



Faculty of Engineering

Managing Risk in Public Transport in Jordan

(Case Study: Amman Bus Rapid Transit System)

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A Thesis

**Submitted to Faculty of Engineering as a Partial Fulfillment of the
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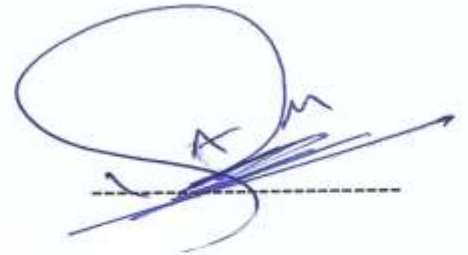
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DEDICATION

To the parents, Without them, I would not have existed in this life, and from them I learned to survive, whatever the difficulties.

To my kind father, my role model, and my ideal in life; He taught me how to live with dignity.

To my loving mother, I do not find words that can give her the right, for it is the epic of love and the joy of a lifetime, and an example of dedication and giving.

To my brothers, my humors, and my joys and sorrows.

To my wife, my highest symbols of loyalty and companion path.

I present to you a master's thesis,

Calling for success and acceptance by respected panelists.

Mohamad Abdullah Habasheen

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LIST OF ABBREVIATIONS

Abbreviation	Meaning
RM	Risk Management
BRT	Bus Rapid Transit
RIT	Ride Integrated Transport
SPSS	Statistical Package for the Social Sciences
TRO	Traffic Regulation Orders
RII	Relative Importance Index

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ABSTRACT

The risk management (RM) has huge effect of cost saving and time performances to infrastructure project. The decision making process in infrastructure projects needs to be supported from tools that will enable risk identification, analysis and response strategy formulation to be developed. The aim of the current study is to manage risk in Bus Rapid Transit (BRT) systems in Jordan, to achieve success in infrastructure projects in Jordan in need to develop strategies for managing and improving them in the future. The problem with this research is that when the BRT began in Jordan, it faces many challenges and obstacles to the success of operating of the project. There for BRT infrastructure project carry significant risks. That need to be manage effectively. This study highlights the risks associated with a project to success BRT in Jordan. By reviewing previous studies, 38 risks were identified and used in the questionnaire distributed to a sample of 270 respondents, 137 were returned and 115 were accepted for analysis. Regarding the interviews, 10 respondents of the questionnaire confirmed that they re aware of risk management, so 10 interviews were conducted, three of them were biased for not answering the questions completely and the other 7 were accepted for analysis. Collected data were tested using (SPSS) software. Through analyzing the questionnaire, the research concluded that the five most important risks facing the success of the BRT project in its operational phase were identified in this research: corruption and

bribery. Poor performance of the supporting infrastructure. Asphalt fall and crack in the BRT track due to the use of defective materials. Contractual problems between the operating company and the government agencies responsible for the project. Weakness communication between interested parties concerned. Through the interviews, the most important expected solutions to these risks were identified, the authority responsible for confronting them, the supervisory authority, the positive results, and at any stage of the operation stages, these risks must be faced. As for future studies, it is recommended to consider the results of this study and its recommendations in order to know whether these recommendations are applicable or can they eliminate or mitigate risks.