

Active Living by Design

Perspectives from the Robert Wood Johnson Foundation

Jamie B. Bussel, MPH, Laura C. Leviton, PhD, C. Tracy Orleans, PhD

The Robert Wood Johnson Foundation (RWJF) created the Active Living by Design (ALbD) national program to address a serious need in the field of chronic disease prevention: to increase the amount of daily physical activity in which Americans engage by facilitating opportunities for physical activity in their everyday lifestyles and environments. In this commentary, we outline the context in which this national program was developed as well as its initial aims, development, evolution to date, and legacy.

Context for the Program

In 1996, the CDC recommended that adults engage in 30 minutes of moderate physical activity (e.g., brisk walking) at least 5 days a week.¹ At that time, the gap between this recommendation and the behavior of the American public was enormous. In 2001, the percentage of adults who engaged in activities consistent with this recommendation ranged from 28.9% to 55.8%, according to state-level surveys.² In 2001, it was unknown whether most children met or did not meet the recommended standard of 60 minutes of physical activity per day.²

Over time, one quarter to one third of the nation consistently met the recommendations for physical activity.³ Many public health programs and promotional efforts demonstrated effectiveness in increasing physical activity in smaller populations or for relatively short periods of time; yet, a sustained impact on increased population levels of physical activity was lacking. At the same time that the CDC was identifying the need for Americans to be more physically active, researchers and practitioners began to examine reasons that the majority of the population was not. There was the view that physical activity was a form of recreational exercise that required certain levels of fitness or athleticism as well as adequate time and access to the environments and resources needed for such exercise, sport, or recreational activity. Yet this misconception was beginning to give way to the recognition that simple forms of so-called "lifestyle activity" (e.g., walking to school or work, walking to run errands) had been

engineered out of almost everyone's daily lives.^{4,5} This translated into a new understanding of the potential role that community design might play in population health promotion.

Emerging findings from the urban planning and transportation literature highlighted the influence of the built environment on lifestyle physical activity. Specifically, these findings showed that people walked more in densely populated neighborhoods with traditional design elements, like sidewalks, good street connectivity, and land use mix, or places where shopping, work, schools, and housing are all in close proximity to one another.⁶ Similarly, the public health literature illustrated the impact of access to parks, playgrounds, trails, and recreation facilities on physical activity.⁶⁻⁸ Researchers argued that changes in the built environment might well account for much of the decline of physical activity and that these environments could be changed to re-engineer physical activity back into the everyday lifestyles of all Americans, adults and youth alike.

Lessons learned from past efforts, including RWJF's work in tobacco control and substance abuse prevention, underscored that effective health promotion and population behavior change required a multi-component ecologic approach that paired individual-oriented health behavior change efforts with efforts aimed at changing the policies and environments to strengthen the norms, supports, and resources for healthy behavior.^{9,10} The ecologic model emphasized that the targets of successful interventions needed to be not just individuals but also the powerful social contexts in which they lived, worked, learned, and played.

Strategies that RWJF employs to achieve broad social and behavioral change also have been described with reference to McKinnley's population model of prevention, which links "downstream," individual-oriented interventions with "mid-stream/mainstream" organization- and community-based strategies and "upstream" or macro-level policy and environmental interventions.^{11,12} The view that community-based interventions to create more activity-friendly environments were necessary for sustainable individual and population-level behavior change was reflected in a growing number of prescriptions for successful national and international efforts to increase physical activity.^{2,13}

From the Robert Wood Johnson Foundation, Princeton, New Jersey
Address correspondence and reprint request to: Jamie B. Bussel, MPH, Robert Wood Johnson Foundation, College Road East, Princeton NJ 08543. E-mail: jbussel@rwjf.org.

It was in this context that, in 2001, RWJF's Health and Behavior Team launched a portfolio of programs designed to change the built environment to facilitate routine, lifestyle physical activity, or so-called "active living." RWJF's Active Living portfolio aimed to re-engineer built environments at the community level by changing the policies that support and promote physical activity as part of individuals' everyday lives. The Active Living portfolio focused on identifying and supporting the environmental and policy approaches with greatest potential to increase population-wide daily physical activity levels. The portfolio included several programs:

1. The Active Living Network based at Pyramid Communications in Seattle, Washington, was organized in 2001 to build a national coalition of leaders and organizations committed to designing healthy, active communities.
2. The Active Living Research National Program Office (ALR NPO), based at San Diego State University (SDSU), was designed in 2001 to build the evidence about the modifiable environmental and policy determinants of active living. The origins and strategy of this ongoing research initiative are described in a special supplement of the *American Journal of Preventive Medicine* in February 2009.^{14,15}
3. The Active Living by Design National Program, with the NPO based at the University of North Carolina, School of Public Health, was developed and launched in 2001 as a community demonstration initiative to apply and expand growing knowledge about effective programs and policies to make neighborhoods and communities more activity-friendly.
4. The Active Living Resource Center, based at the National Center for Bicycling and Walking in Washington DC, was organized in 2002 to provide communities and public health advocates with the tools and resources needed to make walking and biking part of healthy communities and neighborhoods.
5. The Leadership for Active Living program (initially located in close proximity to the ALR NPO at SDSU and now expanded to cover issues related to both active living and healthy eating and relocated to Washington DC, with the new name Leadership for Healthy Communities) was developed in 2002 to build political will, leadership, and advocacy for implementing effective active living policies and programs.
6. Active for Life[®], with the NPO at the Texas A&M University School of Rural Public Health, was designed in 2001 to support and evaluate replicable action-oriented community demonstrations to increase active living among adults aged 50 and older.

Aims of the Program

Active Living by Design (ALbD) was designed to apply rapidly growing knowledge about "what worked" to foster community-level physical activity and learn from these diverse, real-world, community-based applications and innovations.^{4,5} As the Foundation learned with our early work in tobacco, achieving real progress would entail not only funding the research to identify what worked, but also funding parallel initiatives to translate these findings into practice and policy.¹⁴ ALbD aimed to implement and evaluate what was known about multi-component policy, environmental, promotional, and programmatic interventions to alter the social and physical environments in which people lived, traveled, worked, and played. Sometimes policy and evaluation researchers make a distinction between "knowing that" something is true (i.e., building the evidence base) versus "knowing how" to produce the desired effect.¹⁶ While the Active Living Research program focused on "knowing that" certain policy and environmental changes were likely to change population activity levels, ALbD focused on "knowing how" this knowledge about policies and the built environment could best be applied in diverse neighborhoods and communities.

Development of the Program

The first clue that the timing was ripe for such an initiative and that an active-living movement was brewing was the receipt of 966 brief proposals from communities throughout the nation in response to our ALbD call for proposals. This was a record-breaking number of applications for any single RWJF call for proposals. The ALbD National Program Office, along with RWJF staff and national advisors, identified 25 diverse community partnerships to receive funding to develop and implement local projects that support physical activity and active living. The grant making approach that RWJF employed can best be described as a "high touch/low-dollar" approach, through which grantees received modest grants (i.e., approximately \$200,000 each over 5 years) along with encouragement to secure matching funds and considerable hands-on technical assistance by the ALbD NPO staff to increase local capacity for action and sustainability. The ALbD NPO provided technical assistance through a multidisciplinary team of project officers and a comprehensive learning network, which included activities like coordinated grantee meetings, teleconferences, trainings, site visits, and ongoing support and coaching calls.

The ALbD community action model required each community to focus on five primary strategies that address multiple ecologic influences on physical activity behaviors: preparation, promotions, programs, policies, and physical projects. This model, which came to be known as the 5P model, is described by Bors and

colleagues¹⁷ in this supplement to the *American Journal of Preventive Medicine*.

Evolution of the Program to Date

Active Living by Design funded a highly diverse portfolio of community partnerships, representing a variety of lead agencies, diverse geographic locations, and a range of target populations. The community-level strategies implemented were tailored to the unique challenges and opportunities presented by each community. These efforts are described in detail in the case studies presented in this supplement.^{18–32} Although matching support was not a **requirement** for funding, the community partnerships far exceeded what could have been expected in terms of additional funds leveraged. In fact, nearly \$249 million in additional funds or commitments have been leveraged to support the RWJF's investment of \$15.1 million in the Active Living by Design national program.

The ALbD community partnerships applied the 5P model interventions in a variety of communities. The demonstrations have helped to make the case for community-level policy and environmental changes as effective means to get more people on the move. The case studies presented in this supplement present the stories of 15 of the 25 communities and their unique journeys toward "active living by design." Through ALbD and its ongoing evaluation, we continue to learn which environmental and policy change strategies can effectively support everyday physical activity levels and at the same time create safer, friendlier, and more vibrant communities. Such communities build social capital in ways that improve the overall health and happiness of the people who live in them. Multidisciplinary community partnerships and a comprehensive approach to community change have been important cornerstones for this work. The stories presented in this issue not only breathe life into ALbD's model of environmental and social change but also make an important contribution to the growing knowledge base about how communities can implement policies and change environments to support active living. We expect this knowledge base to continue to grow.

A formal, independent evaluation of ALbD community demonstrations is ongoing. It consists of three parts. First, an overall examination of the extent of environmental change in all 25 communities will give public health professionals, city planners, and other champions of this approach a better sense of how much change can be accomplished in a 5-year period with intensive technical assistance and fairly limited financial support. This portion of the evaluation will be completed in 2010. The second part of the evaluation consists of in-depth case studies on the political context in which some of the ALbD communities achieved policy and environmental changes. This activity will

likely be completed in 2010. The third component, funded through a competitive grant initiative from the RWJF Active Living Research program, aims to quantify population-level changes in walking, biking, and other forms of physical activity in two ALbD communities—Somerville, Massachusetts, and Columbia, Missouri. Findings from these studies will be available in 2010.

Legacy of Active Living by Design

In April 2007, the Foundation announced a \$500 million commitment to new childhood obesity prevention programming. This new programming will focus on policy and environmental change strategies to reverse the rise in childhood obesity. In December 2008, the RWJF launched Healthy Kids, Healthy Communities (HKHC) as the successor to ALbD. HKHC is a \$33.4 million program that will provide direct support to approximately 50 communities working to reshape their environments in ways that promote healthy living and ultimately prevent childhood obesity. A crosscutting independent program evaluation will assess the efficacy of varied community-based policy and environmental change strategies. The Active Living by Design National Program Office will lead this new effort, which is slated to become the Foundation's largest action-oriented program aimed at supporting systems,^a policy, and environmental change strategies for improving activity **and** food environments for children. The entire active-living portfolio, and specifically the ALbD national program, offers valuable lessons and insights into both the opportunities and challenges for creating healthy, active environments for children and families.

The ALbD communities faced the challenges of changing the built environment, re-thinking the design and land-use policies that shape the environment, and, in some instances, re-inventing the practices of an entire community. They demonstrated how creativity, determination, vision, and a willingness to see into the future can help make change happen. They also honored the insight and input from an array of disciplines, including urban planning, design, transportation, parks and recreation, local government, housing, community development, pedestrian and bicyclist advocacy and public health—an important element to their success. We hope that the following case studies serve as a springboard for discussion and inspiration to other communities throughout the nation, who seek to make similar changes in their environments and move toward Active Living by Design.

^aThe American Legacy Foundation defines systems change as a permanent and holistic modification of a policy or operational approach within a system (e.g., organization structured at community/regional/state level) that engages many individuals in a collection of interrelated activities.

No financial disclosures were reported by the authors of this paper.

References

1. Centers for Disease Control and Prevention. Surgeon General's report on physical activity and health. *JAMA* 1996;276(7):522.
2. United States Public Health Service. Office of the Surgeon General, United States, ODPHP, CDC (U.S.), NIH (U.S.). The Surgeon General's call to action to prevent and decrease overweight and obesity. Rockville MD.; Washington: USDHHS, Public Health Service, 2001.
3. Centers for Disease Control and Prevention. Behavioral risk factor surveillance system survey data. Atlanta GA: USDHHS, CDC.
4. Frank LP, Engelke P. How land use and transportation systems impact public health: a literature review of the relationships between physical activity and built form. ACES: Active Community Environment Initiative. CDC, 2000.
5. Frank LP, Engelke P, Hourigan D. How land use and transportation systems impact public health: An annotated bibliography: ACES: Active Community Environment Initiative. CDC, 2000.
6. Saelens BE, Sallis JF, Frank LD. Environmental correlates of walking and cycling: findings from the transportation, urban design, and planning literatures. *Ann Behav Med* 2003;25(2):80-91.
7. Jeffery RW. Public health strategies for obesity treatment and prevention. *Am J Health Behav* 2001;25(3):252-9.
8. Schmitz MK, Jeffery RW. Public health interventions for the prevention and treatment of obesity. *Med Clin North Am* 2000;84(2):491-512, viii.
9. Orleans CT, Gruman J, Ulmer C, Emont SL, Hollendonner JK. Rating our progress in population health promotion: report card on six behaviors. *Am J Health Promot* 1999;14(2):75-82.
10. Sallis JF, Bauman A, Pratt M. Environmental and policy interventions to promote physical activity. *Am J Prev Med* 1998;15(4):379-97.
11. McKinnley JB. The new public health approach to improving physical activity and autonomy in older populations. In: Heikkinen E, Ruoppila I, Krusinen J, eds. *Preparation for Aging*. New York: Plenum, 1995.
12. Sallis JF, Owen N. Ecological Models. In: Glantz K, Lewis RM, Rimer BK, eds. *Health behavior and health education: theory, research, and practice*. 2nd ed. San Francisco CA: Jossey-Bass, 1996.
13. Ottawa charter for health promotion. *Can J Public Health* 1986; 77(6):425-30.
14. Orleans CT, Leviton LC, Thomas KA, et al. History of the Robert Wood Johnson Foundation's Active Living Research Program: origins and strategy. *Am J Prev Med* 2009;36(2S):S1-9.
15. Sallis JF, Linton LS, Kraft MK, et al. The Active Living Research program: six years of grantmaking. *Am J Prev Med* 2009;36(2S):S10-21.
16. Pressman JL, Wildavsky AB. Implementation: how great expectations in Washington are dashed in Oakland, or, why it's amazing that federal programs work at all, this being a saga of the Economic Development Administration as told by two sympathetic observers who seek to build morals on a foundation of ruined hopes. 3rd ed. Berkeley: University of California, 1984.
17. Bors P, Dessauer M, Bell R, Wilkerson, R, Lee J, Strunk, S. The Active Living by Design national program: community initiatives and lessons learned. *Am J Prev Med* 2009;37(6S2):S313-S321.
18. Raja S, Ball M, Booth J, Haberstro P, Veith K. Leveraging neighborhood-scale change for policy and program reform in Buffalo, New York. *Am J Prev Med* 2009;37(6S2):S352-S360.
19. Gomez-Feliciano L, McCreary LL, Sadowsky R, et al. Active living Logan Square: joining together to create opportunities for physical activity. *Am J Prev Med* 2009;37(6S2):S361-S367.
20. Miller EK, Scofield JL. Slavic Village: incorporating active living into community development through partnerships. *Am J Prev Med* 2009; 37(6S2):S377-S385.
21. Thomas IM, Sayers SP, Godon JL, Reilly SR. Bike, walk, and wheel: a way of life in Columbia, Missouri. *Am J Prev Med* 2009;37(6S2):S322-S328.
22. Hamamoto MH, Derauf DD, Yoshimura SR. Building the base: two active living projects that inspired community participation. *Am J Prev Med* 2009;37(6S2):S345-S351.
23. TenBrink DS, McMunn R, Panken S. Project U-Turn: increasing active transportation in Jackson, Michigan. *Am J Prev Med* 2009;37(6S2): S329-S335.
24. Walfoort NL, Clark JJ, Bostock MJ, O'Neil K. ACTIVE Louisville: incorporating active living principles into planning and design. *Am J Prev Med* 2009;37(6S2):S368-S376.
25. Omishakin AA, Carlat JL, Hornsby S, Buck T. Achieving built-environment and active living goals through Music City Moves. *Am J Prev Med* 2009;37(6S2):S412-S419.
26. Huberty JL, Dodge T, Peterson K, Balluff M. Activate Omaha: the journey to an active living environment. *Am J Prev Med* 2009;37(6S2):S428-S435.
27. McCreedy M, Leslie JG. Get Active Orlando: changing the built environment to increase physical activity. *Am J Prev Med* 2009;37(6S2):S395-S402.
28. Dobson NG, Gilroy AR. From partnership to policy: the evolution of Active Living by Design in Portland, Oregon. *Am J Prev Med* 2009;37(6S2): S436-S444.
29. Geraghty AB, Seifert W, Preston T, Holm CV, Duarte TH, Farrar SM. Partnership moves community toward Complete Streets. *Am J Prev Med* 2009;37(6S2):S420-S427.
30. Deehr RC, Shumann A. Active Seattle: achieving walkability in diverse neighborhoods. *Am J Prev Med* 2009;37(6S2):S403-S411.
31. Burke NM, Chomitz VR, Rioles NA, Winslow SP, Brukilacchio LB, Baker JC. The path to active living: physical activity through community design in Somerville, Massachusetts. *Am J Prev Med* 2009;37(6S2):S386-S394.
32. Schasberger MG, Hussa CS, Polgar MF, McMonagle JA, Burke SJ, Gagaris AJ. Promoting and developing a trail network across suburban, rural, and urban communities. *Am J Prev Med* 2009;37(6S2):S336-S344.