

VEHICLE GROWTH TRENDS IN
UNIVERSITI MALAYSIA PAHANG
GAMBANG AND PEKAN CAMPUS

SITI NUR LIYANA BINTI SHEIKH ROSLAN

B. ENG(HONS.) CIVIL ENGINEERING

UNIVERSITI MALAYSIA PAHANG



SUPERVISOR'S DECLARATION

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

(Supervisor's Signature)

Full Name :

Position :

Date :

(Co-supervisor'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 : SITI NUR LIYANA BINTI SHEIKH ROSLAN

ID Number : AA13176

Date : 16 June 2017

VEHICLE GROWTH TRENDS IN UNIVERSITI MALAYSIA PAHANG
GAMBANG AND PEKAN CAMPUS

SITI NUR LIYANA BINTI SHEIKH ROSLAN

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

First of all, thanks to ALLAH S.W.T for his mercy and guidance in giving me full strength to complete this research. Even facing with some difficulties in completing this task, I still manage to complete it. A lot of thanks to supervisor, Dr. Parameswary Sundara and my co-supervisor, Dr. Sulisty Arintono for all their support and guidance in helping me to finish my research that really tested my abilities mentally and physically.

Special appreciation to the Pejabat Keselamatan Gambang and Pekan Campus for giving me permission and great co-operation on getting the records for vehicle sticker registration and other useful records. Then I would like thanks to my parents, for supporting me mentally and physically not just during finishing this research but also during my whole studies in order to born as a civil engineer one day

In addition, grateful acknowledgement to all of my friends who never give up in giving their support to me in all aspects of life. Thank you very much my friend, I will never forget all of your kindness.

Thanks

TABLE OF CONTENT

DECLARATION	
TITLE PAGE	
ACKNOWLEDGEMENTS	ii
ABSTRAK	iii
ABSTRACT	iv
TABLE OF CONTENT	v
LIST OF TABLES	viii
LIST OF FIGURES	ix
LIST OF SYMBOLS	x
LIST OF ABBREVIATIONS	xi
CHAPTER 1 INTRODUCTION	1
1.1 Introduction	1
1.2 Background	1-2
1.3 Problem Statement	2-3
1.4 Objectives of Study	3
1.5 Scope of Study	3-4
1.6 Significant of Study	5
CHAPTER 2 LITERATURE REVIEW	6
2.1 Introduction	6
2.2 Vehicle Growth Trends	6-8
2.3 Factors of Vehicle Growth Trends	9

2.4	Effects of Vehicle Growth Trend	9-11
2.5	Vehicle Growth Trends in Malaysia	11-12
2.6	Factors of Vehicle Growth Trends in Malaysia	12
2.7	Effects of Vehicle Growth Trends in Malaysia	13

CHAPTER 3 METHODOLOGY

114

3.1	Introduction	114
3.2	Flow Chart	15
3.3	Data Collection	16
3.4	Data Analysis	16

CHAPTER 4 RESULTS AND DISCUSSION

4.1	Introduction	17
4.2	Data Analysis Based on Record of Registration of Vehicle Sticker	17-20
4.3	Observation on Vehicle Circulation by Volume Countings at Entrance Gate	20-23
4.4	Evaluate Supply and Demand for Parking at Gambang Campus	23-27
4.5	Evaluate Supply and Demand for Parking at Pekan Campus	27
4.6	Propose New Location for Parking	28-30

CHAPTER 5 CONCLUSION

5.1	Introduction	31
5.2	Conclusion	32
5.3	Recommendation	33

REFERENCES	34
APPENDIX A SAMPLE APPENDIX 1	35
APPENDIX B SAMPLE APPENDIX 2	43

LIST OF TABLES

Table 2.1	Total Number of Car Registration in Malaysia from 2010-2015	7
Table 2.2	Increase in Motorcycle Registration from 2015-2011	7
Table 4.1	Parking Capacity for Student and Staff	23
Table 4.2	Supply and Demand for Student Parking	24
Table 4.3	Supply and Demand for Staff Parking	25

LIST OF FIGURES

Figure 1.1	Gambang Campus	4
Figure 1.2	Pekan Campus	4
Figure 2.2	Annual Vehicles Sales in Malaysia, 1967-2016	12
Figure 4.1	Analysis on registration of vehicle sticker at Gambang Campus	18
Figure 4.2	Analysis on registration of vehicle sticker at Pekan Campus	19
Figure 4.3	Average volume countings at Gambang Campus entrance gate 7.00 to 8.00 am	21
Figure 4.5	Average volume countings at Pekan Campus entrance gate 7.00 to 8.00 am	22
Figure 4.6	Parking lot in Kolej Kediaman 1 and Kolej Kediaman 3	26
Figure 4.7	Cars been park on the pavement of road in front of Kolej Kediaman 1 and 3	26
Figure 4.8	Parking lot for students at Block W	27
Figure 4.9	Proposed location of parking lot for Kolej Kediaman 1 and Kolej Kediaman 3	
Figure 4.10	Proposed location of parking lot for Block W	29
Figure 4.11	Proposed location of parking lot for Block W	30

LIST OF SYMBOL

LIST OF ABBREVIATIONS

JPJ Jabatan Pengangkutan Jalan