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A Cost-Benefit Analysis of Physical Activity Using Bike/Pedestrian Trails

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Abstract

From a public health perspective, a cost-benefit analysis of using bike/pedestrian trails in Lincoln, Nebraska, to reduce health care costs associated with inactivity was conducted. Data was obtained from the city's 1998 Recreational Trails Census Report and the literature. Per capita annual cost of using the trails was U.S.\$209.28 (\$59.28 construction and maintenance, \$150 of equipment and travel). Per capita annual direct medical benefit of using the trails was \$564.41. The cost-benefit ratio was 2.94, which means that every \$1 investment in trails for physical activity led to \$2.94 in direct medical benefit. The sensitivity analyses indicated the ratios ranged from 1.65 to 13.40. Therefore, building trails is cost beneficial from a public health perspective. The most sensitive parameter affecting the cost-benefit ratios were equipment and travel costs; however, even for the highest cost, every \$1 investment in trails resulted in a greater return in direct medical benefit.

[environment](#) [community](#) [inactivity](#) [economic analysis](#)

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