

# Measuring Trails Benefits: Equitable Access

## Do low income and minority neighborhoods have less access to trails?

Trails and parks create substantial benefits for public health, property values, businesses, and quality of life, but in many communities these community resources are less abundant in poorer neighborhoods with a larger share of minority residents.

The benefits of parks and trails is greatest for those who live the closest to these resources. This disparity in access to trails and parks therefore has significant health, social, and economic implications and can exacerbate existing environmental justice concerns in communities.

The reasons behind these inequities of access vary across communities. Particularly in urban communities, historically minority or low-income areas tend to be more densely developed, leaving little available space for building new parks or trails. In some rural places, low-income and minority residents may have been less involved with park and trail planning efforts so public resources have not been allocated to these neighborhoods.

Additional details on each of these topics, as well as other relevant research, are available at <https://headwaterseconomics.org/trail>.

## Select Research Highlights

- In [San Diego County, California](#), the condition and amenities of recreation facilities are better in high-income neighborhoods relative to low-income neighborhoods. The likelihood that a child uses the recreation center increases 23 percent for each \$10,000 increase in neighborhood income.<sup>1</sup>
- In [a large city in southern California](#), residents near parks in high-poverty neighborhoods are more likely to not visit their neighborhood park due to safety concerns. Perceived safety is strongly associated with the number of staff at the parks, and parks in high-poverty neighborhoods have, on average, eight fewer staff than parks in low-poverty neighborhoods.<sup>2</sup>
- Research has established that low-income people tend to have higher mortality rates than high-income residents. A study across [England](#) demonstrates that this gap in mortality rate is about half the size in areas with the most green space compared to areas with the least green space.<sup>3</sup>
- In [Los Angeles County, California](#), a study that follows a large sample of children over time demonstrates that children who live a walkable distance from parks are much less likely to be obese or overweight. These benefits can be achieved through formal parks and programs, but also through accessible green space or other small,



### How to use this information:

This research is intended to help community leaders better understand the potential social benefits of trails for residents.

This summary is one of several handouts describing the state of research related to the benefits of trails. The other summaries address:

- Public health
- Business impacts
- Property value
- General benefits
- Quality of life

This series offers a succinct review of common benefits identified in the 130+ studies in Headwaters Economics' free, online, searchable [Trails Benefits Library](#).

informal places that encourage informal play. A lack of access to these resources plays a significant role in children's health.<sup>4</sup>

- Some communities, like Los Angeles, California, are working to reduce inequities through [public funding dedicated to improving](#) public parks and trails in underserved communities. Research on the effectiveness of this fund, known as Proposition K, finds that if not carefully administered, it could exacerbate this problem unless reviewers consider proposals for nontraditional public spaces such as schoolyards and vacant lots because there is very little available park space in the most underserved neighborhoods.<sup>5</sup>
- In [Taos, New Mexico](#), a study finds that lower trail use among Hispanic and low-income residents is likely due to differences in access, not because these residents do not want to use trails. Low-income residents with a park or trail within a 10-minute walk of their house were 50 percent more likely to have used trails during the previous year.<sup>6</sup>

## Methods

Inequities in access often are measured using a combination of GIS mapping, surveys of park users and administrators, and surveys of residents near parks.

GIS techniques include mapping traditional resources like parks, trails, and recreation centers. Researchers, like in the study [across England](#), also map green spaces such as schoolyards, abandoned lots, and treed areas (and found these areas associated with significantly lower mortality rates). Identifying these [“non-traditional” spaces](#) is necessary to create much-needed park spaces in densely populated, underserved urban environments.

Surveys of park users can be in-person interviews or observations. In-person interviews are helpful to determine users' demographics, needs, perceptions of safety, and frequency of use. Formal observations of park users are useful in determining park users' physical activity and use patterns.

Surveys of residents who live near parks and trails can help better understand the demographics of surrounding neighborhoods and the perceptions of safety and park programs for park users and non-users, to determine how parks and trails can better serve the adjacent neighborhoods.

Original studies and additional details on methods can be found in the Trails Benefits Library at <https://headwaterseconomics.org/trail>.

## Contact

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*“In Taos, New Mexico, we find that lower trail use among Hispanic and low-income residents is likely due to differences in access, not because these residents do not want to use trails.”*

- RCC Associates

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## Footnotes

- 1 McKenzie, T.L., Moody, J.S., Carlson, J.A., Lopez, N.V. and Elder, J.P., 2013. Neighborhood income matters: disparities in community recreation facilities, amenities, and programs. *Journal of Park and Recreation Administration* 31(4): 12.
- 2 Cohen, D.A., Han, B., Derose, K.P., Williamson, S., Marsh, T., Rudick, J. and McKenzie, T.L., 2012. Neighborhood poverty, park use, and park-based physical activity in a Southern California city. *Social Science & Medicine* 75(12): 2317-2325.
- 3 Mitchell, R. and Popham, F., 2008. Effect of exposure to natural environment on health inequalities: an observational population study. *The Lancet* 372(9650): 1655-1660.
- 4 Wolch, J., Jerrett, M., Reynolds, K., McConnell, R., Chang, R., Dahmann, N., Brady, K., Gilliland, F., Su, J.G. and Berhane, K., 2011. Childhood obesity and proximity to urban parks and recreational resources: a longitudinal cohort study. *Health & Place* 17(1): 207-214.
- 5 Wolch, J., Wilson, J.P. and Fehrenbach, J., 2005. Parks and park funding in Los Angeles: An equity-mapping analysis. *Urban Geography* 26(1): 4-35.
- 6 RCC Associates. 2016. *Enchanted Circle Trails: Final Survey Results*. Prepared for Taos Land Trust; Headwaters Economics. Boulder, CO: RCC Associates.