

# The Impacts of Land Use on Travel Behavior in Tehran-Karaj Region

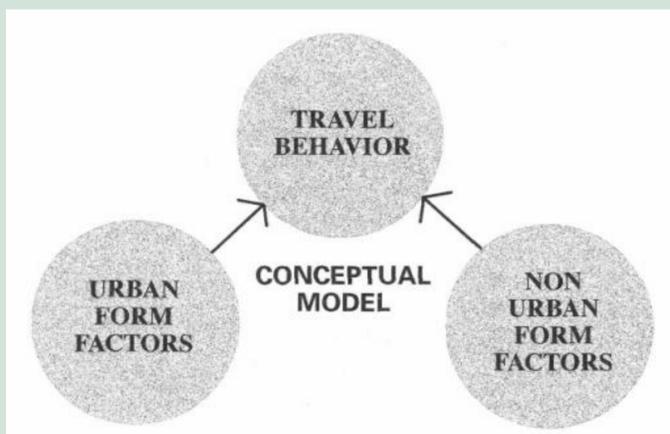
## A study in the framework of Young Cities Project

### Short Introduction

An investigation on the role of land use on non-commute travel behavior in west of Tehran.

### Background

During the past decades the urban form of the Iranian cities has been pushed towards automobile-oriented configurations. More sustainable modes of urban travel seem to be largely neglected. In absence of trustable pedestrian and bicycle travel data, planning for less motorized transportation has become hard. This has made the small-scale quantitative studies on travel behavior necessary.



### Theory

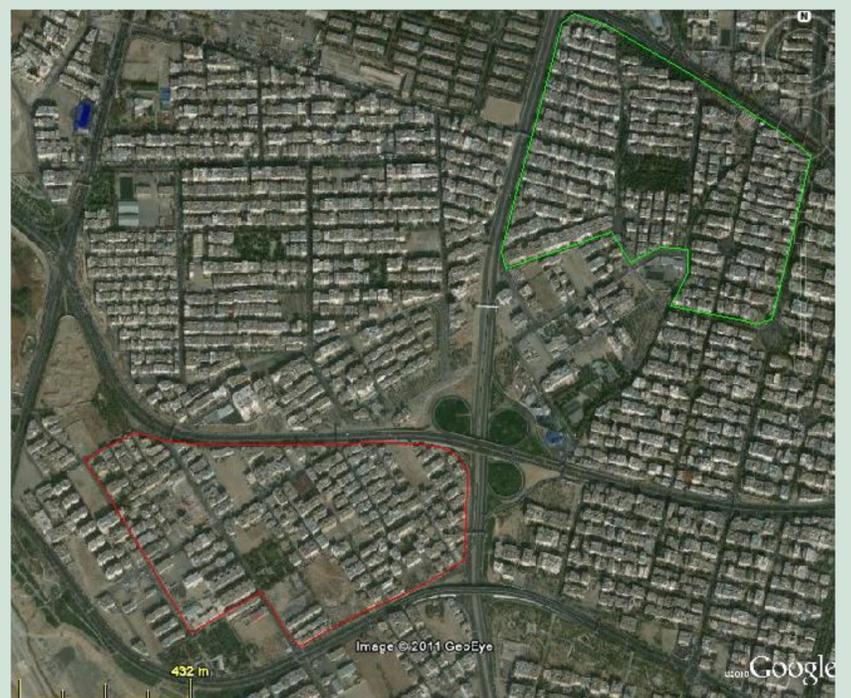
It has almost been proven that there are linkages between urban form and transportation. However the circumstances of these interactions have not been yet completely clear and the need for more empirical studies is still felt. To be more exact, the main components of urban form like land - use mix, population and construction density, neighborhood design, proximity to CBD, etc. influence on the transportation factors like mode choice, travel length, travel time, car ownership, etc.

### Objective

The main objective of this research is to find local and empirical data about non-commute travel behavior generated by different urban textures in Iranian cities. The research is conducted according to the pattern of previous studies related to Transportation/Land Use Modeling (TLUM). The effects of land use and neighborhood design on mode choice, travel length, and car ownership are especially investigated.

### Case-Study areas

A micro-level observation is done in the scale of the neighborhood. Two neighborhoods in the western part of Tehran (Region 5, in Karaj's side) is selected, so that the first one has a central structure with a distinct Neighborhood Unit Center (NUC) and the second one has the conventional characteristics of the sprawled quarters of Iran.



### Research Method

The study is quantitative and empirical. During a survey, the people are asked about their travel habits. The following topics are targeted in the questionnaires:

- The role of self-selection in residential location
- Travel attraction to NUC in traditional neighborhoods
- Travel generation to the outside of the neighborhoods
- Mode choice for the travels to the outside of the neighborhoods
- Public transportation
- Pedestrian mobility
- Attractiveness of the NUC

### Results

The final recommendations are policy-oriented. Sustainable ways for reducing motorized travels and promoting slow modes (pedestrian/bike) are suggested. The suggestions are based on the land use and neighborhood design.

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