

Evidence to Inform a Cycling and Walking Investment Strategy

Angie Cradock ScD, MPE, Harvard T.H. Chan School of Public Health; Jessica Barrett, MPH, Harvard T.H. Chan School of Public Health; Tony Hull, BA, Civil Street Solutions; Billy Fields, PhD, Texas State University

The Issue

In the United States, few people regularly use physically active modes of transportation like walking or biking to get to work or school. Might increasing the investment in pedestrian and biking programs encourage more active modes of transportation? This study uses national data on financial investment in pedestrian and bike programs and infrastructure to evaluate the evidence for how funding can support more walking and biking over time.

Results

Only about 2% of total transportation funding is dedicated to programs that support bike and pedestrian projects or infrastructure, but the amount of funding varies by location. In high investment counties 5.3% of all federal transportation funding is invested in biking and pedestrian infrastructure compared with just over 1% in low investment counties.

At a local level, \$2.59 was spent per person per year in counties with populations of at least 100,000 to support walking and biking, but some places spend more on walking and biking than others. High investment counties averaged just over \$9 per person in walking and biking infrastructure compared with low investment counties that averaged about \$1.50 per person. That difference in investment has an impact. The share of commuters who biked to work increased significantly more between 2000 and 2016 in those counties that invested more in projects to support walking and biking than in similar counties that did not invest as much. This difference translates into approximately 26,000 more bike commuters over time that could be associated with higher investments. Changes in commuting to work on foot, by car, or by public transit did not significantly differ in high investment counties vs. low investment counties over time.

Percent increase in the share of commuters biking to work in high & low investment counties

\$

Low investment counties



 $\triangle 23\%$ increase

\$\$\$\$\$

High investment counties



 $\triangle 56\%$ increase

= 26,000 more bike commuters

Making physical activity an everyday experience for all children

University of California, San Diego 9500 Gilman Dr, Mail Code 0631 La Jolla, CA 92093-0631

paresearchcenter.org @PAResearchCntr





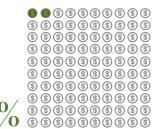
Implications

Many communities may not invest sufficiently to support growth in biking and walking for transportation, recreation or exercise. Federal funding for bike and pedestrian projects can play a role in increasing the proportion of workers using a bike to get to and from work.

Methodology

This study used data from the U.S. Census and the American Community Survey to look at how people ages 16 and older got to and from work over time between 2000 and 2016 in counties with populations of at least 100,000 people. The authors calculated how much total federal transportation funding was used to support projects for biking and walking in all U.S. counties from 2000 and 2015, classifying some as high investment counties and others as low investment counties. Authors looked in depth at data from 104 counties. High investment counties spent five to six times as much as low-investment counties did on bike and pedestrian projects. The researchers then analyzed these data to determine changes over time in the proportion of workers traveling on foot or bike within both low investment and high investment counties.

The amount of federal transportation funding is not proportional to the transportation trips taken by bike or on foot



of federal transportation funding supports programs and infrastructure for walking & biking, but...



3.6%

of people walk or bike to work, and



12% of all trips are taken on foot

or by bike

Data Sources: Fiscal Management Information System, FY 2015; 2012-16 American Community Survey; National Household Travel Survey, 2017

Source

Cradock AL, Barrett JL, Hull T, Fields W. Evidence to Inform a Cycling and Walking Investment Strategy. Boston, MA: Prevention Research Center on Nutrition and Physical Activity at the Harvard T.H. Chan School of Public Health; 2019. Available at: https://www.hsph.harvard.edu/prc/projects/communities-research/evidence-to-inform-a-cycling-and-walking-investment-strategy

The findings in this research summary are based on the results of a project commissioned by the Physical Activity Research Center (PARC) focused on addressing research gaps related to policies aimed at helping children achieve a healthy weight.

Corresponding Author

Angie L. Cradock Prevention Research Center on Nutrition and Physical Activity at the Harvard T.H. Chan School of Public Health 677 Huntington Avenue, Kresge 7th Floor Boston, MA 02115

Email: acradock@hsph.harvard.edu Phone: (617) 384-8933