



UNIVERSITAS
GADJAH MADA

MODE CHOICE ANALYSIS BETWEEN PRIVATE CAR, TRANSJAKARTA (BRT) AND KRL COMMUTER LINE (RAILWAY) USING MULTINOMIAL LOGIT MODEL AND SOCIAL ECONOMIC BACKGROUND OF PASSENGER CASE STUDY : BEKASI-JAKARTA

COMMUTER
RAHMAT HIDAYAT, M. Sani Roychansyah, S.T., M.Eng., D.Eng
Universitas Gadjah Mada, 2018 | Diunduh dari <http://etd.repository.ugm.ac.id/>

CONTENTS

Authenticity statement	I
Acknowledgment	III
Abstract	IV
INTISARI	V
CONTENTS.....	VI
List of Figures	IX
List of Tables	X
Chapter I Introduction.....	1
1.1. Background	1
1.2. Problem Statement	2
1.3. Research Question	3
1.4. Research Objective	3
1.5. Research originality	4
1.6. Research Framework	5
1.7. Structure of Research Report	5
CHAPTER II Literature Review	7
2.1. Mode Choice	7
2.2. Transportation Problem	9
2.1.1. Public Transportation.....	13
2.1.2. Railway transportation.....	16
2.3. Transportation modelling	17
2.4. Aggregate and Disaggregate Mode Choice Models	19
2.4.1. Aggregate Mode Choice Models	19
2.4.2. Disaggregate Mode Choice Models	20
2.7. Discrete choice models.....	21
2.8. Multinomial logit model.....	23
2.9. Significance Test.....	23



UNIVERSITAS
GADJAH MADA

MODE CHOICE ANALYSIS BETWEEN PRIVATE CAR, TRANSJAKARTA (BRT) AND KRL COMMUTER LINE (RAILWAY) USING MULTINOMIAL LOGIT MODEL AND SOCIAL ECONOMIC BACKGROUND OF PASSENGER CASE STUDY : BEKASI-JAKARTA

COMMUTER
RAHMAT HIDAYAT, M. Sani Roychansyah, S.T., M.Eng., D.Eng
Universitas Gadjah Mada, 2018 | Diunduh dari <http://etd.repository.ugm.ac.id/>

2.10. Stated preference survey	24
CHAPTER III Research method.....	26
3.1. Data	26
3.2. Tools	26
3.3. Research Approach	27
3.4. Questionnaire investigation design	28
3.5. Processing data in R software	31
CHAPTER IV STUDY AREA.....	35
4.1. Overview of Bekasi Municipality	35
4.2. Overview of Jakarta	35
4.3. KRL Commuter Line (KCL)	37
4.4. Transjakarta (Busway)	39
4.5. Route Map.....	40
CHAPTER V Result and Discussion.....	42
5.1. Chi-Square Analysis	42
5.1.1. Cross tabulation between mode choice and gender	43
5.1.2. Cross tabulation between mode choice and income	43
5.1.3. Cross tabulation between mode choice and education.....	44
5.1.4. Cross tabulation between mode choice and mode choice reason	44
5.1.5. Cross tabulation between mode choice and trip purpose	45
5.1.6. Cross tabulation between mode choice and Age	45
5.2. Respondents profile	46
5.2.1. Car user analysis	49
5.2.2. BRT user analysis	53
5.2.3. KCL user analysis	57
5.3. Choice Mode Analysis	60
5.3.1. Car user model	61
5.3.2. BRT user model	63
5.3.3. KCL user model	64
5.3.4. Utility function and Probability	66



UNIVERSITAS
GADJAH MADA

MODE CHOICE ANALYSIS BETWEEN PRIVATE CAR, TRANSJAKARTA (BRT) AND KRL COMMUTER LINE (RAILWAY) USING MULTINOMIAL LOGIT MODEL AND SOCIAL ECONOMIC BACKGROUND OF PASSENGER CASE STUDY : BEKASI-JAKARTA

COMMUTER
RAHMAT HIDAYAT, M. Sani Roychansyah, S.T., M.Eng., D.Eng
Universitas Gadjah Mada, 2018 | Diunduh dari <http://etd.repository.ugm.ac.id/>

CHAPTER VI Conclusion.....	70
6.1. Conclusion	70
6.1.1. Relation between variable.....	70
6.1.2. User characteristics	70
6.1.3. Stated Preference analysis	71
6.2 Recommendations	72
Bibliography	73