

**MANAGING THE SOCIO-ECONOMIC  
IMPACTS DUE TO COMPACTION  
OPERATIONS DURING  
CONSTRUCTION OF SOUTHERN  
EXPRESSWAY**

 **MASTER OF BUSINESS ADMINISTRATION**  
University of Moratuwa, Sri Lanka  
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**IN**  
**PROJECT MANAGEMENT**

Amarasinghe S.H.T.L  
Department of Civil Engineering  
University Of Moratuwa



# MANAGING THE SOCIO-ECONOMIC IMPACTS DUE TO COMPACTION OPERATIONS DURING CONSTRUCTION OF SOUTHERN EXPRESSWAY

By

**S.H.T.L. Amarasinghe**

Supervised by



Under the supervision of  
**Dr. Jagath Manatunge**  
Lanka.  
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The dissertation was submitted to the Department of Civil Engineering of the University of Moratuwa in partial fulfillment of the requirement for the Degree of Master of Business Administration in Project Management.

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Department of Civil Engineering

University of Moratuwa

December 2011

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## DECLARATION

I hereby certify that this dissertation does not incorporate, without acknowledgement, any material previously submitted for a Degree or Diploma in any University and to the best of my knowledge and belief, it does not contain any material previously published or written by another person or myself except where due reference is made in the text. I also hereby give consent for my dissertation, if accepted, to be made available for photocopying and for interlibrary loans, and for the title and summary to be made available to outside organizations

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Approved By

***UOM Verified Signature ..***

Dr. Jagath Manatunge

Department of Civil Engineering

University of Moratuwa

<sup>th</sup>  
16 December 2011

## Acknowledgement

I wish to express my sincere gratitude to academic staff of Department of Civil Engineering University of Moratuwa, for giving me this opportunity to conduct postgraduate studies which were very productive, interesting and a valuable experience.

I deeply appreciate the guidance of Dr. Jagath Manatunge, my supervisor, Department of Civil Engineering, University of Moratuwa, for his continuous support and direction rendered during the period of this dissertation.

I would like to mention with respect Prof. Asoka Perera, Dr. Rangika Halwathura and Dr. Lesly Ekanayake of the Department of Civil Engineering, University of Moratuwa for their valuable suggestions, comments and encouragement during the progress presentations. Also, I would like to thank all the academic and non-academic members of the Department of Civil Engineering for their support throughout the period.

My respect goes to Mr. Titus Senarathna, the Coordinating Manager of Kumagai Gumi Co. Ltd, and Mr. Susiripala, the Environmental Manager of Kumagai Gumi Co. Ltd for their support given at data collection stage.

I express my thanks and appreciation to my family for their understanding, motivation and support given to make the priority on this by sharing household responsibilities. Last but not least, I would like to thank all my colleagues and friends who helped me during the preparation of this dissertation.

## Abstract

Southern expressway is the first expressway project started in Sri Lanka. It is expected to help reduce poverty in Southern region, integrate Southern region in to the Country's economic mainstreams, and promote regional development as well as reduce the travel time between the capital city and southern region.

The main purpose of this study is to identify the socio-economic impacts during compaction activities while construction of the southern expressway in Sri Lanka, highlight its impact on the people's lives who live near the highway trace and to forward recommendations for minimization of such disturbances. A questionnaire survey was carried out among the professionals engaged in the project and also nearby households along the trace to identify the influence and the effects of compaction. Altogether 1,547 houses were inspected. In addition, persons who are holding the key positions of the project were interviewed. A crack survey was carried out before the compaction activities on the expressway trace as well as after the compaction activities. After that comparison of a pre- and post-crack survey was done to determine the actual damage to the houses located near the trace due to compaction activities.

After analyzing all the data it is clear that houses which are located close to the expressway trace are considerably damaged due to the construction activities. Vibration levels were monitored by the government institutes regularly at nearby houses. Contractor is responsible for the damage due to higher vibration. Some houses have not been built to the proper standards and some are much old to withstand higher vibration levels. Prior to construction activities of the southern expressway an Environmental impact assessment (EIA) was done by University of Moratuwa in 1999. Mitigation proposed in the EIA has not satisfactorily been implemented as regards to the impact of vibration due to compaction operations and any sufficient attention had not been paid regarding the ground vibrations. Those are the major shortcomings which were identified in this research. Some of the unrealistic designs of the projects were proposed that led to most of the project delays and more of the cost over-runs.

## Table of Contents

Declaration.....	i
Acknowledgement.....	ii
Abstract.....	iii
CHAPTER ONE.....	1
1 INTRODUCTION.....	1
1.1 What is a highway?.....	1
1.2 Southern express way.....	1
1.2.1 Locations of the Southern expressway Project.....	4
1.2.2 The main objectives of constructing express way from Colombo to Matara.....	5
1.3 The social environment of the area.....	5
1.4 Social and environmental effects when operating an expressway.....	6
1.5 Problem statement.....	7
1.6 Objectives of the study.....	8
1.7 Scope of the study.....	8
CHAPTER TWO.....	9
2 LITERATURE REVIEW.....	9
2.1 Southern expressway.....	9
2.2 Feasibility study.....	9
2.3 What is social impact assessment?.....	11
2.4 Ground vibration.....	13
2.4.1 Nonlinear and chaotic vibrations of dynamic compaction machines... 13	13
2.4.2 Damage to the buildings caused by ground vibrations generated by vibratory compactors.....	16
2.5 Vibration Control and Monitoring.....	17
2.6 Cracking in Buildings.....	19
2.6.1 Age and existing condition of building.....	20
2.6.2 Building damages due to soil compaction.....	20
CHAPTER THREE.....	21
3 METHODOLOGY.....	21
3.1 Study area.....	21
3.2 Sampling procedure.....	21
3.3 Data collection.....	21
3.3.1 Primary data.....	21
3.3.2 Secondary data.....	22
3.4 Data analysis.....	22
CHAPTER FOUR.....	23
4 RESULTS AND DISCUSSION.....	23
4.1 Types of houses.....	23
4.2 Age of the houses.....	24
4.3 Structural damage assessment.....	24
4.3.1 Minor cracks.....	25
4.3.2 Intermediate cracks.....	26
4.3.3 Major cracks.....	26
4.4 Crack survey data analysis.....	27
4.4.1 Crack increment percentage for all the houses.....	32
4.5 Impact to the people due to compaction operations.....	33
4.5.1 Responses from the school children:.....	33

4.6	Limitations .....	34
CHAPTER FIVE .....		35
5	CONCLUSION AND RECOMMENDATIONS .....	35
5.1	Conclusion .....	35
	References .....	38
	Appendix 1 .....	40



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## List of Tables

Table 1-1 Summery of the southern expressway project.....	2
Table 2-1 Maximum Permissible Vibration Levels .....	18
Table 4-1 Types of houses.....	23
Table 4-2 Standard Categorization of minor cracks.....	25
Table 4-3 Standard Categorization of intermediate cracks .....	26
Table 4-4 Standard Categorization of major cracks .....	26
Table 4-5 Pre –crack survey data analysis.....	27
Table 4-6 Post- crack survey data analysis.....	28
Table 4-7 Crack increment percentage.....	32
Table 4-8 Crack increment percentage.....	32

## List of Figures

Figure 1-1 Locations of the project.....	4
Figure 2-1 Analytical model of vertical vibration of a single drum roller.....	15
Figure 4-1 Types of houses .....	23
Figure 4-2 Age of the house .....	24
Figure 4-3 Post crack survey .....	28
Figure 4-4 Comparison of Pre survey-Post survey.....	29
Figure 4-5 Minor crack comparison .....	29
Figure 4-6 Intermediate crack comparison.....	30
Figure 4-7 Major crack comparison .....	30
Figure 4-8 Pre post crack comparison .....	31
Figure 4-9 Crack increment percentage.....	31