

2010 volume **42(4)** pages 913 – 930

doi:10.1068/a4291

Cite as:

Lee B H Y, Waddell P, Wang L, Pendyala R M, 2010, "Reexamining the influence of work and nonwork accessibility on residential location choices with a microanalytic framework" *Environment and Planning A* **42(4)** 913 – 930

[Download citation data in RIS format](#)

Reexamining the influence of work and nonwork accessibility on residential location choices with a microanalytic framework

Brian H Y Lee, Paul Waddell, Liming Wang, Ram M Pendyala

Received 10 March 2009; in revised form 19 June 2009

Abstract. The concept of accessibility has long been theorized as a principal determinant of residential choice behavior. Research on this influence is extensive but the empirical results have been mixed, with some research suggesting that accessibility is becoming a relatively insignificant influence on housing choices. Further, the measurement of accessibility must contend with complications arising from the increasing prevalence of trip chains, nonwork activities, and multiworker households, and also reconcile person-specific travel needs with household residential decisions. With this paper we contribute to the literature by addressing the gap framed by these issues and present a novel residential choice model with three main elements of innovation. First, we operationalize a time – space prism (TSP) accessibility measure, which we believe to be the first application of its kind in a residential choice model. Second, we represent the choice sets in a building-level framework—the lowest level of spatial disaggregation available for modeling residential choices. Third, we explicitly examine the influence of nonwork accessibility at both the local and the person level. This residential choice model is applied in the central Puget Sound region using a 2006 household activity survey. The model estimation results confirm that accessibility remains an important influence, with individual-specific work accessibility as the most critical consideration. By using the TSP approach we establish that nonwork accessibility in a trip-chaining context does contribute to the residential choice decision, even after accounting for work accessibility. Empirical tests also reveal a useful aggregation method to incorporate individual-specific accessibility measures into a household-level choice model.

Restricted material

