

Active Living Research: 2011 Translating Research to Policy Award

Award Recipients:



Karen K. Lee, MD, MHSc, FRCPC, New York City Department of Health and Mental Hygiene

Dr. Karen Lee currently heads the Built Environment Program at the NYC Department of Health and Mental Hygiene. Dr. Lee is the lead for the NYC Health Department in its work with the NYC Departments of Design + Construction, Transportation and City Planning, in the development of the Active Design Guidelines published in January 2010 and named as part of the U.S. Environmental Protection Agency's 2010 Smart Growth Achievement Award for Overall Excellence. Dr. Lee and her staff work closely with the American Institute of Architects (AIA) in NY in the planning of the annual NYC Fit City conferences, initiated in 2006. She currently leads the NYC Health Department's efforts to implement the Active Design Guidelines through trainings, outreach and city policy efforts, in partnership with other city agencies in NYC. Dr. Lee's program also provides support to the Food Retail Expansion to Support Health (FRESH) tax and zoning incentive initiative to promote supermarket development in underserved neighborhoods in NYC.

This year, with federal stimulus funding from the U.S. Centers for Disease Control and Prevention (CDC) Communities Putting Prevention to Work grant, Dr. Lee is working with AIANY and AIA National to organize 3 Fit Nation Conferences in Washington DC, New Orleans and NYC, and to provide training and technical assistance to at least 10 other U.S. communities on built environment, physical activity and obesity issues. She has been a co-primary investigator on two Active Living Research grants, and currently also has funding from the Kresge Foundation.

Before coming to NYC, she was with the Epidemic Intelligence Service at the U.S. Centers for Disease Control and Prevention (CDC) where she worked in the Division of Nutrition, Physical Activity and Obesity at the National Center for Chronic Disease Prevention and Health Promotion. The CDC epidemiology field team led by Dr. Lee for the investigation of obesity-related environmental factors in West Virginia was awarded the U.S. Public Health Service Unit Commendation Award for outstanding contributions.

Dr. Lee received her medical degree from the University of Alberta in Canada, followed by a Masters of Health Science in Community Health and Epidemiology from the University of Toronto. She completed a residency in Community Medicine at the University of Toronto. Following her training, Dr. Lee worked in public health departments in Ontario and Edmonton, Canada; was Assistant Clinical Professor in the Department of Public Health Sciences at the University of Alberta in Canada; and served as Chair of the Research and Evaluation



Committee of a World Health Organization Country-wide Integrated Noncommunicable Disease Initiative (CINDI) demonstration site.



Joyce S. Lee, AIA, LEED AP, New York City Department of Design and Construction

Ms. Joyce Lee is the Director of the Active Design Program at the New York City Department of Design and Construction, a City agency with a \$5+ billion construction program. The Active Design Guidelines is an award winning policy document and is currently in implementation phase.

Prior to this position, she was the Chief Architect at the New York City Office of Management and Budget overseeing the survey of major city-owned structures and identifying opportunities in green development. Joyce regularly collaborates with public and private experts to broaden educational opportunities for the profession. Joyce founded the new Committee on the Environment at the American Institute of Architects (AIA) New York Chapter prior to becoming one of the first LEED accredited professionals in the City. She then served as the Chair of the national AIA Committee on the Environment. During her tenure on the advisory committee of the Urban Land Institute New York District Council, she has helped expand public school participation in ULI's UrbanPlan program as vice chair of the education committee.

Joyce received her master of architecture and master of real estate development from the Massachusetts Institute of Technology. She is the recipient of several professional awards including the Platinum Award from the American Council of Engineering Companies and the Public Architect Award from the AIA.



Gayle Nicoll, MArch, PhD, University of Texas, San Antonio

Dr. Gayle Nicoll is an architect and Chair of the Department of Architecture at the University of Texas at San Antonio. Dr. Nicoll has focused her academic work on teaching and research on building technology, human behavior and design practices related to healthy environments. Scholarly contributions include research on the environmental features of building design that promote physical activity, consultation for the LEED Innovation Credit for Active Design and NYC Green building code initiatives and co-author of the Building Design chapter of the NYC Active Design Guidelines.



The above three recipients are accepting the award on behalf of the following:

Michael Bloomberg and City of New York Mayor, City of New York

And

Active Design Guidelines Team:

NYC Department of Design and Construction

David Burney, FAIA, Commissioner, NYC Department of Design and Construction

Margot Woolley, AIA, Assistant Commissioner, Architecture and Engineering Division, NYC Department of Design and Construction

Victoria Milne, MID, Director, Office of Creative Services, NYC Department of Design and Construction

Joyce Lee, AIA, LEED LP, Director of Active Design, NYC Department of Design and Construction

NYC Department of Health and Mental Hygiene

Thomas Farley, MD, MPH, Commissioner, NYC Department of Health and Mental Hygiene

Andrew Goodman, MD, MPH, Acting Deputy Commissioner, Division of Health Prevention and Disease Control, NYC Department of Health and Mental Hygiene

Lynn Silver, MD, MPH, FAAP, Assistant Commissioner, Bureau of Chronic Disease Prevention and Control, NYC Department of Health and Mental Hygiene

Karen K. Lee, MD, MHSc, FRCPC, Director, Built Environment, NYC Department of Health and Mental Hygiene

Sarah Wolf, MPH, RD, Built Environment Coordinator, NYC Department of Health and Mental Hygiene

Thomas R. Frieden, MD, MPH, Former Commissioner, NYC Department of Health and Mental Hygiene, and Director, United States Centers for Disease Control and Prevention



NYC Department of Transportation

Janette Sadik-Khan, Commissioner, NYC Department of Transportation

Wendy Feuer, MA, Assistant Commissioner of Urban Design & Art, Division of Planning and Sustainability, NYC Department of Transportation

Hanna Gustafsson, Former Urban Fellow, NYC Department of Transportation

NYC Department of City Planning

Amanda Burden, FAICP, Hon. AIA, Commissioner, NYC Department of City Planning

Alexandros Washburn, AIA, Chief Urban Designer, NYC Department of City Planning

Skye Duncan, MSAUD, BArch, Associate Urban Designer, NYC Department of City Planning

Researchers

Craig Zimring, PhD, Professor, College of Architecture, Georgia Institute of Technology

Gayle Nicoll, MArch, PhD, OAA, Chair, Department of Architecture, University of Texas San Antonio

Julie Brand Zook, MArch, Researcher, College of Architecture, Georgia Institute of Technology

Reid Ewing, PhD, Professor, Department of City and Metropolitan Planning, University of Utah





New York City Active Design Guidelines: Promoting Physical Activity and Health in Design

The Problem

In New York City (NYC), obesity and type 2 diabetes are epidemic and the major two health problems getting worse. Rates of obesity among elementary and middle school children are particularly high in NYC (39%)¹ compared to national childhood obesity rates (32%).² Playing critical roles in the rise in obesity are the over-consumption of calories and underexpenditure of human energy, both of which are largely shaped by the built environments in which we live, work, play and eat. Today, architectural and urban design too often support unhealthy rather than healthy diets, and sedentary rather than active daily lifestyles. There is a growing body of research to suggest that architectural and urban design, and property management practices can increase regular physical activity and healthy eating. However, this research has yet to be widely translated into public and private sector practices and policies to systematically create a built environment supportive of active living and healthy eating.

The Context

Since 2006, the NYC Department of Health and Mental Hygiene (DOHMH) has partnered with the American Institute of Architects New York Chapter (AIANY) to sponsor the annual conference Fit City: Promoting Physical Activity through Design, bringing together the design and construction sector and public health professionals. At the 2007 conference, the evidence supporting the relationship between the built environment and physical activity was presented. Compelled by the strength of the evidence and the gravity of the obesity epidemic, NYC Department of Design and Construction (DDC) Commissioner David Burney, committed to the development of the Active Design Guidelines: Promoting Physical Activity and Health in Design. Published in January 2010 through a unique multi-agency, inter-disciplinary collaboration with the NYC DDC, DOHMH, Departments of Transportation (DOT) and City Planning (DCP), the Mayor's Office of Management and Budget (OMB), as well as leading academic experts, the Guidelines are a set of evidence-based and best-practice strategies to guide public and private sector architects, designers, planners and owners and managers on the routine inclusion of physical activity promoting strategies in the design, construction and operations of buildings, streets and neighborhoods. NYC Mayor Michael Bloomberg has helped to create conditions for the multi-agency collaboration needed for the successful development and implementation of the Guidelines. This initiative contributes to the vision of a more livable NYC, promoted in Mayor Bloomberg's Design and Construction Excellence Initiative, and synergizes with PlaNYC, the City's sustainability plan. While the targets of this initiative are design professionals and property owners and managers whose practices shape the built environment, the Guidelines will ultimately impact the broader NYC population, which has higher poverty levels and larger populations of Blacks and Hispanics, key obesity risk-factors. ^{3,4} The Active Design Guidelines Team (leadership and staff in NYC's DDC, DOHMH, DOT, DCP and OMB, and academic researchers) and Mayor Bloomberg are being nominated for this award.

Working toward Solutions

The Active Design Guidelines focus on neighborhood, street and building design, and synergies with environmental sustainability and universal design. Since publication in January 2010, the Active Design Guidelines team has been advancing implementation activities including outreach, training and City policy efforts. Outreach and training activities are being undertaken to build the knowledge, skills and capacity of architectural, planning and property management





staff in City agencies and from the private sector to effect built environment improvements for active living in NYC schools, health care facilities, residential and commercial buildings, and playgrounds and parks.

The strategies in the Guidelines are being incorporated into DDC standards used to guide staff, contractors and consultants working on public sector street and building projects and similar policies are being considered for adoption by other City and private agencies. DOT is actively using the street design strategies. In addition, City Planning has created zoning incentives for supermarket development and bicycle storage. Feasibility studies for zoning incentives for additional active design measures, such as best practice stairwells, are underway.

Since their release, over 6,700 copies of the Active Design Guidelines have been downloaded from the DDC web site. Of these, over 1,500 copies have been downloaded in NYC, over 2,700 have been downloaded in other parts of the U.S., and almost 2,500 have been downloaded internationally. A series of workshops with designers, design academics and property management professionals is currently underway to garner input to guide ongoing implementation activities.

The Active Design Initiative is expected to ultimately result in the routine incorporation of physical activity promoting strategies into new and renovation construction projects and building operations in NYC. Once designs are incorporated, these long-term to permanent environmental changes are expected to support increased physical activity over time in NYC. Broad implementation of the Guidelines, particularly in the public sector, will create a healthier built environment across all neighborhoods, including our high needs neighborhoods with the highest obesity rates. Adoption of Guideline strategies will help address the health disparities affected by current disparities in environmental supports for healthy behaviors.

Lessons Learned

The multi-agency, interdisciplinary approach to the Guidelines has been key to the success of this initiative. Beginning as a collaborative interagency effort, this initiative has continued to expand in its partnership scope, allowing for both focused efforts initially as well as expanded buy-in and ownership over time. The process of developing a joint initiative that aligns with the priorities of different partners has been critical for creating momentum. The Guidelines were shared over the course of development with other key City agencies (among them the School Construction Authority, Departments of Housing Preservation and Development, Parks and Recreation, Buildings, the Mayor's Office for People with Disabilities and the Mayor's Office of Long-Term Planning and Sustainability), with private sector design organizations (such as AIANY, American Planning Association NY Chapter, and Urban Green Council, the U.S. Green Buildings Council NY), with leading private sector designers and affordable and sustainable housing developers, as well as with advocacy groups such as Transportation Alternatives. Engagement of these additional groups to provide input into the Guidelines and implementation plans increases buy-in and ownership, and is anticipated to result in even more extensive implementation of the strategies.

Finally, highlighting how the Guidelines synergize with other City and private sector priorities, especially environmental sustainability and universal design, is anticipated to increase appeal and implementation. The team developed a Leadership in Energy and Environmental Design (LEED) innovation credit for physical activity, which has been approved for use in an affordable housing project as well as a health facility. There are currently nine additional projects



incorporating the credit, including new affordable housing developments, library constructions, worksites, and a healthcare facility. This credit promotes active living features such as: community gardens, rooftop fitness centers, courtyard play areas and stairwell access. Further development of possible incentives and mandates such as code changes will assist with Guidelines implementation and are actively being worked on in NYC.

The NYC Active Design Guidelines initiative represents a milestone in translating "active living" research into a City's comprehensive public policy for systematically and routinely incorporating active living into the design, construction and operations of its buildings, streets and neighborhoods. As more is understood about the built environment and its relationship with physical activity and eating behavior, it has become clear that the NYC model of collaboration among health, planning, design professionals and agencies is crucial for addressing obesity.

References

- Egger, J., et al., Childhood Obesity is a Serious Concern in New York City: Higher Levels of Fitness Associated with Better Academic Performance. NYC Vital Signs, 2009. 8(1): p. 1-4.
- 2. Ogden, C.L., et al., *Prevalence of high body mass index in US children and adolescents, 2007-2008. JAMA.* 303(3): p. 242-9.
- 3. Lutfiyya, M.N., et al., Overweight and Obese Prevalence Rates in African American and Hispanic Children: An Analysis of Data from the 2003-2004 National Survey of Children's Health. J Am Board Fam Med, 2008. 21(3): p. 191-199.
- 4. New York Department of City Planning, *The newest New Yorkers 2000: Immigrant New York in the new millennium.* 2000: New York.