

Evaluation of Physical Projects and Policies from the Active Living by Design Partnerships

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Background: Between 2003 and 2008, a total of 25 partnerships funded through the Active Living by Design (ALbD) program worked to change built environments and policies in communities to help citizens be active in their daily routines.

Purpose: This paper systematically summarized the scope of ALbD physical projects and policy changes, described resources generated by the partnerships, and highlighted supports and barriers to the process.

Methods: Using a mixed-methods approach, multiple data sources, including key informant interviews, focus groups, and a web-based tracking system, were used to collect data during project implementation. Qualitative results were analyzed using systematic coding procedures to identify themes, ideas, and concepts derived from the data. Data analysis occurred in 2008–2010.

Results: Most of the 25 partnerships documented physical projects and policy changes in each of the following sectors: urban planning ($n=16$); active transportation ($n=23$); trails/parks/recreation/open space ($n=22$); communities ($n=22$); and schools ($n=18$). ALbD community partnerships were successful at generating ~\$256 million in resources beyond their initial grant, mostly through policy changes. Challenges included creating and sustaining political will and community support as well as securing technical expertise and resources. Planning and relationship building were critical to success in changing policy and implementing projects.

Conclusions: Although there is more to understand about how these change processes affect physical activity and health across populations and settings, as well as how social, cultural, and psychosocial factors influence community responses to the policy changes and physical projects, findings from this initiative provide a foundation for subsequent research and practice.

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Introduction

Physical activity remains suboptimal in the U.S., as most youth and adults do not meet the minimum levels recommended in the 2008 “Physical Activity Guidelines for Americans.”^{1,2} The *Guide to Community Preventive Services* recommends creating or enhancing access to places for physical activity, combined with in-

formational outreach activities, as evidence-based interventions.³ The Guide also recommends implementing community-scale and street-scale urban design as well as land-use policies and practices to promote physical activity.⁴ Given that many sectors have influence on these policy and environmental strategies, a transdisciplinary approach to intervention is needed to help meet these recommendations and increase population levels of physical activity.⁵

In 2003, the Robert Wood Johnson Foundation (RWJF) awarded grants to 25 community partnerships (Table 1) across the U.S. as part of the Active Living by Design (ALbD) national program (www.activelivingbydesign.org). “Active living” is a way of life that integrates physical activity into daily routines, such as walking or bicycling for transportation, exercise, or pleasure or by working in the yard, and taking the stairs.²¹ With 5 years of funding for a maximum of \$200,000 per partnership, grantees endeavored to make it easier for people to be active in their daily routines through

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innovative approaches to community design, public policies, and communication strategies.²²

The ALbD's Community Action Model provided five strategies to influence community change, known as the 5Ps: preparation, promotions, programs, policy influences, and physical projects.²³ The 5Ps represent an integrated, comprehensive approach to increasing physical activity through cross-sector, multidisciplinary partnerships working across many settings and populations. Best practices from many of these communities have been reported previously.²⁴

Policy change is critical to help build, institutionalize, and sustain active living environments and projects. Even with recent evaluations of community-wide changes in California,²⁵ there is insufficient evidence about the reach, adoption, implementation, and sustainability of policy change efforts in the field. The ALbD approach included policy advocacy (e.g., presenting data, educating policymakers) and policy tactics (e.g., changing a policy or organizational procedure).²³ Often in close coordination with these policy changes, physical or built-environment projects were developed to create opportunities for removing barriers to physical activity.

The process of analyzing data and selecting policy advocacy priorities was particular to each partnership. Methods and choices varied widely, based on factors such as leadership and partner strengths, priorities and levels of involvement, internal partnership dynamics, time constraints, perceived local political opportunities or barriers, capacity to follow through, changing

community conditions, and levels of involvement of particular priority populations. Although the 25 partnerships also pursued preparation, promotions, and programming, the present paper focuses solely on physical projects and policy changes. The aim of the paper was to summarize systematically the scope of ALbD physical projects and policy changes, describe

Table 1. The 25 Active Living by Design community partnerships

Location	Related websites	Related studies
Albuquerque NM		
Bronx NY	www.ssbx.org	
Buffalo NY	www.bnmc.org	Raja (2009) ⁶
Chapel Hill NC	www.gochapelhill.org	
Charleston SC		
Chicago IL	www.lsna.net	Gomez-Feliciano (2009) ⁷
Cleveland OH	slavicvillage.org	Miller (2009) ⁸
Columbia MO	www.pednet.org	Thomas (2009) ⁹
Denver CO	www.stapletonfoundation.org	
Honolulu HI	www.kkv.net	Hamamoto (2009) ¹⁰
Isanti County MN	www.co.isanti.mn.us/activeliving.html	
Jackson MI	www.fitnesscouncil.org	TenBrink (2009) ¹¹
Louisville KY	www.louisvilleky.gov/Health	Walfoort (2009) ¹²
Nashville TN	www.nashville.gov/mayor/healthynashville	Omishakin (2009) ¹³
Oakland CA	www.ebayc.org	
Omaha NE	www.activateomaha.org	Huberty (2009) ¹⁴
Orlando FL	www.getactiveorlando.com	McCreedy (2009) ¹⁵
Portland OR	www.communityhealthpartnership.org	Dobson (2009) ¹⁶
Sacramento CA	www.walksacramento.org	Geraghty (2009) ¹⁷
Santa Ana CA	latinohealthaccess.net	
Seattle WA	feetfirst.org	Deehr (2009) ¹⁸
Somerville MA	www.somervillema.gov/Division.cfm?orgunit=SUS	Burke (2009) ¹⁹
Upper Valley NH/VT	www.uvtrails.org	
Wilkes-Barre PA	www.wellnesstrails.org	Schasberger (2009) ²⁰
Winnebago NE	www.hochunkcdc.org	

Note: More-detailed information on Active Living by Design is available (www.activelivingbydesign.org/).

Table 2. Summary of Active Living by Design policy changes and physical projects by sector

Policy changes and physical project strategies	Participating partnerships, n (N=25)
Urban planning sector	16
Housing and developments	8
Zoning regulations and ordinances	6
Community garden facilities	6
Urban design and planning tools and products	5
Local ordinances (street trees, bike racks, bike parking)	5
Subdivision regulations	4
Design review for new developments	
Strategies to improve urban design and planning	3
Funding for urban design and planning projects	1
Active transportation sector	23
Bicycle and pedestrian street improvements	16
Street design policies and standards	12
Funding for transportation	11
Plans for street design or pedestrian/bicycle improvements	16
Public transit improvements	8
Bicycle rental or parking facilities	8
Traffic-calming street improvements	6
Transportation decision making, implementation, tools, and products	5
Policies to support bicycle and pedestrian facilities	5
Policies to support traffic calming	3
New government staff positions	3
Design review for new transportation projects	2
Park, recreation, open space, and trail sector	22
Community trail development	16
Park development and redevelopment	11
Trail design and planning tools and products	10
Funding for parks and recreation projects	10

(continued)

Table 2. (continued)

Policy changes and physical project strategies	Participating partnerships, n (N=25)
Maintenance	9
Recreation facilities and equipment	5
Park, recreation, and green/open spaces design and planning tools and products	5
Land-use policies for parks, recreation, and green/open spaces	5
Policies for trails	4
Community gardens in parks	2
Free use of recreation centers	1
City recreation center director position	1
Community sector	22
Active living decision-making bodies	14
Community-wide design and planning tools and products	12
Community-wide policy initiatives	6
Street closures to support active living	2
School sector	19
Safe Routes to School (environment)	8
Recreation facilities on school grounds	6
Funding for school projects	5
Other schools policies (wellness, recess)	4
Bicycle parking facilities	4
School gardens	3
School design and planning products	3
School speed zone	3
Joint-use agreements	3
Crossing guard position	2
School site design	2
School or afterschool curriculum	2
Physical education in schools	1
Bicycle recycle facilities	1
Parking lot removal	1
School district policies (walking and bicycling to school)	1
Policies to support pedestrian and bicycle infrastructure around schools	1

the resources generated through this process, and highlight supports and barriers to the process.

Methods

An evaluation of the 25 ALbD grantees started in November 2006. The evaluation, described in detail elsewhere,^{25,26} had three primary aims: (1) to assess impacts of physical projects and policy changes on community environments; (2) to document physical projects and policy changes implemented, as well as intended and unintended consequences; and (3) to identify supports and barriers in planning, developing, and implementing interventions. Using a mixed-methods approach, investigators analyzed multiple data sources collected before site visits (e.g., key informant interviews); during site visits (e.g., interviews, focus groups); and over the course of the intervention (e.g., interviews with ALbD staff who provided regular technical assistance and monitoring) from 2008 to 2010.

The Progress Reporting System (PRS), an ongoing web-based log of community activities,²⁷ and a concept mapping project²⁸ were two additional sources of information. For this analysis, quantitative results from the PRS are summarized as counts or means (e.g., planning products, physical projects). Qualitative results from the interviews and focus groups were analyzed using systematic coding procedures to identify themes and concepts.

Themes were organized into categories, or sensitizing concepts, through discussions with grantees, the evaluation national advisory group, and ALbD National Program Office and RWJF staff.^{29–31} This process allowed themes that did not fit into predetermined categories to emerge; later, these themes formed the basis for a systematic qualitative coding procedure using ATLAS.ti to ensure consistency in the analysis across the 25 community partnerships. Additional data-coding procedures are described in a companion paper²⁵ in this supplement to the *American Journal of Preventive Medicine* (AJPM).

Results

Results begin with a summary of the findings from the 25 communities, focusing on projects and policies and organized by five sectors: urban planning, active transportation, trails/parks/recreation/open space, community, and schools (Table 2). Activities occurring in other sectors or settings, such as worksites, were too few to meaningfully summarize. Following the sector activities, resources generated across partnerships and project- and policy-related themes are summarized.

Urban Planning Sector

Many of the partnerships' activities aimed to bring about broad changes in the built environment through plans, policies, and processes that shape land development and infrastructure projects. The most frequent activity was the instigation of changes to ordinances, such as zoning or subdivision ordinances (Appendix A, available online at www.ajpmonline.org). The Omaha NE partnership achieved comprehensive changes, with revisions and additions to the city's zoning and subdivision codes that

affect streetscapes, signage, landscaping, building design, pedestrian networks, public spaces, and connections among neighborhoods, commercial centers, and civic districts.

Changes in other locations aimed to improve the quality of pedestrian environments (Charleston SC, Nashville TN, Orlando FL, and Winnebago NE) and to encourage mixed-use development (Nashville and Portland OR). Several partnerships succeeded in helping their cities to adopt ordinances to increase bicycle parking (Buffalo NY, Nashville, Orlando, and Somerville MA).

Also common were efforts to incorporate active living principles into the design of specific projects, including: the Liberty Green (HOPE VI) revitalization project (Louisville KY), a mixed-use development (Isanti County MN), and a unique mixed-use development of more than 100 housing units with commercial and industrial spaces (Winnebago). Several communities implemented a design review process for new developments (Charleston, Isanti County, Orlando, Sacramento CA).

Despite the importance of built environments in supporting active living, nine partnerships had no planning activities, and most had no more than three. Charleston, Orlando, and Winnebago, however, had a broad spectrum of activities, including participation in the design review process, influence on specific projects, contributions to various plans, and instigation of changes to codes.

Active Transportation Sector

While more of the activities of the partnerships fell into the active transportation sector than any other, the degree of focus on transportation activities varied widely (Appendix B, available online at www.ajpmonline.org). Activities in this category included street design, traffic-calming, bicycle and pedestrian facilities, and public transit improvements. The partnerships' activities reflected a balance between physical projects and the adoption of policies, plans, and other tools that affect the quality of the environment for active travel.

Street improvements aimed at bicycles and pedestrians were most common (Appendix B, available online at www.ajpmonline.org). Most of these projects involved sidewalk construction, often in conjunction with other improvements. Projects to improve the safety and comfort of street crossings were also common, such as changes in traffic signal design or timing.

Several projects included a comprehensive approach. For example, Chapel Hill NC improved bike lanes, traffic signage, crosswalks, Americans with Disability Act (ADA)–compliant curb-cuts, new sidewalks, and lighting. While many of the partnership activities did not immediately result in improvements in the built environment, they had the potential to change the environment

substantially over time. For instance, 12 partnerships contributed to the development of new design policies and standards, important because of their potential to shape street environments throughout the community, and eight partnerships adopted “complete streets” policies or resolutions, which require attention to the needs of all street users.

Eleven partnerships participated in the development of transportation plans, including regional transportation plans, city-level transportation plans, and plans for specific areas or projects (Appendix B, available online at www.ajpmonline.org). Portland included health and equity goals in the regional plan, and Charleston worked to align regional and state transportation policies, including bicycle and pedestrian accessibility. Ten partnerships adopted or contributed to bicycle and pedestrian plans, with most at the municipal level.

Other activities helped ensure the successful implementation of such plans. A number of partnerships were involved in incorporating an active living perspective in transportation decision-making. For example, Chapel Hill created a priority rating process for proposed transportation projects. Charleston updated the region’s travel-demand forecasting model to be sensitive to factors affecting walking, bicycling, and transit use. Sacramento worked with the regional planning agency to develop the Complete Streets Toolkit for cities and counties in the region. Seattle WA created an inventory of active travel improvements. Also important for ensuring implementation of transportation plans were the creation of bicycle and pedestrian coordinator positions in Columbia MO and Somerville, and the creation of a Balanced Transportation Manager position in Omaha.

Trails, Parks, Recreation, and Open Space Sector

In this sector, the most common work was around pedestrian and bicycle trail development, incorporated by 16 of the 25 partnerships (Appendix C, available online at www.ajpmonline.org). Before trails were created, partnerships identified appropriate areas, assisted in design and engineering, and helped clear debris. After the trail was developed, partnerships contributed to signage, landscaping, benches, kiosks, lighting, emergency phones, public art, and removal of graffiti. In some cases, existing trails were widened or upgraded.

Several partnerships helped create trail and greenway master plans to contribute to future trail systems (Bronx NY, Upper Valley NH/VT, Wilkes-Barre PA, Winnebago). Partnerships also considered safety, especially where intersections of roads and trails occurred, and connections to important destinations, such as city centers and schools. The Upper Valley partnership helped pro-

mote trails through an extended GIS database and online mapping tool.

Eleven partnerships were involved in park development and redevelopment (Appendix C, available online at www.ajpmonline.org), in collaboration with such groups as neighborhood organizations, departments of parks and recreation and public works, and community development and environmental justice groups. Sites for these improved or new parks included area underneath a large bridge, a waterfront previously used for parking, and a former junkyard. Several partnerships oversaw or contributed to the development and redevelopment of parks (Bronx, Isanti County, Portland, Santa Ana CA, Somerville). At least ten partnerships obtained funding for park and recreation projects, including reallocation of governmental funds, federal transportation funds, and competitive grants. Others held fundraising events to raise support, such as an organized bike ride.

At least five partnerships helped to upgrade or install new recreational facilities including a youth golf course; park facilities (e.g., hockey rinks, skateboard areas); pools; and recreation centers (Cleveland OH, Isanti County, Santa Ana, Wilkes-Barre, Winnebago). In Santa Ana, a renovated stadium and resurfaced fields allowed for year-round use. In some cases, equipment was provided for activities in parks and recreation centers. In Denver CO, the partnership supported the Mayor’s policy to allow youth to use recreation centers free of charge during one summer. Two partnerships integrated community gardens into local parks (Honolulu HI, Oakland CA).

The development and redevelopment of trails, open space, and parks often incorporated policy work, such as review of zoning and ordinance changes and ADA requirements. The Seattle partnership helped pass a resolution for open space, and the Winnebago partnership passed a tribal council resolution to build the Ho-Chunk Trail. With new or improved facilities came the concurrent issue of maintenance. Some partnerships explored alternative structures to fund and support maintenance whereas other partnerships contributed directly to regular maintenance such as through the provision of personnel.

Community Sector

Activities in the community sector were mainly multisector tactics that engaged transportation and planning departments, although some also involved parks and recreation, public works, and health departments (Appendix D, available online at www.ajpmonline.org). These activities built expertise in active living and capacity for ongoing advocacy throughout the communities. Twelve of the 25 partnerships participated in creating comprehensive

plans and visions focusing on active living goals or principles for cities and counties as well as specific areas and developments.

For example, one partnership led a report for Albuquerque NM on “Priority Changes to City Regulations and Processes to Improve the Environment for Active Living”; another shaped the Charleston County Comprehensive Plan requiring connectivity of sidewalks and funding to retrofit bicycle and pedestrian facilities. A third participated in development of the Winnebago Village Comprehensive Plan to incorporate active living principles. These plans incorporated health as a goal with active living strategies to achieve this goal, so they may have long-term effects on the health of the communities.

Fourteen partnerships developed advisory or decision-making bodies to advocate for active living policies (Appendix D, available online at www.ajpmonline.org). Examples included the Mayor’s Bike/Pedestrian Advisory Committee to establish Local Design Standards for Complete Streets (Cleveland); Bicycle and Pedestrian Advisory Board to review all city projects that affect pedestrians or bicyclists (Buffalo, Chapel Hill); and a mayoral task force on active living (Jackson MI). Some partnerships created or participated in several advisory groups, such as Charleston’s Complete Streets Design Advisory Committee, Charleston County Sales Tax Transportation Advisory Committee, and the Somerville Bicycle/Pedestrian Committee to generate ideas and recommendations for multiple decision-making groups. These organizations created a voice for active living in local decisions.

Six partnerships contributed to the passage of laws or resolutions that supported transportation and land-use policies. Some were mainly symbolic, such as a Shape Up Somerville resolution and Orlando’s Bike to Work Day proclamation, which served to raise awareness of active living among policymakers and residents. Other laws were more substantial and may lead to more-supportive environments for physical activity, such as Charleston’s law prohibiting harassment of bicyclists, a requirement to make Honolulu a bicycle- and pedestrian-friendly city, and growth management policies in Orlando and Portland.

School Sector

Most of the school-related policies and physical projects dealt with relationships in the surrounding community or environments around the school. Fewer policies and projects dealt with changes within the school (Appendix E, available online at www.ajpmonline.org). For example, Oakland had a comprehensive approach toward the school sector, with ten types of strategies.

Complementing work within the active transportation sector, numerous activities were designed to facilitate active and safe travel to school. Eight partnerships completed physical projects as part of Safe Routes to School that included building or improving sidewalks and bicycle facilities, enhancing crosswalks, calming traffic, and adding signage (Appendix E, available online at www.ajpmonline.org). Complementary policies that also supported active travel to school included hiring crossing guards (Oakland, Winnebago); a proposition to require sidewalks around all schools (Seattle); new policy for reduced speed in school zones (Winnebago); and allowing students to bike to all schools (Oakland).

Four partnerships achieved more bicycle parking on campus (Chicago, Jackson, Oakland, Somerville), and Chicago placed a bicycle recycling facility at a school. In Somerville, one school was redesigned to facilitate walking and bicycle access. Several funding successes for the school sector targeted active travel to school, including funds for a crossing guard (Winnebago); a Safe Routes to School grant (Jackson); and ballot approval for a sales tax to fund sidewalks around schools (Columbia, Sacramento).

Joint-use agreements allow school physical activity facilities to be used for community recreation out of school hours, or allow schools to use community facilities. Four partnerships made use of these agreements, such as Sacramento, which created a districtwide joint-use agreement policy. Santa Ana provided ongoing funding for schools to make their facilities available, and the schools recruited a parent volunteer to monitor schoolyard use. In addition, the city built a high school in an existing park.

Schools associated with six partnerships built or upgraded physical activity facilities: Buffalo, Chicago, Cleveland, Denver, Oakland, Wilkes-Barre. Some partnerships pursued broad school policies that would support physical activity, such as planning for recreational use in school site design (Jackson), and making major renovations to school grounds and facilities (Oakland). A Chicago school removed its parking lot and built a playground in its place.

Modest efforts were made to improve physical activity opportunities during school, suggesting that strong partnerships with school officials were difficult to establish. There were several efforts to institute physical activity breaks in the classroom (Chicago); have recess before lunch (Chicago, Winnebago); provide bicycle instruction (Chicago); and create school gardens (Oakland, Orlando, Somerville). Three partnerships supported the adoption of school wellness policies before they were required nationally (Chicago, Somerville, Wilkes-Barre).

Table 3. Examples of resources generated from Active Living by Design community partnerships

Partnership	Example
Bronx NY	Obtained more than \$30.2 million for redevelopment of two urban parks in previous environmentally hazardous areas
Buffalo NY	Received grants in excess of \$11.4 million, including a \$6-million federal project to provide Buffalo Niagara Medical Campus employees improved access to nearby residential, commercial, and retail opportunities
Charleston SC	Allocated \$30 million over 21 years to new Complete Streets activities, including retrofitting existing streets and intersections to ensure bicycle/pedestrian/transit friendliness as well as context sensitivity
Columbia MO	Awarded a \$22-million Federal Nonmotorized Transportation Pilot Program grant to plan, build, and promote use of a network of pedestrian, bike, and wheelchair-accessible paths throughout the city; also obtained \$3.5 million through a voter-approved city sales tax for the street design standards initiative
Oakland CA	Advocated successfully for a local ballot measure to require the city to spend 1% of the budget on children's services and an updated ballot initiative to increase this spending to 2.5% of the city budget, an additional \$13–\$15 million to children's services; also completed more than \$1.5 million in physical renovations to San Antonio Park and Garfield Park through a partnership with the Office of Parks and Recreation
Sacramento CA	Advocated successfully for the inclusion of sidewalks, transit-oriented development, and bicycle lanes among eligible projects for \$93 million in county development fees
Winnebago NE	The Winnebago Tribal Council approved a \$1.8 million architectural and engineering plan for renovating and enclosing a swimming pool

Resources Generated from the Partnerships

The ALbD community partnerships were particularly successful at generating additional financial resources beyond the RWJF grant (examples in Table 3). As a group, they leveraged an estimated \$256 million over the 5-year grant period. The vast majority of this money was secured

for physical projects from public sources in collaboration with other partners or as a result of related processes or decisions that were influenced in some way by the partnership or initiative.

Policy change related to public finance and budgeting proved to be the most productive avenue for generating resources for capital projects (18 of 25 partnerships with nearly \$160 million total, ranging from \$5000 to \$94.5 million), followed by grant writing (all 25 partnerships with more than \$64 million, ranging from \$5000 to \$26.5 million). Policy changes at the governmental and non-governmental levels were also an important way to generate substantial funds for programs. Some examples of public funding mechanisms for both capital projects and programs included bonds, taxes, and budget line items.

The importance of following up on policy changes to secure resources, ensure good implementation, and obtain resources for maintenance of environments was validated by partnerships. Specific policy language dedicating resources for policy or program goals and the capacity of a partnership to monitor project design and implementation frequently were mentioned as being critical elements to support implementation. Partnerships frequently were challenged by not having the resources to conduct these important follow-through steps.

Project and Policy Themes

Several themes emerged from the process of implementing physical projects and policy changes, including themes related to partnerships, political supports or barriers, community supports or barriers, policy implementation, and financial resources or constraints.

Partnerships. Several ALbD partnerships ensured that critical expertise (e.g., officials in planning, transportation, parks and recreation, schools) was represented among their group, particularly when the lead agency of the partnership and its staff had little experience in policy changes or physical projects. This expertise was particularly valuable in negotiating with the individuals and organizations responsible for implementation (e.g., developers, traffic engineers, public works officials, park or school facilities managers, contractors). For example, in Buffalo, because key partners from the department of transportation were involved, realistic expectations and goals were set early on.

However, the loss of hard-to-replace partners was a challenge to several ALbD communities. In some cases, the loss of a project director or the change of a lead agency created reduced access to professional networks, loss of some institutional memory, administrative and leadership challenges, or lower levels of “buy-in” by a lead agency. Moreover, partnerships with only one or a few

individuals having needed expertise made collective decision making and prioritization of efforts more difficult.

Involvement of partners across many sectors, including community residents, gave the partnership credibility in the community and helped with sustainability. The primary downside was the challenge of developing a unified plan with such a large coalition of interests. It was also challenging to communicate and secure commitment from partners over several years and to sustain motivation.

Political supports and barriers. An influential champion helped the success of several partnerships. For example, several partnerships had representatives with local decision-making authority, such as those from an economic development commission or department of transportation (Bronx, Buffalo, Charleston, Columbia, Jackson, Sacramento). However, when the champion was an elected official, turnover led to the need to select new elected or appointed officials who were supportive of current efforts.

Several partnerships noted the importance of involving governmental agencies, because governmental staff work directly on policies and projects. Some partnerships (Charleston, Jackson, Portland, Sacramento) influenced the culture of government agencies through a vision for active living, which was a particular challenge given the automobile-dominated mindset of many transportation decision makers. Having connections to local government also made it easier to create policy changes, which often took several steps of approval or involved several governing bodies.

In some cases, governmental officials did not support active transportation principles. For instance, fire department officials were concerned with traffic-calming projects and narrow streets that might slow emergency response. Liability concerns were often raised by government agencies (e.g., school district concerns for community use of school recreational facilities). However, the opportunity to directly educate officials was sometimes helpful.

At times, governmental bureaucracy hindered the partnership's progress. Chicago provides an example, where support from elected officials in five City Council Aldermanic wards (of 50 wards) was needed before action could be taken. For other sites, coordination of proposed changes across state, county, and city agencies proved challenging (e.g., the same road may be owned and maintained by the state, county, or city in different locations, making a continuous bike lane difficult to construct). It was sometimes difficult to obtain approval for projects if they were not part of an existing strategic plan, emphasizing the value of the many planning products generated by the partnerships (e.g., Pedestrian and Bicycle Master Plans, Parks Master Plan).

Likewise, some projects were postponed as conflict arose across agencies seeking credit for the changes. In some cases, partnerships perceived that government officials responded differently in higher- and lower-income neighborhoods, increasing disparities in access to resources. In two partnerships, a sunset clause required the governing body to reauthorize the group once the ALbD grant ended (Orlando) or the planning commission dissolved (Winnebago).

Community supports and barriers. Many ALbD partnerships targeted their efforts to diverse priority populations (low-SES areas, racial and ethnic populations, rural communities). Small successes helped boost morale, spark similar changes in other locations, and increase demand for more improvements, providing important momentum. Resistance to active living improvements was also apparent. At least one partnership noted tensions with suburban and rural residents, who opposed infill and compact smart growth development (Sacramento); another community encountered challenges in sharing recreational facilities (Cleveland). Other partnerships noted that business owners were concerned that physical infrastructure changes would affect their business negatively, such as through lost parking or diminished automobile access (Buffalo, Charleston, Columbia, Santa Ana).

Although some partnerships were successful in engaging community volunteers to work on projects, residents sometimes did not support active living in general, or specific projects such as sidewalk installation. In several communities, residents were concerned that increased property values, with the building of new infrastructure, could lead to gentrification and displacement of residents. In Isanti County, there was some expressed fear that the partnership might lose community support by associating itself with projects that residents opposed. However, in some communities, stakeholders observed that residents who experienced the positive benefits of active living became less wary of subsequent efforts.

In some cases, residents did not use newly created facilities or infrastructure to the extent that was hoped. Reasons included presence of crime, insufficient connectivity or access to the facility, and lack of awareness. Valuing the ideas and opinions of the community was important to ensure that needs and concerns of the community were reflected in planning activities, resulting in better projects.

Community support was harder to garner when community members did not perceive the need for active living. The long process to obtain policy change made it challenging to sustain public interest. In Chapel Hill, some residents expressed disappointment when concerns

captured on a neighborhood assessment were not addressed immediately. Another partnership noted that planning for improvements was controversial because some neighborhoods received resources before others (Cleveland).

Crime and safety concerns were common across partnerships. For example, security measures and law enforcement increased safety but sometimes made use of the facility uninviting. In at least one partnership, government officials resisted including sidewalk furniture or trees in the design plans because it might be conducive to prostitution, loitering, or drug-dealing.

Policy implementation. Generally, implementation of new policies and projects was both time- and labor-intensive. Several partnerships experienced a slow or even failed process of land acquisition such as with trails extending across property owned by multiple private or public entities (Cleveland, Jackson, Orlando, Somerville, Wilkes-Barre). A few partnerships found that projects completed by outside consultants or national vendors were not done to local standards or did not fit local needs, and poor construction work was cited as a problem. For example, in Charleston, a path was resurfaced with substandard materials that rapidly deteriorated. Some policy changes were projected to be slow at affecting the environment for physical activity, such as zoning changes, but the long-term impact could be substantial.

Conflict between agency policy and what occurred in practice, including lack of enforcement, was another barrier. In some communities, developers resisted making connections to trails in new developments or in adopting new designs to accommodate multimodal transport (Buffalo, Columbia, Louisville, Omaha). In some sites, regional policy change was challenging, with the existence of inconsistent plans across communities (Upper Valley).

The Winnebago partnership was unique in that the tribe had sovereignty, so it could develop and implement its own policies specific to the needs and desires of the community, with fewer barriers to policy implementation and enforcement. Some communities found that having relevant data about the community helped convey the need for improvements. In Orlando, street audit data documented existing problems and illustrated how policy and environmental changes were needed to support physical activity.

Financial resources and constraints. Several partnerships discovered that policy changes need not be costly. However, funding of physical projects was a common concern across partnerships. In some cases, partnership successes helped leverage funding from partners or others. In other cases, local organizations were competing with each other for limited municipal funding. To obtain

funding, the partnerships needed to estimate costs of planning proposals or projects, which at times was difficult. In the Bronx, a full maintenance plan was required for all new projects.

The experience of some partnerships demonstrated the importance of obligating or otherwise protecting resources once they are generated. In one site, public funding approved through a hard-fought public referendum to support community programs for children was undermined by influential opponents and largely eliminated (Oakland). Partnerships that were most successful in generating resources to support physical projects often involved a powerful elected or institutional partner who was already knowledgeable and well positioned to capitalize on larger political priorities. They served as a guide or steward to help navigate the bureaucracy and identify resources. Many also combined the efforts of an influential public champion with strong constituent support.

Discussion

Limitations and Strengths

Limitations of this component of the evaluation should be acknowledged. First, this evaluation lacked behavioral outcome measures, such as physical activity. However, with the relatively short time of 5 years to create community change, more-proximal measures of progress may be more appropriate. In particular, built-environment changes take years to take shape, and many policies do not have immediate effects.

Second, although the PRS was in place before changes took place as a result of the ALbD grants, the other components of the evaluation (e.g., interviews, focus groups, concept mapping) all occurred post hoc only. Third, the design lacked comparative evaluation in control communities and focused solely on communities that received funding. Fourth, the PRS depended on site staff recording activities. Despite training, there was inconsistency across sites in reporting practices, in part because of staff turnover and staff acceptance of the program. Thus, it may be subject to over- or under-reporting.²⁷

Finally, many of the communities received multiple sources of funding related to these efforts and several of the efforts had roots in the community starting before the grant period. Therefore, in large part, the successes associated with the ALbD initiative relate to a vision for an initiative that complements other local endeavors. Thus, findings cannot be attributed to ALbD alone.

Despite these limitations, the scope of evaluating 25 diverse communities was a wide-ranging undertaking. The evaluation combined qualitative and quantitative methods to triangulate findings and evaluate project and policy changes that occurred in these communities.

Other strengths and limitations of the evaluation approach are discussed in a companion paper²⁶ in this *AJPM* supplement.

Conclusion

As communities continue to try to achieve numerous and substantial changes to support active living with limited resources, the ALbD initiative provides a robust model for community change. The partnerships worked in a number of sectors, including urban planning ($n=16$); active transportation ($n=23$); trails/parks/recreation/open space ($n=22$); communities ($n=22$); and schools ($n=18$). The diverse array of lead agencies and community partners engaged in decisions related to built-environment policy and projects illustrates how various skills and capacities can be brought together for a common goal among sectors and community residents. The successes are a reflection of the opportunities created by community visioning and resource sharing. Increased understanding of the many assets and challenges encountered through the community partnership efforts can be useful in preparing future leaders to be more successful.

The ALbD community partnerships demonstrated at least four major lessons. First, multisector partnerships are capable of generating substantial financial resources to support policy changes and physical projects. But they are challenged frequently to create and sustain the political will, technical expertise and resources, and community support to implement, enforce, and maintain initiatives over time. Second, policy is often the most productive means of generating resources for active living projects and can provide an impetus for changing institutional priorities and culture in local government agencies.

Third, time invested in planning (e.g., obtaining sufficient and well-aligned resources, creating blueprints for action) and relationship building (e.g., educating local elected and appointed officials, gaining input and buy-in from community residents, negotiating build-out with contractors) is critical to successful policy and physical project implementation, enforcement, and maintenance. Fourth, the commitment to working in various racial, ethnic, and lower-income communities increased collaboration between government agencies and community residents where health disparities are greatest and policy changes and physical projects are needed most. Although there is a great deal more to understand about how these change processes affect physical activity and health across populations and settings, as well as how social, cultural, and psychosocial factors influence community responses to the policy changes and physical projects, findings from this initiative provide a foundation to support subsequent efforts.

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Appendix

Supplementary data

Supplementary data associated with this article can be found, in the online version, at dx.doi.org/10.1016/j.amepre.2012.06.024.

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