## **PREFACE**

In recent years planners and transportation specialists have begun to promote more sustainable urban transportation systems that include a strong presence of well-used pedestrian and cycling infrastructure. This shift from car-oriented development to emphasizing the need for improved active transportation networks comes largely as a response to the negative impacts that automobiles have had in terms of air pollution, road accidents, and congestion. As a result, many cities have reacted by adopting policies that promote active modes of transportation, such as walking and cycling due to their positive environmental, economic, health and social benefits.

Transportation planners are developing more sustainable and efficient alternatives with the goal of fulfilling mobility needs without generating the negative consequences associated with automobile use. However, a large focus has been placed on improving cycling networks (paths and lanes), often leaving the planning of terminals (parking facilities) as an afterthought.

As cities continue to promote the use of the bicycle as a preferred mode, transportation professionals must maximize the benefits of their investments by planning both bicycle networks, as well as secure and efficient bicycle parking facilities. Cities need to recognize the negative consequences associated with bicycle theft and take preventative actions by aiming to create urban spaces that encourage cycling and decrease instances of bicycle theft. This research project aims to better understand bicycle theft and tries to fill the gap concerning the security, availability, and pricing of bicycle parking facilities. It recognizes that a major concern for cyclists is bicycle theft and, therefore, seeks to answer questions about the security and availability of bicycle parking, as well as about cyclists' willingness to pay for secured bicycle parking facilities.

The project is divided into two distinct chapters; the first examines the state of bicycle theft in Montreal, addressing questions about the 'who,' 'what,' 'where,' 'how,' and 'when' of theft to better understand how Montreal cyclists are effected by bicycle theft and vandalism in the region. Building on the findings of chapter one, chapter two focuses on understanding what kind of cyclists are willing to pay for secured bicycle parking in Montreal, and makes suggestions for an appropriate pricing scheme. The first chapter was presented at the 92nd Transportation Research Board Annual Meeting, Washington D.C. as van Lierop, D., Grimsrud, M., & El-Geneidy, A. (2013). *Breaking into bicycle theft: Insights from Montreal, Canada.* While the focus of this project is on bicycle theft and bicycle parking facilities in the Montreal region, it is expected that many of the findings and methods can be adapted for use by transportation planners in other cities.