

ABSTRACT OF THE DISSERTATION

Choices and Constraints: Gender Differences in Travel Behavior

By

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The purpose of my dissertation is to explore how gender interacts with other factors such as personal attitudes, earning power, household structure, and the built environment to influence travel behavior, with a focus on whether these factors strengthen or relieve the constraints women face when making travel choices. In this context, my dissertation is organized around three separate case studies in California that rely on various discrete choice econometric models.

Results from my first case study indicate that chauffeuring trips in two-adult households with children are intensely gendered, and women bear most of the chauffeuring burden. It is partly because women's income earning potential is generally lower than that of their male partners. However, living in neighborhoods with access to bus stop and with less single-family housing can reduce this gender chauffeuring gap. It suggests that compact urban development and better bus service may yield social benefits that help alleviate women's household burdens.

In my second case study, I find that mothers are more likely to extend their greater concerns about traffic safety to their children, which in turn reduces the chance that their children will walk or bike to school. However, mothers bear most of the burden to chauffeur their children to school not because they worry more, but because chauffeuring children is still seen

more as a mother's responsibility. It suggests that interventions targeting an increase in children's active commuting to school should focus on the concerns of mothers, especially as they relate to traffic characteristics.

My findings in the third case study reveal that both environmental and safety concerns are associated with sustainable travel behavior, but the influence of safety concerns is more prominent and women have greater safety concerns. Moreover, proximity to transit service can increase sustainable travel behavior, but having higher safety concerns can totally offset this effect. For women with higher safety concerns, the reduction is even greater. It suggests that to encourage sustainable travel behavior, reducing personal safety concerns about transit use may be more effective than increasing public environmental awareness, especially for attracting potential female riders.