



**FITLOT**  
OUTDOOR FITNESS PARKS

## Research Recap

**FitLot is a national nonprofit organization dedicated to helping communities find the resources they need to plan, build and program outdoor fitness parks. FitLot has fitness parks in all 50 states and 3 territories.**

# Benefits of Outdoor Fitness Facilities

Outdoor fitness parks are a helpful tool communities can use to increase and promote physical activity. Research on outdoor fitness parks is new and has room for growth but initial findings are promising. Below you will find a recap of existing research regarding outdoor fitness parks.

## Main Question

Do outdoor fitness facilities get used by the communities they serve and do they increase activity?

## The Findings

One study found significantly higher odds of engaging in higher levels of physical activity (529%) compared with other target areas in the park. This influence was found whether equipment was placed in a specific area or spread out throughout the park along a path [2].

Another study found installing fitness equipment was associated with absolute increases in parks visitors. These installations also increased levels of moderate to vigorous physical activity in the park. [1].

A study found outdoor gym users were more frequent park users and represented a significantly higher proportion of local residents compared to general park users. The most cited reasons for using outdoor gyms was to gain strength, tone muscle, or to lose weight [3].



## Fast Findings

- Studies investigating the efficacy of outdoor gyms on physical activity found significant increases in moderate and vigorous physical activity where outdoor gyms were installed.
- Proximity to outdoor fitness equipment appears to influence use. Therefore, more outdoor fitness equipment should be installed near places of residence and work.

## Sources

- [1] Cohen, D. A., Marsh, T., Williamson, S., Golinelli, D., & McKenzie, T. L. (2012). Impact and cost-effectiveness of family Fitness Zones: A natural experiment in urban public parks. *Health & Place*, 18(1), 39–45. <https://doi.org/10.1016/j.healthplace.2011.09.008>
- [2] Sami, M., Smith, M., & Ogunseitan, O. A. (2020). Placement of Outdoor Exercise Equipment and Physical Activity: A Quasi-Experimental Study in Two Parks in Southern California. *International Journal of Environmental Research and Public Health*, 17(7), 2605. <https://doi.org/10.3390/ijerph17072605>
- [3] Stride, V., Cranney, L., Scott, A., & Hua, M. (2017). Outdoor gyms and older adults - acceptability, enablers and barriers: a survey of park users. *Health Promotion Journal of Australia*, 28(3), 243–246. <https://doi.org/10.1071/he16075>





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# Other Key Findings on Parks and Green Spaces

### Physical Activity & Parks

The presence of paved trails, unpaved trails, and wooded areas were significantly related to park-based physical activity when examined independently. In fact, parks with paved trails were almost 26 times as likely to be used for physical activity compared with parks without trails [7].

### Economic Impact

The global estimate of healthcare costs of physical inactivity in 2013 was 53.8 billion dollars. The US direct cost and indirect cost of physical inactivity was \$27,792,555,000 in 2013 [4].

### Active Transport

Those who engage in active transport (walking/cycling) have an 8% reduction in all cause mortality and a 9% reduction in risk for cardiovascular disease incidence. Active transport also reduced the risk of diabetes by 30%. When looking at the subgroup of bicycle commuters you see a risk reduction of 24% of all cause mortality and a reduction of 25% in cancer mortality [5].

### Environmental Impact

Urban trees and other vegetation provide cooling through shade and transportation. Urban vegetation may also improve air quality by removing air pollutants. Places like parks, gardens, and playgrounds improve infiltration of stormwater during extreme precipitation events [6].

### Safety

Based on a 45 study review, findings suggest the presence of parks and green spaces reduce urban crimes. This includes mechanisms such as social interactions, community perception, biophilic stress reduction, etc [8].

### Bottom Line

As we have shown through this research recap, parks are valuable spaces that add value to the communities they serve. Outdoor fitness facilities improve value with increased physical activity levels and more community cohesion.

### Sources

- [4] Ding, D., Lawson, K. D., Kolbe-Alexander, T. L., Finkelstein, E. A., Katzmarzyk, P. T., van Mechelen, W., & Pratt, M. (2016). The economic burden of physical inactivity: a global analysis of major non-communicable diseases. *The Lancet*, 388(10051), 1311–1324. [https://doi.org/10.1016/s0140-6736\(16\)30383-x](https://doi.org/10.1016/s0140-6736(16)30383-x)
- [5] Dinu, M., Pagliai, G., Macchi, C., & Sofi, F. (2018). Active Commuting and Multiple Health Outcomes: A Systematic Review and Meta-Analysis. *Sports Medicine*, 49(3), 437–452. <https://doi.org/10.1007/s40279-018-1023-0>
- [6] Kabisch, N., van den Bosch, M., & Laforteza, R. (2017). The health benefits of nature-based solutions to urbanization challenges for children and the elderly – A systematic review. *Environmental Research*, 159, 362–373. <https://doi.org/10.1016/j.envres.2017.08.004>
- [7] Kaczynski, A. T., Potwarka, L. R., & Saelens, B. E. (2008). Association of Park Size, Distance, and Features With Physical Activity in Neighborhood Parks. *American Journal of Public Health*, 98(8), 1451–1456. <https://doi.org/10.2105/ajph.2007.129064>
- [8] Shepley, M. (n.d.). The Impact of Green Space on Violent Crime in Urban Environments: An Evidence Synthesis. Retrieved September 29, 2022, from <https://www.mdpi.com/1660-4601/16/24/5119>





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### Additional Research on Parks and Outdoor Fitness Facilities

- Observation of and intention to use new places and changed spaces for physical activity during the COVID-19 pandemic - United States, June 2021
- Outdoor Fitness Equipment Usage Behaviors in Natural Settings
- Quantifying the contribution of neighborhood parks to physical activity
- Exercise Training with Fitness Zone Equipment in Sedentary Hispanic Women
- Parks and physical activity: why are some parks used more than others?
- Contribution of public parks to physical activity
- Changes in Physical Activity After Installation of a Fitness Zone in a Community Park
- Understanding the impact of the installation of outdoor fitness equipment and a multi-sports court on park visitation and park-based physical activity: A natural experiment
- Outdoor gyms in Santiago: urban distribution and effects on physical activity
- Who Is Using Outdoor Fitness Equipment and How? The Case of Xihu Park
- Outdoor gyms and older adults - acceptability, enablers and barriers: a survey of park users
- Six weeks of combined aerobic and resistance exercise using outdoor exercise machines improves fitness, insulin resistance, and chemerin in the Korean elderly: A pilot randomized controlled trial
- Fitness Equipment in Public Parks: Frequency of Use and Community Perceptions in a Small Urban Centre
- A Novel Exercise Initiative for Seniors to Improve Balance and Physical Function
- Association of "Weekend Warrior" and Other Leisure Time Physical Activity Patterns With Risks for All-Cause, Cardiovascular Disease, and Cancer Mortality
- Effect of physical inactivity on major non-communicable diseases worldwide: an analysis of burden of disease and life expectancy
- Effects of physical activity on life expectancy with cardiovascular disease

