


9-2010

Making Choice that Change Lives

Yizhao Yang
University of Oregon

Let us know how access to this document benefits you.

Follow this and additional works at: http://pdxscholar.library.pdx.edu/trec_briefs

 Part of the [Education Policy Commons](#), [Transportation Commons](#), and the [Urban Studies Commons](#)

Recommended Citation

Yang, Yizhao. Making Choice that Change Lives. OTREC-RR-10-01. Portland, OR: Transportation Research and Education Center (TREC), 2010.

This Report is brought to you for free and open access. It has been accepted for inclusion in TREC Project Briefs by an authorized administrator of PDXScholar. For more information, please contact pdxscholar@pdx.edu.



OTREC
OREGON TRANSPORTATION RESEARCH
AND EDUCATION CONSORTIUM

P.O. Box 751
Portland, OR 97207-0751
Phone: (503) 725-2843
Web site: <http://otrec.us>
Email: askotrec@otrec.us



MAKING CHOICES THAT CHANGE LIVES

Exploring the relationships between parents' housing location choices and school transportation.

Issue

The past several decades have witnessed a rapid increase in parents driving their children to school. In fact, nationwide surveys indicate that 65 percent of children are now driven to schools in private automobiles, compared with 18 percent in 1969. Increased reliance on private automobiles in school travel has led to concerns about both the adverse effect on children's health and the negative effects on the environment. Many federal, state and local programs and policies now focus on increasing the rate of children walking or biking to school.

Children's ability to walk or bike to school depends largely on where they live. Surprisingly, we know very little about how families make choices about where to live in relation to school travel. Existing school travel research has generally focused on the effects of environmental characteristics on the likelihood of children walking or biking to school. This project took a more comprehensive approach by examining the relationships between transportation to school, neighborhood walkability and where families choose to live.

Research

Yizhao Yang, assistant professor at the University of Oregon, investigated whether or not, and to what degree, parents explicitly consider school travel options when deciding where to live. In addition, the project examined the relationship between parents' consideration of active school commuting (ASC) during their housing hunt and later school-travel behavior.

To explore these issues, the project team conducted surveys, focus groups and interviews in Eugene, Ore. The survey findings showed a significant discrepancy in the level of preference for ASC and actual school-travel behavior. Overall, only 15.4 percent of parents surveyed reported that their child walks or bikes to school at least three days a week, while about 70 percent said that they preferred their child to walk or bike to school.

THE ISSUE

Four decades ago, few parents drove their children to school. Now most children get to school by private vehicle. Although walking or biking requires living close to school, little research has focused on housing location in this context.

THE RESEARCH

Yizhao Yang of the University of Oregon looked at how much parents consider school travel options when deciding where to live. When parents considered active school commuting early on, children were much more likely to walk or bike to school.

IMPLICATIONS

Many programs aimed at encouraging walking and biking focus on the built environment. This study identifies a need to devote more resources to changing parents' attitudes and preferences.

MORE INFORMATION:

otrec.us/project/184

PROJECT INFORMATION

TITLE: Understanding School Travel: How Location Choice and the Built Environment Affect Trips to School

LEAD INVESTIGATOR: Yizhao Yang, University of Oregon

PROJECT NUMBER: 2008-184

PARTNERS: Eugene School District 4J; Department of Planning, Public Policy and Management, University of Oregon

COMPLETED: January 2010

ONLINE: otrec.us/project/184

The majority of parents in the survey considered school transportation in their housing search, and their intention to use ASC at this stage had significant impacts on their later school-travel behavior. The odds of a child regularly walking or biking to school increased by a factor of 5.42 if her parents thought about using ASC when searching for a home. The project also found that environmental characteristics such as home-school distance, neighborhood walkability and parental safety concerns significantly affect ASC use. Longer home-school distance and poorer neighborhood walkability led to lower odds of using ASC, with home-school distance showing a greater impact.

In the interviews and focus groups, parents reported very limited housing options in the community. School travel proved less of a priority in location choice compared to housing affordability, neighborhood appearance and recreational opportunities. Currently, little coordination exists between community land-use planning and school planning. The current plan in Eugene stresses concentrated redevelopment and infill development. However, neighborhoods are prioritized for development based on their location to commercial services, not schools.

Implications

This study's findings support the contention that residential-location choice provides a mechanism by which ASC preference exerts influence on later behavioral patterns. The findings also reveal the limitations of the environment-based strategy for changing school travel behavior. Currently, most Safe Routes to School programs devote the majority of resources to improving physical infrastructure, which impacts walkability. Yet the influence of walkability on travel patterns is limited when compared to that of home-school distance and preference.

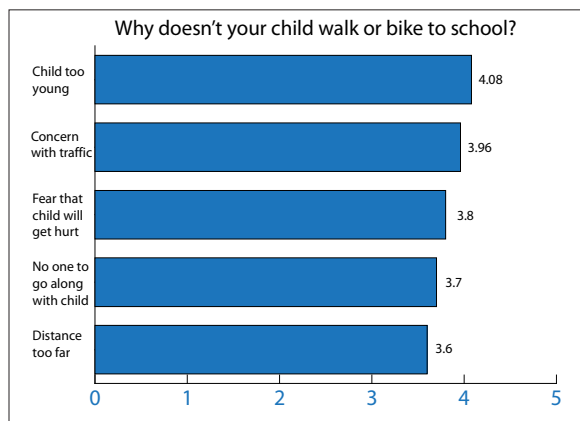


Figure: Reasons parents don't let their child walk or bike

A survey of parents whose children use modes other than walking or biking as their primary transportation supplied possible reasons to rank on a scale of 1 (not important) to 5 (extremely important). Existing literature reflects concerns over safety and distance to school as strong barriers.

Allowing more children to live close to their schools could greatly impact school-travel behavior. School siting policies have required schools to be located close to residential neighborhoods. While this study's findings support such policies, they also show that parents' choice of residence is affected by the configuration of housing opportunities and land uses in the entire community. Thus, better collaboration between community land-use planning and school planning is clearly called for.

While environmental conditions are necessary for ASC, they are not sufficient. This research shows that parents' intention to use ASC upon moving to a current residence greatly affects later ASC use. Therefore, a clear need exists to invest more resources in changing parent attitude and preference.