

Factors affecting private car choice in High Occupancy Vehicle Lane (Case Study: Shahid Chamran Highway)

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Abstract

The construction of High Occupancy Vehicle (HOV) Lane is one the methods for urban traffic management, and the tendency to construct these lanes has attracted many developing countries in recent years. One of the important issues in constructing these lanes is to examine the factors affecting the choice of these lanes by individuals. Therefore, in this study, using stated preference, people were asked whether or not they use their own private car in HOV lane in Shahid Chamran highway (whether they are carpooling or they pay toll). A binary logit model was created for people's choice. Modeling results show that, in addition to the individuals' characteristics, their travel characteristics have an impact on the choice of these lanes. The results of this study can be used for the feasibility study of the construction of HOV lane on Shahid Chamran highway.

Keywords: *High Occupancy Vehicle Lane, Stated Preference, Binary Logit, Choice Model*



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