

**A Systems-Based Approach to Improving Health
and Reducing Structural Disadvantage in Urban Neighborhoods**

Point of Contact

Jeff Walker
Professor of Criminal Justice; Professor of Health Behavior
jeffw@uab.edu
205-934-2069

The Problem – Disadvantaged Urban Neighborhoods

Making disadvantaged urban neighborhoods healthy and vital is a grand challenge facing Birmingham and all other US cities. This challenge has eluded governments and private entities at all levels for decades, largely because of its immense and complex scope. As far back as the 1930s with the Chicago Area Project [1], attempts to turn areas of concentrated disadvantage into vibrant communities have failed, or at least failed to be fully successful. Recent efforts to gentrify areas to make them more vibrant have seen some success; but displace low-income residents living there, further concentrating disadvantage in other areas [2]. What is needed is a systems-based effort crossing many boundaries that is also realistic in what can be accomplished within the social, economic, and political structure of a city. An often-overlooked element of neighborhoods is that, as systems, addressing one part rarely improves the whole [3, 4]. To improve the system, a holistic and therapeutic approach is necessary to overcome decades of structural and economic disadvantage. This challenge necessitates community-based participatory partnerships, innovative thinking, and interventions addressing a variety of interconnected issues at the neighborhood level.

Conceptualization of the Plan of Work to Make Urban Neighborhoods Healthy and Vibrant

Successful revitalization of a neighborhood requires two simultaneous processes: 1) resources to overcome the multifaceted structural disadvantage the area and residents have experienced; and 2) a mechanism for community building among the residents. This proposal provides resources at multiple points of eight connected subsystems of health issues, structural disadvantage, and building social capacity. The foundation of these activities is the establishment of a Neighborhood Action Center (NAC), that will establish a location to coordinate program activities and provide a place for connection and action among neighborhood members.

Improve health and mental health. People who live in distressed areas experience the worst kinds of health-related stress [5]. A centralized portal will provide resources for physical health, nutrition, activity, and mental health counselling and services, among others. Establishing a community health clinic within the NAC will serve as the gateway to a variety of resources and services that will improve residents' health. We will partner with the Neighborhood Association in the neighborhood(s) to identify a place for the NAC; and we will partner with the Jefferson County Department of Health and UAB Medicine for health services.

Improve economic viability and self-sufficiency. Hope in the future is critical in revitalizing a neighborhood. Residents need opportunities for good jobs, within their neighborhoods, that are a part of the current economy. We propose to work with the Birmingham Business Alliance and other economic drivers in Birmingham to establish employment opportunities within the neighborhoods. We will partner with the Innovate Birmingham Regional Workforce Partnership Initiative to train local residents to work in technology and in fields in the current economy.

Improve housing quality and affordability. Housing conditions strongly influence health and psychological wellbeing [6]. Living in dilapidated conditions contributes to hopelessness and feelings of unfairness. Further, hazards such as mold and lead-based paint contribute to asthma and cognitive problems [7, 8]. We propose to work with the economic partners, the Neighborhood Housing Services of Birmingham, and the Birmingham Land Bank Authority to address housing quality and affordability. This effort will help revitalize and maintain homes, rid them of health hazards, and provide resources and protection against raising taxes and rent.

Improve learning and education. Children living in poverty are rarely prepared to enter school [9]. Head Start programs help; but more is needed. Research has shown that children exposed to cultural venues and learning activities (e.g. being read to at home) at an early age fare better in elementary school [10]. We will partner with the Jefferson County Committee for

Economic Opportunity Head Start, the UAB School of Education, and the UAB School of Public Health to establish funded free or low-cost, high quality day cares, Pre-K, and afterschool care programs to improve educational opportunities. The programs will provide intense early learning opportunities for children, with a focus on STEM education initiatives that may improve the economic viability of the neighborhood. It will also address intergenerational learning for adults.

Improve access to healthy food. Research linking food insecurity to a variety of health and social issues is well established [11]. We propose three efforts to address food insecurity. First is the establishment of community gardens in or around the NAC. This is also linked to improving a sense of community (see below). Second is a teaching kitchen to teach residents how to prepare nutritious and fresh food. Finally, we will work with economic partners and the State through the Healthy Food Financing Act of 2015 to establish quality grocery stores in the area.

Improve safety and reduce crime. It is difficult to have hope in the future, to exercise in the neighborhood, and to have pride in the neighborhood when residents fear for their safety [12, 13]. Applying evidence-based crime reduction programs, we will work with non-profit community providers, the Jefferson County Family Court, and the Birmingham Police Department to develop and implement site specific efforts to reduce crime and improve safety.

Improve the social environment. A part of building community is celebrating the arts and exposing residents to a variety of arts [14]. We will engage the UAB Departments of Art, Music, and Theatre to increase the exposure to arts. This could come in the form of art festivals that celebrate neighborhood artists, an AIEVA satellite for art exhibits (national and local artists), or working with economic partners to convert abandoned structures into live/work space for artists.

Improve the sense of community. All areas of this proposal aim to build social cohesion and collective efficacy among residents. Community building requires interventions in the physical and social environments [15, 16]. In partnership with the Health Action Partnership, Birmingham Land Bank Authority, and the City, efforts to improve the physical environment will involve blight eradication, greening of vacant lots, streetscape improvements, and establishment of complete streets. All of these activities will be driven by the residents' choices and contributions. These improvements will increase hope, pride, and instill a desire to sustain improvements. To address the social element of community building, we will use the NAC as a gathering place for groups in the neighborhood, and we will make the area around the NAC and other locations in the neighborhood accessible and conducive to formal and informal interactions among residents.

How the Project Benefits Birmingham, Alabama, the U.S., and the World

Revitalizing a neighborhood that has experienced concentrated poverty and disadvantage is perhaps one of the top grand challenges in the U.S. Change is possible but difficult given the diverse nature of neighborhoods and their response to different efforts [4]. This project would benefit the chosen neighborhood(s) in terms of resources, services, and therapeutic community building. Success in this project would also be a benefit to Birmingham because the project could be scaled and replicated in other neighborhoods. Further, we believe our innovative, interdisciplinary, and systemic approach will be successful, and would make Birmingham a model city for urban revival throughout the country and the world. These efforts would also make Birmingham a destination city for new residents and companies looking to locate to a vibrant, upcoming area. Other Grand Challenge proposals are likely to propose similar, more detailed solutions to the eight areas proposed here. We will certainly welcome collaboration with other teams. If we are successful in this Grand Challenge, it would have win-win economic benefits, less dependence on government assistance, higher revenues from property and income taxes, and greater economic activity in Birmingham and beyond.

Potential Team Members

UAB Team Members

School of Public Health

- Max Michael, Lisle Hites, Ariann Nassel
- Mary Evans, Frank Franklin, Susan Davies,
- Robin Lanzi, Lloyd Edwards

College of Arts & Sciences

- Jeff Walker (Criminal Justice)
- Sylvie Mrug, Catheryn Orihuela (Psychology)
- Dione King, Stacy Moak (Social Work)
- Departments of Theatre, Music, Art and Art History

College of Education,

- Early Childhood faculty

UAB CORD

AIEVA

Innovate Birmingham Regional Workforce Partnership

Community Partners

- Community Advisory Board and Neighborhood Associations
- Jefferson County Department of Health
 - Bryn Manzella
- Birmingham Business Alliance
- Health Action Partnership
- UAB Medicine
- Innovate Birmingham Regional Workforce Partnership
- Birmingham Land Bank Authority
- City of Birmingham
- Jefferson County Committee for Economic Opportunity Head Start
 - Waddy DePriest, Executive Director
- Birmingham Police Department
- Jefferson County Family Court
- Neighborhood Housing Services of Birmingham
 - Kelliagh Gamble, CEO

References

- [1] Wirth, Louis. 1938. Urbanism as a way of life. *American Journal of Sociology*, 44(1):1-24.
- [2] Ellen, Ingrid G. 2016. Advancing our understanding of Gentrification. *Cityscape: A Journal of Policy Development and Research*, 18(3):3-8.
- [3] Batty, Michael. 2007. *Cities and Complexity*, Cambridge MA: MIT Press.
- [4] Walker, Jeffery T. 2007. Advancing science and research in criminal justice/criminology: Complex systems theory and non-linear analyses. *Justice Quarterly*, 24(4):555-581.
- [5] Brunner, Eric. 1997. Socioeconomic determinants of health: Stress and the biology of inequality. *British Medical Journal*, 314:1472.
- [6] Krieger, James and Higgins, Donna L. 2002. Housing and health: Time again for public health action. *American Journal of Public Health*, 92(5):758-768.
- [7] de Leon, Edwin and Schilling, Joseph. 2017. *Urban Blight and Public Health: Addressing the Impact of Substandard Housing, Abandoned Buildings, and Vacant Lots*. Washington, DC: Urban Institute.
- [8] Brooks-Gunn, Jeanne and Duncan, Greg J. 1997. The effects of poverty on children. *The Future of Children*, 7(2):55-71.
- [9] Winter, Alix S. and Sampson, Robert J. 2017. From lead exposure in early childhood to adolescent health in a Chicago birth cohort. *American Journal of Public Health*, 107:1496-1501.
- [10] Ryan, Rebecca M., Fauth, Rebecca C., and Brooks-Gunn, Jeanne. 2006. Childhood poverty: Implications for school readiness and early childhood education. In Bernard Spodek and Olivia N. [11] Saracho (Eds.), *Handbook of Research on the Education of Young Children* (pp. 323-346). Mahwah, NJ: Lawrence Erlbaum Associates Publishers.
- [11] Olson, Christine M. 1999. Nutrition and health outcomes associated with food insecurity and hunger. *The Journal of Nutrition*, 129(2):521S-524S.
- [12] Lorenc, Theo, Clayton, Stephen, Neary, David, Whitehead, Margaret, Petticrew, Mark, Thomson, Hilary, Cummins, Steven, Sowden, Amanda, and Renton, Adrian. 2012. Crime, fear of crime, environment, and mental health and wellbeing: Mapping review of theories and causal pathways. *Health and Place*, 18:757-765.
- [13] Sampson, Robert J. 2012. *Great American City: Chicago and the Enduring Neighborhood Effect*. Chicago: University of Chicago Press.
- [14] Phillips, Rhonda. 2004. Artful business: Using the arts for community economic development. *Community Development Journal*, 39(2):112-122.
- [15] Swaroop, Sapna, and Morenoff, Jeffrey D. 2006. Building community: The neighborhood context of social organization. *Social Forces*, 84(3):1665-1695.
- [16] Sampson, Robert J. and Graif, Corina. 2009. Neighborhood social capital as differential social organization: Resident and leadership dimensions. *American Behavioral Scientist*, 52:1579-1605.