



Analysis the Factors Influence Traveling Behavior of Students

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Abstract

This study examines the factors that influence the mode choice of students traveling to and from school. A paper survey was developed and conducted to collect information of a large stratified sample of 7443 students between ages 7 and 17 in 78 schools in the city of Mashhad, Iran. The results confirmed this conclusion that students between ages 7 and 14 are more likely to walk and bike to school compared to ages 15 to 17. The results of the analysis conclude that students with lower income are more likely to walk or bike. While girls are less likely than boys to prefer walking or biking relative to traveling by school buses and cars. The research reported in this paper studied students traveling behavior and the barriers to them walking and biking to school. It was found that only 50 percent of Iranian students walk or bike to school. Results showed that the top barriers to students are fear of social/cultural stigma, school distance and safety. To encourage more students to walk and bike to school, it is recommended to develop national/regional/local Safe Routes to School programs.

Keywords: traffic, students, traveling to school, walking and biking.

1. INTRODUCTION

During recent years walking and biking to school has become a concern for public health and transportation planners and policy makers in the world. Streets are becoming more congested and children have less physical activity and more overweight and are more likely to use car and school bus to go to school (1). Many of the traffic related problems are due to the lack of proper pedestrians and cyclists facilities (2). Around 20 percent of morning and afternoon rush-hour traffic was found to be related to schools (3). Encouraging students more walking and biking can relieve some of the congestion on streets surrounding schools. This increase in physical activity provides a long list of benefits for children – reduced risk for diabetes, high blood pressure, asthma and sleep apnea and increased self esteem (1). However, there are various barriers to students walking and biking. As more children are driven to school, parents become convinced that traffic conditions make it unsafe for walking or biking and join the line of cars at the school (1). Previous studies show that concerns for safety, school distance and the young age of the child are the top three reasons parents did not let their child walk or bike to school. Yee et al conducted a parent survey to find out the desired safety improvements. Parent recommendations to improve walking and biking safety included suggestions for additional traffic controls and crossing guards; a focus on reducing traffic speeds in the school zone; and increased police presence to improve the safety and security of children walking or biking (4). The objective of this research was to identify and study the barriers to student walking and biking to school.

2. METHODOLOGY

A student travel survey was designed to identify the school trips of 7 to 17 years students using a stratified sample. The survey includes three parts. The first part asked a student to write his/her age, gender, grade and class. The second part consists of two questions about going to school and coming back from school mode. Each of the questions includes 9 possible students travel modes to school: parents' car,