Longitudinal Analyses of Washington State Student Travel Surveys

Anne Vernez Moudon, PhD

Background
Active school travel (AST, walking and biking) helps children be healthy. It also reduces air pollution and noise, as well as traffic congestion. To ensure the support of parents and teachers, AST must be safe. The Washington State Department of Transportation (WSDOT) has been running one of the oldest and most successful State Safe Route to School (SRTS) programs in the nation. This project continues collaborative work carried out by WSDOT and the research team to improve the conditions for and the rates of AST. It takes advantage of a unique longitudinal dataset of Student Travel Surveys (2014, 2016, 2018), that have been administered jointly by WSDOT and Washington State Department of Health.

Research Project
Data from the three waves of Student Travel Surveys will be combined with data developed in previous research regarding (i) school sociodemographic characteristics; (ii) school neighborhood walkability (street infrastructure and land use); (iii) Washington SRTS projects (2005-today); and (iv) state-wide vehicular collision data (2001-2017) to address three questions:

• 1) Is neighborhood walkability around schools associated with higher rates of students walking to school?
• 2) Do rates of walking and biking to school increase following the completion of SRTS projects?
• 3) What is the relationship between higher rates of students walking and biking to school rates of collision between youth and vehicles near schools?

This research will serve to assess the effect of past SRTS programs on rates of walking and biking to school and to guide WSDOT in selecting strategies that will increase the safety of AST.

ABOUT THE AUTHORS
The research team consisted of Anne Vernez Moudon of the University of Washington.

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