POLICY BRIEF

Understanding the Impact of Active Design in Affordable Housing: Insights for Policymakers and Developers

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CENTER FOR ACTIVE DESIGN

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Rooftop hydroponic farm at the Arbor House affordable housing development in the South Bronx, New York

The design of our communities impacts our health

The relationship between the design of building, streets, neighborhoods and health is no longer a matter of speculation. Thanks to over a decade of research, we know that there is a direct connection between the design of the built environment and physical, social, and mental health outcomes. In addition, a multitude of successful design projects serve as case studies that demonstrate how design can be used to promote health in unique community contexts.

Active Design is an evidence-based approach to development that identifies urban planning and architecture solutions to support healthy communities. The term "Active Design" was coined from New York City's interagency collaboration that culminated in the 2010 publication of the *Active Design Guidelines*. The Center for Active Design (CfAD), founded in 2012, emerged from this initiative and influences a range of projects and policies that impact the health of New Yorkers. Active Design strategies are practical design solutions that are rooted in research and informed by case studies and best practices.

Policymakers and developers can promote health by incorporating Active Design into affordable housing

Affordable housing represents an essential typology for addressing the needs of populations with some of the greatest health risks. Low-income communities continue to face a disproportionately higher burden of chronic diseases, such as heart disease, cancer, and asthma.[6] In many low-income and minority communities, it is difficult to find resources such as safe, walkable streets, well-maintained playgrounds and recreation spaces, or access to healthy food.[2, 7-10]

Stakeholders can ensure affordable housing residents have opportunities for healthy living by incorporating Active Design. Developers can now receive technical assistance and recognition through the Active Design Verified initiative (detailed below). Policymakers and funders can establish guidance and incentives based on the latest evidence and best practices.

FINDINGS FROM A PILOT STUDY IN THE BRONX SUGGEST THAT ACTIVE DESIGN IMPROVES RESIDENTS' HEALTH

The study, conducted by the Icahn School of Medicine at Mount Sinai, compared the health of residents in Arbor House—a 124-unit building with Active Design elements in the South Bronx—with residents in a building without Active Design features. After one year of living in Arbor House residents in the study reported:

- A significant increase in stair use, with a 53% decrease in the number of individuals who reported not having walked up any flights of stairs per week.
- On average, 58% reported an increase in the number of flights they ascended per week; 20% of residents increased the number of flights in the control building.
- Focus group participants reported that the Active Design ambiance and feeling of safety truly supported and promoted the active pursuit of health and wellness.

More research is needed in order to more fully understand how Active Design impacts the health of affordable housing residents.

TESTIMONIAL

Luis' Story: Active Design in Affordable Housing can Change Lives

Luis grew up in the South Bronx, an area with some of the highest rates of overweight and obesity in New York State. Growing up, healthy food was not readily available or affordable, and spaces for physical activity, such as playgrounds, were unmaintained and dangerous. By the time he was 27, Luis weighed almost 400 pounds, and his physical and mental health were suffering. While he had made efforts to improve his health, it wasn't until he moved into Arbor House that he was able to lose nearly 200 pounds. Arbor House has allowed him to reimagine a future for his three children, where it will be "...second nature to them to be healthy," he says. "It won't be foreign to them like it was for me."[11]

Outdoor lighting and additional greenery adds to the pedestrian sidewalks at Prospect Plaza

Active Design Verified supports and recognizes affordable housing that integrates Active Design

Active Design Verified (ADV) inspires the design of affordable housing that promotes resident health and wellbeing. ADV is a joint initiative, led by the Center for Active Design and the Partnership for a Healthier America. As part of ADV, developers commit to implementing Active Design strategies within a percentage of their affordable housing portfolios. Developers who commit to ADV receive training and technical assistance to ensure successful integration of Active Design strategies. Over the course of the commitment, the developer also receives verification of progress and public recognition of success.

Affordable housing projects that are a part of ADV incorporate design elements that invite everyday use, such as stairs, supportive walking and biking infrastructure, and on-site exercise facilities. ADV strategies also acknowledge post-occupancy efforts with free or low-cost programming that continue to support resident health. Over 4,200 affordable housing units across the country are estimated to be impacted through ADV.

PROSPECT PLAZA IS LEADING THE WAY

Prospect Plaza is the first multi-family affordable housing site to achieve ADV recognition. Prospect Plaza is a newly constructed development by Blue Sea Development in Brownsville, Brooklyn. Brownsville residents are majority Black (76%) and Hispanic (20%) and nearly 40% are living below the poverty line. According to the Office of Vital Statistics, in NYC in 2011 and 2012 Brownsville had the highest death rates from all causes, as compared to the rest of NYC, with preventable diseases wielding an especially heavy burden.

Upon completion, Prospect Plaza will offer nearly 400 housing units across three sites, plus 24,000 square feet of supermarket/retail space and an 8,400 square foot community facility. The development is comprised of five buildings across three adjacent blocks, a massive undertaking that will provide neighborhood-level healthy opportunities for residents to be active, access healthy food, and engage with neighbors. Prospect Plaza features a number of Active Design elements that contribute to its ADV recognition:

View from Arbor House hallway looking into out towards outdoor exercise area

Outdoor space for adults and children to relax, socialize, and be active
Onsite and easily accessible outdoor exercise areas and recreation courtyards encourage physical activity among residents. Research shows that outdoor fitness equipment, suitable for all ages, and painted ground markings increase physical activity and stimulate play.[12-14] By engaging in regular physical activity in these spaces, residents stand to reduce their overall risk of coronary heart disease and gain numerous other health benefits.[15, 16]

Gardens for activity, engagement with neighbors, and healthy food access
Raised garden beds in the outdoor space offer Prospect Plaza residents an opportunity to engage in community gardening. Community gardeners tend to meet the recommended fruit and vegetable intake, consuming more than non-gardeners.[17] Gardening is also great physical activity for all ages and has potential weight control benefits.[18, 19]

Inviting stairs for physical activity as part of daily living
Stairwells at Prospect Plaza are well-lit, maximize daylighting, and feature speaker systems that project music to encourage stair use. Signs on each floor serve as reminders that the stairs are conveniently located and promote health. Stair climbing throughout the day can improve cardiovascular health and lower the risk of early mortality.[20]

Bike parking facilities encourage residents to bicycle for travel and leisure
Indoor and secure long-term bike storage are offered in lower ground floors, marked with clear wayfinding signage. Residents and visitors can also lock their bikes to outdoor bike racks. Bicycling for leisure or travel can help residents meet the recommended levels of weekly moderate exercise.[21, 22]

Walking distance from amenities
Prospect Plaza is situated within walking distance of daily amenities and public transportation. Walking at least 30 minutes a day helps reduce the risk of high blood pressure, high cholesterol, and diabetes.[23-25]

EVALUATING ACTIVE DESIGN AT PROSPECT PLAZA WILL INFORM AFFORDABLE HOUSING POLICY AND PRACTICE

Prospect Plaza offers a prime opportunity to build upon the Arbor House pilot study and fill a much needed gap in the available research base. Responding to the need for additional research, the Center for Active Design has partnered with the Icahn School of Medicine at Mount Sinai to evaluate the impact of Active Design on the health of residents moving into Prospect Plaza.

The evaluation uses body measurements and questionnaires to observe Prospect Plaza residents' health and behavior before moving into Prospect Plaza. At the same time, this data will be collected on residents living in a building without Active Design features, allowing for comparison between groups. Residents are invited to participate in the study at their lease signings.

The additional sites at Prospect Plaza provide an opportunity to expand the study and maximize its impact. Pending funding, the research team will collect data at all five buildings, using passive monitoring and activity trackers, and conducting focus groups.

Conclusions and Policy Implications

Developers and policymakers play a crucial role in ensuring that our homes and neighborhoods are designed and built to support health. Affordable housing that supports the health of residents has potential cost savings for developers, tenants, and public and private health providers. Healthy affordable housing initiatives, such as ADV, and continued research, such as the Arbor House and Prospect Plaza evaluations, are important contributors to sparking systemic change in affordable housing.

Regulatory and funding mechanisms should also be employed to positively impact affordable housing and neighborhood development patterns. For example, Low-Income Housing Tax Credits (LIHTC) are critical to making affordable housing developments financially viable. The LIHTC program is administered at the state level, where a Qualified Allocation Plan (QAP) determines criteria for awarding tax credits. QAP criteria directly influence the siting and design of affordable housing in each state. States can impact residents' health by refining QAP criteria to elevate evidence-based design strategies.

The recently released Housing New York plan signifies affordable housing as a priority for communities across the country. We must seize this opportune moment for widespread adoption of Active Design in affordable housing, ensuring positive consequences for health equity, quality of life, and community vitality.

About the Center for Active Design

The Center for Active Design is the leading non-profit organization that uses design to foster healthy and engaged communities. Our mission is to transform design and development practice, ensuring equitable access to vibrant public and private spaces that support healthy communities. For more information on our affordable housing initiatives, contact info@centerforactivedesign.org.

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