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Smart Growth Center/Public Health Team Awarded Grant to Study Linkage Between Adolescent Physical Activity and the Built Environment

A Public Health and Smart Growth research team from the University of Maryland has been awarded a major grant to conduct a three-year study of the linkage between adolescent physical activity and the built environment of the neighborhoods of high school students.

The project, funded by the Robert Wood Johnson Foundation under their Active Living Research Program, will be directed by Dr. Carolyn C. Voorhees, a behavioral and social epidemiologist with appointments in the Departments of Public and Community Health and Kinesiology. Dr. Voorhees is also an affiliate of the National Center for Smart Growth Research and Education. Dr. Gerrit J. Knaap, the Smart Growth Center's Executive Director, and Dr. Kelly J. Clifton, of the Department of Civil and Environmental Engineering and also a Smart Growth Center affiliate, are also members of the research team.

The focus of the study was prompted by the national epidemic of obesity, a health problem that is especially prevalent among adolescents. The study will attempt to identify the determinants of physical activity in adolescents, including the effects of their surrounding built environment. The research will attempt to determine if the built environment encourages sedentary lifestyles, and therefore contributes to adolescent weight problems, or whether the built environment can facilitate or acts as a barrier to physical activity.

Most previous studies that have focused on the relationship between the physical environment and physical activity have focused on adults. This study, however, will focus on adolescents and, more specifically, on adolescents in urban environments, who statistics show are particularly at risk. The researchers will work with a mostly minority (African American) adolescent population from a variety of residential environments and socio-economic backgrounds in Baltimore City.

“This research provides a unique opportunity to integrate the various disciplinary approaches to the study of the built environment and public health,” Dr. Voorhees said. “This may prove to be more fruitful than perspectives from just one field of study.”

The interdisciplinary team of researchers has expertise in the study of public health, transportation, city planning, physical activity, adolescents and statistical analysis.

Dr. Voorhees has previously researched environmental, behavioral and personal factors related to smoking and physical activity in minority youth and adults. She has also been the Principal Investigator for a separate study of the community characteristics and physical activity in middle school girls in two Maryland counties.

Dr. Knaap has published extensively on urban form, land use and smart growth. Dr. Clifton has been involved in several recent studies involving physical activity and the built environment that focused primarily on pedestrians.

In addition to Drs. Voorhees and Knaap, the team will include:

- Dr. Deborah Rohm Young, a physical activity epidemiologist and associate professor of Kinesiology; and,
- Dr. Min Qi Wang, a professor of public and community health whose expertise is in health behavior and the use of complex bio-statistical analyses in large data sets.