THE EFFECTIVENESS OF PEDESTRIAN BRIDGE

NADA NADHIRAH BINTI ABDUL LATIF

B. ENG(HONS.) CIVIL ENGINEERING

UNIVERSITI MALAYSIA PAHANG



SUPERVISOR'S DECLARATION

I hereby declare that I have checked this thesis and in our opinion, this thesis is adequate in terms of scope and quality for the award of the Bachelor Degree of Civil Engineering with Hons.

(Superv	visor's Signature)
Full Name	:
Position	:
Date	:



STUDENT'S DECLARATION

I hereby declare that the work in this thesis is based on my original work except for quotations and citations which have been duly acknowledged. I also declare that it has not been previously or concurrently submitted for any other degree at Universiti Malaysia Pahang or any other institutions.

(Student's Signature) Full Name : NADA NADHIRAH BINTI ABDUL LATIF ID Number : AA13199 Date : 19 June 2017

THE EFFECTIVENESS OF PEDESTRIAN BRIDGE

NADA NADHIRAH BINTI ABDUL LATIF

Thesis submitted in fulfillment of the requirements for the award of the Bachelor Degree in Civil Engineering

Faculty of Civil Engineering and Earth Resources UNIVERSITI MALAYSIA PAHANG

JUNE 2017

ACKNOWLEDGEMENTS

Alhamdulillah, praise to Allah S.W.T and the Holy Prophet Muhammad S.A.W. with His blessing, I can finish my Final Year Project.

I am grateful and would like to express my sincere gratitude to my supervisor Professor Madya Dr. Sulistyo Arintono and Dr Parameswary A/P Sundara from Faculty of Civil Engineering and Earth Resources, for her and his germinal ideas, invaluable guidance, continuous encouragement and constant support in making this research possible. Special thanks to residents at Taman Sri Inderapura and Peramu Jaya area give cooperate to do the research and without their cooperating in answer my interview, I may not complete my research.

I acknowledge my sincere indebtedness and gratitude to my parents for their love, dream and sacrifice throughout my life. I am also grateful to my fiancé and friends for their sacrifice, patience, and understanding that were inevitable to make this work possible. I cannot find the appropriate words that could properly describe my appreciation for their devotion, support and faith in my ability to attain my goals. Special thanks should be given to my committee members. I would like to acknowledge their comments and suggestions, which was crucial for the successful completion of this study.

TABLE OF CONTENT

DE	CLARATION	
TIT	TLE PAGE	
AC	KNOWLEDGEMENTS	ii
ABS	STRAK	iii
ABS	STRACT	iv
TAI	BLE OF CONTENT	V
LIS	T OF TABLES	viii
LIS	T OF FIGURE	ix
LIS	T OF ABBREVIATIONS	x
CH	APTER 1 INTRODUCTION	1
1.1	Introduction	1
1.2	Background	4
1.3	Problem Statement	4
1.4	Objectives	5
1.5	Scope of Work	5
1.6	Significance of Study	6
CH	APTER 2 LITERATURE REVIEW	7
2.1	Introduction	7
2.2	The Meaning of Pedestrian Bridge	9
2.3	Use of Pedestrian Bridge	9
2.4	Overpasses / Underpasses Pedestrian bridge	10

	2.4.1 Criteria of Overpasses and Underpasses	12	
2.5	Geometric of Pedestrian Bridge	12	
2.6	Safety Concern on Pedestrian Crossing Behavior	14	
CHAI	PTER 3 METHODOLOGY	15	
3.1	Introduction	15	
3.2	Case Study	17	
3.3	Flow Chart of the Study 1		
3.4	Question for Interview Design		
3.5	Methodology and Data Resources	20	
3.6	Data Collection	21	
	3.6.1 Interview	21	
	3.6.2 Observation	21	
CHAI	PTER 4 RESULTS AND DISCUSSION	22	
4.1	Introduction	22	
4.2	Result of Part "A" in Interview	23	
4.3	Result of Part "B" in Interview	26	
	4.3.1 Respondent of the Motorcycles	26	
	4.3.2 Respondent of the Pedestrian	30	
4.4	Result of Part "C" in Interview	32	
4.5	Discussion	35	
CHAI	PTER 5 CONCLUSION	37	
5.1	Introduction	37	
5.2	Conclusion	38	

5.3	Recommendation	38
REF	ERENCES	39
APP	ENDIX A	41
APP	ENDIX B	43

LIST OF TABLES

Table 4.1	Respondents Distribution by Age Group and Sex	23
Table 4.2	Respondents Distribution by Occupation and Sex	23

LIST OF FIGURE

Figure 1.1: Pedestrian Deaths as a Percent of Total Motor Vehicle Deaths, 2005- 2014	2
Figure 1.2: Pedestrian Deaths as a Percentage of Total Road-Related Deaths by City	3
Figure 1.3: Pedestrian Deaths as a Percentage of Total Road-Related Deaths by State	3
Figure 2.1: Fence Installed Near the Pedestrian Bridge	8
Figure 2.2: Fear Installed at the Middle of Road	8
Figure 2.3: Pedestrian Underpass (Saunderson, 2011)	11
Figure 2.4: Pedestrian Overpasses (Nadzari, 2012)	11
Figure 3.1: Pedestrian bridge in front of Taman Sri Inderapura	16
Figure 3.2: Pedestrian bridge in Peramu Jaya (Google Maps)	17
Figure 3.3 : Flow Chart	19
Figure 4.1: Percentage of Pedestrian and Motorcycle Users by Frequency of Use at Peramu Jaya	t 24
Figure 4.2: Percentage of Pedestrian and Motorcycle Users by Frequency of Use at Taman Sri Inderapura	25
Figure 4.3: Reasons for Use Motorcycle Bridge at Peramu Jaya	27
Figure 4.4: Reasons for use Motorcycle Bridge at Taman Sri Inderapura	28
Figure 4.5: Reasons for not Using Motorcycle Bridge at Peramu Jaya	29
Figure 4.6: Reasons for not Using Motorcycle Bridge at Taman Sri Inderapura	30
Figure 4.7: Reasons for not Using Pedestrian Bridge at Peramu Jaya	31
Figure 4.8: Reasons for not Using Pedestrian Bridge at Taman Sri Inderapura	32
Figure 4.9: Opinion about Pedestrian Bridge Maintained Properly	33
Figure 4.10: Things can Improve the Use of Pedestrian Bridge at Peramu Jaya	34
Figure 4.11: Things can Improve the Use of Pedestrian Bridge at Taman Sri Inderapura	35

LIST OF ABBREVIATIONS

GHSA	Governors Highway Safety Association
NHTSA	National Highway Traffic Safety Administration
SMK	Sekolah Menengah Kebangsaan
AASHTO	American Association of State Highway and Transportation
	Officials