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School

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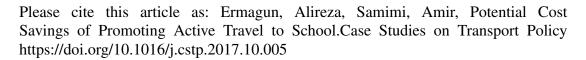
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### ACCEPTED MANUSCRIPT

#### **Potential Cost Savings of Promoting Active Travel to School**

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#### HIGHLIGHTS

- A 1% increase in distance to school decreases the probability of walking by 1.94%.
- Parental safety concern may diminish the probability of walking by 60%.
- Reducing a 1% distance to school has a US\$30 potential health cost savings per child.
- Alleviating parental safety concerns has a US\$719 potential health cost savings per child.
- High-income households would benefit more from safe routes to school programs.

#### **ABSTRACT**

The obesity epidemic among children has dramatically risen in recent decades. Children are recommended physical activities such as walking or biking to school. However, the amount of active modes in school trips has decreased noticeably in recent years. This study is an effort to quantify potential cost savings of children's walking, as a form of active travel to school. The data was collected in Tehran, from a cross-sectional cohort of more than 4,700 high school and middle school students. This study looks at a wide range of policy sensitive variables, such as safety and distance to school in various scenarios. The findings indicate if the safety concerns of parents associated with their children walking to school are alleviated, the direct and indirect annual costs of obesity decreases by US\$719 per student. Further, a 1% decrease in the distance from home to school diminishes the annual per capita health costs associated with obesity by about US\$30. However, the amount of financial savings varies among different segments of society.

**Keywords**: Students' Health; Active Transportation; Nested Logit Model; Obesity Costs; Tehran

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