This brief report presents evidence from multiple disciplines and sectors (e.g., transportation, urban/community planning, law and policy, public health, and parks and recreation) in the context of the five built environment settings identified in NIKE’s Designed to Move report that facilitate and encourage physically active lifestyles. These settings, 1) parks and open spaces, 2) schools, 3) land use and urban design, 4) transportation, and 5) buildings/workplaces, are recognized as important characteristics of the built environment for physical activity. Identifying key components of the built environment, and how to support these assets, can facilitate seamless integration of sport and physical activity into every person’s, and especially every child’s, daily life. This report is informed, in large part, by Active Living Research, a program of the Robert Wood Johnson Foundation. Please note that given challenges to access, and disparities in access to sport and play spaces, attention to and features of the built environment contained in this report should be viewed in light of the physical and emotional needs of under-served children.
Parks and Open Spaces

Building new parks, renovating old ones, and improving all parks with programing and features that promote sport and exercise are proven strategies for improving health and reducing the costs associated with physical inactivity. Sharing park spaces with schools and other community groups is another strategy to improve opportunities for sport and play within communities.

Living Near Parks

A study conducted in Southern California found that living near parks and recreation/sport programs significantly reduced the risk of being overweight or obese among children. The study also found that residents of rural areas had access to greater amounts of green space (developed open space, grass, shrub, and forest areas), but were located much farther away from parks and recreation areas, as compared with urban residents.

Having the Right Facilities

Other studies have found that some features within parks, such as basketball courts and trails, encourage more physical activity.

Renovation

Of two San Francisco parks that were recently renovated, researchers found that one experienced a more than fivefold increase in park use while use nearly doubled in the other park.

Programming

The Southern California study found that more than half of the children in their study had no sport/recreation programs within 550 yards of their home. The researchers estimated that if all children in the study had matching sport/recreation programs near their homes, “8-9 percent would move from overweight to normal and approximately 2-3 percent would move from obese to overweight.” Another study found that parks are used less when they don’t offer programming or have sport/recreational features that attract people. Further, facility-specific programming and classes can encourage participation and engagement from a broader demographic, including individuals who would not normally use the park. Some researchers speculate that a lack of programs in lower-income neighborhood parks may be one reason that their parks are used less often than the parks in neighborhoods where incomes are higher.

Sharing Resources

Youth sports leagues and K-12 schools are the groups most likely to use park facilities on a regular basis or host programs at parks for the purpose of sport, active recreation, or another form of physical activity.

Schools

Sharing school and community play spaces through legal contracts (shared-use agreements), or simply opening school facilities to the public, can increase opportunities for sport and recreation, as well as increase the number of children who are physically active in the community. The shared use (or joint use) of existing school and community sport and recreational facilities can be a cost-effective way to promote physical activity among residents of all ages. For example, a school may allow community members to use a track, playground or basketball court for free when school is not in session. Additionally, legal contracts, commonly referred to as joint use agreements, can set the terms for sharing sport and recreational facilities or programs to create opportunities for community members to be physically active.

Importance to Public Health

“Public school facilities have emerged as an area of attention by public health advocates because of their great availability in US communities and their importance as a place for physical activity.”

Most Common Partnerships

According to one national study, schools most often share their facilities outside of regular school hours with youth sports leagues and parks. They also share with faith-based organizations, Boys and Girls Clubs, and YMCAs/YWCAs.
**Effectiveness of “Shared Use”**

Several studies have found that opening school grounds to the community results in increased physical activity in those communities.

- Adolescents surveyed in Boston, Cincinnati, and San Diego were more likely to be physically active when they had access to fields and play areas after school.\(^{11}\)

- A study conducted in two lower-income New Orleans communities found when a previously locked schoolyard was opened and supervised, the number of children who were physically active outdoors was 84% higher than in a community that had closed schoolyards.\(^{12}\)

**Barriers to Sharing**

Five prominent challenges to shared use are: 1) funding for costs associated with greater facility utilization, 2) establishing effective dialogue between the multiple users of school spaces, 3) designing school spaces to facilitate shared use, 4) ensuring protection from liability, crime, vandalism, and other physical incivilities, and 5) determining decision-making processes for allocating space.\(^{10}\) Several organizations have developed resources for schools and other interested groups on how to address and navigate these challenges.

**Urban Design and Land Use**

Walkable and connected neighborhoods generally have better access to parks and play spaces than non-walkable neighborhoods. Additionally, walkable neighborhoods make it easier for residents to use active transportation to get to places where they can play sports and engage in physical activity.

**Mixed Land Use Encourages Walking**

Areas with a distribution of commercial, office, residential, institutional, and park/recreational land uses are generally considered high mixed-use. An Atlanta study found that youth ages 5 to 18 who live in mixed-use neighborhoods walk more for transportation to a variety of places, including places to play.\(^{13,14}\)

**Location of Play Spaces is Important**

A study involving 1,556 adolescent girls found that teenage girls reported 33 additional minutes of physical activity per week for each park located within a half-mile from home. The teens were also more active when parks were lighted and had walking paths.\(^{15}\)

**Safety is Critical**

In one study, researchers found that children were five times more likely to walk to school if their parents felt their neighborhoods and streets were safe.\(^{16}\) Perceptions of safety are influenced by crime and traffic. Crime reduction through urban design strategies include lighted streets and paths, natural surveillance (“eyes on the street”), and general maintenance.

**Disparities Exist**

Lower-income communities and communities of color have limited access to well-maintained and safe parks and other play spaces. These same communities also frequently lack features that support walking.\(^{14}\)

**Streetscape Design**

Streetscape design, which includes characteristics of the pedestrian environment such as street crossing design and quality of sidewalks, can enhance pedestrian safety and attractiveness, likely encouraging more walking to parks and open spaces where kids can play.\(^{17,18}\)

**Transportation**

Enhancements to transportation infrastructure such as pedestrian overpasses, safety and directional signage, crosswalks, sidewalks, bicycle lanes and separated paths, multi-use trails, and traffic calming measures, in addition to Safe Routes to School initiatives, can result in increased recreational opportunities, opportunities for physical activity, and improvements in children's health. Further, there are opportunities for joint funding of multi-use trails that serve both transportation and recreation purposes.
Walking/Biking to School
Makes for More Active Kids

Studies of children and adolescents have found that walking or bicycling to school results in more overall physical activity. However, commuting decreased by 68 percent from 1969 to 2001.

Designing for Safety is Important

Intersections with pedestrian signals, crosswalks, curb cuts, and other traffic calming measures tend to protect residents and facilitate walking and bicycling in communities.

Investments in Transportation Can Help Kids Be Active

“Transportation infrastructure investments that support physical activity can result in increased recreation and sport opportunities, improvements to individuals’ health and decreased health care costs.”

Bicycle Facilities and Sidewalks Help

Sidewalks, bicycle lanes, and separated paths promote physical activity, and cities that invest in bicycle facilities exhibit higher levels of bicycle commuting.

Buildings/Workplaces

Locating buildings where people live and work near open, public spaces that promote sport and physical activity; providing easy access to sport facilities and outdoor recreational space for children; designing courtyards, gardens, and green roofs as outdoor spaces for children’s play; and promoting cycling and activity through access to compatible land uses, are evidence-based strategies to increase physical activity.

Mixed use development is Important

Studies show that locating and orienting buildings in areas where land use is mixed promotes sport and recreational activity, in addition to walking and cycling.

Active Design

Studies provide evidence that specific design features like sports courts and running paths can provide opportunities for active use of on-site open space in urban areas where outdoor space is limited. Other features promoting physical activity within a workplace building or facility include on-site showers for active commuters and joggers, on-site gyms, and “point of decision” signage (i.e. encouraging the use of stairs).

Lighting Can Promote Extra Play

Studies suggest that providing streetlights and floodlights on paths and in active play areas can enhance physical activity by extending time for play into the evening.

Access is Important

Studies report that locating buildings near open, public spaces and providing easy access to outdoor space for children increases opportunities for play.
The SPARC is an interdisciplinary research collaborative within the Sport Management Program in the Department of Tourism, Recreation and Sport Management at the University of Florida. The purpose of SPARC is to produce relevant and timely research that addresses sport as a facilitator of the physical, social, and emotional health of individuals, and the economic health of communities. SPARC is the official research partner of the Aspen Institute’s Project Play. Dr. J.O. Spengler serves as the Director of SPARC and Dr. Michael Sagas, chair of the Department of Recreation and Sport Management, provides support to the collaborative.

The Aspen Institute’s Project Play is a thought leadership exercise that will lay the foundation for the nation to get and keep more children involved in sports, with a focus on addressing the epidemic of physical inactivity. The initiative convenes sport, policy and other leaders in a series of roundtable and other events, and in January 2015 will publish a framework for action that can help stakeholders create “Sports for all, Play for Life” communities. More: www.AspenProjectPlay.org

References


