Active Parks, Healthy Cities

Recommendations from the National Study of Neighborhood Parks
What draws people to a park?

**Programming**
Each additional supervised activity increased park use by 48% and physical activity by 37%. Programming can help attract more seniors and teen girls—both underrepresented in parks.

**Walking Loops**
Walking loops increase park use by 80%, including twice as many seniors, and 90% higher levels of moderate-to-vigorous exercise.

**Play Areas**
The most common reason for going to a park is “bringing children.” Play areas account for 25% of children’s park use. Every play element added to a playground increases its use by 50%.

**Marketing**
On-site banners, posters and signs brought a 62% increase in users and a 63% increase in moderate-to-vigorous physical activity.
The National Study of Neighborhood Parks

The RAND Corporation and City Parks Alliance, led a National Study of Neighborhood Parks to identify to what degree neighborhood parks in America’s cities encourage people to be physically active. The study was supported by the National Heart, Lung and Blood Institute of the National Institutes of Health. Over a two-year period (2014–2016) data collectors observed park design and behaviors in 174 neighborhood parks in 25 cities across the country. For the purposes of this study, neighborhood parks are defined as being between 2 and 20 acres and intended to serve local residents living within a 1-mile radius of the parks. Researchers documented park use, including who was using the park, their age, gender, and level of physical activity (sedentary, moderate or vigorous), specific activities, as well as park characteristics, amenities, and current conditions. The research team also collected information on how parks were perceived by those who used them. The research team has published multiple articles on the study findings in peer reviewed journals, which were the primary source for this report. The journal articles and related publications1,2 are listed in Endnotes, along with the Research Team and Cities Studied. Links to related publications and additional case studies can be found at cityparksalliance.org.

Americans are suffering from a health crisis, and it’s partly due to physical inactivity.

In fact, by contributing to many of our chronic diseases, physical inactivity is literally a killer, directly responsible for 11 percent of all deaths.

This problem is not easy to solve, but one big step would be providing Americans with great close-to-home park and recreation options. Parks are places proven to get people moving.

Unfortunately, parks have been almost entirely left out of the health equation. While the nation spent $10,348 per resident on health care in 2016,3 the median per-person spending on urban parks was a minuscule $83 in 2017.4 And the portion spent on small, close-to-home neighborhood parks was even less.

Neighborhood parks that are well-designed with diverse facilities and targeted programming can play a critical role in promoting moderate-to-vigorous physical activity. But most neighborhood parks today aren’t designed or programmed to successfully do that and are therefore underutilized. Relatively modest investments can improve neighborhood park conditions to encourage physical activity for everyone, regardless of age, gender, or income.

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Study Findings and Recommendations

**Programming**
Nothing increases park use and physical activity as much as *programming*—providing supervised activities to help people make use of the space—with each additional supervised activity leading to a 48 percent increase in park use and a 37 percent increase in physical activity. In particular, seniors and teen girls are underrepresented in parks and benefit greatly from programming targeted at their needs and interests.

**Design**
Park and playspace design influences how much a park is used and how physically active park users will be. Parks with walking loops were found to have 80 percent more users, over twice as many seniors, and 90 percent higher levels of moderate-to-vigorous physical activity. With playgrounds, more is better. The National Study of Neighborhood Parks found that for every element added to a playground, use (and activity level) increases by 50 percent.

**Marketing and Outreach**
On-site marketing, such as banners, posters and signs, are proven effective at increasing park use and physical activity, and many cities are effectively using social media and online tools to connect people with parks. The study found that park departments deploying these kinds of publicity experienced a 62 percent increase in users and a 63 percent increase in physical activity.

**Measuring Park Use**
One of the key findings of the study was that, overall, most neighborhood parks are underused, a fact that only emerges with measurement. Parks that are well-used are much more likely to have vocal constituency to support them; and park agencies that measure park use are better positioned to justify public spending to maintain and enhance them.
Everyone loves to see a beautiful park, but it turns out that nothing increases park use and physical activity as much as programming—providing supervised activities to help people make use of the space. According to the study, each additional supervised activity increased park use by 48 percent and physical activity by 37 percent. Unfortunately, programs in neighborhood parks are few and far between—especially in parks in high-poverty neighborhoods. Here are some ways to change that:

**Programming by Age Group: Seniors**

Seniors age 60 and above comprise 18 percent of the population but only 4 percent of neighborhood park users. Given that physical activity can have immediate benefits for older folks in preventing or mitigating the impact of chronic diseases, park systems should do everything possible to get seniors active. That includes building better walking trails and adding enhanced programming to provide structure, encouragement, companionship and fun.

In Philadelphia, PA groups walk together in five parks thanks to We Walk PHL, a partnership of the Fairmount Park Conservancy, the Philadelphia Parks and Recreation Department, the Department of Public Health, the Arthritis Foundation and the Health Promotion Council. The free, 12-week, spring-and-fall program generated about 750 users in 2017. Most of the walks cover about a mile at a moderate pace, making them especially attractive to seniors.
One of the nation’s longest-running recreation programs—84 years—is found in San Antonio, TX where dance classes in the city’s adult & senior centers feature jazz, flamenco, Latin, hip-hop, line and folklorico movement. In 2017 over 3,500 San Antonians took one or more dance classes. Some participants join dance troupes that perform at community events, schools and senior living facilities. “The troupes are great advertisements for our classes,” says Brenda Burton, Assistant Parks and Recreation Manager for the City of San Antonio, who oversees senior programs. Many other cities offer diverse dance programs. One type, soul line dancing to rhythm-and-blues and hip-hop songs, has become very popular, especially with middle-aged and older African-American women.

Programming by Age Group: Children

Not surprisingly, children’s use of parks is disproportionately high—what is a park without children? But they, too, greatly benefit from programming, particularly if it includes activities that build physical coordination and social interaction. Parks can also play a critical role fighting hunger during the summer, when there is no free school lunch, by coordinating activities with free summer lunch programs.

Park systems should do everything possible to get seniors active.
**Providence, RI** Mayor Jorge Elorza’s Eat, Play, Learn PVD Program is a multi-department attack on the health/hunger problem. In partnership with the Healthy Communities Office, Parks Department, Recreation Department, Public School District and Department of Arts, Culture, and Tourism, the Summer Meal Program serves lunches at 33 neighborhood parks. It also runs the PlayCorps Program in five parks “to get kids into playgrounds, build things, make art, have unstructured play time to make their own fun, do science experiments, garden, and eat meals,” says Parks Superintendent Wendy Nilsson. Since Eat, Play, Learn PVD launched, there has been a significant increase in children’s meals eaten during the summer, some sites seeing an increase of as much as 300 percent. The Parks Department trains and employs youth to run PlayCorps programs, leveraging existing funds from the summer youth employment program.

**Brownsville, TX** literally goes the extra mile to take play opportunities to its residents. In 2009 the Parks and Recreation Department retrofitted one of its old trailers to store everything from sports balls, hula hoops, jump ropes, and soccer goals to bean bag toss, building blocks, scooters and trikes, and even inflatable jousting pieces. Every week, staff drive to different venues and lead activities and games. “When we bring our rec center on wheels to a local park, we see families engage with their kids and a lot of smiling faces. It’s what summer’s all about,” says Damaris McGlone, Director of Brownsville’s Parks and Recreation Department. The Mobile Rec Unit, which started with a $5,000 donation, is staffed by temporary workers, volunteers, and a permanent part-time employee, and has yearly direct costs of under $3,000.

*Brownsville, TX Imagination Playground.*
Females are underrepresented in parks, even counting mothers taking young children. Among teenagers, boys outnumber girls 65 to 35 percent. As for active sports, it’s even worse: only 8 out of every 100 girls play sports in neighborhood parks, and for teen girls it’s only 4 out of every 100. Teen and pre-teen girls need particular attention when it comes to park programming. Here are some notable examples:

To give young girls a supportive, comfortable experience of team sports, three Philadelphians founded the Wild Things Girls Softball League. With up to 160 girls each season, Wild Things emphasizes fun and enjoyment as well as skills. For instance, girls switch positions every inning to gain new perspective and learn new strategies. A “softball for life approach” allows them to sometimes go shoeless or to dance their way around the bases. Reflections on game performance morph into discussions about life in general. With volunteer staff, the registration fee is only $5.
Girls Play L.A., an outgrowth of the Gender Equity Program of the Los Angeles Department of Recreation and Parks, motivates girls in underserved communities to get into sports. In 2018, there were 88 Girls Play L.A. sites with 27,000 participants. The program is offered quarterly for 8–10 weeks each session; participation costs only $10. The goal is to bring female participation in youth sports all the way up to 50 percent. The Department of Recreation and Parks also works with the Alliance of Women Coaches to set up mentorship and coaching programs.

Programming by Age Group: General Population

Of course, everyone else benefits from programming, too, particularly programming that inspires people to get active.

Providence, RI has a goal of offering fitness classes in one out of every four city parks. Through the Health and Wellness Initiative of the Partnership for Providence Parks, the program offers yoga, stroller fit, cross fit, hybrid strength and conditioning, and more. With financial support from the YMCA, the city arranged for private instructors to offer free fitness classes in the parks in lower-income neighborhoods while allowing the instructors to charge fees in higher-income neighborhoods. The YMCA and park Friends groups sometimes also provide daycare during the classes.
Parks evolve over time. By responding to community needs—and often by working in partnerships to stretch dollars further—city park departments can make design improvements that enhance health. Here are some elements found to be most significant by the National Study of Neighborhood Parks:

**Walking Loops**

Compared to other parks, parks with walking loops were found to have 80 percent more users, over twice as many seniors, and 90 percent higher levels of moderate-to-vigorous physical activity. The additional use and activity occurred not only on the loops but throughout the entire park. **Significantly, only 29 percent of neighborhood parks have walking loops, even though they generate the highest amount of physical activity of any park facility for all age groups**—and they have by far the greatest positive impact on seniors (who may prefer the relative increased safety of a smooth, uninterrupted path away from motor vehicle traffic). The National Study of Neighborhood Parks conjectures that park walking loops provide both physical and psychological advantages by attracting a regular community of users who get to know each other and provide social support.

Increasingly, cities are building Fitness Zones, a collection of outdoor, non-motorized strength-building equipment comparable to what is found in private gyms, along walking paths to increase use and encourage more physical activity for adults and teenagers.

Adams Park in Atlanta, GA is a 32-acre multi-purpose recreational destination, complete with a pond plus a new splashpad, tennis courts, a playground, ball fields and a golf course. But until recently, those looking for a low-key exercise experience had been offered only a truncated path by the pond. During a visioning process, the community called for a full-fledged walking loop. The city and a nonprofit partner responded, raising money to install a beautiful PermaTrek boardwalk, and use has skyrocketed. (PermaTrek costs from $40–$110 per square foot, depending on supports.)

*Adams Park, Atlanta, GA*
Play Areas

The most common reason cited for going to a park is “taking children,” and 25 percent of all children’s park use takes place in play areas. Not surprisingly, play areas are the most common facility in neighborhood parks, but not all playgrounds inspire equal amounts of activity.

With playgrounds, more is better. The National Study of Neighborhood Parks found that for every play element added to a playground, use (and activity level) increases by 50 percent. Spraygrounds and spinners are particularly popular.

But playgrounds don’t have to be just for kids. Multigenerational playgrounds, as well as playgrounds with adjacent Fitness Zones, are an increasingly popular way for both children and their caregivers to get a positive dose of physical activity.

When Tracy McGinnis, the philanthropy director of the Southminster retirement community in North Carolina, learned that European doctors prescribe visits to playgrounds, she was inspired to work with Mecklenburg County’s Park and Recreation Department to create a multigenerational playground in Marion Diehl Park. Southminster spent over $200,000 on playground equipment, which includes a giant rope-climb and an electronic game integrated with the equipment. Adults were given a rubber surfaced walking track as well as resistance and cardio machines.
With playgrounds, more is better. For every play element added to a playground, use (and activity level) increases by 50 percent.

A new sport that is particularly popular among the older set is pickleball. Invented in Seattle in the 1960s, pickleball is a lower-intensity combination of tennis, badminton and pingpong. Since the playing area is smaller than a tennis court and the net is lower, players can run less and don’t have to reach as high. Many park systems across the country enable pickleball by simply adding markings to existing tennis courts. Albuquerque, NM offers the sport on converted tennis courts in six parks and has two dedicated pickleball centers. The game is drop-in, allowing players to rest as well as lowering the barrier for newcomers to join.

In Anacostia Park in Washington, DC a free park fitness facility adjoins a popular children’s pirate ship-themed playground. Adult caregivers and companions can exercise on one or more of 18 stations. The equipment is easy to use and offers flexibility exercises, strength training and a cardio workout. The National Park Service purchased the equipment, and The Trust for Public Land received a grant from ICF International to fund the installation and add some small landscape upgrades, totaling under $35,000.

▲ Garvey Park, L.A. Fitness Zone.
Non-traditional Activities
Everyone enjoys something new—and that goes for sports and recreation, too. Over the years there have been all kinds of fads, from hula hoops to rollerblades to skateboard parks. Some have come and gone, others have stayed and grown. Here are some new ones that can provide health benefits in neighborhood parks.

Slacklining, a new pastime, is generating great interest. The sport—which involves tying a strong nylon ribbon between two poles or trees and balance-walking along it—began in Boulder, CO in the 1940s, but it didn’t take off until the 2000s. “Skateboarding and slacklining are very popular with young people, both male and female,” said Jeff Haley, Boulder Parks and Recreation’s manager of planning, design and community engagement. “It’s important to us to engage youth in the parks.” While improperly placed slacklines can damage trees, Boulder worked with enthusiasts to design a pilot program that utilized specific species and rigorous tree protection, and the program is now permanent. (There is also now a permanent course in a park; crowdfunding along with Slackline Industries, a local business, helped cover the cost.)

Traveling Rings, a set of dangling metal rings, were originally developed at Muscle Beach, Santa Monica, CA in the 1960s. Santa Monica increased the accessibility of its rings by installing both large and small series to meet the needs of different sized persons. Traveling Rings are a big draw, even to small neighborhood parks, and very popular with teens and young adults. No appointments are needed, and there are no leagues to join or schedules to coordinate. Good for building strength and showing off tricks, the concept has gradually spread to San Antonio, Virginia Beach, Providence and New York City.
Restrooms: Finding Relief

Even when a park features great amenities, a beautiful setting, varied programming and easy accessibility, if it doesn’t have public comfort stations, many park users may stay away. However, maintenance of traditional brick and mortar bathrooms can place significant burdens on park agencies—from routine cleaning to removal of graffiti and even dealing with the theft of copper pipes. Portable sanitation units (“port-a-potties”) are affordable and offer great flexibility, but they can be awkward to use and impinge on park image. But there are innovations in outdoor restroom design that some cities are discovering.

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In Portland, OR, City Commissioner Randy Leonard instigated the design of a better public toilet. With input from police, fire and maintenance personnel, the result is the wheelchair-accessible and easy-to-clean metal “Portland Loo.” With open bars at the top and bottom, the restroom is ventilated, and police can see how many people are within. The system uses water for flushing but there is no sink—only hand sanitizer—and blue lighting discourages heroin use. As of 2018, 17 Portland Loos were installed in Portland, and over 50 others are in use across the U.S. and Canada. The base price is $90,000; utility work, foundation work, shipping and installation add another $36,000–$44,000.

Dolores Park, a 16-acre park in San Francisco’s Mission neighborhood, is extremely popular with families, tourists and local residents. To provide comfort for park visitors and discourage unwanted uses, the city’s park management, maintenance and park patrol staff worked with The Trust for Public Land and community groups to design a new toilet. The doors—metal gates with vertical bars—are opened for day use and locked at night, and the restrooms open directly into the park. The stainless-steel toilets and shallow sinks are easy to clean and less vulnerable to vandalism. Built-in dividers can be moved to make the restroom larger or smaller. According to feedback from park staff, the Dolores Park toilets are working well for both the public and the city.
Marketing and Outreach

On-site marketing, such as banners, posters and signs, are proven effective at increasing park use and physical activity. The study found that park departments deploying these kinds of publicity experienced a 62 percent increase in users and a 63 percent increase in physical activity. Getting the word out through social media is also growing, including the use of online tools, such as Meetup, to connect people to parks.

Signs are basic, and Lincoln, NE is a leader in respectful and helpful messages to its populace: “Attention Practice Teams: If field is chalked, you can practice but please keep off the chalk. Thank You.” Lincoln also posts signs giving web addresses for relevant public and private bird organizations in various metro birding areas, and it rewards park sponsors with their name on an “Adopt-a-Lincoln Landscape” sign. Lincoln is also part of the growing trend to educate users about the ecological benefits of parks and about new design elements within them. The city has a “Rain to Recreation” post-sized sign that explains and illustrates park features that help reduce water pollution.

In 2017, the City of Greensboro, NC began using Meetup to advertise and solicit participation in exercise classes in the parks. Fitness instructors donate their services, but the city allows them to advertise their businesses and collect participant email addresses. Since using Meetup, the classes have doubled in size. Greensboro also uses Meetup to advertise “Yappy Hour” for dog training, an Adoptapalooza, and even dog yoga. The Kids Club Meetup advertises activities such as sports, crafts, and children’s gardening.
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The use of social media is common, but the City of Westminster, CO hit upon a fun and novel way of using this marketing and outreach tool. To attract people to parks, Westminster Parks Department launched a monster egg hunt via Facebook. By claiming that “residents report unusual sightings at Standley Lake Regional Park,” the department spread news of the sighting of strange eggs that had been found around the lake. #StandleyMonster updates received significant social media engagement, with one video getting more than 30,000 views. Residents were informed that park users could find these mysterious eggs and take them to a nature center for a “verification of authenticity,” a certificate, and a display stand. This enabled the city to further the social media buzz by promoting each egg sighting on the fictitious Westminster Enquirer Facebook page. The department has seen a significant increase in park visitors and trail users since the egg hunt launched.

Waco, TX has brought trails into the digital age. Eleven of its parks are outfitted with sign boards displaying QR codes. When a trail user points a smartphone at the code, it downloads a video about the workout modules. Besides being fun, the QR Fit Trail system provides valuable data for the city by recording when and where videos are downloaded. The city’s parks and recreation department partnered with Live Well Waco of the Waco-McLellan County Public Health District to purchase the system and deploy it. A $50,000 Texas Health Communities Grant covered the signage costs, and a $93,000 Community Development Block Grant was used to co-locate fitness equipment with the new signs.
“If you don’t measure, you can’t manage” is a well-known aphorism, but the National Study of Neighborhood Parks found that park departments rarely measure their level of use, beyond counting permits and fees. While measurement is not always cheap or easy, it greatly increases agencies’ ability to target investments and activities to serve all residents and to make the case to the public and public officials about the value of their services.

One of the key findings of the study was that, overall, most neighborhood parks are underused, a fact that only emerges with measurement. Parks that are well-used are much more likely to have a vocal constituency to support them; and park agencies that measure park use are better positioned to justify public spending to maintain and enhance them.

Despite the challenge, some park departments and their partners, such as universities, nonprofits, park advocates and volunteers, are using a range of strategies to identify who is using the parks, what they are doing and not doing, and how they are responding to the offerings.

The gold standard of park measurement is a tool called SOPARC (Systematic Observation of Play and Recreation in Communities). Originally developed by the RAND Corporation, it was applied in the National Study of Neighborhood Parks. SOPARC utilizes direct observation to assess park and recreation areas, including park users’ physical activity levels, gender, activity modes/types, and estimated age and ethnicity groupings. Observers using the tool can also collect information on park activity area characteristics (such as accessibility, usability, supervision, and the presence of organized activities).

New technologies enable cities to passively collect user data. A variety of automated count technologies have been developed to measure the number of bicyclists and pedestrians using a trail, such as passive infrared, ground sensors and piezoelectric strips. And new solar-powered and cellular enabled park benches can track the number of cellular devices of people within range of the bench.

When SOPARC was used in three cities to analyze the contribution of dog parks to physical activity for canine owners, the resulting report was sobering. It indicated that many owners were driving to the park and getting little exercise. But the study showed that improved walking routes to and from the parks (as well as changes to the parks’ design) could stimulate more physical activity for dog owners. The findings would never have been learned without measurement.
The SOPARC methodology was also applied to a study of children’s park use and physical activity in 20 neighborhood parks in Durham, NC. By combining the data with measurement of park and neighborhood characteristics, the study revealed that it was differences in the parks—rather than differences in neighborhood socio-economic characteristics—that accounted for the variation in the children’s activity levels. The presence of playgrounds and basketball courts, as well as more sidewalks and safer intersections in the surrounding neighborhoods, were all positively associated with park use.

Conclusion

Neighborhood parks that are well designed, programmed and marketed present an opportunity to address public health challenges. By leveraging creativity, new partnerships and innovation we can make our parks places where all people—regardless of age, gender or ability—choose to be more physically active. Active Parks, Healthy Cities presents some low-cost examples of how cities are succeeding and we’re looking for more. Send us your stories at info@cityparksalliance.org.
CITIES STUDIED

Cities in which parks were observed include:

- Fresno, CA
- Los Angeles, CA
- San Francisco, CA
- Victorville, CA
- Pueblo, CO
- Westminster, CO
- Gainesville, FL
- Jacksonville, FL
- Columbus, GA
- Kansas City, KS
- Topeka, KS
- Louisville, KY
- Cleveland, OH
- Pittsburg, PA
- Dallas, TX
- Waco, TX
- St. Louis, MO
- Lincoln, NE
- Manchester, NH
- Albuquerque, NM
- Buffalo, NY
- New York, NY
- Yonkers, NY
- Winston-Salem, NC
- Cleveland, OH

In the second round of observations Minneapolis, MN and Portland, OR were added to the study.

Endnotes


City Parks Alliance is the only independent, nationwide membership organization solely dedicated to urban parks. Its mission is to engage, educate and nurture a broad-based constituency to support the creation, revitalization and sustainability of parks and green spaces that contribute to more vibrant and equitable cities.

The National Study of Neighborhood Parks was funded by the National Heart, Lung and Blood Institute of the National Institutes of Health. The research was conducted by the RAND Corporation in partnership with City Parks Alliance with assistance from The Trust for Public Land.