UNIVERSITY TRANSPORTATION CENTER



RESEARCH BRIEF

Fconomic and Health Metrics of Active School Travel: A Practical Tool or Transportation Planners and Educators

Anne Vernez Moudon, PhD, Xiao Shi



Background

Research has established that Active School Travel (AST-which includes walking or bicycling) can provide 10% of the physical activity that a child needs to be fit and healthy. AST also contributes positively to addressing transportation woes by

reducing vehicle miles traveled, which in turn reduces traffic congestion and associated Green House Gas emissions and other pollutants generated by motor-vehicles.

This project will develop the Children Walking To Health Tool (CW2H) for use by Departments of Transportation to measure the health and monetary benefits of AST.

Research Project

The Children Walking To Health Tool builds on the recently developed Washington School Walk Score (W*2), which estimates the school-level rates of AST for more than 1,300 K-8 schools in Washington State. Input data will be the WS*2-derived percent of children in each school who are expected to use AST, while output data will be estimates of the corresponding health and economic outcomes. Used



interactively, CW2H will serve to test different scenarios and examine the impact of changes in WS*2.

Obtaining the health and economic metrics will consist of "translating" rates of AST into expected health and economic outcomes. This translation will come from meta-analyses using the results of previous studies that have correlated active travel or physical activity with health outcomes and health care cost savings.



ABOUT THE AUTHORS

The research team consisted of Anne Vernez Moudon and Xiao Shi of the University of Washington.

ABOUT THE FUNDERS

This research was funded by the Pacific Northwest Transportation Consortium, with additional support from the Washington State Department of Transportation and the University of Washington.

EXPECTED DATE OF COMPLETION

August 2022

FOR MORE INFORMATION

http://depts.washington.edu/pactrans/research/projects/economicand-health-metrics-of-active-school-travel-a-practical-tool-ortransportation-planners-and-educators/