



شبكة المعلومات الجامعية
التوثيق الإلكتروني والميكرو فيلم

بسم الله الرحمن الرحيم



HANAA ALY



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TOWARDS A CONDUCTIVE URBAN ENVIRONMENT FOR BIKING AS AN ACTIVE MODE OF TRANSPORT

By

Haidy Ibrahim Saeed

A Thesis Submitted to the
Faculty of Engineering at Cairo University
in Partial Fulfillment of the
Requirements for the Degree of
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in
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Towards a Conducive Urban Environment for Biking as an Active Mode of Transport

Key Words:

Health, Urban mobility, Active transport, Urban environment, Bike-friendly environment

Summary:

The bike is one of the active means of transport that is healthy and reliable. However, Cairo has few bikers, and an increasing number of private cars are causing congestion and pollution that has a severe health impact. Setting up a safe and convenient environment for cyclists is a critical issue. This study analyses the causes of the lack of cyclists and explores the potential strategies for increasing bike tours for transport. The study finds out that there is a need for selection criteria to assist policymakers for selecting an appropriate investment-value district. Therefore, this thesis aims to propose bike-ability indicators specially tailored for the Egyptian context for assessing and evaluating Cairo districts' urban environment to choose suitable supportive locations for biking projects. Research results are the characteristics and indicators that need to exist in the urban environment in such a way that the districts of Cairo will have the potential to be developed in order to accommodate bikes for transport by guiding the funding to the right place. These indicators are tested and weighted by questionnaires for cyclists, residents and experts to end up with a strategy for selecting districts in Cairo that are worth investing in order to become bike-friendly districts.

Disclaimer

I hereby declare that this thesis is my own original work and that no part of it has been submitted for a degree qualification at any other university or institute.

I further declare that I have appropriately acknowledged all sources used and have cited them in the references section.

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Dedication

I would like to dedicate this thesis to my beloved family, who supported me during this long path and encouraged me to complete this thesis.

I also would like to dedicate this thesis to my uncle's soul, Emad Khater, who is always in my heart.

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بسم الله الرحمن الرحيم

{ وما توفيقى إلا بالله عليه توكلت وإليه أنيب }

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