

Improving Public Health through Public Parks and Trails: Eight Common Measures

Did You Know?

Only one-half of U.S. adults and less than one-third of youth get recommended amounts of physical activity. Inadequate physical activity accounts for \$117 billion in annual health care costs.ⁱ Limited access to safe and convenient places for physical activity makes such activity hard for some people.

Parks and trails can be gateways to healthy living by promoting holistic health. Parks provide opportunities for physical activity, stress reduction, social interaction, and environmental sustainability. The [Community Guide](#)ⁱⁱ now recommends access to parks and trails in combination with improved walk/bike routes as a public health intervention to increase physical activity.

Summary

Park and trail system planners, public health professionals, community leaders, and researchers all need to know what does and does not work well with regard to park access and use and how it relates to improved community health. The National Park Service (NPS) and Centers for Disease Control and Prevention (CDC) collaborated to identify eight common measures that can be used to link parks and trails to public health goals.

What Common Measures Can Do

Data from common measures can be used to

- Highlight the positive impact that parks and trails have on public health
- Emphasize the importance of local parks and trails to community decision makers and funders
- Help communities set goals and evaluate results
- Make a case for specific changes in infrastructure and funding
- Help local agencies make strategic decisions about parks and trails that can increase their public health benefits
- Identify trends and compare approaches to park and trail design and management
- Identify potential locations for new or improved access to parks and trails
- Create improved transportation routes and recreation opportunities for targeted neighborhoods

A system of parks and trails aligning with public health goals strengthens policy and planning goals at all levels. For instance

- Local policies for developing parks and trails (e.g., Complete Streets, Safe Routes to Parks) within a half mile of multi-family developments can increase park availability and active travel options for nearby residents.
- Local strategies for promoting nearby parks and trails within neighborhoods can encourage awareness of walkable access to park and trail entrances.
- Statewide strategies—for example, as components of State Comprehensive Outdoor Recreation Plans or statewide health promotion programs—that encourage walkable access to parks and trails through grant programs or technical assistance programs can help achieve public health goals.
- Funding mechanisms for park and trail infrastructure can support increased access to parks and trails close to home.

These benefits can best be realized if we have a system of common measures for parks and trails at all geographic levels.

Common Measures at a Glance

Table 1. Suggested measures for public parks and trails and recommended geographic level of measurement for data collection

GEOGRAPHIC LEVEL OF MEASUREMENT					
	SUGGESTED MEASURES	FACILITY AREA	SITE	CITY / COUNTY	STATE / NATIONAL
ACCESS MEASURES	1. Proximity - Percentage of the population (city/county/state/ national) living within a half mile of a public park or trail corridor boundary.			✓	✓
	2. Walking Access - Percentage of the population (city/ county) with less than a half-mile walk route to a public park or trail entrance.			✓	
	3. Park Connectivity - Ratio of the number of people with less than a half-mile walk route to a public park or trail entrance to the number of people living within a half mile of that specific park or trail corridor boundary.		✓		
ACREAGE MEASURE	4. Land Area - Percentage of land area designated as public parks or trails.			✓	✓
FACILITY AREA MEASURES	5. Physical Activity - Percentage of users engaged in sedentary, moderate, or vigorous physical activity at a specific facility area.	✓			
	6. Visitation - Annual number of visits to a specific facility area.	✓			
	7. Frequency – Average number of visits to a specific facility area by an individual during a period of time.	✓			
	8. Duration - Average time spent at a specific facility area by an individual.	✓			

Looking Ahead

Some necessary next steps include:

- Promoting awareness, conversation, and acceptance of common measures among planners, health professionals, community leaders, and researchers.
- Validating common measures to confirm their usefulness and association with public health.
- Developing easy ways for local park and trail planners to collect, use, contribute, and share data from common measures.
- Establishing a national group responsible for collecting, tracking, and reporting data produced by common measures.

About The Report

This document is a summary based on research conducted in 2014 and 2015 by North Carolina State University's Parks, Recreation and Tourism Management Department in collaboration with the National Park Service and the Centers for Disease Control and Prevention. An article published in the Journal of Parks and Recreation Administration discusses the earlier research and is available here: <https://js.sagamorepub.com/jpra/article/view/7143>.

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Learn More

Download the 26-page report

http://go.nps.gov/improving_public_health

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- ⁱ CDC [Centers for Disease Control and Prevention]. 2016. Keeping Americans Healthy at Every Stage of Life at a Glance 2016: Public Health Problem, Americans Need Safe Places for Physical Activity. Atlanta: US Department of Health and Human Services. Accessed July 27, 2017. Available: <https://www.cdc.gov/chronicdisease/resources/publications/aag/dnpao.htm>.
- ⁱⁱ U.S. Community Preventive Service Task Force. 2017. Physical activity: Built environment approaches combining transportation system interventions with land use and environmental design. U.S. Department of Health and Human Services. Accessed July 21, 2017. Available: <https://www.thecommunityguide.org/findings/physical-activity-built-environment-approaches>.