by those working to address social determinants of health inequities is determining where to focus their efforts" ((Baker, Metzler, & Galea, 2005), p. 554). The project team used a HiAP perspective to focus on the five key factors in the Farley model that were the most upstream factors representing sectors outside the health sector that could be conducive to policy change. These factors include: education, employment, drug and alcohol marketing, male incarceration, and social capital.

As Farley describes, these five factors are associated with STDs in the following ways: Education's health-protective effects occur directly and through its impact on employment and income (Farley, 2006). Employment can increase individuals' access to health insurance, as well as provide meaningful engagement in society. Research has shown that when people are not sufficiently employed or engaged in meaningful activity, risk taking behaviors can increase, including those that could result in STDs (Akers, Muhammad, & Corbie-Smith, 2011). Farley reports that when individuals – particularly men – perceive no opportunity to engage in the legal economy, they may engage in illicit drug and alcohol marketing (17). Drug and alcohol availability and use have been shown to be positively correlated with STDs (17). Such illicit activity can lead to incarceration. The incarceration rate might influence STDs by creating an imbalance in male-female ratios. Kilmarx et al. (Kilmarx, et al., 1997) found syphilis incidence, for example, is higher in counties with lower ratios of males to females, and in counties with greater concentrations of female-headed households. Social capital is also an important factor for understanding STDs. When neighbors watch out for each other and social connections are encouraged through formal and informal structures, many times illegal activities (such as drug use and risk taking behavior) can be curbed (Altschuler, Somkin, & Adler, 2004).

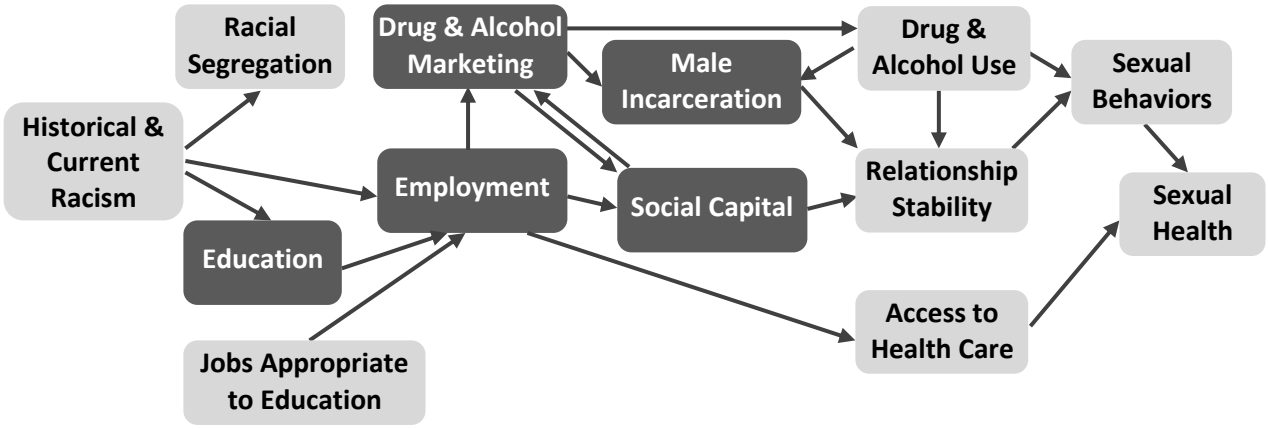

Figure 4. Model to explain elevated rates of sexually transmitted diseases in Blacks through social determinants of health (adapted from Farley, 2006)

Place Attachment Theory for Place-Based Community Efficacy

Seven consultations with Subject Matter Experts (SMEs) were conducted to further expand upon the findings in the literature. This led to the identification of a theoretical framework for the community efficacy component of the guiding question: place attachment theory. Riley defines place attachment as ‘‘an affective relationship between people and the landscape that goes beyond cognition, preference, or judgment’’ ((Altman & Low, 1992), p. 13). Altman and Low (Altman & Low, 1992) described place attachment as being created and maintained through interactions with the environment, including interconnections between biological, environmental, psychological, and sociocultural processes. Place attachment relates to financial investment in the community, social cohesion, and low fear of crime. An emphasis on the longstanding pride in the neighborhoods surrounding Fort McPherson can help both community members and policymakers “recognize the importance of the preservation of a people in a place, the preservation of a community, the preservation of places that people are proud to call home” (Brown, Perkins, & Brown, 2003).

Methods

Given the complexity of STD transmission, effective prevention of STDs will require multidisciplinary, unconventional inquiry to understand and address the contextual factors that promote environmental conditions and patterns that facilitate transmission of diseases. As Baker et al. (2005) discuss in their editorial on addressing the social determinants of health inequities, such work should engage stakeholders and community partners, incorporate methods such as Photovoice and qualitative data, and solicit input from experts in sectors outside the health field to "help us understand and meet social and political challenges" (p. 555). This project contributes to the Health in All Policies literature by providing an innovative three-pronged mixed methods design that follows this guidance from the literature, locates the specific problems within a geographic context, and identifies policy solutions and community assets.

Creswell et al. (Creswell, Klassen, Clark, & Smith, 2011) define mixed methods as a research approach or methodology that uses multiple methods, intentionally integrates or combines these methods to draw on the strengths of each; and frames the investigation within philosophical and theoretical positions. Figure 5 provides an overview of the iterative mixed methods design, and each component is described in further detail below. The first element of the mixed methods design utilizes the research literature and subject matter experts to identify the social determinants of the health problem in question and the data indicators that specifically capture these determinants, then utilizes available local data to geographically map the indicators for the community in question. The second element of the model builds off the data indicators identified in the first, and locates community leaders in the sectors related to those indicators to conduct key informant interviews for identifying policy solutions to the problems in question. The third element, during a concurrent process, utilizes a place attachment theoretical perspective identified by subject matter experts to engage community members in a community-based participatory Photovoice technique to photographically document the assets in their community that they feel attached to and wish to protect. Findings from all three elements were then shared with stakeholders as a form of member check and to solicit additional engagement for next steps. Protocol for this project was approved by the Institutional Review Board of Georgia State University.

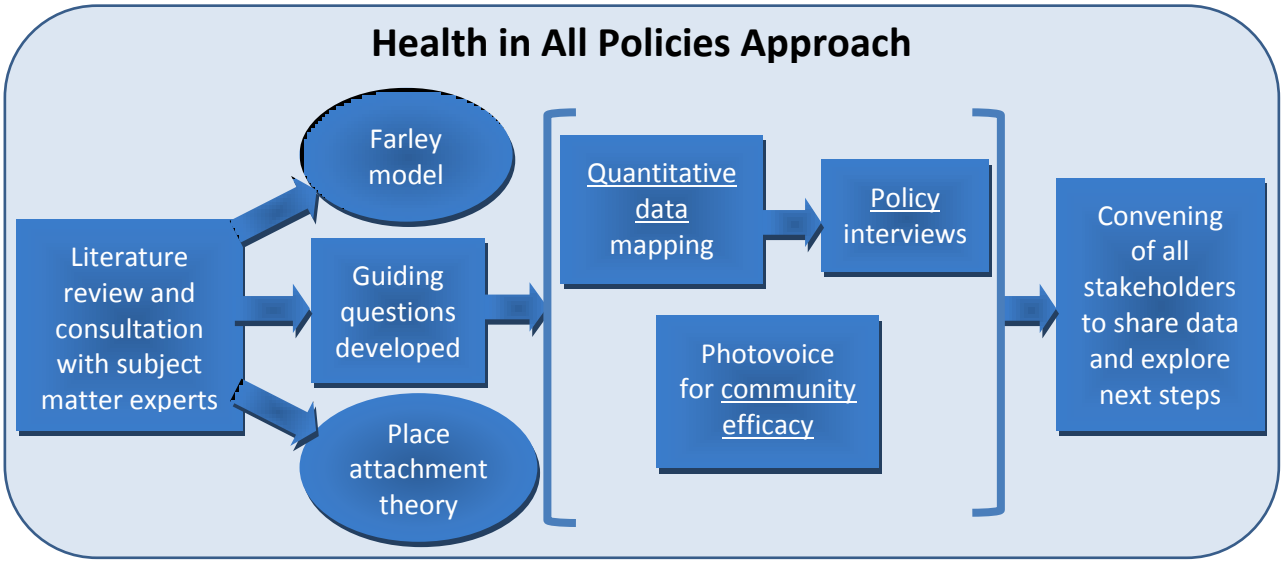

Figure 5. Health in All Policies approach to addressing and improving the social determinants of community health: a mixed methods design

Literature Review & Consultation with Subject Matter Experts

The project team conducted a detailed literature review to identify indicators for social, environmental and economic factors related to STDs, as well as seminal literature describing potential policy opportunities in the context of the community change and transformation.

Subject matter experts (SMEs) were consulted during a series of seven in-person meetings or telephone calls. The SMEs included staff from CDC's Behavioral Interventions and Research Branch and Division of STD Prevention Health Equity group; Georgia State University's Institute of Public Health, Department of Sociology, and Department of Geology; and agents from the U.S Immigration and Customs Enforcement. SMEs provided insight on a variety of topics, such as social capital, social cohesion, social networks; community efficacy; policy, systems, and environmental approaches to STD prevention; dynamics of STD transmission; geographic aspects of social network interactions; and general knowledge of the area surrounding Fort McPherson.

Quantitative Data & Mapping

Quantitative data that are relevant, actionable, and publicly available may be meaningful to community members in tracking community challenges over time and identifying opportunities for action. Data that represented the social determinants of STDs, as identified in the Farley model, were assessed. Data were then spatially mapped with the Fort McPherson property circled, indicating a 1.5-mile buffer from the base perimeter. This was selected to capture at least a portion of the four high-STD zip code areas that surround the base and to overlap with a range of policy-making jurisdictions—public safety, education, city council, Neighborhood Planning Units (NPUs), and other governmental sectors.

The process for determining indicators was to:

a) develop, from the literature and SME interviews, a broad list of social and environmental variables for which there is credible evidence of a correlation with STD rates;

b) exclude determinants not amenable to influence through policy, systems or environmental change, or where change would likely have unacceptable co-effects;
c) exclude variables for which data specific to the project area could not be obtained by the public at a zip code or census tract level*;
d) identify specific measurements for these variables as evidenced in the literature; and finally,
e) seek reasonable proxy variables where data for the original indicator were unavailable.

* Publicly available data was deemed to be a priority for this project, as communicated by CDC partners, in an effort to fully support community engagement in the project topic over time. For more information on how to access each data source, please see Appendix A.

Interviews

Using the information from the literature and data indicators, the project team identified experts in specific sectors representing the core social determinants of STDs. For example, after recognizing and linking the impact of education to STDs and sexual health, the project team sought to interview an expert in education. Key informant interviews were conducted with 20 individuals representing the following sectors: education, finance, housing, indigent defense, prisoner re-entry, faith community, community based organizations, academia, and the Georgia Legislature. Key informants were selected for their ability to speak to policy options within the five components of focus in the adapted Farley model: education, employment, male incarceration, drug and alcohol marketing and social capital. Most interviews were conducted in person, although some were conducted by phone to accommodate scheduling. Written consent was attained prior to the interview. Interviews followed an approved protocol and the length ranged from 45 minutes to over 3 hours in one case, with the average interview lasting 1.5 hours.

Community-Based Participatory Photovoice

Photovoice, a process by which people can identify, represent, and enhance their community through a specific photographic technique, was used as a community-based participatory approach to the project. Photovoice was appropriate for this project because it: (I) enabled people to record and reflect their community's strengths and concerns, and (2) promoted critical dialogue and knowledge about important issues through large and small group discussion of photographs (Wang & Burris, 1997). A total of seven meetings were conducted with community members over three months, in which participants were asked to represent their community or point of view by taking photographs, discussing them together, and developing narratives to go with their photos. A strategic non-representative sampling strategy was used to ensure that the participants represented a range of people from the community. A total of six community members fully participated in the Photovoice and focus groups. Incentives in the form of $25 gift cards and refreshments during the meetings were provided.

Data Sharing with Stakeholders and Next Steps

Once all data were collected, analyzed, and triangulated, they were shared with multiple stakeholder groups. Attendees included community members; policy makers; Local Redevelopment Authority (LRA) representatives, including the LRA's leadership and community advisory committee; and representatives from the state department of public health and the CDC. Data were shared at the Georgia State University Visualization Wall, which is a large-scale, high-resolution display used to present data or highly visual systems side by side. Since people can gather around it together or stand back and take in a grand perspective, the wall can help community members and policymakers discover new ways to

interact with data and devise new methods of collaborative research. The presentation of the data offered an opportunity for dialogue, in which community members provided insights and recommendations for moving forward.

Results

Findings from the literature review and consultation with SMEs, indicators and mapping, interviews, and Photovoice were integrated and organized according to Farley's model.

Education

Education is one of the most upstream factors in the Farley model, providing health-protective effects directly and through its impact on employment and income (Farley, 2006). Photovoice participant Joshua Peltier captured the current state of education needs in the area with his photo, titled "Playground of Today", which he describes as follows:

Even though buildings are decaying and falling down, the children are still growing up. In this picture, the boy is focused on what he is doing and not his surroundings. He represents hope for the future, but we must make sure he has a healthy supportive environment for him to learn and grow.

Figure 6. Today's Playground by Joshua Peltier

Education indicators of interest for which data were publicly available included graduation rates of individual public high schools and achievement of "Adequate Yearly Progress" (AYP) as defined by the No Child Left Behind Act. In a ranking of high school graduation rates in the City of Atlanta, Fulton County and DeKalb County school systems, the schools located near Fort McPherson fall into the lower fifth overall, with graduation rates for 2010 ranging from 64 percent to 81 percent (see Figure 7).

Graduation Rates - Atlanta, DeKalb and Fulton Public Schools		
DeKalb School of the Arts	100.0	TOP QUINTILE
The School of the Arts at Carver	98.6	
Early College High School at Carver	98.5	
Northview High School	97.3	
School of Technology at Carver	97.2	
Chattahoochee High School	96.6	
Milton High School	94.9	
Dekalb Early College Academy	92.6	
Chamblee Charter High School	92.1	
Westlake High School	91.9	
Grady High School	91.6	
Alpharetta High School	91.0	2ND QUINTILE
Dunwoody High School	90.8	
Druid Hills High School	90.6	
Mays High School	90.3	
North Springs High School	90.1	
Lakeside High School	89.8	
Tech High School	89.1	
Riverwood International Charter School	88.9	
Tucker High School	88.9	
Stone Mountain High School	88.9	
Centennial High School	88.6	
Redan High School	88.1	3RD QUINTILE
Roswell High School	87.3	
School of Health Sciences and Research at Carver	87.3	
Columbia High School	86.0	
Cross Keys High School	85.7	
Fulton County	85.3	
North Atlanta High School	85.1	
Stephenson High School	84.5	
South Atlanta Law and Social Justice School	84.0	
South Atlanta School of Computer Animation and Design	84.0	
Southwest DeKalb High School	83.7	
South Atlanta School of Health and Medical Science	82.7	
Miller Grove High School	81.6	4TH QUINTILE
Washington High School Senior Academy	81.6	
Clarkston High School	81.2	
Tri-Cities High School	80.6	
Maynard H. Jackson, Jr. High School	80.2	
Lithonia High School	79.9	
Martin Luther King, Jr. High School	79.6	
DeKalb County	79.2	
Avondale High School	78.8	
Cedar Grove High School	78.6	
Douglass High School	77.7	
Creekside High School	74.9	
TEACH Charter High School	74.1	BOTTOM QUINTILE
Therrell School of Engineering, Math, and Science	73.8	
McNair High School	73.6	
Banneker High School	72.0	
Towers High School	69.5	
Therrell School of Law, Government and Public Policy	68.7	
Atlanta Public Schools	66.3	
Therrell School of Health and Science	64.1	
Independence Alternative School	52.5	
McClarin Alternative School	48.2	
Elizabeth Andrews High School	45.5	
Crim High School	12.8	

Figure 7. Graduation rates of Atlanta, Fulton, and DeKalb schools

Another data indicator for education is local investment in public schools. A recent study on school finance policies which is based on several indicators of funding equity (Cummings, Ponce, & Mays, 2010) gave Georgia an overall student finance grade in the range of C- to C+, and also found that weighted, per-pupil funding is greater in wealthy school districts in the state, relative to poor districts. There are a number of adjustment formulas used by the states to allocate additional funding. One of the common formulas, and one that Georgia does not employ, takes into account local income levels in determining allocation levels. This presents a policy tool for directing school funding more equitably, and in a way that would address the enhanced student needs in schools around Fort McPherson.

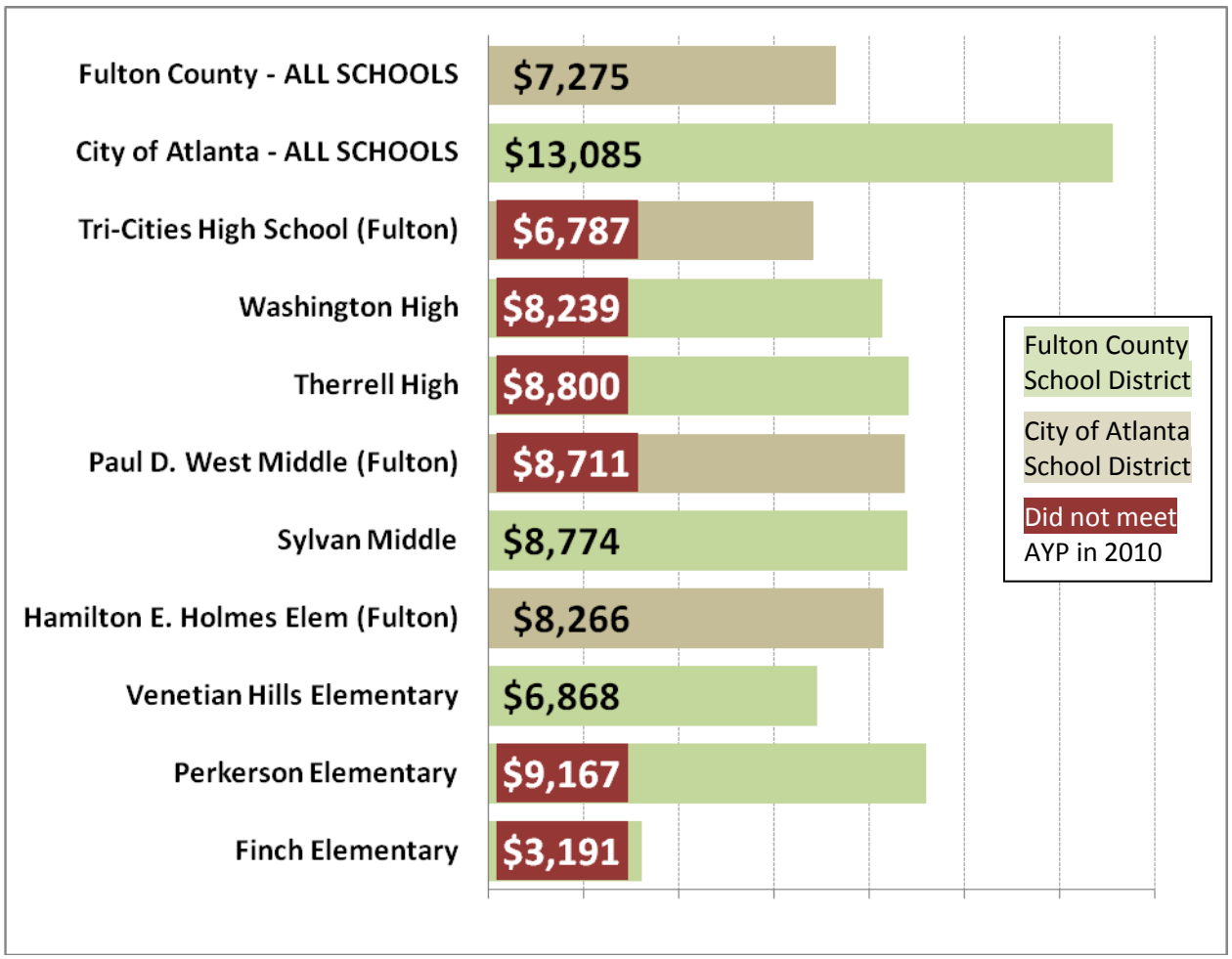

Figure 8. Georgia General Fund Expenditures per Student and Met/Did Not Meet Adequate Yearly Progress

During interviews, key informants suggested that there was a policy opportunity to increase the ratio of social workers and nurses to students based on the needs of the student populations by school, rather than a per student-professional formula that is the same for each school, regardless of need.

Employment

In Farley's model, employment is a lynchpin among social and environmental factors affecting STDs, as it impacts several other factors: drug and alcohol marketing, male incarceration, social capital, and access

to health care. Employment can mitigate illegal sales of alcohol and drugs by providing legal means to earn income, thus also potentially reducing male incarceration. It boosts social capital by engaging working-aged individuals in productive daily activity, enhancing self-esteem, and enriching social networks. Income earned through employment makes healthy behaviors and preventive care more affordable; and, where available, access to group health insurance plans and employer-subsidized premiums make employed individuals and their families more likely to be insured.

During the Photovoice focus groups, many participants referred to the "heyday" in southwest Atlanta when businesses like restaurants, clubs, and shops were thriving and several were black-owned family businesses. People referred to this time with a sense of pride. In more recent times, the area has been affected by economic divestment in its business corridors. Participants in the Photovoice focus groups spoke of how the base closing may further impact small businesses.

In the photo by Allean Brown, entitled, *Hardware Hard Times*, she writes:

East Point Hardware Store is an established small business that has been adversely affected by the base closing. They used to have a customer base of Ft. McPherson contractors because the store is so close to the base. The store is really missing those customers now. We need a program to support small businesses that are being affected by the base closing.

Figure 9. Hardware Hard Times by Allean Brown

Most census tracts surrounding the base have a deficit of jobs relative to residents, though there is an exception to the east of the base. This is an industrial area with a few large manufacturing operations and little housing stock. Employment areas in metro Atlanta are concentrated in the downtown corridor; along the Northern and Southern Perimeter; and to the West. The map presented in Figure 10 may support the Photovoice participants' observations of economic divestment in their area compared to earlier times.

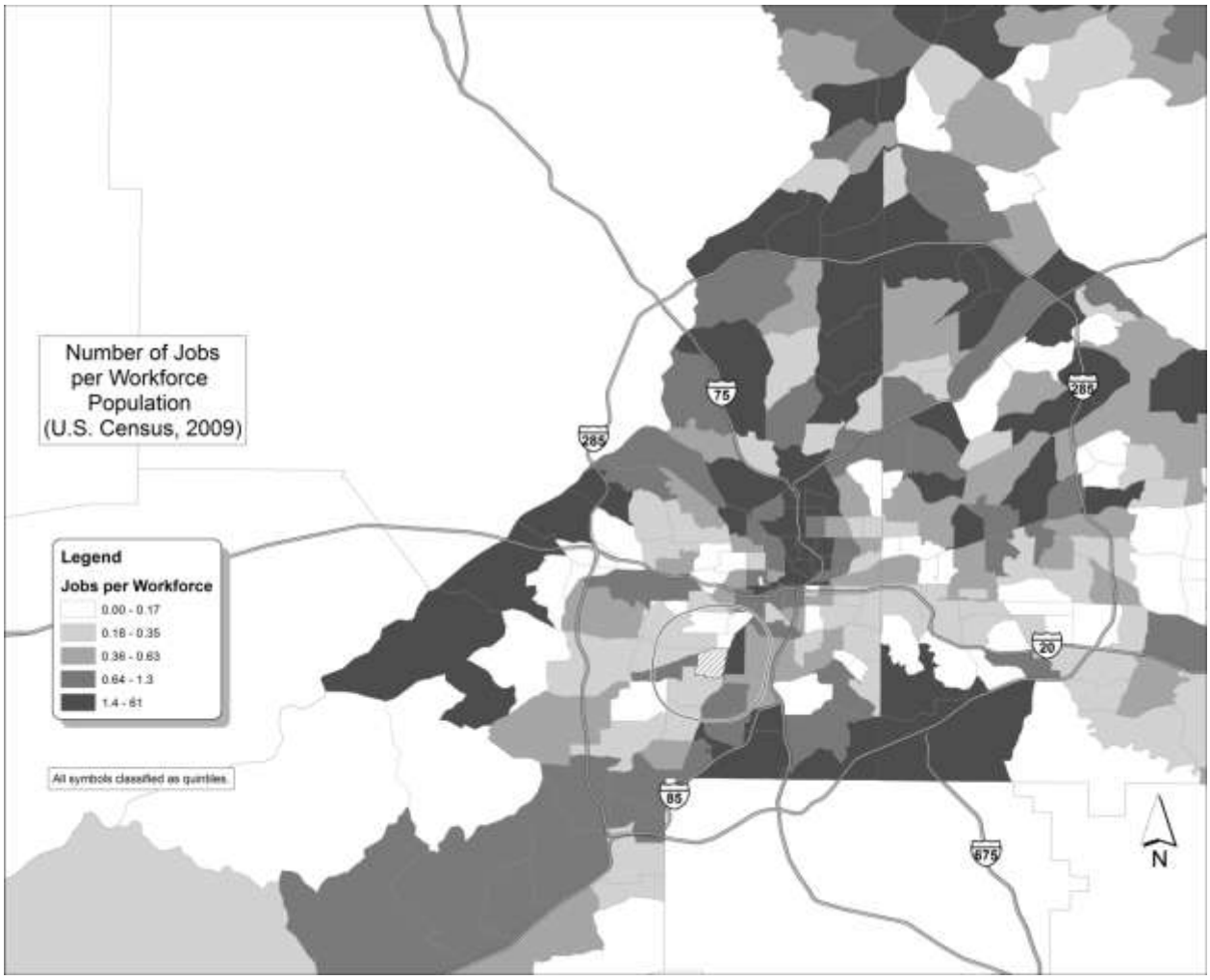

Figure 10. Jobs per workforce population by census tract, 2009

A number of wealth-building policy suggestions were identified through interviews conducted with local officials and experts. From a policy standpoint, one of the best tools for wealth-building is the implementation of community hire agreements (CHAs), which would encourage new businesses associated with the redevelopment to hire locally. Similar policy tools, often referred to as Project Labor Agreements, require that a certain percentage of the workforce for a temporary construction project is drawn from the local population. While such agreements could certainly apply to the McPherson redevelopment, in order to establish long-term stability and community wealth, it will also be important to apply this strategy to permanent employment opportunities associated with businesses becoming established on and around the redevelopment site.

Atlanta's anchor institutions represent one of the most promising strategies for fostering the development of locally-based businesses. By entering into contractual agreements to provide a product or service for these institutions, new local enterprises are provided with an improved chance for long-term success. Universities, hospitals, and local, state and federal government make ideal partners for fledgling small businesses because they are consistent; consistent in the sense that they are established parts of the community, and typically possess the resources to withstand most economic shocks that might otherwise force them to suddenly cut back on orders for products or services provided by local

business partners; consistent also in the sense that their demand for many products and services is high and steady. For example, regardless of the economic conditions, the time of year, or any other factor, the demand for laundry services by the local hospitals is always present and unlikely to fluctuate wildly. Because new small businesses typically have a high rate of failure, the presence of a high-demand, consistent customer is invaluable for long-term success.

Another policy suggestion approaches wealth-building from a slightly different angle. It highlights the need to anticipate the kinds of industries that will be drawn into the community due to the redevelopment, and to match local workforce development efforts accordingly.

Drug & Alcohol Marketing

The Farley model indicates that drug and alcohol marketing in a community is directly related to [lack of] employment, drug and alcohol use, male incarceration, and social capital. A significant body of literature speaks to the relationship between a neighborhood's physical condition and various undesirable outcomes, including drug and alcohol presence and use. The visible presence of neighborhood blight as well as criminal activities such as prostitution creates an atmosphere implying that nobody cares and that undesirable behaviors and actions are tolerated.

A major theme of the expert interviews on this topic was that even the most well-designed policy will be ineffective at combating negative drug and alcohol influences in a community if there are insufficient enforcement mechanisms in place. One policy suggestion highlighted the importance of strict enforcement of city codes intended to protect resident safety and minimize the appearance of blight. Often, codes regarding the presence of environmental contaminants are inadequately enforced, as are those that target owners of vacant and abandoned homes and unsightly junk lots. A related suggestion was that criminal laws also need to be consistently enforced.

> *"Blight cannot be accepted. Not by police officers, not by code enforcement officials, and not by citizens." – Key Informant*

The map of code violations in the City of Atlanta in Figure 11 is for the 2006 calendar year and shows a relatively high number of junk vehicles, open and vacant structures and overgrowth violations. As outlined in the Atlanta Department of Planning and Community Development's annual reports(City of Atlanta Department of Planning and Community Development, 2006), a number of administrative policies and actions have been implemented since that time to reduce violations and improve enforcement.

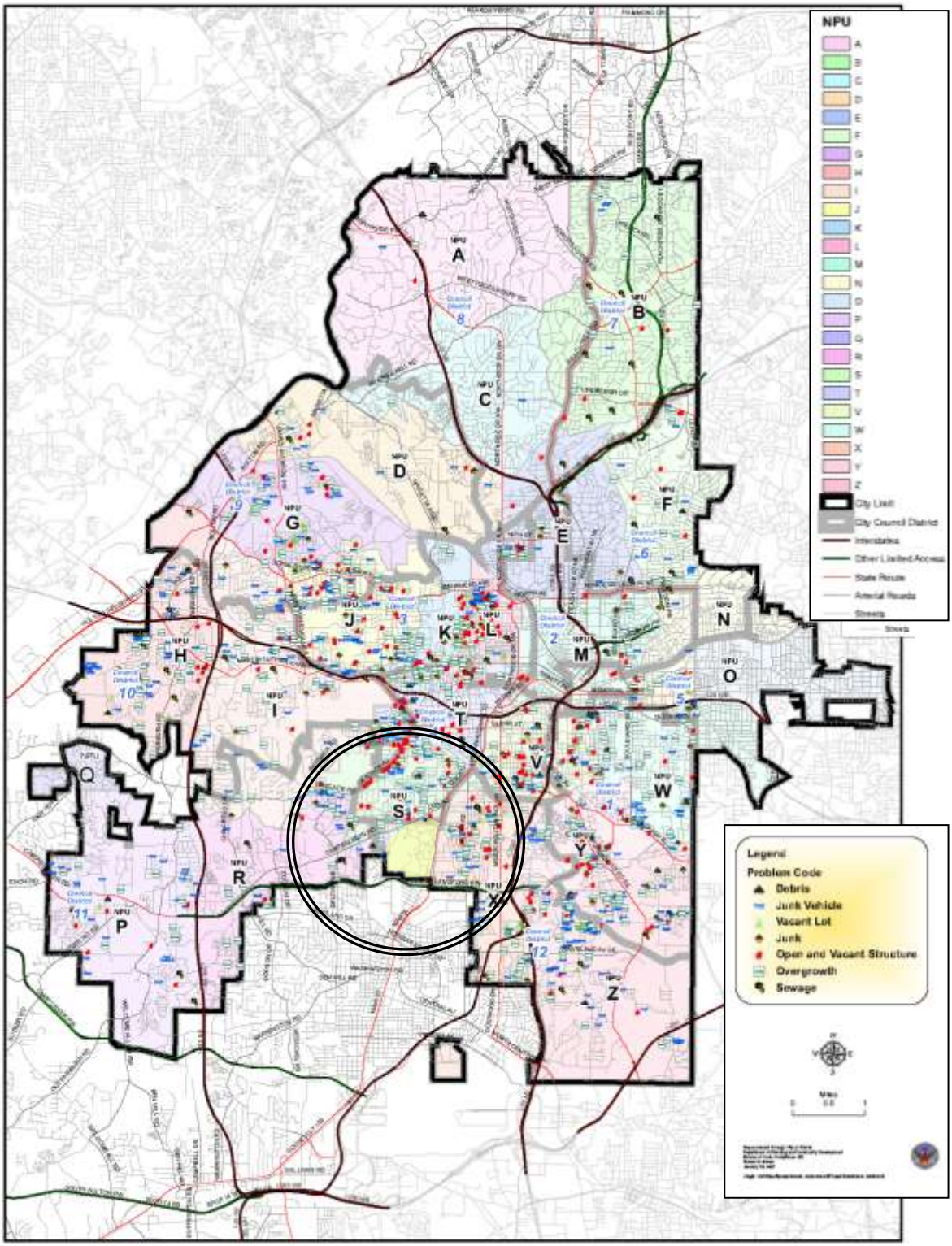

Figure 11. City of Atlanta Code Violations from 2006

Male Incarceration

The Farley model suggests that illicit drug and alcohol marketing can lead to incarceration, which might influence STDs by creating an imbalance in male-female ratios. Although incarceration rates for the area were not available, a proxy of male parolees was used. The areas around Fort McPherson show the highest concentrations in the City of male residents on parole as of Fall 2011 (Figure 12), revealing a pattern similar to the mapping of STD rates in the area and suggesting support for the relationship between male incarceration rates and STD rates discussed in the literature.

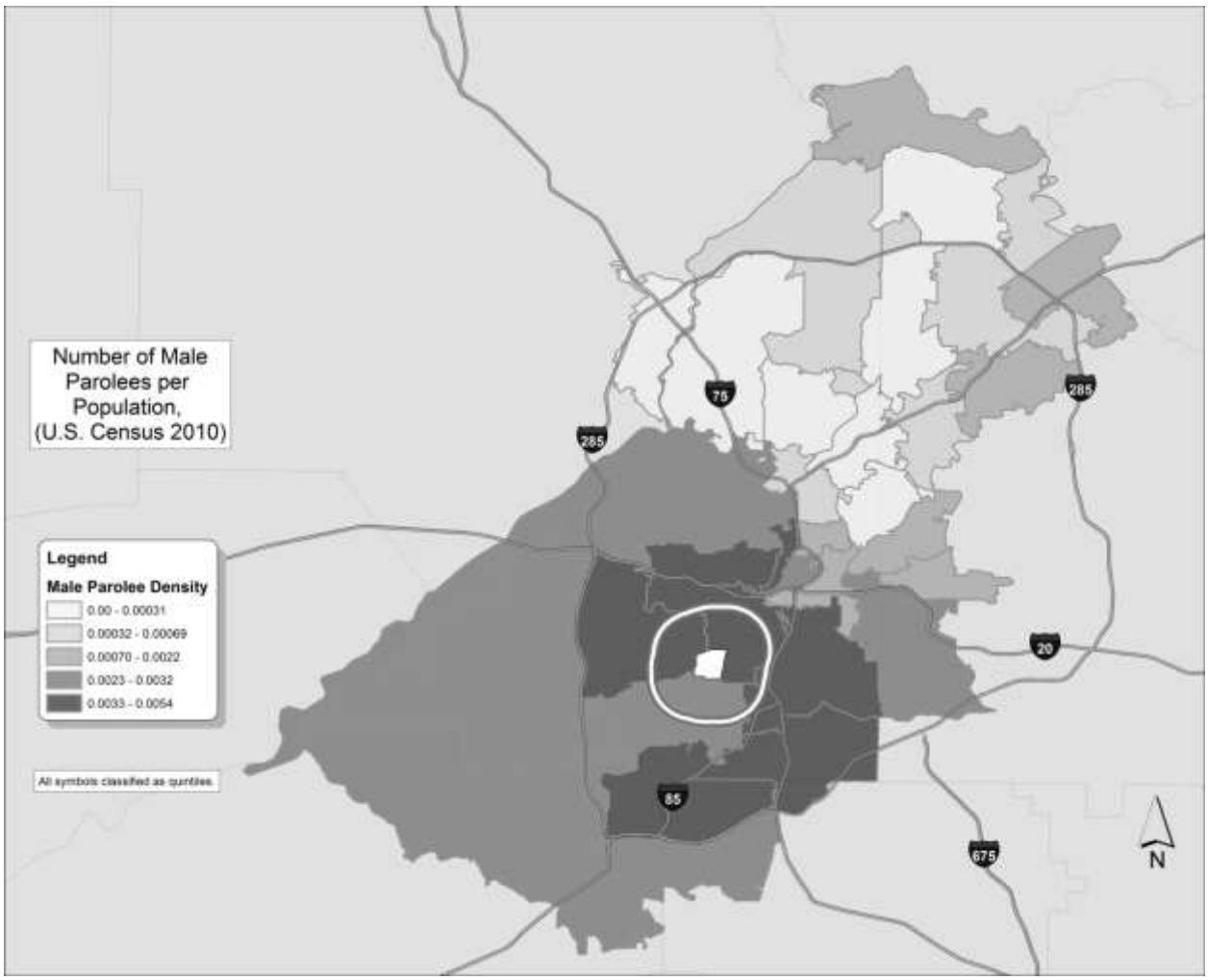

Figure 12. Number of male parolees per population, 2010.

The most serious offense for more than one quarter of all male parolees is nonviolent and drug-related. African-Americans and Hispanics have less access to mental health and addiction counseling (Wells, Klap, Koike, & Sherbourne, 2001).

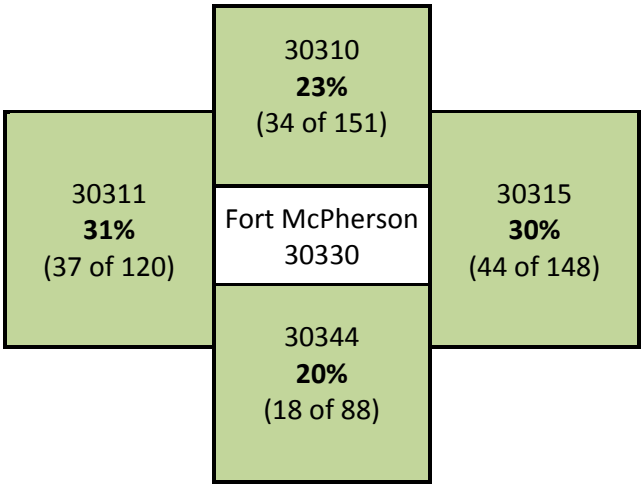

Figure 13. Portion of men on parole whose most serious offense is nonviolent and drug-related

The implication for Fort McPherson is that local men may not have the resources available to break the cycle of addiction, increasing the likelihood of repeated drug-related arrests and increasingly long jail sentences. Key informants suggested providing Fort McPherson's residents with enhanced access to addiction and mental health treatment resources.

In addition, it was suggested that diversion into addiction treatment programs may be a more desirable response to minor drug offences than enforcing mandatory sentence policies, which (a) remove males from the population while (b) doing little to address the root cause of the crime: addiction. Some of the policy changes suggested, therefore, might have a considerable effect on the numbers of men absent from the community due to incarceration.

Earlier, the potential of using CHAs to increase the employment opportunities for local residents as the redevelopment process begins was introduced. In order to give all residents a chance to improve their level of well-being and decrease the likelihood of relapse into drug use, key informants suggested it may be useful to include provisions into these agreements that do not permit discrimination based on criminal records, particularly for minor offenses.

Social Capital

Social capital is included in the Farley model because illegal activities (such as drug use and risk taking behavior) may be curbed when neighbors watch out for each other and social connections are encouraged through formal and informal structures. The concept of social capital was explored from a variety of different perspectives in this project, including public safety, family supports, and gathering places.

Social Capital: Public Safety

Public safety is another area in which policy may be particularly effective. For example, there is strong support for the argument that lighting has a significant impact on crime rates (Farrington & Welsh, 2002). One suggestion for improving on social capital around Fort McPherson is to ensure that all streets and other community spaces have adequate lighting.

Figure 14. City of Atlanta Violent Crime Rate, 2010

Another policy suggestion was to create a non-emergency (e.g., 311) number so people have the ability to communicate with police and city officials about potential problems before they escalate to crisis level. This increases the feeling of efficacy, community and personal safety, and fosters neighborhood cohesion.

The concept of safety was expressed differently in the Photovoice project, most likely due to the Photovoice focus on assets. For example, in this photo and essay by Dianese Howard entitled, *Backyard Parks,* she writes:

There is a private park for every home. A restful spot for the household, friends and neighbors. Having private green space is key to the lives of people who live here. Children can play safely, free from harm. The fruit trees provide healthy snacks and the gardens provide nutrition. Protecting this in-town, suburban lifestyle is important to the quality of life of existing and new residents. All of this within just a few miles from downtown Atlanta and the busiest airport in the world.

Figure 15. Backyard Parks by Dianese Howard

Many of the Photovoice participants spoke of a similar benefit of living in southwest Atlanta-- the amenity of convenient city living with suburban aesthetics and features such as big yards, parks, quiet living and single family homes.

One participant discussed his perception of public safety in the area and the social capital in the neighborhood that addressed an infraction in this regard. "I moved to East Point and was blessed to move into an old subdivision…the area is one of the lowest crime areas. It's quiet. The neighbors, the local people were so welcoming that when I moved in, in July, somebody broke in August. When I got home, the neighbors were there, with full support. I had one neighbor who called the locksmith, and he took care of it for me. So that identity took me back to my dad's hometown, where people took care of each other."

Interviews with local officials suggested community policing as a strategy for addressing public safety concerns. This particular strategy is closely tied to social capital. It involves increasing the level of cooperation and dialogue between police, residents, and local institutions such as the business community (Pino, 2001). While achieving this enhanced level of coordination is not as straightforward as

providing adequate lighting in streets and parks, increasing trust and communication has a direct impact on trust and overall safety.

Social Capital: Family Supports

It is well-established that living in poverty is intimately tied to multiple life stressors such as substandard housing and community violence, which can have immediate and long-term impacts on physical and mental well-being (Evans & English, 2002). In environments such as this, these forms of stress are often so pervasive throughout the population that local residents are often unable to recognize the health implications. As a result, serious mental and physical health problems are left untreated. As one expert explains, “A lot of people in these communities are depressed, and they don’t even know it.”

In order to strengthen families and move beyond basic day-to-day survival, people must have a way to acquire the tools for moderating the devastating influence of daily stress on health and well-being. As mentioned, mental and emotional conditions such as depression are very common outcomes of stress, yet they often go unrecognized and untreated. One policy suggestion in this area is to increase access to mental health services.

Violence, whether in the community or in the home, is one of the most common causes of stress in many communities. For this reason, providing enhanced resources for victims of violence represents a strong opportunity for decreasing stress, supporting healthy family environments, and improving overall social cohesion.

Places to de-stress in neighborhoods can support mental health. Several of the Photovoice participants referenced the plentiful parks, tree cover and green space that can be found in Southwest Atlanta as places for relaxation and as one participant put it, “serenity, serenity, serenity.” This is exemplified in Dianese’s photo and essay entitled, *The Road Less Traveled* (Figure 16). She writes:

Protecting our natural assets is key to the quality of life in our neighborhood. Having a tranquil spot that is devoid of the hustle and bustle of development.

Figure 16. The Road Less Traveled by Dianese Howard.

Social Capital: Gathering Places

The key informants interviewed provided several suggestions for increasing the number and scope of gathering places that are known to foster social capital. One suggestion was to develop joint use agreements, where multiple community groups use the same location as a meeting space. For instance, schools and churches often open their doors to clubs and self-help groups. A perfect example is the Outdoor Activity Center; located in the vicinity of Fort McPherson. While its primary purpose is as an activity space for local children, it also allows other groups, such as the Photovoice participants, to meet there as well.

Cost is often a barrier that restricts access to potential gathering places. For this reason it was also suggested that the cost of access to community institutions such as recreation centers should be set so that they are affordable to a greater percentage of the local population. Many local recreation centers provide after-school activities, so they also have strong potential to address the third policy suggestion, which is to increase the scope of daycare and nutrition services.

Several assets in the community are prime candidates for joint use agreements or policies that allow community access to publicly funded spaces for multiple uses. Figure 17 is a photo of the Outdoor Activities Center (OAC) taken by Allean Brown. The Photovoice portion of this project held sessions at the OAC out of the generosity of the staff there. Darryl Haddock, the OAC executive director, said he has an unwritten policy to allow community groups to use the space when it is available. Allean further describes why she sees the OAC as an asset to the Cascade neighborhood.
“Outdoor Activities Center” by Allean Brown

This is the best-kept secret of southwest Atlanta. Tucked into the inner sanctum of the Cascade community, just north of Fort McPherson, sit 26 acres of trails and indigenous foliage, flora, fauna and insect habitats for public exploration, education and enjoyment. There is an outdoor theatre, a challenge/ropes course and gardens of all types. This is a treasure to be preserved and promoted.

Figure 17. Outdoor Activity Center by Allean Brown

Other potential candidates for joint use agreements and places where the community can gather are libraries and churches. In her photo and essay entitled, Adams Park Library, Allean writes*:*

This is a small gem in a big neighborhood. It is well utilized by children and adults and provides a much needed space for learning and meeting. I would like to see Science, Technology, Engineering & Mathematics (STEM) programs developed at the library for all ages and connected to the employment center on the base. We can encourage collaborative partnership between our public learning institutions and private research & development partners.

Figure 18. Adams Park Library by Allean Brown

Houses of worship can also serve in this critical role to build social capital. In his photo, *Mother, Son, Holy Ghost* (Figure 19), Joshua writes:

If you want to have a thriving healthy community, you need to have a place where people can gather. The church is that haven. For many, it is the rock of the community that connects the people.

Figure 19. Mother, Son, Holy Ghost by Joshua Peltier

Transportation

The Photovoice portion of the project focused on neighborhood assets and was guided by place attachment theory. There were a few strong themes that emerged outside of the Farley model that were important social determinants of health. Transportation was a major theme that emerged and was referenced in a variety of ways including private and public transport. Atlanta's public transportation system, MARTA, was a strong theme for many of the participants. Two MARTA train stops border the northeastern and southeastern points of Ft. McPherson. Having access to the train and the bus was viewed as a major asset of the neighborhoods near the base. This is exemplified in Jerry's photo entitled, *City Bus* (Figure 20).

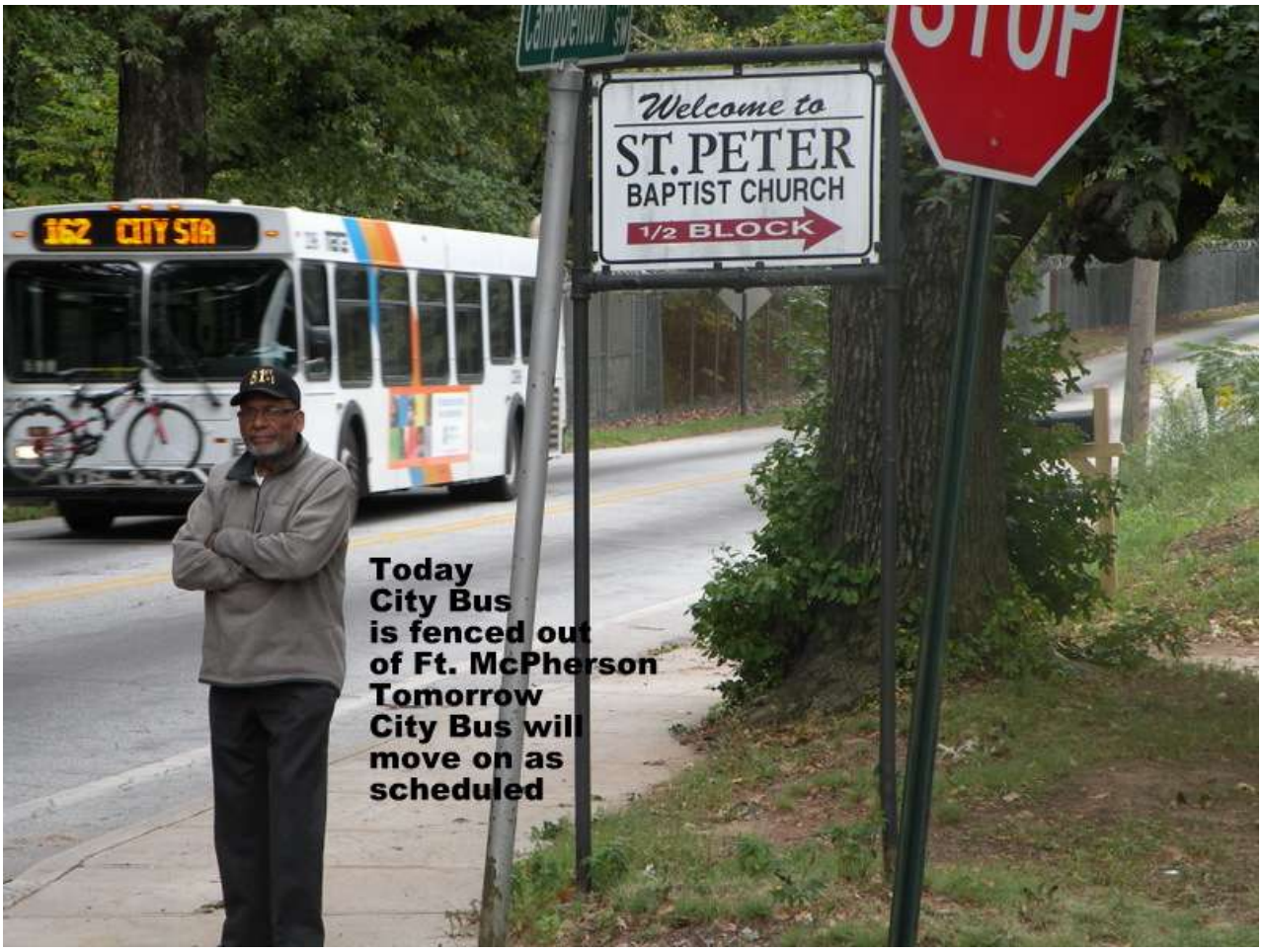

Figure 20. City Bus by Jerry Moore.

In addition the active transport was also captured. Ellis Manns, in his photo entitled, *Sidewalk Exercise*, writes:

I have a terrier and he's my buddy. We walk from my neighborhood to the main entrance of Ft. McPherson on Lee Street all the way to the next train station at Oakland. This side of the base has a sidewalk and that is our exercise trail. I've been doing that for at least 5 years, and it has such a pleasing effect on me and my terrier, Houdini.

Figure 21. Sidewalk Exercise by Ellis Manns

History and Culture

A second theme arose from the place-attachment perspective of exploring the neighborhood assets through Photovoice.

In keeping with the transportation theme but connecting it to a sense of history, Fitzgerald in his photo entitled Transportation Roots writes:

I wanted to look into history, so I found information on East Point. I learned that the East Point name is from being an Atlanta transportation hub. Here you can see the East Point Historical Society and the train in the back. I would like to see the Historical Society enhanced. A roadway along the southwest end of the base connecting to Stanton Road and Headland Drive would increase the visibility of the Historical Society. The Historical Society could be a tour stop for visitors and residents alike.

Figure 22. Transportation Roots by Fitzgerald Smith, Jr.

One Photovoice participant summarized the importance of history and culture and how to incorporate these in redevelopment (Figure 23).

"Journey Into the Past" by Dianese Howard

This cemetery is the oldest in Atlanta and final resting place for a diverse group of people; slave and free, indigenous and immigrant, soldier and civilian are being cared for by the Utoy Cemetery Association. This is important because it bears witness to history of the South and speaks to remembering the past. The rich history and natural beauty of this site is a natural learning lab. Recently, over 90 graves of black Americans were discovered. There are also identified grave sites of Muscogee (Creek) Indians along with veterans of the Revolutionary war and the War of 1812. We must remember our past.

Figure 23. Journey into the Past by Dianese Howard.

In the Photovoice sessions, Dianese also told the project team that her grandfather was a stone mason and worked on many of the stone foundations that can be seen in the southwest Atlanta neighborhoods. These stone foundations are captured in Allean's photos of several places in the area (Figure 24). Allean writes:

In designing new spaces, preserve the local texture of variegate stone walls and gates. These rocky foothills of the north Georgia mountains and Stone Mountain rubble should be regarded and replicated. New structures should reflect the aesthetic of this place.

Figure 24. Stone Foundations by Allean Brown.

Discussion

Addressing social determinants of health inequities provides public health an opportunity to understand the context in which disparities exist and persist. Public health discourse has primarily focused on social determinants as an explanation for disparities, leaving us challenged with *how* to change and impact these determinants, particularly ones that are beyond the health sector. Public health is also challenged in how to motivate action on these determinants, when the problems identified often appear daunting. Health in All Policies is an approach that specifically targets policy opportunities in sectors outside the health sector with a solutions-focused lens, focusing on fundamental causes (Phelan, Link, & Tehranifar, 2010). Findings from this project confirm that Health in All Policies can be one of the tools public health is searching for (Centers for Disease Control and Prevention, April 2009, October 2010) to apply to a specific health outcome such as STDs, and it can be used from a stakeholder engagement perspective as well. The use of conceptual models that identify social determinants for a particular health outcome, which can then be narrowed from a Health in All Policies lens, and the use of place attachment theory as a framework for approaching place-based community engagement, offer further refinements in this operationalization of a Health in All Policies approach.

Once all data were collected, analyzed, and triangulated, they were shared with stakeholders. The presentation offered an opportunity for community members to provide feedback and recommendations on opportunities for communication, partnership, research and practice in a variety of areas. Figure 25 contains recommendations for next steps that were identified by stakeholders. Recommendations are organized around the key components of Farley's model and also include ways to improve the relationships between people and both natural and built environments and research opportunities.

Employment/Education

- Partner with universities on Science, Technology, Engineering, and Mathematics (STEM) and support STEM programs for teachers and students, from elementary school to college, to the creation of jobs
- Learn from the Harlem Children's Zone, which provides free support for children and families through parenting workshops, a preschool program, public charter schools, and child-oriented health programs for thousands of children and families
- Use the resources of existing institutions/universities: Healthy Food Financing, or the Institute of Global Health; connect to state Department of Agriculture and look for opportunities for support or funding for developing a food cooperative

Drug & Alcohol Marketing

- Locate, list, or map out the mental health and substance abuse services available in the area and provide this as a resource.
- Increase access to addiction treatment.

Male Incarceration

- Provide supportive services for populations affected by incarceration
- Fund pre-treatment readiness, which are evidence-based initiatives on how to prime people for success.

Social Cohesion

- Increase the number of sidewalk cafes, businesses to use near home
- Improve park utilization through adequate lighting; proper maintenance; and design strategies that support sightlines, surrounding area character
- Explore partnership with local After-School All-Stars program, to provide middle school students with venues for physical activity
- Consider ways to limit technology, such as cell phone use and texting, in public places, which may interrupt relationship building
- Encourage public school field trips *in the area,* such as the Outdoor Activity Center and community gardens
- In any redevelopment effort, preserve the tree canopy and natural beauty.
- Develop programs to educate residents about their neighborhood
- Encourage residents to get involved with their neighborhood associations, historical society, and/or city government
- Consider ways in which to brand the area, following the examples of local cities/neighborhoods, and even Detroit's campaign, "Say Good Things About Detroit." Features to highlight in a branding campaign include: natural beauty, historical center, and other amenities; educated population; purchasing power; beautiful housing stock; live-work-play area; convenience to employment centers, downtown, airport, public transit; connectivity; an ideal area for retirees.
- Increase lighting, especially on major thoroughfares
- Install street signs and names for surrounding areas.
- Enforce codes, including those related to industrial dumping, and implement community dumpsters

Further Research/Investigation

- Adolescents: Where do they see STD risk on an everyday basis? What STD prevention programs are available?
- What are the local municipalities doing about Health in All Policies?
- Comparative data pre-/post-BRAC-closure would be helpful.

Figure 25. Opportunities for Next Steps in Addressing the Social Determinants of Health Inequities

Assessments of social determinants data confirmed findings in the literature that these challenges co-exist in the same geographic location as areas of high STD rates. Utilization of publicly available,

relevant, and actionable data can not only be informational, it can be an opportunity. Initial stakeholder reactions to the data included confirmation of their assumptions and responses that the problems seemed overwhelming. However, when this data was further woven with the findings on policy opportunities and visual documentation of the assets of their community, stakeholders were motivated to identify additional solutions and to take action.

Limitations of this project include those inherent to a case study, which is that it presents an opportunity to deeply understand one case, but offers limited perspective on the characteristics which may be unique and therefore not representative of other cases.

Current Activities Related to Suggested Next Steps

Although both of the following activities occurred without feedback from this project, two suggestions provided in this report have recently been addressed to some extent and should be acknowledged as progress in these areas. The first activity relates to the suggestion that the cost of access to recreation centers be more affordable to a greater percentage of the local population. An official from the City of Atlanta reported that fees for the Office of Recreation's summer youth programs were reduced from $65 to $35 per week for Atlanta residents and city employees, in order to provide access to quality programs for youth without placing undue financial burden on parents.

The second activity relates to the suggestion for diversions into addiction treatment programs, rather than enforcing mandatory sentence policies for drug offenses. On May 2, 2012, Governor Nathan Deal signed into law HB 1176, which, among other things, allows courts to establish a drug court division to provide an alternative to the traditional judicial system for disposition of such cases (Georgia General Assembly Legislation, 2012).

Conclusions

This project addressed the social determinants of STD inequities by utilizing a Health in All Policies approach while acknowledging the critical role of place attachment. The unique combination of methods proved to be an excellent way to operationalize HiAP, yielding meaningful data to document challenges, highlight assets, and explore policy opportunities while simultaneously engaging stakeholders in dialogue regarding next steps.

Next steps for the project team include responding to requests to share findings with groups who can mobilize action, such as the Community Engagement committee of the Local Redevelopment Authority, which could inform redevelopment decisions relating to Community Hire Agreements, green space preservation, and place-attachment branding, and the Atlanta City Council, which could inform decisions related to lighting and code enforcement, among others. Efforts will be made to publicize the findings and engage other sectors as well.

Policy changes could improve overall health as well as sexual health. Publicly available data can be used to track changes in STD rates and social determinants over time. Changes addressing the fundamental causes of STDs may occur over an extended period of time. Plans for tracking changes should maximize design elements for ongoing natural experiments (Wagenaar, 2011) and special care should be taken to track length of residency in the area to address potential confounding from displacement of current community members.

Findings from this project could inform other redevelopments, other community-based studies of STDs, and other Health in All Policies efforts. As more HiAP efforts are utilized and tracked, the field will continue to refine its methodologies and assess its outcomes.

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APPENDIX A

HOW TO LOCATE THE DATA PROVIDED IN THIS REPORT

A description of each indicator for which data is presented in this report, with a description and detailed explanation of how to find the data for yourself, are provided below.

- Reported STD Cases (p. 7)
  - Description: Includes combined rates of chlamydia, gonorrhea, and syphilis per 100,000 population.
  - Acquisition: This information was provided by the State of Georgia Department of Public Health at the request of the Centers for Disease Control and Prevention. Data at this level may not be publicly available, but state-level data can be accessed here: http://www.cdc.gov/nchhstp/atlas/.
- Foreclosure Trends (p. 8)
  - Description: Monthly foreclosure data for Fulton and DeKalb County ZIP codes for CY 2010. Table shows the percentage of loans in the Federal Reserve Bank dataset that are in foreclosure in any given month (data suppressed for ZIP codes with < 50 loans).
  - Acquisition: Via e-mail upon personal request of Karen Leone de Nie, Research Director, Federal Reserve Bank of Atlanta, Community and Economic Development Department, Research Division (karen.leonedenie@atl.frb.org). 10/27/2011
- High school graduation rates (p. 17)
  - Description: The No Child Left Behind Act of 2001 required reporting of graduation rates by one formula; while new federal law requires a different calculation. The present study pre-dated this change, so only the NCLB-compliant rate was used. If acquiring the same data today as described below, both values will be displayed. For detailed definitions, click the "i" for More Information displayed in the Report Card header on any Report Card sub-page.
  - Acquisition: Go to the Georgia Department of Education's website, http://www.doe.k12.ga.us/Pages/Home.aspx. Click School Reports on the right. Notice the school year options at top left: green forward and backward arrows allow selection of different school years. Select a school from the list. Click the Report Card tab at left. In the row of links at the top, choose Comparisons; then choose Download Other Data in the bar beneath the top row of links. Download the data table called Grad_Rate.xls, which contains the number and percentage of students graduating overall from each school and system, as well as numbers and rates by demographic group.
- Local investment in public schools (p. 18)
  - Description: Dollars from the Georgia General Fund dedicated to the school divided by the number of students enrolled.
  - Acquisition: Go to the Georgia Department of Education's website, http://www.doe.k12.ga.us/Pages/Home.aspx. Click School Reports on the right. Notice the school year options at top left: green forward and backward arrows allow selection of different school years. Select a school from the list. Click the Report Card tab at left. Click the Personnel and Fiscal link at the top, then Revenues & Expenditures just below

it. This provides school enrollment numbers (full-time enrollment or FTE) and Georgia General Fund expenditures allotted to the school, as well as the calculated General Fund Dollars per FTE.

- Jobs per workforce population (p. 20)
  - Description: The number of people aged 16 or older in an area who are employed in proportion to the number of people aged 16 or older in the labor force. Both numbers include people in the armed forces.
  - Acquisition: Both numerator and denominator came from the 2009 (5-year average) American Community Survey (ACS). Go to the American Factfinder website (http://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t). In the menu at left select Topics, expand the set under People by clicking the "+" sign; expand Employment; select Employment (Labor Force) Status and close the small window. Go to Geographies in the left-hand menu and select Census Tract, then Georgia, then highlight All census tracts within Georgia and close the window. No selections need to be made under Race and Ethnic Groups or Industry Codes. This search will open a list of links to tables containing data that meet the criteria. Choose the second one, Employment Status (S2301). The table that opens contains data for total population, population in labor force, and population employed by age group for each census tract in Georgia.
- City of Atlanta code violations (p. 22)
  - Description: Violations of the Atlanta Housing Code, Graffiti Ordinance or Commercial Maintenance and Industrial Code. In the City of Atlanta, the Bureau of Code Compliance is responsible for the inspection and enforcement of residential and commercial properties to ensure compliance with applicable ordinances.
  - Acquisition: The map shown was downloaded from the City of Atlanta Geographic Information Systems map catalog (http://gis.atlantaga.gov/apps/maps/). Click "Code Enforcement" in the menu at left; then click the link to Code Violations 2006.
- Number of male parolees per population (p. 23)
  - Description: The number of men serving parole with addresses in a given zip code divided by the total number of adults residing in that zip code, times 1,000.
  - Acquisition: The Georgia Parolee Database is available to the public online at http://www.pap.state.ga.us/ParoleeDatabase/Controller. In the search form, a single zip code is entered at a time, with no other search criteria. This returns a list of all the parolees under supervision whose address of residence is in that zip code, arranged alphabetically by last name, with additional information about each. We copied and pasted these zip-level data into an Excel spreadsheet where we could more easily remove those listed as female and count the men.
- Portion of men on parole whose most serious offense is non-violent and drug-related (p. 24)
  - Description: The number of men on parole with a primary offense involving a drug violation, by zip code, divided by the total number of men on parole in the zip code.
  - Acquisition: Information provided for each parolee in the Georgia Parolee Database (web address above) includes "primary offense", which is defined as "the most serious

crime of which the parolee has been charged". Drug-related crimes were identified by entries such as "Sale/Distribution Cocaine" or "Violate Ga Cntrl Sbst Act [Georgia Controlled Substances Act]". In accordance with the FBI's Uniform Crime Reporting (UCR) program, violent crimes are defined as those involving force or threat of force. There are four offenses considered violent crimes: murder and non-negligent manslaughter, forcible rape, robbery, and aggravated assault. (Uniform Crime Report: Crime in the United States 2010, available at http://www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s/2010/crime-in-the-u.s.-2010/violent-crime/violent-crime) The Hierarchy Rule that governs reporting requires that only the most serious offense in a multiple-offense criminal incident be counted. Crimes in descending order in this hierarchy are murder and non-negligent manslaughter, forcible rape, robbery, and aggravated assault, followed by the property crimes of burglary, larceny-theft, and motor vehicle theft. It follows that the most serious offense for which someone is serving parole is a nonviolent one when the primary offense listed is illegal possession, manufacture, sale, smuggling or distribution of a controlled substance. Note that other nonviolent offenses such as check fraud and theft by taking are included in the total number of parolees (denominator), along with violent and drug-related crimes.

- Violent crime (p. 25)
    - Description: Incidents of murder, non-negligent manslaughter, forcible rape, robbery, or aggravated assault (see UCR definition above).
    - Acquisition: Crime statistics for the City of East Point were not found in publicly accessible data sets, so an inquiry was made to the East Point Police Department. We were informed that these could be provided but that a formal request under the Freedom of Information Act was required. Time prevented our pursuing this further. Crime data for the City of Atlanta were downloaded into Excel from the Atlanta Police Department's website at http://www.atlantapd.org/crimedatadownloads.aspx. These are detailed data including type of crime, date, time, location street address, location GIS coordinates, and more. Two other websites offer easier ways to access Atlanta crime data, though with less detail. MapATL.com allows users to select date ranges, crime categories and police zones and produces a map showing the locations and numbers of crimes meeting those criteria. The Atlanta Journal-Constitution's Atlanta Crime Search site (http://www.ajc.com/news/atlanta-crime-reports-107392.html) produces a table of incidents from the city of Atlanta Police Department based on the user's selection of neighborhood and crime type. The table includes the address, neighborhood, date and crime, along with a link to more details.

“The Road Less Traveled” photo by Dianese Howard