

**The role of public participation in improving bicycle infrastructure implementation
with evaluating the case of Taman Ayodya-Blok M and
Banjir Kanal Timur bike lanes in Jakarta, Indonesia**

Master Thesis

A thesis submitted in partial fulfillment of the requirements for the Master Degree from
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Abstract

Transportation networks answer the basic need of people to move from one place to another place to fulfill their daily activities. The increase of motorization in metropolitan cities, particularly in Jakarta (Indonesia), has become an impediment for the quality improvement and the emergence of non-motorized transport (NMT), such as cycling. The increasing number of cyclists in Jakarta's Bike Community is in tandem with the presence of bike lanes in South and in East Jakarta. Despite the Jakarta's government through local transportation agency attempts to increase bike use through active promotion to the public and supportive efforts of other stakeholders such as NGO (document report of local transportation agency, 2009), there has been no government regulation or public-based policies generated on bike use. Bicycle infrastructure implementation has not accommodated the needs of public (citizens) and evaluation is lacking which could account for the barriers to success for cycling in Jakarta. The needs for involving public (citizens) and stakeholders in the evaluation and decision making process to achieve public-based policies is important to improve bicycle implementation, for example the existence of opinions from public, private sectors and NGO can support government efforts on bicycle implementation in term of decision making, funding support, the supply of bike facilities and bike programs support.

This research explore barriers encountered on bicycle infrastructure implementation through deductive (policy analysis that have been implemented) and inductive process (making survey) which will be used as the inputs for improving bicycle implementation. Besides that, this research will provide policy recommendations on cycling, particularly regarding with the procedure of public participation (direct and/or indirect participation) for evaluating bicycle infrastructure implementation in the present and for future. In doing so, online survey using Qualtrics application and using email and also review many sources from book, journals, articles and document reports will be conducted. Then, deductive and inductive content analysis both quantitative and qualitative data and descriptive analysis will be employed in this research.

The result of this research shows that the improvement of bike infrastructure implementation can be done by conducting the evaluation through involving public (citizens) and other stakeholders. In doing so, procedure of participation is needed to make the clarity for public and stakeholders on how to address their complaint and opinions to government. Furthermore, the research findings is that public (citizens) prefer direct participation method through websites (e.g. citizens' blog, social media) to indirect participation (through organization and/or institution, such as Jakarta Transportation Council/*DTKJ*, Traffic and Road Transport Forum/*Forum LLAJ* and local transportation agency) in order to convey their complaints and inputs to Jakarta's government.

Keywords: *evaluation in planning, public participation, decision making.*

Acknowledgement

Public participation issue in transportation planning evaluation, particularly in bike lanes implementation in Taman Ayodya-Blok M and Banjir Kanal Timur, Jakarta (Indonesia) is still in consultation level through public representatives such as experts, practitioners and academics. The absence of public opinions from citizens or common people, private sectors and/or NGO, becomes the policies produced only lead to government-based policy rather than public-based policy. This master thesis entitled "The role of public participation in improving bicycle infrastructure implementation with evaluating the case of Taman Ayodya-Blok M and Banjir Kanal Timur bike lanes in Jakarta, Indonesia". This thesis is a fulfillment part of the requirements for the Double Master Degree of Transportation Program in School of Architecture, Planning and Policy Development, Institute Teknologi Bandung (Indonesia) and Environmental and Infrastructure Planning in Faculty of Spatial Sciences, University of Groningen (the Netherlands).

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CHAPTER 1

Introduction

1.1 Context

Human activity in the world cannot be separated from transportation needs. Transportation is required in order to accommodate people movement from origin to destination either by using intermodal transportation or multimodal transportation (Jones et.al, 2000) that can provide comfort, safety, security and affordable. The common transportation problem is traffic congestion and environmental issue (air and noise pollution). This phenomenon often takes place in the developing countries because of the emergence of motorization. The development of motorization characterized by the growth of the motor vehicle's ownership rapidly in metropolitan cities in the developing countries (such as Bangkok, Manila, Mexico, Shanghai, Kuala Lumpur and Indonesia), is one of the main causes in making transportation and environmental problem (Gwilliam, 2010). Those problems inevitably will decline the quality of non-motorized transport (NMT) such as cycling and walking.

The quality and performance of cycling can be improved through conducting the evaluation which it can be done by involving public participation in its process. The role of public (citizens) is needed in decision making process in order to get the information related to the issues emerged (Innes and Booher, 2000), to improve the decisions and to find the legitimacy of decisions (Innes and Booher, 2000; Laurin and Shaw, 2008; Irvin and Stansbury, 2015), to make the law and regulations (Innes and Booher, 2000), to provide social justice in achieving the equality principle (Innes and Booher, 2000) and as a democratic process (Laurin and Shaw, 2008). In addition, according to Roberts (2007), public (citizens) can be involved in all process of decision making, for example in making the initiation of planning, conducting the formulation and analysis, doing the evaluation and its implementation. This means that in doing the plans, implementation, evaluation and decision making process, public (citizens) should be involved either direct and/or indirect participation.

Dealing with these, the plans certainly must be evaluated to ensure that the planning goals and its objectives are appropriate with the outcomes. The evaluation in planning aims to improve decision-making, in which the decision makers can take a lesson from the failure of planning in order to yield a better policy in the future. Oliveira and Pinho (2010) mention that the evaluation is premised on the conformance and performance. Conformance-based evaluation focuses on the assessment of the success and the failure of planning based on the criteria or conformance degree, in which the mechanism of evaluation will measure the attainment of goals and objectives of planning conforming with the outcome resulted, while the performance-based evaluation refers to the structure and framework of decisions.

Besides that, in planning arena, the objective of decision-making is to embody people's welfare by accommodating public interest. The presence of public interest that must be fulfilled prosecutes the existence of public participation in planning evaluation. According to Alexander (2010), the concept of public interest relates to the deliberation process produced by making public interactions, in which they come up the controversy to make decision. He also argues that there are three roles of public interest in planning; firstly is to authorize planning as a state activity; secondly is a rule for planning practice and its professional ethics; thirdly is a provision for planning evaluation and its products (policies, projects and plans). The public either the person who ever involved or do not ever contribute (common people and/or citizens) in planning evaluation, can participate in decision-making process through a deliberative process that aims to give the opportunity in addressing their opinions in order to embody the right of equality, to gain the feedback from public about the alternative decisions, to ensure that the public opinions are considered in decision-making process and to build a collaborative action between government and public (citizens).

In corresponds to public participation in planning evaluation and decision making for the improvement of the performance of bicycle infrastructure implementation that aims to encourage and to attract people to use bicycle in their daily activities, in the mid of 2011, the first bike lane in Jakarta has been implemented in *Taman Ayodya-Blok M* (South Jakarta) that leads to the concept of Transit Oriented Development (TOD). Afterwards, the government also construct bike lane located in *Banjir Kanal Timur* (East Jakarta). Since the implementation of bike lanes, the amount of bicyclists is increasing until now. It is featured by the emergence of Community Based Organization (CBO) namely Indonesia Cycling Committee /*Komite Sepeda Indonesia* and Jakarta's bicycle community. They become a trigger to motivate people to use bicycle in daily activities (work, school, shopping etc.) However, unfortunately, the current condition of bicycle infrastructure implementation is decreasing in term of quality and performance. There are two barriers encountered that cause a decrease of the bicycle infrastructure implementation. The first is a physical barriers that consist of two constraints are bike infrastructure and bike network in relation to the compliance of comfort, security, safety, orderliness and smoothness aspects, in which those aspects are mandated by the laws No.22/2009 on traffic and road transport. Bike infrastructure is also characterized by the emergence of street vendors and motor vehicles parking, mixed-traffic with motor vehicles, whilst bike network is featured by the shortcomings of accessibility integrated with public transport modes and the accessibility from residential area to office, school and business centers. The second is non-physical barriers that means lack of government regulation in national and local level, lack of funding to build and develop bicycle infrastructure and its facilities, the drawback of a collaborative action between government, stakeholders and also public (citizens).

Actually, public participation in planning evaluation in Jakarta and other cities of Indonesia mainly in road transportation field, has been mandated through the act No. 22/2009 about traffic and road transport and the government regulation No. 37/2011 about Forum LLAJ (*Forum Lalu Lintas dan Angkutan Jalan*/Traffic and Road Transport Forum). However, public participation is still in the level of consultation such as making public dialogue that comprises of person and/or groups involved in traffic and road transport fields, for example transportation experts, practitioners, academics etc. In other words, public participation in planning evaluation is public representatives and there is no information exchange between public (citizens) and government (one-way communication). Practically, this way is informal approach which the result of public opinions through public representatives is still weak to be considered in decision-making process. It can be seen that until now there is no improvement of quality and performance of bicycle infrastructure implementation and a strong regulation on bicycling. Whereas, in planning evaluation, the role of public (citizens) is important to assess the success and the failure of planning implementation and to ascertain that the government's policy can obtain the legitimacy in decision-making. Rowe and Frewer (2000) argue that public participation in the lowest level characterized by the presence of top-down communication and one-way information built between the regulator and public itself. Meanwhile, in the highest level, public participation featured by making public dialogue that emerges two-way information exchange and provide opinions, inputs and notions in decision-making process.

In Jakarta, public opinions are accommodated through a consultation and coordination forum between public (citizens) and local government namely DTKJ (*Dewan Transportasi Kota Jakarta*/Jakarta Transportation Council), but DTKJ has not had the authority to make decision because it just tasks to accommodate people's ideas and give suggestions to Governor as considerations in decision-making. Additionally, the existence of DTKJ has not informed to Jakarta's people as a whole, so the procedure for public (citizens) to complain about planning evaluation is not clear and still confused. Besides that, if there is a complaint from public on transportation issues, DTKJ only continues it to the institution that related to those problems, whereas the function of DTKJ is a bridge of public opinions to be addressed to the local government.

From the explanations above, the evaluation in planning particularly related to the case study of this research requires public participation (citizens) which they should be involved in decision-making process, either through direct participation with public representatives or indirect participation through public representatives that can be accommodated through Jakarta Transportation Council/DTKJ, Forum LLAJ and another participation procedures. In relation to this, this research will elaborate on how public (citizens) can improve bike infrastructure implementation in Jakarta, how they are involved in the

evaluation and decision making process and what the concept of public participation in dealing with public participation method that should be conducted in obtaining public opinions and an appropriate participation procedures for public (citizens) to address their opinions in decision making process.

1.2 Research Objectives

The research objective of this study is to evaluate the performance of the bicycle infrastructure implementation by involving with specific focus on the role of public participation during the evaluation process. This study also aims to provide some policy recommendations for Jakarta's government to improve decision-making related to the improvement of the quality and the performance of bicycling in term of physical (infrastructure and networks) and non-physical aspects (law, regulation, funding and collaboration mechanism between intra-government institution, public and stakeholders).

1.3 Research Questions

The research objectives result the main research question on how public participation can improve bicycle infrastructure implementation and several sub research questions are:

1. How is bicycle infrastructure implementation? and what are barriers encountered of implementing bicycle infrastructure?
2. What is the role of public participation in the evaluation and decision making process of implementing bicycle infrastructure?
3. How can the evaluation and decision making process of bicycle infrastructure implementation be improved?

1.4 Research Framework

The arrangement of the research framework used is premised on two parts are theoretical framework and empirical framework. Theoretical framework used in this research aims to give the insight on how to improve the decision in planning evaluation related to the case study, in which theories used will be used to explain and interpret the empirical framework. Additionally, the theoretical framework employed in this research consists of three theories, in which the core of theory used, firstly, is in the theory of evaluation in planning that divides into ex-ante evaluation and ex-post evaluation. Secondly is the concept of public participation that relates to typology, method and procedure of participation. Thirdly is stakeholder theory that consists of three aspects are descriptive/empirical, instrumental and normative. Those theories is interrelatedness, in which in order to improve the bicycle infrastructure implementation, the evaluation is required to improve policy making. Moreover, the role of public participation in the

evaluation of bicycle infrastructure implementation is needed, in which involving public to improve policy either direct and indirect participation need the institution and/or organization to accommodate public opinions that it relates to the corporation using stakeholder theory.

Those theories is used to interpret the empirical framework on how to improve policy in bicycle infrastructure implementation by conducting the evaluation both physical and non-physical aspects. Besides that, the evaluation employed emphasizes on involving public that aims to identify the barriers encountered on the bicycle infrastructure implementation that it will impact on the arrangement of policy on bicycling as the output of the research. In association to this, the research framework can be seen in **Figure 1.1**.

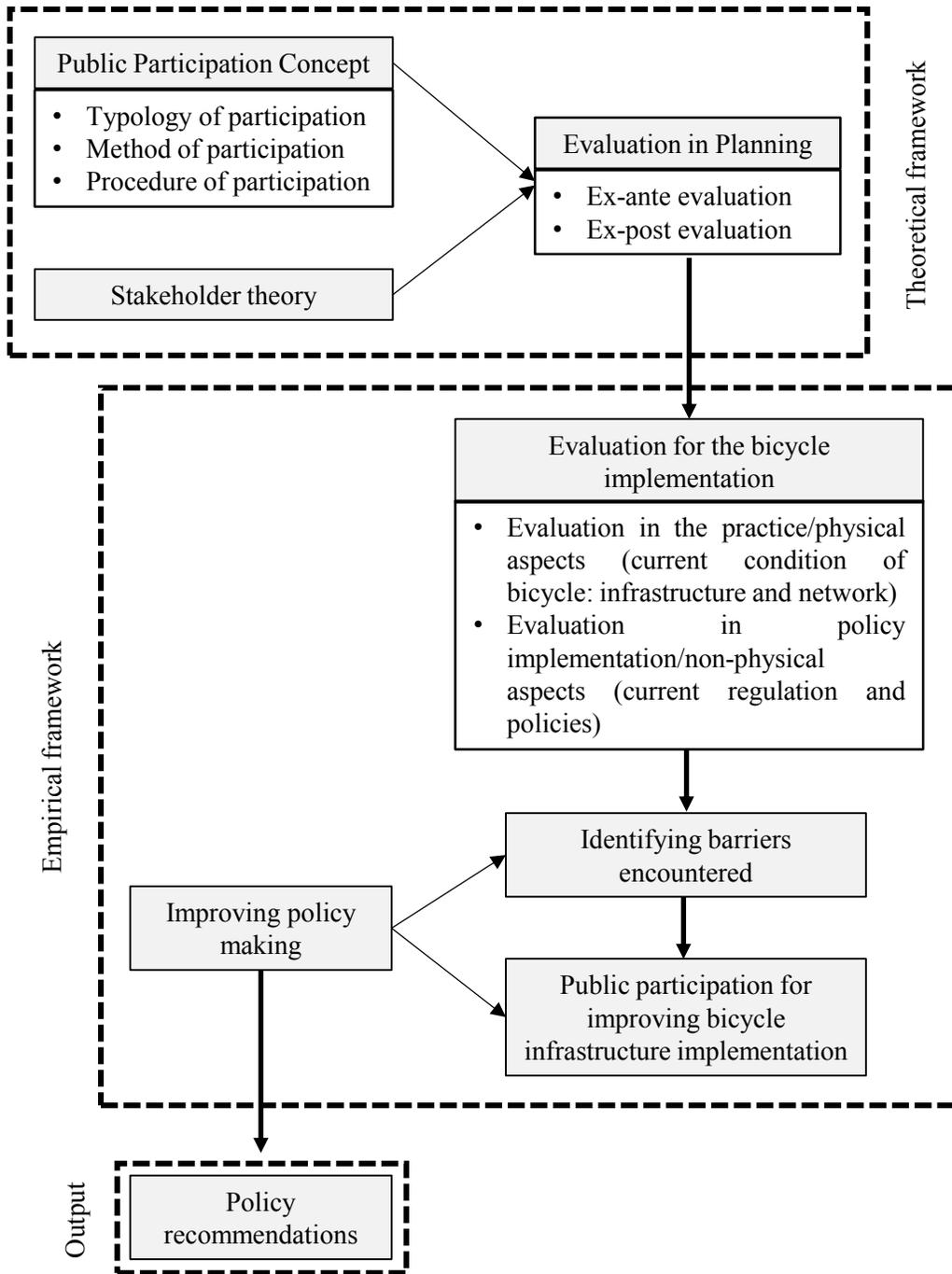


Figure 1.1 Research Framework

1.5 Thesis Structure

This study consists of six chapters. The content of each chapters can be described as follows:

Chapter 1 : Introduction

This chapter explains about the context, research problems, research objectives and questions followed by research framework.

Chapter 2 : Theoretical Review

This chapter elaborates the evaluation in planning, public participation concept encompass method and procedure of participation, public participation in decision-making process and also stakeholder theory.

Chapter 3 : Research Methodology

This chapter shows the methodology and data collection.

Chapter 4 : Case Context

This Chapter explores the current condition of bicycle infrastructure implementation both physical and non-physical aspects bicycle, public participation regulations and followed by actors involved in bicycle implementation.

Chapter 5 : Data Analysis

This chapter highlights the analysis data obtained from survey and reflection of analysis results.

Chapter 6 : Conclusiosn and Recommendations

The final chapter explains the conclusions, key findings of the research and policy recommendations and subsequently the explanation for further research.

CHAPTER 2

Theoretical Review

Planning and evaluation can be described as cause and effect relationship. Planning needs the evaluation in order to assess the effectiveness of policies either before or after the implementation. In urban planning, particularly in the transportation field, evaluation is important to be conducted. Planning evaluation aims to increase the public service and the continuity of the city itself. According to Oliveira and Pinho (2010), one of the principle for planning evaluation is that the planning exercise have to be evaluated, in which there are four reasons encompass evaluation authorizes planning as a whole in which it assesses overall the result obtained of planning practice; it assists politicians and planners in complex process of decision-making; it promotes and effective planning dynamic that reviews the result of planning through evaluation practice; and it enables planning practice based on a continuous learning process. It means that planning evaluation must be employed to improve the decision-making it can remedy the quality and the performance of planning exercise to be a better in the implementation in the future.

The evaluation of planning exercise cannot be conducted only by the decision makers itself. The involvement of other parties such as citizens and stakeholders is also important as an input in the policy arrangement. The role of public (citizens) and stakeholders influence on the quality of decision-making, in which they can participate in the decision-making process. Renn et.al. (1993) argue that the involvement of public in decision-making process is debatable in the role, the authority and also the procedure of participation. Besides that, Renn et.al. (1993) mention that “stakeholders are valuable resources for eliciting concerns and developing evaluative criteria since their interests are at stake and they already made attempts to structure and approach the issue”. Related to the governance context, it means that incorporating public and stakeholders in decision-making can strengthen the decision made and also their engagement also aims to embody the democratic principle, in which they can intervene in the government’s plans and policy. Hence, a collaborative action between governments, public (citizens) and stakeholders in planning evaluation will improve decision-making, in which the decision makers will gain a valuable input from them to increase the performance of plans.

From the above explanation, this chapter will elucidate a theoretical review associated with explaining the evaluation in planning, and then elaborating public participation concept and stakeholder theory. Finally, the most important things that also included in this chapter is public participation in decision-making.

2.1 Evaluation in planning

Evaluation in planning is not easy to be employed, especially with the involvement of public and stakeholders because it relates to the method and procedure of participation that depend on the circumstances. Additionally, the evaluation is carried out in order to find out whether the plans conducted has fulfilled the objectives of plans. In planning evaluation, certainly, there are the principals for evaluating the plans that should be fulfilled. According to Oliveira and Pinho (2010), there are seven principles for planning evaluation: planning practice should be evaluated; the design of an assessment methodology must be clearly linked with planning evaluation theory; the evaluation methodology should suit the object under appraisal; the planning practice (plan, process, result, etc.) must be evaluated as a whole; evaluation and planning process should be developed together; the evaluation process must have a balanced development in time (ex-ante, on-going and ex-post); the presentation of evaluation results and the analysis of their use by planning should be valued.

A planning evaluation itself can be distinguished into two types: first, the ex-ante evaluation that focuses on the policies prediction that have not been implemented and it has a ‘forward looking’ nature. Second, the ex-post evaluation that relates to ‘backward looking’ nature concerned with policies actual effect that have been applied (Nijkamp et.al, 1990). Additionally, Crabbé and Leroy (2008) state the type of policy evaluation consists of ex-ante, on-going (ex nunc) and ex-post evaluation, in which the ex-ante evaluation is conducted before policy implementation, whilst on-going evaluation is intermediate evaluation that have to be done in current condition (between ex-ante and ex-post evaluation). Meanwhile, the ex-post evaluation refers to the evaluation employed after the implementation of policy itself has been enacted. Talen (1996) makes a typology of planning evaluation into four categories: evaluation prior to plan implementation (evaluation of alternative plans and analysis of planning documents); evaluation of planning practice (studies of planning behavior and description of planning impacts); policy implementation analysis; and evaluation of the implementation of plans (quantitative and qualitative). In other words, the linkage between principals and typology of planning evaluation means that the principals of planning evaluation mentioned by Oliveira and Pinho reveal that the typology of planning evaluation that should be conducted (ex-ante, on-going and ex-post evaluation) have to fulfill the principals of planning evaluation in order to attain the objectives of planning practice.

2.2 Concept of public participation

Definition and the purposes of public participation

Term of public participation has a various definitions such as public involvement, public engagement, citizen participation etc. According to Rowe and Frewer (2005) the definition of public

participation in a broad term is the exercise of incorporating the public in agenda setting, decision and policy-making in the organization and/or institution in order to gain an appropriate policies in the circumstances and to develop policy itself. They also argue that the concept of public participation is defined implicitly and explicitly because it has not clear formulated, in which the scope of participation and the effectiveness of the procedure of participation depend upon on the circumstances (Rowe and Frewer, 2005). Besides that, Innes and Booher (2000) argue the public participation in the decision-making have five goals encompass getting some information for making decision related to projects, policies and plans; improving the decision by taking the public's knowledge; making fairness and justice without excluding the citizens in order to reach the equality principle; obtaining legitimacy in order to reach the decision premised on the democratic purposes; making the law or regulation needs to involve the public. Furthermore, the purpose of participation in government decision-making consists of four goals (Laurian and Shaw, 2008), are:

1. Process-based goals

This goal aims to increase the public and agency awareness of public opinion, in which the public can be informed about the issues transparently. In addition, the participation also emerges a lessons learning process as a whole in order to improve the decision made.

2. Democratic process

As a democratic process, the participation aims to show the transparency, inclusiveness, and fairness and power sharing. In this purposes, the public elicit the information to convey their opinions, then the opinions can be expressed freely, heard, respected and judged in decision-making process. Additionally, there is no dominated group, in which the public and also stakeholders have the same opportunity and power to participate in decision-making process.

3. Outcome-based goals

The importance of participation deals with the issue-related, governance and social outcomes. The goals of issue-related outcomes has to fulfill the requirements, obtain the completion to reach the consent and improve the quality of decision, while the goals of governance outcomes will increase a legitimacy of decisions, prevent and decrease the disputes and provide the solutions. Meanwhile, the social outcomes will associate with building of institutional capacity and social network, increase the public's rights.

4. User-based goals

The importance of user-based goals is aims to make participants satisfied in the process and the outcomes of participation.

Table 2.1 The advantages of citizen participation in government decision-making

	Advantages to citizen participants	Advantages to government
Decision process	Education (learn from and inform government representatives) Persuade and enlighten government Gain skills for activist citizenship	Education (learn from and inform citizens) Persuade citizens; build trust and allay anxiety or hostility Build strategic alliances Gain legitimacy of decisions
Outcomes	Break gridlock; achieve outcomes Gain some control over policy process Better policy and implementation decisions	Break gridlock; achieve outcomes Avoid litigation costs Better policy and implementation decisions

Source: Irvin and Stansbury (2015)

Typology of participation

In some cases of participation, Rowe and Frewer (2005) argue that the public can be an active participants who involve in decision-making process as a public representative, passive participants who do not accept information from the regulators and informants who give the opinions about the problem occurred. It means that there are the distinctions on the level of participation for the public in decision-making process whether it is viewed as participation, nonparticipation etcetera. Due to the level of participation, Rowe and Frewer distinguish three typologies of public participation based on the flow of information (Figure 2) between participants and sponsors (between public and government in the governance context). First, public communication interprets that there is only one-way of information flow, in which the mechanism specified for public to give feedback to the sponsor is not entailed. Second, public consultation shows that the information addressed from the public to the sponsor is in the informal dialogue. Third, public participation has two-way of information flow, exchange information, interaction and collaboration between sponsors and public. Additionally, in the public participation, the dialogue occurred between public and sponsors is usually in group setting; and the raw opinion addressed, the dialogue and negotiation from public to the sponsor may be change based on the opinion of both members (sponsor and public participants).

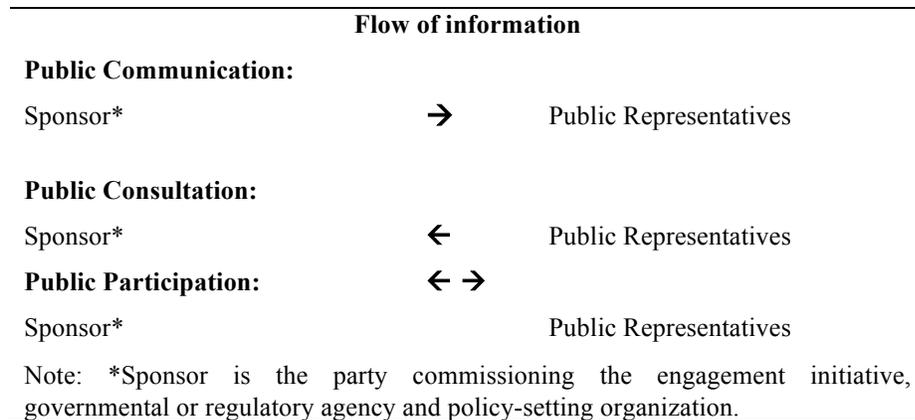


Figure 2.1 Three typologies of public engagement

Source: Rowe and Frewer (2005)

The judgment of Rowe and Frewer about the concept of public participation is linked to the typology of participation and non-participation based on Arnstein (1969) namely a ladder participation. Arnstein (1969) distinguishes three types of participation with eight levels (**Figure 2.2**). He states that citizen participation is a citizen power that give the have-nots citizens or economically disadvantaged people is involved in decision-making authority of the political and economic process. Additionally, the have-nots is not only the symbolic person or even as the representative people to participate in decision-making, but also they have a full power to control the decisions (on the eight level).

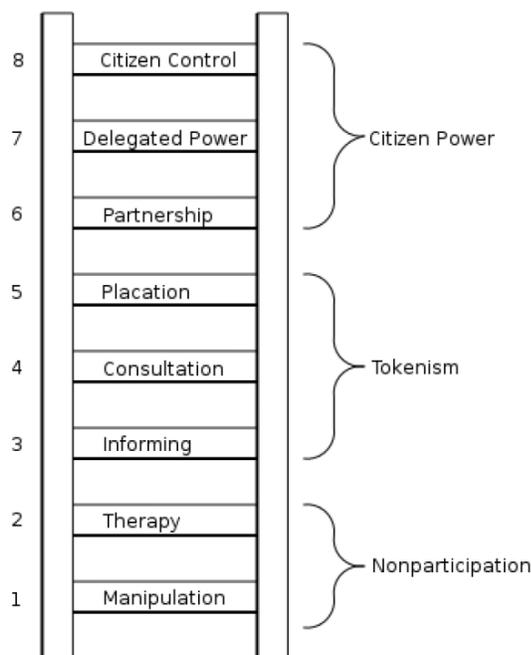


Figure 2.2 Eight rungs on the ladder of participation

Source: Arnstein (1969)

Table 2.2 Typology of participation and non-participation (a ladder participation)

No.	Typology of Participation	Level of Participation	Explanation
1.	Non participation	Manipulation and therapy	The have-nots citizens cannot participate in planning and the power of participation is still fully in the power holders that they have the function to “educate” and “cure” the participants.
2.	Tokenism	Informing, consultation and placation	In this level, the power of have-nots citizens is still a symbolic to show up the presence of the equity principle and they do not have the assurance that their views or notions will be concerned by the power holders in decision-making.
3.	Citizen power	Partnership, delegated power and citizen control	In this level, the have-nots citizens can make a negotiation with the power holders and they also have a full power and freedom to control the decisions in decision-making process.

Source: Arnstein (1969)

The concept of public participation in the third typology of ladder participation (citizen power) have a little similarity to a new concept namely organic planning acquainted by Plein et.al (1998) that explain about a full authority for the public to control policies. Organic planning focuses on building interaction, collective action and collaboration between citizens and government officials. Besides that, in organic planning, citizens as an initiators who convey the issue to the government. In the other words, citizens has a full function in controlling the issue development and the government policy (Plein et.al, 1998). The aim of organic planning is to create the on-going discussion between citizens and government through public dialogue or forum. Additionally, it does not follow a legally-binding to the institutional tools.

According to the International Association for Public Participation/IAP2 (2007), there are five spectrums of public participation as follows:

1. Inform – the authority of public in making-decision is moderately been considered.
2. Consult – the public involvement in decision-making process aims to give the feedback that is considered as an input of decision.

3. Involve – the public is steadily incorporated in decision-making and the decision made really consider the public opinion.
4. Collaborate – the public is suspected as a partner to develop the alternative solutions.
5. Empower – the decision made depends on the public.

Increasing Level of Public Impact					
	Inform	Consult	Involve	Collaborate	Empower
Public Participation Goal	To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.	To obtain feedback on analysis, alternatives and/or decisions	To work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered	To partner with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution	To place final Decision making in the hands of the public
Promise to the Public	We will keep you informed	We will keep you informed, listen to and acknowledge concerns and aspirations, and provide feedback on how public input influenced the decision.	We will work with you to ensure that your concerns and aspirations are directly reflected in the alternatives developed and provide feedback on how public input influenced the decision	We will look to you for advice and innovation in formulating solutions and incorporate your advice and recommendations into the decisions to the maximum extent possible.	We will Implement what you decide.
Example Techniques	<ul style="list-style-type: none"> ▪ Fact sheets ▪ Web sites ▪ Open houses 	<ul style="list-style-type: none"> ▪ Public comment ▪ Focus groups ▪ Surveys ▪ Public meetings 	<ul style="list-style-type: none"> ▪ Workshops ▪ Deliberative polling 	<ul style="list-style-type: none"> ▪ Citizen advisory committees ▪ Consensus building ▪ Participatory decision-making 	<ul style="list-style-type: none"> ▪ Citizen juries ▪ Ballots ▪ Delegated decision

Figure 2.3 IAP2 spectrum of public participation (2007)

Figure 2.3 portrays that five spectrums of public participation give a similar understanding with a ladder participation that also explore the degree of public participation. Based on those spectrums, there is an improvements of each level in term of the role and the authority of public in decision-making. It indicates that a level of participation according to IAP2 is connected with three typologies of public

engagement by Rowe and Frewer (**Figure 2.1**), in which between the public and sponsor can make a collaborative actions through building two-way communication. Thus, the linkage among those theories about the public participation concept can give an insight that the role of public in the different level of participation reflects on quality of decisions made in decision-making process that also impact on the legitimacy of policy implementation.

Public Participation Method

Types of public participation methods have characteristics, strengths and weaknesses such as referenda, public meetings, public opinion survey, consensus conference, citizen panel, public dialogue, focus group etc. The distinction of public participation methods used will interpret different procedure of participation. It means that the measurement of the procedure of participation is based on the effectiveness of participation practice and the outcomes yielded. Rowe and Frewer (2000) mention that *“particular method might prove either effective or ineffective depending on how it is formulated and conducted”*. It means that several method have the possibility of failure to be applied practically. This is caused by the absence of the standard of provision about the best quality of those methods because it adjusts the circumstances. Hence, to assess the effectiveness of those methods, Rowe and Frewer (2000) divide into two types for the effective of public participation encompass acceptance criteria and process criteria. The acceptance criteria deals with the effectiveness of procedure implementation, in which it depends upon the point of view of public to assess the effectiveness of procedure whether it becomes fair or not for the public, so the procedure might be successful or failure. Meanwhile, the process criteria depends on the public acceptance of the procedures employed, in which the effectiveness itself is assessed from the recommendations of the decision attained.

Table 2.3 A Number of the Most Formalized Public Participation Methods

<i>Participation Method</i>	<i>Nature of Participants</i>	<i>Time Scale/Duration</i>	<i>Characteristics/Mechanism</i>	<i>Examples/References</i>
Referenda	Potentially all members of national or local population; realistically, a significant proportion of these.	Vote cast at single point in time.	Vote is usually choice of one of two options. All participants have equal influence. Final outcome is binding.	Biotechnology in Switzerland (Buchmann 1995); waste repository in Sweden (af Wählberg 1997).
Public hearings/inquiries	Interested citizens, limited in number by size of venue. True participants are experts and politicians making presentations.	May last many weeks/months, even years. Usually held during week-days/working hours.	Entails presentations by agencies regarding plans in open forum. Public may voice opinions but have no direct impact on recommendation.	Frequent mechanism in, for example, United States (Fiorino 1990), Australia (Davison, Barnes, and Schibeci 1997); review by Middendorf and Busch (1997).
Public opinion surveys	Large sample (e.g., 100s or 1,000s), usually representative of the population segments of interest.	Single event, usually lasting no more than several minutes.	Often enacted through written questionnaire or telephone survey. May involve variety of questions. Used for information gathering.	Radioactive sites in United States (Feldman and Hanahan 1996); genetically modified food in the United Kingdom (Vidal 1998); biotech surveys (Davison, Barnes, and Schibeci 1997).
Negotiated rule making	Small number of representatives of stakeholder groups (may include public representatives).	Uncertain: strict deadline usually set: days/weeks/months.	Working committee of stakeholder representatives (and from sponsor). Consensus required on specific question (usually, a regulation).	Used by U.S. Environmental Protection Agency (Hanson 1984); method discussed by Susskind and McMahon (1985) and Fiorino (1990).
Consensus conference	Generally, ten to sixteen members of public (with no knowledge on topic) selected by steering committee as "representative" of the general public.	Preparatory demonstrations and lectures (etc.) to inform panelists about topic, then three-day conference.	Lay panel with independent facilitator questions expert witnesses chosen by stakeholder panel. Meetings open to wider public. Conclusions on key questions made via report or press conference.	Used in Denmark and Netherlands on topics from food irradiation to air pollution (Joss and Durant 1994; Grundahl 1995); also used in United Kingdom on plant biotechnology (Ellahi 1995).
Citizens' jury/panel	Generally, twelve to twenty members of public selected by stakeholder panel to be roughly representative of the local population.	Not precise but generally involve meetings over a few days (e.g., four to ten).	Lay panel with independent facilitator questions expert witnesses chosen by stakeholder panel. Meetings not generally open. Conclusions on key questions made via report or press conference.	Examples in Germany, United States, and United Kingdom (e.g., Crosby, Kelly, and Schaefer 1986; Coote, Kendall, and Stewart 1994; Lenaghan, New, and Mitchell 1996).
Citizen/public advisory committee	Small group selected by sponsor to represent views of various groups or communities (may not comprise members of true public).	Takes place over an extended period of time.	Group convened by sponsor to examine some significant issue. Interaction with industry representatives.	Particularly evident in United States, for example, in cleanup of waste sites (Lynn and Busenberg 1995; Perhac 1998); see Creighton (1993) for guidelines.
Focus groups	Small group of five to twelve selected to be representative of public; several groups may be used for one project (comprising members of subgroups).	Single meeting, usually up to two hours.	Free discussion on general topic with video/tape recording and little input/direction from facilitator. Used to assess opinions/attitudes.	Guidelines from Morgan (1993); U.K. example to assess food risk (Fife-Schaw and Rowe 1995).

Source: Rowe and Frewer (2000)

Procedure of participation

The role of public (citizens) in decision-making process is required to legitimize the policy. It reflects the public awareness to the government policies and issue occurred. Roberts (2007) argues that public can involve in all stages of policy making such as analysis, initiation, formulation, implementation and even evaluation. Although the public can participate in policy-making, the procedure of participation is on-going debatable whether direct participation and indirect participation. Direct participation have the

feature that citizens can directly contribute and address their ideas to the government without the representatives and it can be seen as a horizontal function because there is no limitation hierarchy between government and citizen (Abouassi et.al, 2013). The concept of participation that Arnstein mentioned as central power to fully control decision making is defined as direct participation. The direct participation emphasizes on the power sharing between citizens and government official in substantive decision and making actions together (Roberts, 2007). It means that the decision made gives a strong legitimacy because it is arranged through building a collaborative action without the gap between citizens and government. On the one hand, direct citizen participation might be compatible with the certain issue, but in other issue is not appropriate to be applied. One of disadvantage is the amount of individual involved to meet up directly by face-to-face in different background. Due to this, the indirect participation emerged. The indirect participation to cover this problem. The indirect participation is characterized by the presence of representatives, hierarchy process (Abouassi et.al, 2013). Through selected representatives, the right of citizens to give the opinion to the issue-related has been represented by them.

2.3 Stakeholder theory

The success of policy implementation cannot be separated from the role of many stakeholders in decision-making process. The term of stakeholders was found in the early 1960s that meant as a parties or groups that possess the interest in a corporation, have an influence in decision-making such as employees, suppliers, customers, creditors, competitors, governments, and communities (Goodpaster, 1991). Besides that, according to Jones and Wicks (1999) that explain about the current condition of stakeholder theory research, actually, the core of stakeholder theory are the corporation consisted of groups where they can influence the decision and even affected by its decision; stakeholder theory relates to both process and outcomes for the firm (organization and/or institution) and stakeholders itself; the interest of each stakeholders involved in organization aims not to dominate to the others; and theory emphasizes on managerial decision making. It means that the usage of stakeholder theory in relation to decision-making, basically, leads to two main aspects. First aspect is the corporation that can be defined as organization and even institution. The existence of corporation (organization and/or institution) brings to the interrelatedness of making interaction or two way communication among stakeholders (figure 2.4), in which the presence of interaction among them will affect the decision-making. Second aspect is the outcomes resulted that means the objectives and benefits attainment in organization and/or institution is the results that achieved by all stakeholders involved. In other words, the objectives can be achieved if one stakeholder involved (e.g. only government agencies) do not think that its own role is the dominant and large contribution compared with other stakeholders in organization and/or institution itself. Furthermore, in relation to both aspects, the stakeholder model is given in the following figure.

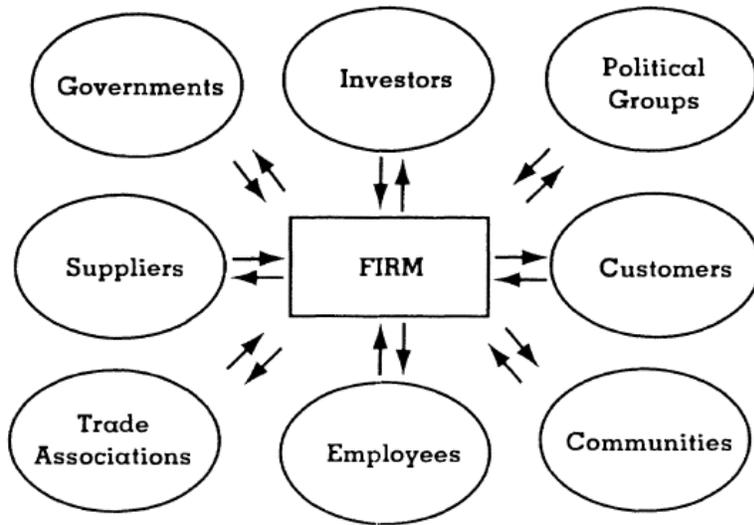


Figure 2.4 Contrasting model of the corporation: the stakeholder model
 Source: Donaldson and Preston (1995)

Regarding with **Figure 2.4**, stakeholder model can be applied in other settings, but it leads to the confusion rather than clarification (Donaldson and Preston, 1995; Jones and Wicks, 1999). It means that this model depends on the contextual circumstance (e.g. stakeholder in transportation field, industry, infrastructure etc.) and it needs the clarification based on the domain of organization/institution itself. For example, in transportation field, there are three categories of stakeholders encompass: users are the citizen as a whole including the poor, disable person and common society; operators constitute the groups that have tasks to operate and drive the operational function such as bus companies, owners association, driver's association, public transport association, suppliers etc.; and regulators encompass institution made the decision and had the executive function to assign the policy such as ministry or department of transportation, local government agencies, private bus companies, polices etc (Fouracre et.al, 2006).

According to Donaldson and Preston (1995), there are three types of stakeholder theory. First type is descriptive/empirical that "the theory is used to describe, and sometimes to explain, specific corporate characteristics and its behavior". This type relates to the identification of the characteristics of corporation (organization/institution) itself, what its concern, interest, resource and capacity and programs conducted to support the objectives of organization/institution. For example, in relation to the case study of this research, identifying the characteristics of organization/institution such as ITDP/Institute for Transport Development Policy (NGO) can assist the attainment of the success of bicycle infrastructure implementation because this organization is in line with the government objectives to improve the bicycle implementation in Jakarta, so ITDP can be involved and participated in planning evaluation that aims to improve the government policy arrangement on the bicycle implementation in Jakarta.

Second type is instrumental that "the theory is used to identify the links between the stakeholder management and the achievement of the corporate goals and its performance". This type deals with the purposes of organization/institution, what action should be done to achieve the goals and/or objectives and how to manage all stakeholders' interests in the organization/institution. In relation to the case study, due to stakeholders have different interests and perceptions, stakeholder management is required in order to reduce and minimize the contradictions among them particularly in giving the input or opinion to improve the government policy on the bicycle implementation in Jakarta. So, the goals and outcomes achieved of organization/institution are based on a mutual agreement among stakeholders involved.

Third type is normative that "the theory is used to interpret the function of the corporations, including the identification of moral or philosophical guidelines for the operation and management of corporations". This type relates to the organization/institution management, in which, in doing this the needs of guidelines is needed to choose and consider the decision made. Moreover, the normative aspect is not hypothetical but categorical (Donaldson and Preston, 1995) that dealt with a various choices in decision making process. In relation to the case study, various decisions chosen is premised on the guidelines obtained from the empirical knowledge. For example, the empirical knowledge from public (citizens) and/or other stakeholders about the current condition (in the real field) to evaluate the bicycle implementation is required because it can provide the description to the public and other stakeholders in giving the inputs and opinions on how to improve the current condition in present and for future. Thus, regarding with the function of corporation (organization/institution), a normative aspect interrelates to the role and responsibility of each stakeholders, so they can find out their capacity in the domain of organization/institution itself to support the government policy on the bicycle implementation.

Actually, understanding stakeholder theory particularly those types relates to the public participation concept and evaluation in planning, in which stakeholder theory is required to support both theories. In addition, the corporation (organization/institution) is needed to accommodate the public opinions in planning evaluation process that aims to improve the bicycle infrastructure implementation in Jakarta. Furthermore, the linkages of three theories used will relate to the conceptual framework of this research, in which the core of those theories in relation to the case study, finally, leads to policy arrangement that require the institutional form. The interrelatedness of theories can be seen in the following table.

Table 2.4 The linkages of three theories used

<p>Public participation concept</p>	<p>→</p>	<p>Evaluation in planning The role of public in the domain of planning evaluation is to legitimize the decision making and to improve the the performance of bicycle implementation to the public.</p>
<p>Stakeholder theory</p>	<p>→</p>	<p>Public participation concept The emergence of corporation (organization/institution) creates interaction among stakeholders that leads to two way communication (government can obtain the feedback from public and other stakeholders to improve the policy on the bicycle implementation.</p>
<p>Evaluation in planning</p>	<p>→</p>	<p>Stakeholder theory It relates to the corporation (the needs of organization/institution) to achieve the objectives and outcomes that aims to improve the bicycle implementation.</p>

Source: Author (2015)

2.4 Conceptual Framework

This research try to explore on how the concept of public participation can improve bicycle infrastructure implementation. In relation to this, conceptual framework is needed as a guideline to conduct the research which it also relates to answer the research questions. Additionally, the basic theories used in this research is also required to develop a conceptual framework. Moreover, in order to understand more deeply the objectives of this research, there are two tensions of theoretical concept that would be used in this research are the concept of public participation and evaluation in planning.

Concept of public participation consists of three important aspects encompass the role of public participation, level of participation and organization/institution of participation. The role of public participation refers to the typology of participation as Rowe and Frewer (2005) mentioned that public participation relates to the role of public either as active participants or passive participant in decision making process, in which it is characterized by the acceptance of information to public in response to the issue. Meanwhile, level of participation regards with Arnstein (1969) stated that the role of public deals with the function of public in decision making process that comprises of non participation, tokenism and citizen power, whilst the organization/institution of participation relates to the process of participation that requires a media to address public opinions. The needs of organization/institution in decision making

process corresponds to the method and procedure of participation either direct participation or indirect participation.

Evaluation in planning links to the process of participation. Conducting the improvement of bicycle infrastructure implementation needs the evaluation process, in which public opinions in decision making process are an essential things as the inputs to make decisions and to get the legitimacy. Besides that, the evaluation in planning is a learning process for making decision either it is employed before (ex-ante evaluation) or after policy implementation (ex-post evaluation) as Nijkamp et.al. (1990) stated. Furthermore, the evaluation process should be conducted in order to make sure that planning practice has complied its objectives as Oliveira and Pinho (2010) mentioned.

Through making the linkage both the concept of public participation and evaluation in planning, the author attempts to develop a conceptual framework that can be used as the guideline of doing the research. In addition, the main focus of conceptual framework, basically, deals with the evaluation and decision making process, in which from the result of evaluation that involves public, it will lead to decision making improvement which will be used as the policy recommendations for improving bicycle infrastructure implementation. Thus, conceptual framework of this research can be depicted in the following figure.

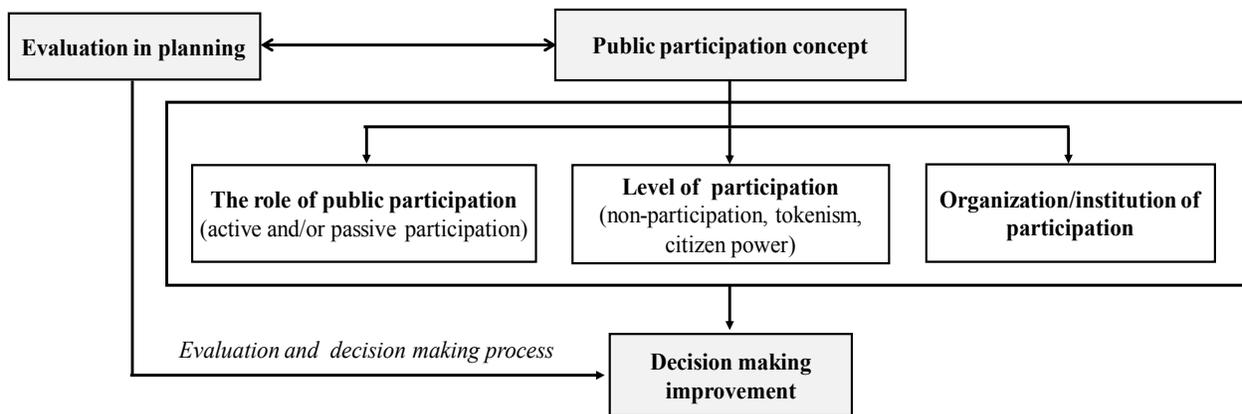


Figure 2.5 Conceptual framework of the research

CHAPTER 3

Research Methodology

This chapter aims to elaborate the process of conducting the research, particularly in relation to the way of data collection (method of collection data) in order to answer the research questions. This research attempts to explore the process of gaining public opinions, local government's perspective and stakeholder's perception in order to improve the quality and performance of bicycle infrastructure implementation in Jakarta, in which they can be used as the inputs in arranging the policy that specifically lead to public-based policy. Furthermore, this chapter will explain on the analysis used to analyze primary and secondary data in order to achieve the research output.

1.1 Research Methodology and Data Collection

In doing research methodology, the research objectives and outputs achieved should be determined previously. Research methodology relates to the process of getting data (primary and/or secondary data), how to obtain data (data sources), how the data collection method and how to analyze data collected (method of analysis). This research interprets a qualitative research that dealt with exploring the public opinions, stakeholder's perception and the government's perspective as the inputs for improving the bicycle infrastructure implementation. Dealt with getting the inputs from public, government and stakeholders, the barriers encountered on the bicycle implementation can be identified either physical barriers or non-physical barriers. As Tan et.al (2014) mentioned the actors' engagement and stakeholder involvement become a core when identifying barriers. In doing so, this research will involve the public, local government and stakeholder in relation to obtain data.

Data collected in this research is divided into two parts are primary and secondary data. Method used in collecting primary data is using online survey through creating the questionnaire using Qualtrics application, in which the number of respondents surveyed is 60 respondents. In relation to the target of respondents, the main provision of the target of respondents is intended to Jakarta's people, so there is no specific requirements for selecting the respondents. Additionally, the provision of the number of respondents (60 respondents) is based on a purposive sampling as one of the sampling method in qualitative research that "group participants according to preselected criteria relevant to a particular research question" (Source: Module 1 Qualitative Research Methods Overview). The sample sizes in purposive sampling might and might not be determined before data collection, but it depends upon the availability of time and resources. Besides that, the method of primary data collection is also using email intended to local government (local transportation agency) and stakeholders (Jakarta Transportation

Council/*DTKJ* and also NGO (Institute for Transportation Development Policy/*ITDP*). Therefore, in relation to this, the reasons of conducting primary data collection using online survey (Qualtrics application) and email is due to the limitation of time and resources.

In association to the list of questions, data collected from respondents is using Indonesian language/*bahasa Indonesia* about survey for improving the quality and performance of bike infrastructure implementation in Jakarta/*survey peningkatan kualitas dan performansi penerapan infrastruktur lajur sepeda* in order to make them easier in answering the questions. Besides that, the list of questions surveyed is divided into four parts are characteristics respondents, characteristics of bike facilities, suggestions to be improved on the bike implementation and public participation concept, in which each parts consist of both quantitative data and qualitative data (list of questions for public can be seen in Appendix 1). Basically, the list of questions intended to local transportation agency and stakeholders more emphasizes on the concept of public participations, programs, planning and policy that they have conducted in the present and for future, whilst, the list of questions intended to public (citizens) focus on all questions, in which public assess the bike infrastructure implementation as a whole, but list of questions do not relate to programs, planning and policy. Meanwhile, method used to collect the secondary data is reviewing book, journals, articles, document reports (laws, regulations and policies) and internet publications that subsequently distil the information from them, in which the data collected will be used to evaluate implicitly the bicycle implementation (ex-ante evaluation and ex-post evaluation).

The analysis conducted in this research is a qualitative content analysis. Content analysis is method used to analyze the document, written language, verbal or visual communication that aims to distil the words into fewer content-related categories (Elo and Kyngäs, 2007). It means that data collected from a wide scope can be reduced and/or narrowed down to be a concepts or categories that those interpret the same meanings from the previous data obtained as a whole. Besides that, data for content analysis are texts which the meanings are related to verbal discourse, written documents and visual representations (Krippendorff, 1989). The aim of content analysis is "to provide knowledge and understanding of the phenomenon under study" (Downe-Wamboldt, 1992, p. 314). Moreover, the outcome of content analysis is concepts or categories that aims to construct a model, conceptual system, conceptual map or categories (Elo and Kyngäs, 2007). It means that content analysis is method for analyzing data from verbal (e.g. document reports, writing texts, articles, newspapers, magazines etc.) and visual communication and it does not include vocal communication. In addition, content analysis might be used qualitative or quantitative data and deductive or inductive way. Deductive content analysis is "used when the structure of analysis is operationalized on the basis of previous knowledge and the purpose of the study is theory testing" (Kyngäs and Vanhanen, 1999 adopted from Elo and Kyngäs, 2007, p.109),

whilst "inductive content analysis is used in cases where there are no previous studies dealing with the phenomenon" (Elo and Kyngäs, 2007, p.107). Besides a qualitative content analysis, a descriptive analysis will be conducted to describe the overall of data collected, particularly to interpret the analysis result from primary and secondary data. The research methodology can be seen in the following table.

Table 3.1 Research Methodology

No.	Objectives	Data collected	Data Sources	Method of Collection Data	Method of Analysis	Output
1.	To evaluate the performance of the bicycle infrastructure implementation by involving public (citizens) and stakeholders.	Primary data on the characteristics of respondents (public), characteristics of bike facilities and data dealt with the public participation concept.	<ul style="list-style-type: none"> – Survey 60 respondents (public) who live in Jakarta area by using questionnaire (Qualtrics application). – Survey stakeholder's perceptions by using questionnaire (through email) on the bicycle implementation that intended to local government (local transportation agency), Jakarta Transportation Council/DTKJ and NGO (Institute for Transportation Development Policy). 	Online survey using Qualtrics application and email	Inductive content analysis using quantitative and qualitative data; descriptive analysis	An appropriate method and procedure of participation in evaluating the bicycle infrastructure implementation.
2.	To provide policy recommendations to improve decision making on bicycle infrastructure implementation.	Secondary data on the current condition of bike lanes implementation (laws regulations and policy).	Book, journals, articles, document report from local transportation agency and internet publications.	Review book, journals, articles and document reports.	Deductive content analysis and descriptive analysis	Policy recommendations as the inputs in composing the government regulation in relation to improve the bicycle infrastructure implementation.

Source: Author (2015)

CHAPTER 4

Case Context

Land transportation problem cannot be separated from the demand of transport modes needs and the supply of road infrastructure. The imbalance condition between them will cause traffic congestion, in which it still takes place in Jakarta, as metropolitan city and the capital city of Indonesia. The availability of road space to accommodate people's movement in their daily activities, is not only fully dependent on motor vehicles usage that they will give some negative implications, for instance the emergence of public health, safety and pollution issues. The needs of non-motorized transport mode (NMT) such as bicycle is essential things to reduce those implications and to create Jakarta's environmentally friendly for future. In doing so, the needs of regulations, policies and organization and/or institution are required to improve the quality and performance of bicycle infrastructure implementation in Jakarta, particularly in Taman Ayodya-Blok M and *Banjir Kanal Timur* bike lanes.

The government plans related to the development of bike lanes in Jakarta is only in the arrangement of macro transportation pattern/*Penyusunan Pola Transportasi Makro* that premised on Jakarta's Governor decree No. 84/2004. In the practice, the key success of bicycle infrastructure implementation in Jakarta cannot be excluded from the role of public either the public affiliated in Community Based Organization (CBO) such as Indonesia Cycling Committee (*KSI/Komite Sepeda Indonesia*) and Jakarta's bike community or public (citizens). Besides that, the role of stakeholder (non-governmental organization/NGO) contributes in supporting the government tasks and encourage public (citizens) to participate in policy making. Their presence can be trigger in policy making process (e.g. the arrangement and completion of government regulation). Thus, the policy resulted in policy making process is not only dependent upon the government-based policy, but also public-based policy.

From the above explanation, this chapter will elaborate the current condition of bicycle infrastructure implementation in Jakarta, particularly in relation to barriers encountered; regulation and policy implementation of bicycling in the present. Then, this chapter will explore some regulations related to public participation, especially in traffic and road transport field.

4.1 Current condition of bicycle implementation

4.1.1 Identifying barriers encountered of bicycle implementation

In planning evaluation, identifying barriers encountered aim to structure an appropriate policy strategy and how those strategies can be applied in policy making arena. In relation to this, identifying

barriers encountered of bike infrastructure implementation in Jakarta will be conducted through deductive and inductive process. According to Tan et.al. (2014) deductive process begins with theoretical background toward the observations through policy analysis, interview and focus group, meanwhile an inductive process starts with the observations and recognizes the barriers in the real field in order to develop a conceptual model. In this research, identifying barriers employed is based on an inductive process and deductive process.

Based on deductive process, there are two barriers encountered in bicycle infrastructure implementation in Taman Ayodya-Blok M (South Jakarta) and *Banjir Kanal Timur* (East Jakarta) bike lanes as can be seen in the following table.

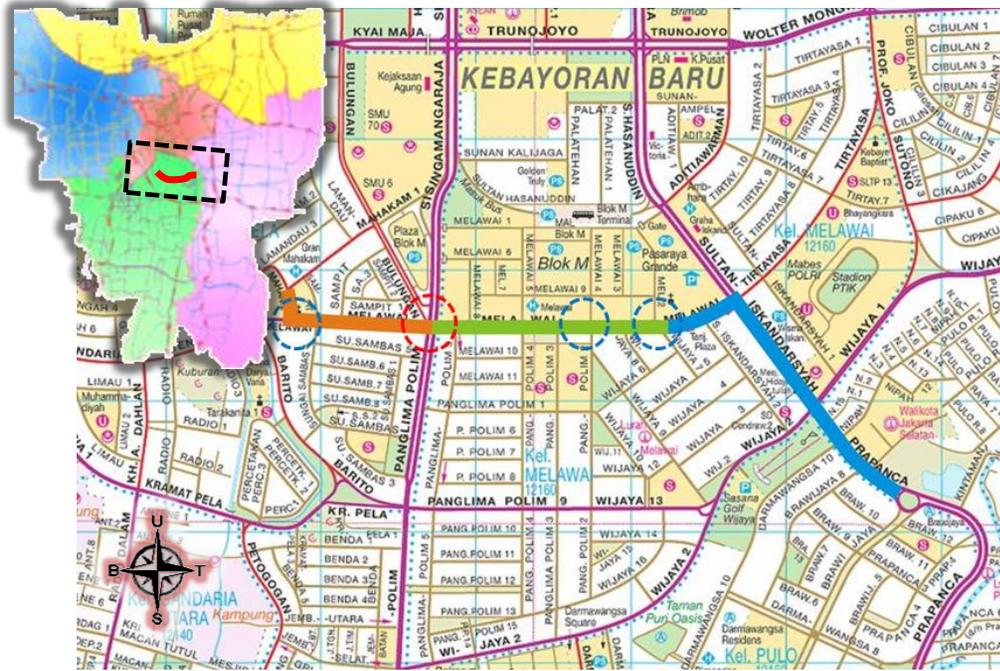
Table 4.1 Barriers encountered of bicycle infrastructure implementation

No.	Barriers encountered	Descriptions
1.	Physical barriers	<p>The compliance of five aspects, as follows:</p> <ul style="list-style-type: none"> a. Comfort aspects are convenience to be passed; the existence of of bike facilities e.g. parking, bike signs and markings; the existence of park and ride facilities in railway and/or bus stations; bike lanes have an easy access from residential to other destination e.g. school, office, shopping center; bike lanes are free from street vendors. b. Security aspect relates to the crime. c. Safety aspect are the compliance of safety aspect (e.g. less accident) and bike lanes are still mixed traffic with motor vehicles. d. Orderliness aspect refers to the existence of traffic light priority for cyclists particularly in intersection. e. Smoothness aspect relates to the bike lanes are free from traffic congestion.
2.	Non-physical barriers	<p>The compliance of five aspects, are:</p> <ul style="list-style-type: none"> a. Legal aspect is dealt with the existence of government regulation on bicycling including bicyclists' rights. b. Controlling aspect relates to the surveillance function from government official on the road about the abuse of bike lane usage. c. Promoting aspect refers to the existence of bike campaign programs conducted by government e.g. bike socialization program to citizens. d. Policy aspect regards with the policy enactment on bicycling e.g. bike free

No.	Barriers encountered	Descriptions
		day in the weekend. e. Collaboration aspects (collaboration actions among stakeholders (government institutions, NGO and public/citizens)).

Source: Author (2015)

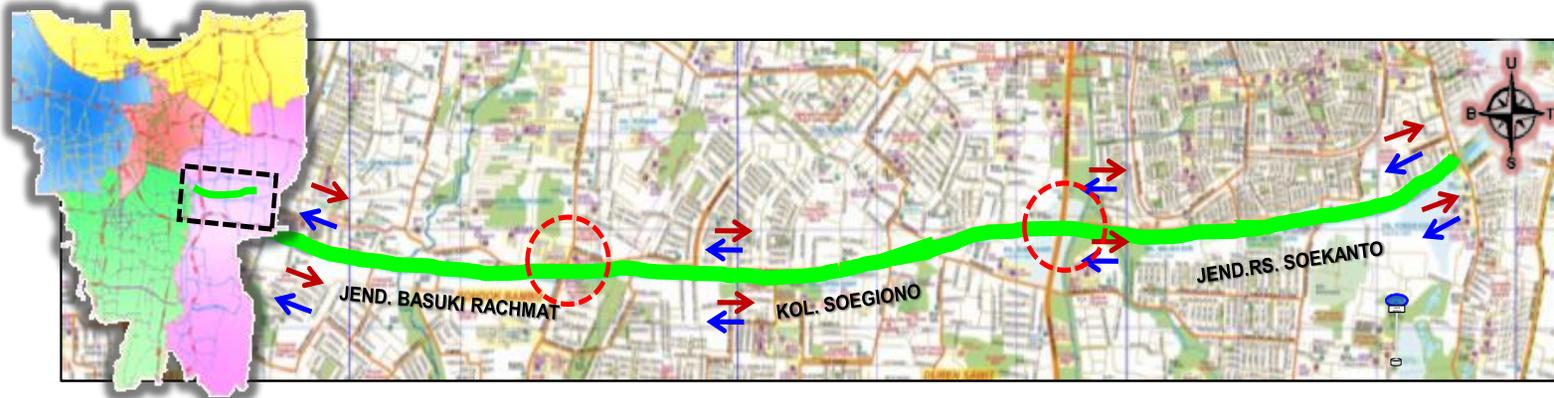
In order to ensure and check that those barriers (physical and non-physical barriers) are really impediments for the success of bicycle infrastructure implementation, the other method used to identify barriers is using inductive process (survey of public opinion) that intended to public (citizens), so barriers encountered can be known after conducting the survey and the analysis process. In relation to physical barriers, the current condition of bike infrastructure implementation in Taman Ayodya-Blok and *Banjir Kanal Timur* bike lanes can be seen in **Figure 4.1** and **Figure 4.2**.



- Track 1
- Track 2
- Next plans
- (Blok M – government office of Southern Jakarta)
- ○ Intersection
- Zebra cross
- Length of bike lane: 1.5 km



Figure 4.1 Current condition of bike lane in *Taman Ayodya – Blok M* (South Jakarta)
Source: Author (2015)



— Bike path

Track 1: Jl. Jend. Basuki Rachmat

Track 2: Jl. Kol. Soegiono

Track 3: Jl. Jend. RS. Soekanto

Length of bike path: 6.7 km

○ Intersection



Figure 4.2 Current condition of bike lane in *Banjir Kanal Timur* (East Jakarta)
Source: Author (2015)

4.1.2. Bicycle regulation and policy

The emergence of the act 32/2004 about Local Government has the impact on the local government system, in which the local government in Indonesia have fully authority to organize and develop their region. Based on that regulation, although the local government have to manage their area, it does not imply that central government cannot be allowed to collaborate in arranging the policy. It also means that the arrangement of local government regulation still has to refer to the central government regulation as a guideline. In relation to bicycle implementation, there are several regulations set by the central government as can be seen in **Table 4.2**.

Table 4.2 Bicycle regulation in national level

No.	Legislation	Description
1.	The act 22/2009 on traffic and road transport	<p>Article 62 and 63 state that government must provide the easiness for the bicyclists to traffic; bicyclists have the right to get the supporting facilities of security, safety, orderliness and smoothness in traffic.</p> <p>Article 106 states that people who drive motor vehicle on the road is obligated to prioritize pedestrian and bicyclists' safety.</p>
2.	Government regulation (PP) No.55/2012 on vehicle	Article 114 and 115 explain about the technical requirements of bicycle related to safety aspects and the availability of bike facilities.

Source: Document report (2014)

Guiding from central regulation, bicycle regulation is still part of non-motorized vehicle (NMT) that combined with vehicles drove by animal effort such as rickshaw such as rickshaw/*becak* and other variation of it, so, there is no specific regulation of bicycling arranged by central government. Besides that, in relation to the act No.22/2009 the other aspects that should be considered in bicycle implementation are security, orderliness and smoothness in traffic. Meanwhile, referring to PP No. 55/2012, the main aspect compliance that should be considered dealt with the bicycle usage on the road is safety aspect. PP No.55/2012 also mandates that local government must release the further regulations associated with types and the provision of bicycling through each local government regulation. In association to this, the presence of bike lanes in Jakarta practically have not been supported with a

specific bicycle regulation that organize the physical requirements related and the non-physical provisions associated with bicyclists' rights.

Besides the central government regulation, Jakarta's government also release some regulations as legal basis in relation to bicycle the implementation as stated in **Table 4.3**.

Table 4.3 Bicycle regulation in local level (DKI Jakarta)

No.	Legislation	Description
1.	Local government regulation No. 5/2014 on transportation	Article 42, clauses: (1) Bike lane can be integrated with infrastructure of intermodal transportation. (2) The availability of bike lane can be conducted in primary and secondary activity center, transit oriented development region (TOD) and tourism regions. (3) The supply of bike lane should concern three aspects are comfort and safety aspects for bicyclists; bike lanes do not interfere the smooth traffic; consider the accessibility for disable people.
2.	DKI Jakarta Governor decree No. 84/2004 on the arrangement of macro transportation pattern	The improvement of non-motorized transport (NMT) is included in the direction of transportation policy for revitalizing transport facilities. However, this legislation still focuses on the improvement of mass public transport (railway transport and bus rapid transit/BRT <i>Trans Jakarta</i>) as one of solutions to restrain private vehicles usage and reducing traffic congestion.

Source: Document report (2014)

According to local government regulation No.5/2014, the main distinction of this regulation compared with the act No.22/2009 (central government regulation) is in the determination of transit oriented development (TOD) concept, in which this concept have incorporated in local regulation but does not include in central regulation and it has been implemented in *Blok M* region that also integrated with *Taman Ayodya-Blok M* bike lane. However, the establishment plans and/or its development of bike lane have not been enacted by local regulations. It means that the master plan of bike lanes have not been

released and bike regulation only refers to the regulation of macro transportation pattern. In relation to this, the bicycle infrastructures implementation should be improved in the present and developed for future through involving public (citizens) in the evaluation process in order to get the inputs for arranging bike regulations.

In relation to governor decree No. 84/2004, the development of bike lanes in Jakarta are still partial policy, in which the direction of land transportation policy development still emphasizes on the improvement of mass transportation such as railway transportation and bus rapid transit (BRT) *Transjakarta* that aim to reduce traffic congestion. On the one hand, Jakarta's government have not released policy restriction on motor vehicles usage. It seems that Jakarta's government have not fully concerned to bicycle policy.

Actually, dealing with bicycle policy, Jakarta's government have enacted policy on car free day/*hari bebas kendaraan bermotor* in the weekend, in which Jakarta's people can pass a certain roads that have been determined as a specific location by using bicycle (without motor vehicles). This policy aims to encourage people in order to be interested in using bicycle without. In relation to this, there are two regulations released by Jakarta's government are governor regulation No.119/2012 on the accomplishment of motor vehicle free day; and local transportation agency decree No. 380/2012 on location, scheduling and practicing of motor vehicle free day in Jakarta, as can be seen in **Table 4.4**.

Table 4.4 The location of motor vehicle free day in Jakarta

No.	Region	Location
1.	South and central Jakarta	Jl. Sudirman – Jl. MH Thamrin (monument welcome / <i>tugu selamat datang</i> until horse statue roundabout / <i>bundaran patung kuda</i>)
2.	East Jakarta	Jl. Pemuda (ARION intersection (Jl. Pemuda – Jl. Velodrome) until Jl. Pemuda - Jl. Bekasi intersection
3.	North Jakarta	Jl. Danau Sunter Selatan (Jl. Danau Sunter Selatan-Jl. Danau Sunter Utara intersection until Jl. Danau Sunter Selatan-Jl. Danau Sunter Barat intersection)
4.	Central Jakarta	Jl. Letjend Soeprapto (Jl. Letjend Soeprapto - Jl. Ahmad Yani intersection until FO Galur)
5.	South Jakarta	Jl. Sisingamangaraja

No.	Region	Location
		monument welcome / <i>tugu selamat datang</i> until Jl. Trunojoyo - Jl. Kyai Maja (CSW)
6.	West Jakarta	The old town area of the garden sari / <i>kawasan kota tua tamansari</i> (Jl. Kali Besar Utara – Jl. Kali Besar Timur – Jl. Kali Besar Barat – Jl. Kopi – Jl. Kali Besar Timur 2 – sebagian Jl. Kali Besar Timur 3 - Jl. Kali Besar Timur 4 - Jl. Kali Besar Timur 5 – Jl. Pos Kota)

Source: Local transportation agency (2013)

4.2 Actors involved in bicycle implementation

4.2.1 Indonesia cycling committee

Indonesia cycling committee or KSI / *Komite Sepeda Indonesia* is a community based-organization (CBO) and non-profit organization that consist of bicyclists in different backgrounds such as students, workers, civil servants etc. They are interested in developing and promoting the bicycle usage in many cities of Indonesia. KSI exists in DKI Jakarta, West Java province, West Sumatera province, Central Java province and Lampung province. In Jakarta itself, one of the evidence of KSI's effort in the success of bicycle implementation is the construction of Taman Ayodya–Blok bike lane. Their participation is not only in socializing or campaigning bicycle usage, but also in funding support, in which the fund used to construct bike lane does not come from local government budget (non-APBD).

4.2.2 Jakarta's bike community

Jakarta's bike community or *Komunitas Sepeda Jakarta* is a set of citizens that shape a community. They also attempt to create Jakarta's environmentally friendly that oriented in using bicycle. The presence of bike community in Jakarta is a booster to increase of the number of bicyclists. The inauguration of the first bike lane in Taman Ayodya–Blok M induces the amount of bicyclists in Jakarta is increasing and approximately 100.000 persons (online newspaper accessed on 11 February 2015, 2011). The increasing number of bicyclists also precisely comes up the another bike communities in different region in Jakarta such as bike to work community/B2W in the eastern and northern of Jakarta namely "*robek, rosella, ranger, rogad, robin, BMX, low riders and onthel* bicycle community.

4.2.3 Institute for transport development policy

ITDP is a non-governmental organization (NGO) that exists in Indonesia, India, China, South Africa, Senegal, Ghana, Tanzania, Brazil, Mexico and Colombia. There are three main program focused by ITDP encompass the development of mass transportation oriented in high quality and less cost; the plans and advocacy that emphasize on non-motorized transport (NMT); and the reinforce of non-motorized transport industry (ITDP website accessed on 11 February 2015). Meanwhile, ITDP for Indonesia especially for Jakarta province has three programs for supporting the government's tasks are the development of bus rapid transit (BRT) namely Trans Jakarta; transport demand management for reducing traffic congestion and decrease the car usage; and the improvement of the exercise of non-motorized transport (NMT). In addition, ITDP's program aims to create environmentally friendly and to improve public transport and NMT usage.

4.3 Current regulation of public participation

The role of public participation in the exercise of land transportation mainly in traffic and road transport field, have been mandated in the act No. 22/2009 (article 256) that state public (citizens) have the right to give notions and inputs to the government either in central or local level in order to compose regulations, guidelines and technical standards. Besides that, public can address their ideas through personal/individual, groups and organization and/or institution. In order to accommodate public opinions, the derivation of the act No. 22/2009 has been published through government regulation (*PP/Peraturan Pemerintah*) No. 37/2011 on traffic and road transport forum or Forum LLAJ/*Forum Lalu Lintas dan Angkutan Jalan*.

In relation to PP 37/2011, on the one hand, forum LLAJ is important to be shaped in each local level because it emerges interaction and relationship between local and central level in decision making process. However, this regulation is lack of incorporating aspect on how the procedure for the public (citizens) and other stakeholders to convey their notions and complaint about government policy. In Jakarta city, the government have not released this regulation, consequently forum LLAJ also has not been shaped, whereas it is a legal basis set by central government and local level should follow up it. On the other hand, in local level, Jakarta's government precisely have shaped the advisory committee based on governor decree No. 460/2014, namely *Dewan Transportasi Kota Jakarta / DTKJ* or Jakarta Transportation Council as a consultation and coordination forum to accommodate public participation and another stakeholders. Nevertheless, this committee has not fully authority to make decision as the executive function. This condition becomes a dilemma, on the one hand, the legal basis published by central government has been released (forum LLAJ). On the one hand, the emergence of DTKJ is only a

formality function (written discussion by email with one of DTKJ's membership on 4 December 2014), in which due to the limitation of human resources in DTKJ's membership (only consist of 17 persons), every complaints and aspirations from Jakarta's people can only be continued to the authorized agency and/or institution related to the issues encountered such as local transportation agency, public works agency etc. In relation to this, the role of public and other stakeholders is still in level of participation "consult" or consultation people, in which public opinions and stakeholders inputs is required as the feedback and consideration aspect in decision making process (IAP2 spectrum, 2007).

4.3.1. Jakarta Transportation Council (DTKJ)

Jakarta Transportation council or DTKJ (*Dewan Transportasi Kota Jakarta*) constitutes consultation and coordination forum between citizens and local government that only exist in Jakarta city. DTKJ consists of several actors from universities, transportation experts, public transport users, NGO, businessmen of public transport, crew transport, transportation agencies and police. The task of DTKJ is to accommodate public opinions and stakeholders inputs and to provide the considerations in policy-making to Jakarta's Governor in transportation field. Additionally, DTKJ has four divisions encompass fares and financing, feasibility and safety, law and citizen's relationship, research and development divisions. As a mediator between citizens and government, DTKJ also conducts the evaluation to the accomplishment of government policy and give the inputs either asked or not by Governor in order to improve policy making.

4.3.2. Traffic and Road Transport Forum (Forum LLAJ)

The emergence of Forum LLAJ (Traffic and Road Transport Forum/*Forum Lalu Lintas dan Angkutan Jalan*) is premised on mandating the act No. 22/2009 about traffic and road transport and government regulation or PP/*Peraturan Pemerintah* No.37/2011 on forum LLAJ. Forum LLAJ is a mediator of coordination intra-government institutions on the exercise of traffic and road transport in national, regional and local level. The tasks of forum LLAJ is conducting coordination intra-government institutions that needs integrated planning and finding the solutions of traffic and road transport problems. The government institution involved in the accomplishment of traffic and road transport comprises of five sphere are transport modes; road infrastructure; industry development; technology development; registration and identification of motor vehicle and driver, law enforcement, operational management and traffic engineering and traffic education. Moreover, the discussion process in forum LLAJ is a deliberative process based on a mutual written agreement in the manuscript of agreement that signed by all of the institution membership. Thus, the agreement made is dependent upon all membership involved.

CHAPTER 5

Analysis

This chapter will elaborate five parts that dealt with the case study. First part is the analysis data related to the survey results from public (citizens) using online survey. Second part is analysis data resulted from local government (transportation agency), Jakarta Transportation Council/DTKJ and non-governmental organization/NGO (Institute for Transportation and Development Policy/ITDP) by using email. The last part is the reflection of the overall analysis results.

5.1 Analysis data using online survey to public (citizens)

The explanation on analysis data using online survey (Qualtrics application) in this part is divided into three sub-parts encompass characteristics repondents, characteristics of bike facilities and public participation concept. Additionally, data analyzed both quantitative and qualitative data is using content analysis, in which the outcome of content analysis is concepts or categories (Elo and Kyngäs, 2007). Therefore, the outcome of this analysis is the concept of public participation, in which this concept cannot only used to evaluate bicycle infrastructure implementation in the present, but also for bicycle development in the future.

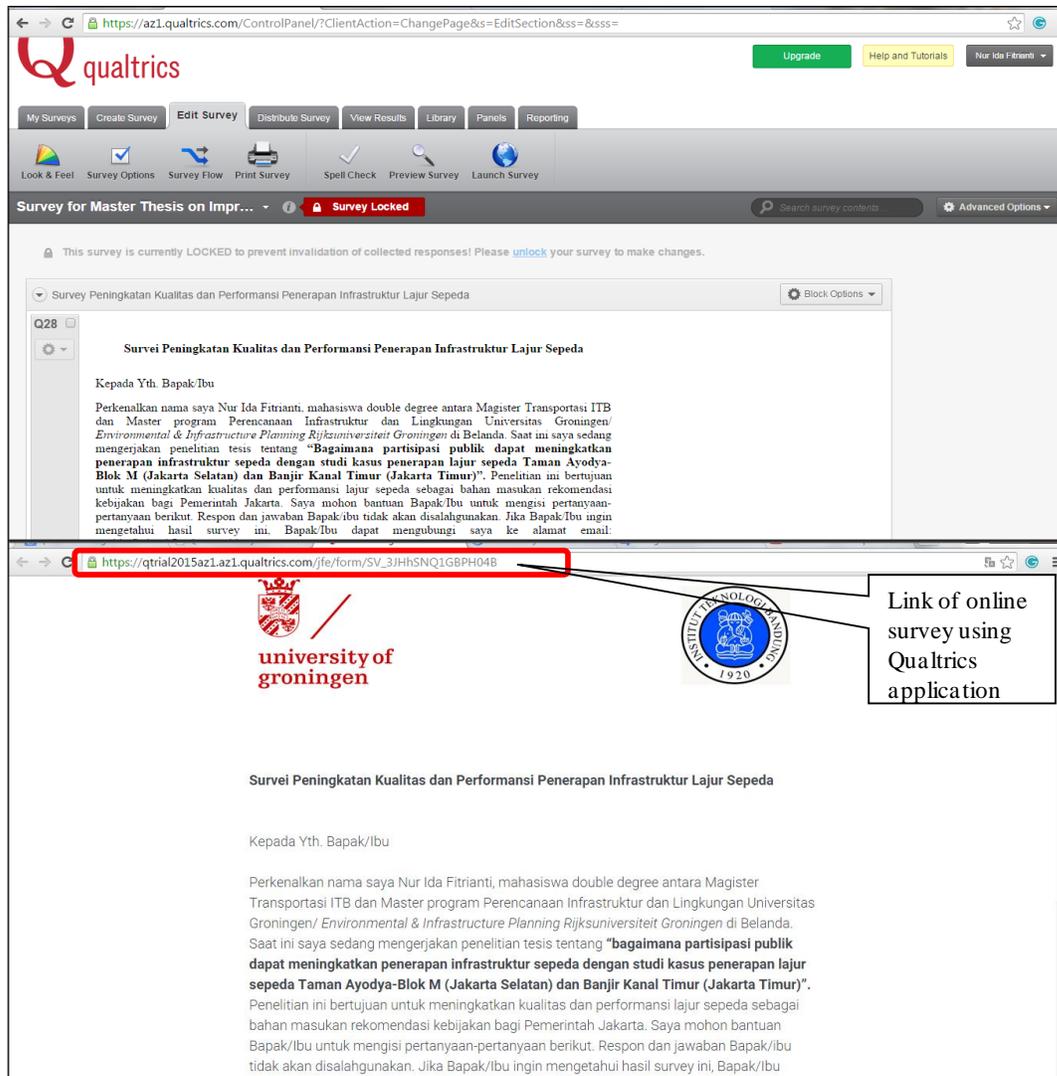


Figure 5.1 Description of online survey using Qualtrics application

5.1.1 Analysis of characteristics respondents

This part relates to characteristics respondents (citizens) that consist of gender, occupation and age. However, the explanation in more detail of this part is focused on the age side. From gender side, the dominant trend of public participation from 60 respondents is female with total 34 persons (57%) and male with total 26 persons (43%). Meanwhile, from occupation side the characteristics respondents is dominated by government employees (38%); 37% private employees; 15% students; 8% (teacher, nurse and house wife); and 2% entrepreneur (*wiraswasta*). Furthermore, in term of age, the author categorizes the age variation into six ranges that refer to Ministry of Health of Indonesia as can be seen in table 5.1 below.

Table 5.1 Range age

No.	Age range (years old)	Age categorization
1.	0 - 5	Toddler
2.	5 - 11	Kiddy
3.	12 - 25	Teenager
4.	26 - 45	Adult
5.	46 - 65	Elderly
6.	More than 65	Old

Source: Ministry of health of Indonesia (2009)

Characteristics of respondents age (citizens) is dominated by adult (67%) and from elderly (3%) followed by teenager (30%). The range age deals with trip destination and intensity of bike use of each respondents. From the analysis result of trip destination related to age range show that the existence of bike lane is dominant to be used for exercise in the weekend with short distance (57%) in their residential area; 22% for social activities and 13% for shopping. It means that the interest of citizens particularly adults to use bike is only dominant for exercise in the weekend with their family, not to use bike to school (2%) and/or office (7%). In view of the tendency of this results, it reflects that the provide of bike lanes have to be started in residential area and the promoting action can also be began in there through persuasive approach to citizens in order to embed their interest to use bike in other their daily activity that means bike usage is not only for exercise (short distance), but also for working, schools etc. (long distance that might be integrated with public transport). Furthermore, the provide of bike lane in one area in Jakarta will be adjusted to characteristics of trip destination and the land use tipe (residential area, office, school, business centre) on design of bike infrastructure facilities either mixed or separated bike lanes. Thus, the construction of bike lane can be efficient and effective, particularly in term of providing budget or funds and the benefits accepted by Jakarta's people.

Table 5.2 Characteristics respondents based on age range and trip destination

No.	Age range (years old)	Trip destination				
		School	Office	Shopping	Social activities	Others (exercise)
1.	12-25 (teenager)	0	0	3	7	8
2.	26-45 (adult)	1	3	5	6	25
3.	46-65 (elderly)	0	1	0	0	1
Total		1 (2%)	4 (7%)	8 (13%)	13 (22%)	34 (57%)

Source: Analysis (2015)

On the other hand, from the intensity of bike use, citizens is only using bike for once per week (52%) and followed by 27% citizens is never using bike in Jakarta in their daily activities (27%). This condition shows that citizens interest on using bike lane is still less, especially for teenagers in junior and senior high school that they are often using motorcycle to trip particularly to school and even to trip for short distance (social activities). It relates to the lack of socialization on cycling culture amongst teenagers particularly from primary school, junior and senior high school, in which they are often use motorcycle to school because their parents are allowed to bring motorcycle to school, although they have not had driving license (online newspaper, 2011).

Table 5.3 Intensity of bike use based on age range

No.	Intensity of bike use/age range	12-25 (teenager)	26-45 (adult)	46-65 (elderly)	Total	%
1.	Once per week	10	20	1	31	52%
2.	Twice per week	1	6	0	7	12%
3.	Three times per week	1	1	1	3	5%
4.	Four times per week	0	0	0	0	0%
5.	More than four times per week	1	2	0	3	5%
6.	Never use bike	5	11	0	16	27%

Source: Analysis (2015)

5.1.2 Analysis of characteristics of bike facilities

This section will elaborate about analysis of characteristics of bike facilities that interpreted by identifying barriers encountered both physical and non-physical barriers on bike infrastructure implementation. Previously in chapter 4 (case context), identifying barriers have been conducted through deductive (from theoretical background to observations) and inductive process (from observations/survey to theoretical background) as Tan et.al (2014) stated. In relation to this, the aims of asking public with the question on barriers encountered is to check and to ensure that barriers identified from deductive process are in line with the current condition of bike infrastructure implementation (inductive process). Besides that, according to the analysis result, physical barriers have been categorized into five aspects are comfort, security, safety, orderliness and smoothness, while non-physical barriers are also classified into five aspects encompass legal, controlling, promoting, policy and collaboration aspects. Moreover, the type of answering the questions of identifying barriers encountered is using likert scale from 1 (strongly disagree) until 5 (strongly agree) that interpret the public statements (Table 5.4).

Table 5.4 Physical and non-physical barriers of bike infrastructure implementation (likert scale)

No.	Categorization of barriers	Description	Strongly disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly agree (5)
PHYSICAL BARRIERS							
1.	Comfort	Convenience to be passed.	14 23%	32 53%	8 13%	4 7%	2 3%
		The existence of bike facilities (e.g. parking, bike signs and markings).	2 3%	19 32%	15 25%	20 33%	4 7%
		The existence of park & ride facilities (e.g. railway & bus stations).	2 3%	16 27%	9 15%	27 45%	6 10%
		Bike lanes have an easy access from residential to other destinations (e.g. school, office, shopping center).	2 3%	19 32%	11 18%	25 42%	3 5%
		Bike lanes is free from street vendors.	16 27%	35 58%	6 10%	2 3%	1 2%
2.	Security	Security aspect compliance (e.g. less crime).	8 13%	23 38%	16 27%	8 13%	5 8%
3.	Safety	Safety aspect compliance (e.g. less accident).	11 18%	27 45%	8 13%	9 15%	5 8%
		Bike lanes are still mixed traffic with motor vehicles	3 5%	8 13%	3 5%	20 33%	26 43%
4.	Orderliness	The existence of traffic light priority for cyclists particularly in intersection.	12 20%	34 57%	10 17%	1 2%	3 5%
5.	Smoothness	Bike lanes are free from traffic congestion.	15 25%	28 47%	8 13%	6 10%	3 5%

No.	Categorization of barriers	Description	Strongly disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly agree (5)
NON-PHYSICAL BARRIERS							
1.	Legal	The existence of government regulation on bicycling (including bicyclists' rights).	9 15%	32 53%	13 22%	4 7%	2 3%
2.	Controlling	Lack of surveillance function from government official on the road about the abuse of bike lane usage.	2 3%	2 3%	3 5%	32 53%	21 35%
3.	Promoting	The existence of bike campaign programs conducted by government (e.g. bike socialization program to citizens).	12 20%	30 50%	11 18%	5 8%	2 3%
4.	Policy	The policy enactment on bicycling (e.g. bike free day in the weekend).	1 2%	2 3%	7 12%	27 45%	23 38%
5.	Collaboration	Collaboration actions among stakeholders (government institutions, NGO and public/citizens).	15 25%	26 43%	14 23%	4 7%	1 2%

Source: Analysis (2015)

Table 5.5 The descriptions of physical barriers on bike infrastructure implementation in Jakarta

No.	Categorization of barriers	Descriptions	Explanations
1.	Comfort	Convenience to be passed	53% public state disagree which the bike lanes are not convenience to be passed because of the presence of barriers such as street vendors and on-street parking (car, motorcycle, <i>bajaj</i>).
		The existence of bike facilities (e.g. parking, bike signs and markings)	33% public state agree to the presence of bike facilities and 32% public state disagree . Actually, the current bike facilities is still worthed such as in Taman-Ayodya-Blok M, but in Banjir Kanal Timur its facilities is still less on bike signs and markings.
		The existence of park & ride facilities (e.g. railway & bus stations)	45% public state agree on the presence of park and ride facilities, particularly in Taman Ayodya-Blok M. This route, basically, leads to the concept Transit Oriented Development/TOD integrated with Blok M-Kota bus station (Transjakarta/BRT and other public transports such as <i>kopaja</i> , <i>metromini</i>) to business centre district/CBD in central Jakarta. However, this facilities have not been integrated with other Transjakarta corridors (total corridors is 15) and even with railway stations. Hence, the development of NMT must also be integrated with railway station. Additinally, 27% public state disagree because in Banjir Kanal Timur bike lane has not had park and ride facilities.
		Bike lanes have an easy access from residential to other destinations (e.g. school, office, shopping	42% public state agree the bike lane have a good access and 33% public state disagree . In relation to agree statement, an easy access is found in Taman-Ayodya-Blok M because there is integration between transportation and lands use (spatial planning), in which people who live adjacent to bus station have a good

No.	Categorization of barriers	Descriptions	Explanations
		center)	accessibility, especially in term of travel time (time savings) that they can trip through bicycling and walking, then they can go using public transport. On the other hand, dealt with disagree statement, an easy access is not there in Banjir Kanal Timur, in which this bike lane has a high traffic that connect between East Jakarta and Bekasi municipality and it might not to get a good access like in Taman Ayodya-Blok M route. Thus, the design (separated or mixed-traffic bike lanes) and the determination of function (bike to work/school, exercise etc) need to adjust the characteristics of traffic in both area.
		Bike lanes is free from street vendors	58% public state disagree and 27% state strongly disagree . The emergence of street vendors is often dealt with trigger factor that it relates to the presence of activities in an area dominated by people who require foods, advertisement etc, mainly in Banjir Kanal Timur. Nevertheless, this activity become a barriers for people who really want to use bike lane as exercise and the presence of street vendors is impediments for them. Thus, it needs controlling function and sterilization of bike lanes.
2.	Security	Security aspect compliance (e.g. less crime)	65% public state neutral on this statement. It has not become a special attention because the usage of bike lanes is not as routine activity which people will often use bike for their daily activities, even until night.
3.	Safety	Safety aspect compliance (e.g. less accident)	45% public state disagree and 18% public also state strongly disagree against the compliance of safety aspect due to the bike lanes are still mixed-traffic with motorcycle, in which motorcyclists have not concerned to bicyclists' safety and

No.	Categorization of barriers	Descriptions	Explanations
			their awareness is less to prioritize bicyclists to pass first on the road.
		Bike lanes are still mixed traffic with motor vehicles	43% public state strongly agree and 33% state agree . This statement also relates to the safety aspect which design bike lanes are adjacent to motor vehicles, particularli in Taman Ayodya-Blok M. Some public suggest that the design of bike lanes should be lessons learned to Groningen (the netherlands) in term of the sequence designated roads (e.g. motor vehicle, car parkings, bike lane, pedestrian, type of land use/spatial).
4.	Orderliness	The existence of traffic light priority for cyclists particularly in intersection	65% public state disagree and 28% public state strongly disagree because in the real field there is no bike lane traffic light priority in intersection in Jakarta, in which bicyclists can pass on road coincided with other motor vehicles.
5.	Smoothness	Bike lanes are free from traffic congestion	47% public state disagree and 30% public state strongly agree against this stetement due to daily phenomenon in Jakarta is traffic congestion dominated by motorcycles.

Source: Analysis (2015)

Table 5.6 The description of non-physical barriers of bike infrastructure implementation in Jakarta

No.	Categorization of barriers	Descriptions	Explanations
1.	Legal	The existence of government regulation on bicycling (including bicyclists' rights)	53% public state agree that means most of people know the existence of bike regulation and 22% state neutral that means they know the presence of bike regulation but it is not well-informed to public due to there is no socialization to public. So, it is important to improve the promoting or campaigning of bike regulation, not only for bicyclists, but also for all road users in order to improve the awareness of road users on their rights on the road, particularly to build the awareness on providing the priority for bicyclists.
2.	Controlling	Lack of surveillance function from government official on the road about the abuse of bike lane usage	53% public state agree and 35% public state strongly agree against this statement. Regarding with the current condition in the real field, the role of government official, particularly police on the road do not aware about the abuse of bike lane by the indiscipliner road users (e.g. motorcyclists) who still use bike lane, mainly in Taman Ayodya-Blok M route. It is also induced because of the absence of collaboration among government institution (transportation agency and police), especially in campaigning bike regulation for all road users.
3.	Promoting	The existence of bike campaign programs conducted by government (e.g. bike socialization program to citizens)	50% public state disagree and 20% public state strongly disagree because bike socialization program is still less to encourage people to use bike. It also relates to the current condition of both bike lanes infrastructure, so people is still more interested in using motorcycle than bicycle. Additionally, the absence of government policy in line with the bike campaign programs to citizens(e.g. policy on the motor vehicles usage restriction based on specific area and a specific time), become an obstacle to attract people to use bike in their daily activities.

No.	Categorization of barriers	Descriptions	Explanations
4.	Policy	The policy enactment on bicycling (e.g. bike free day in the weekend)	45% public state agree and 42% public state strongly agree of the enactment of bike day. Actually, the policy enactment on bike implementation is only car free day in a certain road in Jakarta particularly for weekend. Hence, the bike day is one of driving forces to build the public interest to use bike, in which this policy can be enacted, not only for weekend and corridors, but also for weekday, certain area in Jakarta and certain time (peak hour and off-peak hour).
5.	Collaboration	Collaboration actions among stakeholders (government institutions, NGO and public/citizens)	43% public state agree and 25% public state strongly agree. It means that the collaboration among stakeholders is still less and it have to be improved in order to improve the bike infrastructure implementation, in which in doing so, the needs of collaborative and participatory approach is very important, particularly in term of funding support.

Source: Analysis (2015)

5.1.3 Analysis of public participation concept

This section will explain about the analysis of public participation concept. Type of questions on this consists of two parts, first is yes and no questions, then followed by the choice question associated with the current method and procedure of public participation (in the present) and an appropriate method and procedure of participation (for future). Additionally, the analysis used in this parts is an inductive content analysis and descriptive analysis.

In relation to yes and no questions, the analysis results show, first is that most of public (citizens) have not been involved by Jakarta's government in giving the inputs on the bike infrastructure implementation (98%). It means that public (citizens) have an active role in decision making process as public representatives (e.g. transportation expert, practitioners etc.). Second is that public need to be involved in the evaluation of bike implementation (95%). Third is that public participation method (75%) and procedure of participation (87%) in the present on giving the inputs of bike implementation are not there either direct or indirect participation, in which public complaints and opinions on the government policy is tackled by local transportation agency. Fourth is that 73% public state that they do not know about the existence of DTKJ as coordination and consultation forum to address public opinions on transportation field. It becomes an impediments for public to contribute to the government policy (in transportation field) in improving bike infrastructure. In addition, procedure for public is not there.

Table 5.7 Analysis of public participation procedure

No.	Public participation procedure	Total (%)	Descriptions
1.	Direct participation	48 (80%)	<p>48% public choose to be involve in evaluating bike infrastructure implementation without public representative or direct participation, such as through government website and citizen's blog. This procedure is considered effective in accommodating the public opinions. 12% public prefer to be involves in the evaluation process of bike lane implementation through local transportation agency as government institution. However, only 8% public state to participate in the evaluation process through DTKJ. The emergence of DTKJ has not well-informed to public (citizens) as the</p>
2.	Indirect participation		
a.	Through Jakarta Transportation Council / DTKJ	5 (8%)	
b.	Through Forum LLAJ	0 (0%)	
c.	Through local transportation agency	7 (12%)	
d.	Other procedure	0 (0%)	

No.	Public participation procedure	Total (%)	Descriptions
			coordination and consultation forum to convey the public opinions in transportation field (73%).

Source: Analysis (2015)

According to **Table 5.7**, actually, public do not ever be involved by Jakarta's government to evaluate directly bike infrastructure implementation, in which public participation procedure in the present is still using indirect participation through public representatives, such as transportation expert, practitioners and academics who understand about transportation, particularly non-motorized transport (bicycling). In addition, public are involved in public dialogue/public meetings, workshop and focus group (FGD) which their inputs can be considered in decision-making. Besides that, in corresponds to the survey results, direct participation is important and indirect participation is also required to improve bike infrastructure implementation. Thus, combining both methods will result a better ways to get a better inputs from citizens. Therefore, the role of public participation can be maximized to achieve a well-decision making that leads to public-based policy rather than government-based policy.

Table 5.8 Public participation method in the present

No.	Category of participation	Type of participation (Present)	Total
1.	Inform	Public comment	8 (13%)
		Focus group	6 (10%)
		Surveys	2 (3%)
		Public meetings	15 (25%)
2.	Consult	Fact sheets	0 (0%)
		Web sites	16 (27%)
		Open houses	0 (0%)
3.	Involve	Workshops	5 (8%)
		Deliberative polling	0 (0%)
4.	Collaborate	Citizen advisory committees	8 (13%)
		Consensus building	0 (0%)
		Participatory decision-making	0 (0%)
5.	Empower	Citizen juries	0 (0%)
		Ballots	0 (0%)
		Delegated decision	0 (0%)

Source: Analysis (2015)

According to **Table 5.8**, involving public (citizens) in the present is still in inform level through public meetings (25%) and public comment (13%) and citizen advisory committee (13%) through Jakarta Transportation Council/DTKJ (public representative) and in consult level through web sites (27%). In relation to this result, public participation method that public chosen is not dealt with their involvement in evaluating the bike infrastructure implementation. It also means that public ever be involved by Jakarta's government in contributing to give the inputs, however not in the context of conducting the evaluation of bike implementation. As evidence is that the result of previous answer state that 98% public are not ever be involved by Jakarta's government to evaluate the bike infrastructure implementation. Nevertheless, this results show that public participation method in the present is still in inform level which public participation aims to provide objective information in order to help them in understanding the problems, alternatives and solutions and in consult level that the goal of public participation is to get the feedback about the alternatives and/or decision (IAP2, 2007).

In association to public participation method for future (**Table 5.9**), public are allowed to answer the method more than one answer, so the analysis used is only from the total of their choice or intended participation, then its results are ranked. The result shows that in inform level public choose public participation of public comment (47 persons); in consult level, public (citizens) prefer to be involved using websites (56 persons) as the first choice, in which it relates to direct participation procedure through government website and/or citizen's blog (48%); in involve level, workshop (31 persons) is more effective than deliberative polling (10 persons); in collaborate level, public choose citizen advisory committee as an effective participation method which relates to the function of council and/or coordination forum (e.g. Jakarta Transportation Council/DTKJ, Traffic and Road Transport Forum/*Forum LLAJ*) and in empower level, public prefer to choose delegated decision as participation method for future.

Table 5.9 Public participation method for future

No.	Category of participation	Type of Participation (Future)	Total (persons)	Ranking
1.	Inform	Public comment	47	3
		Focus group	26	11
		Surveys	43	4
		Public meetings	26	12
2.	Consult	Fact sheets	50	2
		Web sites	56	1
		Open houses	21	15
3.	Involve	Workshops	31	7

No.	Category of participation	Type of Participation (Future)	Total (persons)	Ranking
		Deliberative polling	27	10
4.	Collaborate	Citizen advisory committees	35	5
		Consensus building	23	13
		Participatory decision-making	30	8
5.	Empower	Citizen juries	22	14
		Ballots	28	9
		Delegated decision	33	6

Source: Analysis (2015)

5.1.4 Analysis of suggestions to be improved

This part will explain the analysis of suggestions resulted from the survey which they have been categorized into six aspects are the improvement of infrastructure facilities, controlling, promoting, legal, policy and collaboration aspects. This results can be seen in **Table 5.10**.

Table 5.10 Suggestions for improving bike infrastructure implementation

No.	Categorization of suggestions	Suggestion to be improved
1.	Improving Infrastructure facilities	Add and provide bike parkings in the office, shopping centre and other business centre.
		Improve the design of bike infrastructure such as separated-traffic bike lane, bike lane are not merged with car park particularly on-street parking (benchamrking with Groningen).
		Increasing the multitude of bike signs and markings on the road such as "bike zone" to inform the other road users to prioritize bicyclists.
		Provide traffic light priority for bicyclists in intersection.
		Add the bike network and accessibility.
		Evaluate bike infrastructure regularly to improve comfort, security and safety aspects for citizens.
2.	Controlling	Conducting an assertive action for indiscipliner of bike lane (e.g. giving punishment and/or sanctions).
		Sterilization bike lanes from street vendors and car/motorcycle parkings with increase the number of government official on the road.

No.	Categorization of suggestions	Suggestion to be improved
3.	Promoting	<p>Improving citizens awareness to participate in maintaining bike lanes through persuasive approach.</p> <p>Socialization of bike regulation, bike usage (e.g. bike day) and bike safety to improve citizens awareness through participatory approach (e.g. involving Jakarta's bike community).</p> <p>Conducting an educative program through campaigning to schools particularly in elementary/primary school (early age) and incorporating lessons on the procedure of traffic on the road to build the childrens' awareness (e.g. bike culture to prioritize bicyclists on the road).</p> <p>Making an innovative design of bike to be more attractive and improving the potential of marketing.</p>
4.	Legal	<p>Arrange a new strict regulation on bicycling that consist of providing the priority in intersection, bicyclists rights on the road and the enactment of sanction or punishment for people who abuse bike lane.</p>
5.	Policy	<p>Pull and push policy for bicycling that means the policy enactment have to balace between encouraging people to be more interested in using bike and take other policy to support the current policy on bicycling. Push policy relates to bike day, car free day based on area (not in corridors), marketing policy (e.g. giving an incentive) for companies who contribute for the success of bike implementation. Additionally, pull policy is intended to other road users, such as the motor vehicles usage restriction policy to reduce the trends of motorcycle usage for short distance trip (only use bike).</p> <p>Policy enactment have to be adjusted to the function of providing bike lane (e.g. Only for recreation, short distance trip, for working, for schooling etc.).</p>
6.	Collaboration	<p>Making collaboration with private sector and other parties through CSR (corporate social responsibility) in order to improve public interest (collaboration in promoting and campaigning) and to improve bike infrastructure itself particularly for funding support.</p>

Source: Analysis (2015)

5.2 Analysis data using email to stakeholders

This section will explain implicitly about an overview of data collected from email intended to local transportation agency, NGO (Institute for Transport Development Policy/ITDP) and Jakarta Transportation Council/DTKJ. The aims of this analysis is to know opinions and perspectives of each stakeholders and public (citizens) on an appropriate participation procedure for future from public and stakeholders; bike programs in the present and for future from NGO and DTKJ; and plans and policy in the present and for future from transportation agency. In relation to this, the analysis data can be seen in the following table.

Table 5.11 An overview of analysis data using online survey and email

No.	Descriptions	Stakeholders			
		Public/citizens	Local Government (Transportation Agency)	Jakarta Transportation Council / DTKJ	NGO (Institute for Transportation and Development Polic)
1.	Appropriate participation procedure for future through involving public and stakeholders	Direct participation through website (citizen's blog) and public comment	Direct participation through website namely Public Opinion Response System or Sistem Respon Opini Publik (ROP) in social media such as twitter, facebook or email.	Direct participation through social media.	Direct participation without public representatives.
		Indirect participation through Jakarta Transportation Council/Dewan Transportasi Kota Jakarta/DTKJ	Indirect participation through Jakarta Transportation Council or Dewan Transportasi Kota Jakarta/DTKJ and Forum LLAJ (the regulation of Forum LLAJ has not been assigned by Jakarta's Governor); Development planning meetings namely Musrenbang / <i>Musyawah Perencanaan Pembangunan</i> in sub-district level.	Indirect participation through Jakarta Transportation Council/DTKJ and Forum LLAJ.	Not through indirect participation.
2.	Programs in the present and future			Public dialogue on reviewing NMT system.	Bike sharing programs
3.	Planning and policy		<u>Planning</u> : Review of bike lane points.		

No.	Descriptions	Stakeholders			
		Public/citizens	Local Government (Transportation Agency)	Jakarta Transportation Council / DTKJ	NGO (Institute for Transportation and Development Polic)
	in the present	<u>Policy:</u> Car free day in weekend	<u>Policy:</u> Revise Transport Master Plan (Rencana Induk Transportasi) instead of Macro Transportation Pattern or <i>Pola Transportasi Makro</i> / PTM that include the exercise of bike lane implementation in Jakarta; the accomplishment of car free day.		
4.	Planning and policy for future		<u>Planning:</u> Improve the physical construction of bike lanes; Socialization of bike lanes construction in residential area; develop budget for bike lane construction in fiscal year.		
		<u>Policy:</u> Bike day in weekday based on a certain area and time; socialization of bike regulation (safety campaign) through participatory approach.	<u>Policy:</u> Arrange draft of governor regulation on bicycling as derivation of government regulation No.5/2014 about transportation.		

Source: Analysis (2015)

5.3 Reflection of analysis results

According to the analysis data using online survey that reflected by characteristics respondent, the aims of bike lanes usage do not to fulfill daily activities (school, office, shopping and social activity). It means that the public interest to use bicycle in order to support daily activities is still low, in which the existence of bike lanes is a supportive activities, such as exercise, refreshing or family time in the weekend. It also can be seen from the intensity of bike use that public (citizens) use bicycle only once per week (52%) which dominated by adult (26-45). Besides that, dealt with the characteristics of bike facilities that interpreted by the existence of barriers encountered, safety aspects (bike lanes are still mixed-traffic with motor vehicles) become the main concern of bike infrastructure implementation followed by comfort aspect (inconvenience to be passed is 53%). It reflects on the presence of street vendors (58%) in *Taman Ayodya-Blok M* and *Banjir Kanal Timur* bikes lane that induces dissatisfaction for public, so their interest to uses bicycle is low. In relation to the compliance of safety aspect, actually, relates to lack of controlling function (non-physical barriers) from government officials (53%), in which the punishment of the abuse of bike lanes usage on the road is still a discourse that has not been implemented on its sanctions because of the shortcomings of shadow of law and a strict policy enactment on cycling.

In association to the analysis data using email intended to stakeholders (local transportation agency, Jakarta Transportation Council/DTKJ and NGO) which interpreted by the analysis of public participation concept, direct participation without public representatives can be conducted in tandem with indirect participation through public representatives. Direct participation is intended to public (citizens) through website (social media e.g. Facebook, twitter, Instagram etc.) and public comment (e.g. citizen's blogs), in which this method is effective and efficient to accommodate public opinions in term of time and cost, so the needs of direct public meetings is not required with the consideration of number of public (citizens). Meanwhile, indirect participation is also needed to gain the inputs from intra and inter government institutions such as transportation agency, education agency, public works agency and another agencies; and from non-governmental organization/NGO and private sectors, in which it can be done through citizens advisory committee. The procedure of indirect participation for government institutions can be addressed through Traffic and Road Transport Forum (Forum LLAJ/*Forum Lalu Lintas dan Angkutan Jalan*), whilst the participation procedure for non-government institutions can be conveyed through Jakarta Transportation Council (DTKJ/*Dewan Transportasi Kota Jakarta*). In doing so, the shadow of law, the clarity of each actors' tasks and socialization to public (citizens) about the presence of public participation procedure are also required to support the plans, programs and policies in

transportation field that lead to public-based policy. The concept of public participation can be depicted in **Figure 5.2**.

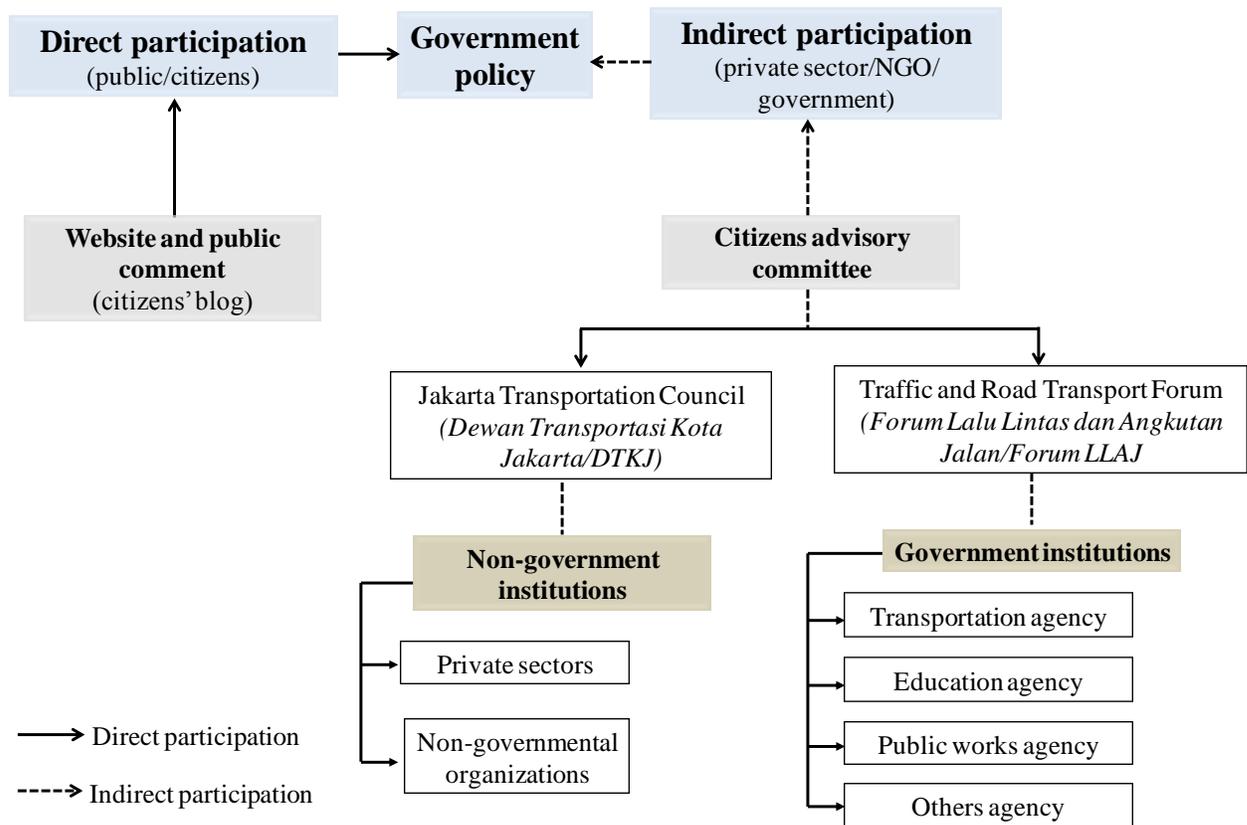


Figure 5.2 Public participation concept

Besides the concept of public participation, another the analysis result is about the program, planning and policy in the present and future. Programs undertaken on cycling through involving public participation is making public dialogue to review the exercise of non-motorized transport system (NMT) in the real field. This way is one of the ways to get the inputs from public representatives. Practically, bike sharing programs is also conducted as the ways to encourage people to use bicycle particularly in city centre. Besides that, this program is only carried out in a certain areas, in which it only includes in the ITDP program. Regarding with planning and policy in the present, an important things that have been conducting are the review of the existing bike lane points and the arrangement of transport master plan which bike planning is also in there. Moreover, planning and policy for future relate to the improvement of bicycle infrastructure, socialization (cycling campaign), getting funding support and the arrangement of regulation on cycling. This means that the programs, planning and policy on cycling that have been conducting, have not been integrated each

other, for example bike programs that have been done by stakeholder is not in line with government's plans and its policy. That's why, bicycle implementation has not been successfully executed.

CHAPTER 6

Conclusions and Recommendations

This research explains the concept of public participation in association to evaluate bicycle infrastructure implementation. Using the empirical study of the case of *Taman Ayodya-Blok M* and *Banjir Kanal Timur* bike lanes in Jakarta, this research confirms the role of public participation in the evaluation and decision making process of bicycle infrastructure implementation. Next to this, Jakarta's government have the plans related to the development of bike lane that is embodied in regulation No. 84/2004 on macro transportation pattern, in which the plans of bicycling is in there. Additionally, dealt with policy enactment on cycling, car free day policy that have been implemented in the weekend is the stimulant to improve the bike usage. On the one hand, Jakarta's government have also released the local government regulation No. 5/2014 about transportation which also include implicitly the provisions of bike lane to support the regulation No. 84/2004. On the other hand, Jakarta's government have not been published the governor regulation as the derivation of government regulation No. 5/2014 that specifically guides the cycling. In response to this, this research attempts to provide policy recommendations to Jakarta's government in arranging governor regulation on cycling through involving public (citizens), local government (transportation agency), Jakarta transportation council (DTKJ) and NGO (ITDP), in which they are asked to give the inputs and suggestions in the evaluation process of bicycle infrastructure implementation. Thus, their inputs can be used as the policy considerations to improve the performance of bicycle infrastructure implementation in the side of physical and non-physical aspects.

In this final chapter, the first sub section will provide the conclusions in relation to the overall analysis results and answer the research questions that have been mentioned in the previous chapters. Subsequently, key findings of the research will also be given. Furthermore, several policy recommendations in relation to the improvement of bicycle infrastructure implementation will be elaborated and finally the further research will be elucidated as the last part of this research.

6.1. Conclusions

Conclusions drawn in this research corresponds to answer the research questions which the main research questions is on how public participation can improve bicycle infrastructure implementation, then this is followed by the sub research questions that comprise of three questions, those are: 1) How is bicycle infrastructure implementation? and what are barriers encountered of implementing bicycle infrastructure?; 2) What is the role of public participation in the evaluation and decision making process

of implementing bicycle infrastructure? and how is the concept of public participation in improving bicycle infrastructure implementation?; 3) How can the evaluation and decision making process of bicycle infrastructure implementation be improved?. In relation to those questions, I try to make some notes as the conclusions that linked to the analysis data resulted, are:

- 1.) Public can improve bicycle infrastructure implementation through the evaluation and decision making process, which this way will come up public opinions as the the inputs for government in the arrangement of cycling policy. In addition, evaluation conducted encompass ex-ante and ex-post evaluation. Ex-ante evaluation is conducted before policy implementation (Nijkamp et.al.,1990) through involving public (citizens) and stakeholders. It means that evaluation employed encompasses reviewing the plans, programs and policy on cycling that would be implemented. As the results of reviewing them will produce suggestions in composing laws, regulations and policies, particularly in arranging governor regulation as the derivation of local government regulation No. 5/2014 on transportation. Meanwhile, ex-post evaluation is employed after policy implementation (Nijkamp et.al.,1990), in which this evaluation should be conducted regularly to ensure that the objectives and the outcome of plans, programs and policies undertaken can be achieved. This evaluation refers to the identifying barriers encountered of bike infrastructure implementation. Furthermore, the evaluation both ex-ante and ex-post can be used as a learning process to gain knowledge from different perceptions of each actors (government, citizens and stakeholders).
- 2.) The current bike infrastructure implementation is still constrained by several barriers that impact on the success of bike implementation in the future. There are two kinds of barriers encountered encompass physical and non-physical barriers. Physical barriers corresponds to comfort, security, safety, orderliness and smoothness aspects. From comfort aspect, the existing bike lanes are not convenience to be passed because of the emergence of street vendors and on-street parkings, whilst in the side of the compliance of safety and security aspects, the presence of bike lanes have not sufficiently complied those aspects because bike lanes are still mixed-traffic with motorcycles. This condition is also caused by the absence of traffic light priority (orderliness aspect compliance) and traffic congestion (smoothness aspect compliance). In relation to non-physical barriers, there are five barriers encountered encompass legal, controlling, promoting, policy and collaboration aspects. From the side of legal aspect, the absence of regulation on cycling becomes the main hinder of bike implementation as a whole which it impacts on another aspects. The current regulation on cycling is only implicitly explained in macro transportation pattern as a guidelines to conduct transportation planning. Additionally, the absence of cycling regulation induces a weak collaboration between government, citizens and stakeholders in arranging the regulation that is also impacts on a partial

policy enactment. Actually, the current cycling policy is only enacted in a certain roads and only in the weekend. Moreover, it comes up a lack of controlling function from government official to drop witnesses for indiscipline road users who abuse bike lanes. Furthermore, it obstructs promoting activities due to the lack of collaboration between government, stakeholders and public (citizens). Thus, physical and non-physical barriers should be eliminated through involving public and all stakeholders in the evaluation and decision making process.

- 3.) The role of public participation in the evaluation and decision making process can be as informed people and consultation people, in which they can participate in planning evaluation and its implementation (Roberts, 2007) either through direct or indirect participation interpreted by the concept of public participation (**Figure 5.2**). Besides that, regarding with theory of public participation concept as Arnstein (1969) stated “ladder participation”, typology of public participation in evaluating bike infrastructure implementation is in consultation rungs (tokenism), in which the role of public in decision making process is a symbolic to embody the equity principles. This can be seen with the presence of indirect participation through public representatives (e.g. transportation experts, practitioners, academics) which public opinions from government and non-government institutions can be addressed to Jakarta Transportation Council/*DTKJ* and traffic and road transport Forum/*Forum LLAJ* using public dialogue, workshop and FGD. Moreover, according to Rowe and Frewer (2005), the position of public participation based on typologies of public engagement (**Figure 2.1**) related to the flow of information that is in public consultation characterized by one-way communication from public representatives to government as policy maker and vice versa. Meanwhile, dealt with IAP2 spectrum of public participation (**Figure 2.3**), the role of public in the evaluation of bike infrastructure implementation is in ‘inform level’(websites or social media) and ‘consult level’ (public comment or citizen's blog), in which the goal of public participation is to inform and to give an understanding to public (citizens) about problems, alternatives and solutions; and to gain the feedbacks from them. Furthermore, based on the analysis results public only know that their complaints and their opinions can only be conveyed through government institution or local transportation agency. It means that public (citizens) is not well-informed on transportation issues mainly cycling issues. Besides that, public (citizens) is never involved to evaluate directly the implementation of cycling because they do not know about indirect participation procedure, particularly in relation to the existence of *DTKJ* as a coordination and consultation forum, so they are involved indirectly through public representatives.
- 4.) The evaluation and decision making process of bike implementation can be improved by positioning the public not as inform and/or consult level, but as involve and collaborate level (IAP2, 2007),

citizens power or partnership (Arnstein, 1969), public participation with two-way communication between government and citizens instead of public representatives (Rowe and Frewer, 2005), which they are as the partner of government in making decisions. Besides that, in making decisions on cycling in collaborate level through citizen advisory committee policy, the main aspect that should be considered is the transparency of information, which public (citizens) who do not involve in decision making process can know the progress of decisions made. This can be done through making citizen's blog that specifically discuss on cycling. Moreover, the evaluation process is not only conducted for ex-post evaluation, but also ex-ante evaluation through involving public, whilst decision making process can be improved through maximizing the role of Community Based Organization/CBO such as Indonesia Cycling Committee and Indonesia Transportation Society/*Masyarakat Transportasi Indonesia* and NGO (ITDP). Thus, the decisions made is based on public-based policy instead of government-based policy.

6.2. Key findings of the research

From the overall research results, there are several key findings of the research, as follows:

- 1.) Providing bike lanes should consider citizen interest (local people) which it corresponds to the public acceptance on the emergence of bike lane in each regions and/or areas. Public acceptance is needed to get the legitimacy and agreement about the development of bike lanes in each regions/areas and to minimize the conflicts emerged in the availability of road capacity between private vehicle users and bicyclists. Besides that, it should consider the function of bike lane, such as bike lane for work, school, exercise etc., in which it should be adjusted to the characteristics of land use (residential area, office, school and business centres). This consideration relates to the provisions of designing bike infrastructure and bike policy enactment (e.g. the direction of bike lane either one-way or two way direction, unidirectional or opposite direction to motor vehicles, separated-traffic bike lane or mixed-traffic bike lane etc.).
- 2.) The role of public in decision making process can be an active and passive participation as Rowe and Frewer (2005) mentioned. The role of public as an active participants is through public representatives which they are people who understand the issues occurred and it also means that public can be involved in decision making process because the information on bike planning, programs and its policies is well-informed. Meanwhile, passive participation implies that public is not involved in decision making process due to the information accepted to public about the plans, programs and policies of cycling is not well-informed. As a consequence, the improvement of bicycle implementation cannot be achieved because there is no information exchange between government,

stakeholders and public (citizens) which it leads to the lack of the role of public participation in decision making process. Therefore, the transparency of information about planning, programs and policies undertaken by government is needed to public (citizens) as an important aspect in the evaluation and decision making process.

- 3.) The effectiveness of participation method should consider the number of public (citizens) involved, time horizon, planning context and public willingness. This is interpreted by the analysis results that public (citizens) prefer to involve in decision making process through direct participation using websites and/or public comments (citizen's blog) rather than indirect participation through citizen/public advisory committee. In relation to this, direct participation using websites can be an appropriate ways to involve public (citizens) because of the effectiveness of time in obtaining public opinions with considering the amount of population. Meanwhile, indirect participation can be an alternative ways, in which this way can be the consideration to make decision because it is employed through public representatives (e.g. expert, practitioners, academics). Thus, planning evaluation through involving public should be conducted both direct and indirect participation based on considering the effectiveness of participation.
- 4.) Evaluation in planning through involving public should consider the objectives of participation. In relation to the analysis results, evaluation in planning can be conducted through public representatives (indirect participation) if the consideration of public participation is outcome-based goals and process-based goals that aims to improve the quality of decisions made because public involved in decision making process constitutes people who grasp transportation issues, mainly on cycling. Meanwhile, planning evaluation can also be employed without public representatives (direct participation) if the considerations is a democratic process and user-based goals in order to obtain the legitimacy of decisions and an equal principle.

6.3. Recommendations

Recommendations proposed in order to improve bike infrastructure implementation deals with the barriers encountered of bike implementation both physical and non-physical aspects that resulted from survey in part of analysis of suggestions to be improved (**Table 5.10**). From the survey results, policy recommendations in order to compose the government regulation on bicycling, are:

- 1.) The provisions technically of the supply of bike infrastructure design in Jakarta have to be adjusted to land use type or spatial planning (e.g. residential area, schools/university, business centre) either

mixed-traffic bike lane or separated-traffic bike lane and they also have to be adjusted to the function of the supply of bike lane (e.g. for exercise, for work, for school etc.).

- 2.) The provisions of bike usage for short and long distance trip in Jakarta (kilometres), for example for a certain short distance is using bike, for a certain time and area in Jakarta.
- 3.) The provisions legally of abusing bike lane will be followed-up as violation and it have te given the sanctions or punishments.
- 4.) The promoting of traffic knowledge on bicycling have to be incorporated in educational curriculum (particularly in elementary school).
- 5.) The policy of bike day have to be enacted in weekday based on area and time (peak hour and off-peak hour).
- 6.) Government can make a collaboration with private sectors and NGO through CSR (corporate social responsibility).

Those policy recommendations can also be improved more through reviewing the articles on cycling from the experiences of another countries as the guideline and/or benchmarking that can be applied to Jakarta case. In relation to this, adopting policy recommendations for improving bicycle infrastructure implementation in Jakarta can be seen in the following table.

Table 6.1 Policy recommendations for increasing bicycling in Jakarta

No.	Policy recommendations	Descriptions
1.	Physical aspects	<p>1.) Expanding bike lane network with separated bike facilities, such as for bike to school, bike to work and including construction of bicycle bridges and short-cuts to create a complete network of separated bike facilities and to provide more convenient faster connections.</p> <p>2.) Design of bike lane facilities, as follows:</p> <ul style="list-style-type: none"> a. On-road bike lanes Bike lanes are designated with a white stripe; bicycle icon on the pavement and signage; bike lanes are on each side of the road, to the right of motor vehicle lanes recommended at least five feet wide. b. Two-way travel on one-way streets Contra flow bike lanes allow bicyclists to travel in the opposite direction on one-way streets, usually on urban residential streets or local streets with low traffic speeds; false one-way streets use signage or barriers to allow cyclists to enter a street, but restricted for motor vehicles. c. Signed bicycle routes A shared roadway which has been designated by signing as a preferred route for bicycle use and it may be more common on residential streets or other streets with low motor vehicles traffic. d. Bicycle boulevards They are signed bicycle routes, usually for low-traffic streets that also include traffic calming features, such as speed bumps, diverters and traffic circles etc. e. Cycletracks They are similar to bike lanes, but physically more separated from motor vehicles, such as with a curb, vehicle parking, or other barriers, and usually do not allow pedestrian travel.

No.	Policy recommendations	Descriptions
		<p>f. Colored lanes Paint or other methods are used to color bike lanes that aims to make more visible for motorists and to minimize a potential conflict points, such as intersections or on-ramps (colored on-street bike lanes).</p> <p>g. Shared lane markings (sharrows) They are used in lanes shared by motor vehicles and bicycles to alert drivers to the potential presence of cyclists and to show cyclists where to ride.</p> <p>h. Bike boxes Bike boxes are installed at a signalized intersections (in front of motor vehicle lane, that provide a convenience aspect for cyclists to wait the light is green. Bike boxes are also intended to make cyclists more visible to motor vehicles and give them a head start through the intersection.</p> <p>i. Bicycle phases-traffic signals Separating traffic signals phases for bicycles at intersections can provide time for cyclists to cross an intersection without motor vehicle traffic (giving priority for cyclists to be passed).</p> <p>j. Maintenance of facilities Pavement quality and the existence of debris on lanes can impact on bicycling decisions and safety.</p> <p>k. Techniques to shorten cyclist's routes Cut throughs provide cyclists but no motor vehicles with a more direct connection. Right-turn shortcuts allow cyclists to turn before reaching an intersection.</p> <p>3.) Parking facilities</p> <p>a. Bike parking with types, as follows:</p> <ul style="list-style-type: none"> - General parkings that means public bike parking provided at residents, workplaces, commercial buildings or at school and universities.

No.	Policy recommendations	Descriptions
		<ul style="list-style-type: none"> - Unsheltered/sheltered bike parkings are provided with and/or without bike racks on the side walks, plazas or open parking, in which the development trend is towards to sheltered parking with a roof of some sort. - Guarded parkings is provided in order to prevent theft, such as at bike stations and in outdoor parking guarded by attendants/security officials. - Bike lockers is provided at train or metro stations whic is the main form of sheltered, secure bike parkings. <p>b. Showers at workplaces that are usually combination of showers, clothes storage and change facilities; often in conjunction with bike parking facilities.</p> <p>c. Bicycle stations that provided with full-service facilities offering secured, sheltered bike parking including bike rentals, bike repairs, showers, accessories, bike washes, bike touring advice etc. Stations are usually adjacent to train or metro stations as a key form of integration with public transport, but sometimes located in commercial districts of city centers.</p> <p>4.) Providing bike parking facilities to be integrated with public transport</p> <p>Bike parking is one of the key dimensions of integrating bicycling with public transport which a better integration of bicycling with public transport leads to more bike and ride trips, and probably to more bicycling as a whole. Type of bike parkings related to the integration concept with public transport, are:</p> <p>a. Parking at rail stations and bus terminals</p> <p>Providing the number of bike parkings at most suburbans rail and many metro stations, in which people from suburbans can be accommodated by the availability of bike parking. The existence of bike parking lead to the concept of bike and ride which is cheaper than park and ride. Additionally, instead of park and</p>

No.	Policy recommendations	Descriptions
		<p>ride in rail and bus stations in Jakarta, the availability of bike and ride can be made with a minimum parking as one of the requirements that should be complied when establish new rail or bus stations, whilst the availability of park and ride can be made with a maximum parking.</p> <p>b. Parking at bus stops Providing bike parkings in a certain bus stops that counted promised on demands</p> <p>c. Bikes racks on buses Providing bike racks within buses. The availability of this facilities should be adjusted to technical aspects of vehicles, in which it can be provided for long term horizon (for Jakarta) based on public's interest in using bike.</p> <p>d. Bikes on rail cars Providing bike space on rail cars should adjusted to the demands (number of rail users) either in peak or off-peak hours. So, the availability of bike space on rail cars might be provided during off-peak hours.</p> <p>e. Short-term rental bikes Providing the rental bike is in rail stations using automated smart card technology, for example in the Netherlands with OV-Fiets public transport bike rentals (shared bike system) for trips from major train stations to the final destinations of travelers that usually near the city center; and Call-a-bike rentals in Germany.</p>
2.	Non-physical aspects	
	a. Legal	<p>1.) Program often mandated by law that include promotions, financial incentives and provision/requirements of facilities, such as the arrangement of master plan on cycling supported with government regulation.</p> <p>2.) Helmet laws require cyclists of all ages or of specified ages (e.g. under 18 years old) to wear helmet (such as in Australia, the use of helmet for cyclists is mandatory in all states and territories.</p>

No.	Policy recommendations	Descriptions
		<p>3.) The provision on reducing speed limits for vehicle traffic (traffic calming programs) to improve safety for cyclists and pedestrians and to improve environmental quality (e.g. reduce noise nuisance). In UK has promoted 20 mph (miles per hours) or 32 kilometres per hours.</p> <p>4.) The provision of the the availability of bike parkings (free parking for cyclists in rail and bus stations, workplaces, shopping center and business center).</p> <p>5.) The provision of location of bike parkings.</p> <p>6.) Strict law enforcement on cycling.</p>
	b. Controlling	Improve the performance of government officials on the road to enact strictly regulation on cycling.
	c. Promoting	<p>1.) General travel programs</p> <p>General travel programs relates to supporting programs for bicycling which aims to reduce vehicles travel, usually by shifting commute mode to transit, walking, and/or bicycling. This programs are almost similar to pull and push approach, in which bicycling is a feeder mode (Martens, 2004) to support public transport in order to decrease the motor vehicles usage on the road that impact on reducing traffic congestion. General travel programs encompass:</p> <p>a. Individualized marketing (Travel Smart and Smart Trips)</p> <p>Comprehensive marketing programs that intended to individuals in a neighborhood, school or worksite. Program usually involve targeted information, events and incentives, such as transit passes or coupon to bicycle stores.</p> <p>b. Travel awareness programs</p> <p>Programs designed to reduce driving or private vehicles and to increase public transport, walking and bicycling usage that usually implemented by local governments or community organizations. For Jakarta</p>

No.	Policy recommendations	Descriptions
		<p>itself, travel awareness programs can be conducted through involving Indonesia Cycling Committee (KSI/<i>Komunitas Sepeda Indonesia</i>) to participate in promoting this programs and also involving Ministry of Transportation to campaign on travel awareness.</p> <p>c. Safe Routes to School</p> <p>Safe Routes to School (SR2S or SRTS) programs include an extensive educational campaign, encouragement, infrastructure and enforcement programs that aims to increase the safety and number of students walking and bicycling to school; to raise the environmental awareness; and to improve motorist behavior toward cyclists and pedestrians. For Jakarta, this program can be included in tandem with the program of road safety held by Ministry of Transportation, in which students are involved in campaigning safety. Additionally, an educational campaign on cycling should be done in all schoolchildren as the mandatory in learning curriculum.</p> <p>2.) Bicycling-Specific-Programs</p> <p>Bicycling programs are a promotional programs that encourage people to use bicycling encompass:</p> <ol style="list-style-type: none"> a. Annual bike day (bike-to-work-day and bike-to-school day). b. Bike sharing programs that offer short-term rentals for a nominal fee and sometimes require a one-time or annual membership fee. Bicycles can be picked up and returned at designated spots around the city, usually through an automated system. c. Bicycle ambassador program d. Bike competition. e. Subsidized helmet programs f. Bicycle film festivals etc.

No.	Policy recommendations	Descriptions
	d. Policy	<p>Policy interventions can be conducted directly and indirectly. Indirect policies depends on "pull policies" that government attempt to enact another policies in order to increase bicycling, in which this policies will indirectly impact on increasing bicycle usage. Additionally, these policies lead to pro-bicycle policy package (Pucher et.al, 2010) that combine between infrastructure, programs and policy (as packages of coordinated policies), as follows:</p> <ol style="list-style-type: none"> 1.) Congestion charging policy for private car based on time (peak hour and off-peak hour) and specific location in workday as supporting policy for increasing bicycling. 2.) Car-free day policy that do not only enact in the weekend, but also in workday. 3.) Motor vehicles restriction policy depending on the license of plat numbers (odd-even number car restriction). 4.) Creation of extensive car free zones and street. 5.) Restriction on car parking space in area building (e.g. shopping center, business center and workplaces). 6.) Elimination of free car parking and provide bike free parkings. 7.) The installation of bike parking instead of on-street parking. 8.) Raising parking price based on time period and certain location (e.g. parking price will be higher in city center or CBD than in suburbans). 9.) Integration concept between land use and transportation, for example compact development concept (mixed-use) and transit oriented development (TOD) that generate trips short enough to walking and cycling.
	a. Collaboration	<p>Collaboration approach between government institutions (Ministry of Education, Ministry of Transportation, Ministry of Public Works, Police) and another stakeholders (e.g. private sectors, NGO and public/citizens) to finance the construction of bike infrastructure and facilities, for example through public private partnership (PPP) and value capture methods; and to provide an extensive bicycling training course.</p>

Source: adopted from Pucher et.al (2010) and Martens (2004)

6.4. Further research

Based on the empirical study for the improvement of bike infrastructure implementation in Jakarta, the research show that public (citizens) who do not ever involve in transportation field, particularly in bicycling have to be informed on the mechanism of giving aspirations and they also should be involved in decision making process either direct and indirect participation. Basically, type of participation method like website is suitable to be implemented in Jakarta area, in which citizens can directly address their complaint and opinions on the government policy related to bike implementation. Besides that, the development of social media like twitter, facebook, instagram, path and others provide an easy way to directly convey citizens' aspirations and their presence (social media) also come up the emergence of publik openness principle, in which citizens have the rights and freedom in giving the complaint and notions. Moreover, the indirect participation is also needed for some organization and/or institution (among government institutions, private sectors and NGO) based on the hierarchy and/or bureaucracy from bottom-up approach (participatory approach) to be conveyed to Jakarta's Governor in order to improve bike infrastructure implementation in Jakarta. Thus, combining participation procedure both direct and indirect participation that leads to public-based policy will be effective in accommodating the aspirations from public (citizens) and all stakeholders.

For further research, in relation to data collected from public, the categorization of respondent (road users) between bicyclists, motorcyclists, private users and public transport users is required to know a different perspectives from them. Besides that, it aims to find out their perceptions (staed preference survey) on the construction of bike lanes that they will influence on the decreasing of road capacity for motorcyclists, private car users and public transport users. Furthermore, social and traffic impact assessments of bike lane construction can be conducted for further research.

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Appendix 1

Survey Guidance for Public (Using Qualtrics Application)

Dear Mr. / Mrs.

My name is Nur Ida Fitrianti. I am a student of Double Degree Master in Bandung Institute of Technology (Indonesia) for Transportation Program and University of Groningen (The Netherlands) for Environmental and Infrastructure Planning Program. Today, I am doing the thesis research on **“How public participation can improve bicycle infrastructure implementation: the Case of Taman Ayodya-Blok M and Banjir Kanal Timur bike lanes in Jakarta (Indonesia)”**. This research aims to improve the quality and performance of bike infrastructure implementation as the policy recommendation for Jakarta's Government in making decision on bicycling. I need your help to fill out and answer some questions below. Additionally, your individual response will not be abused and it will be recorded anonymously. If you want to know the result of this survey, please do not hesitate to contact me through email nurida.fitrianti@yahoo.co.id.

Regards,
Nur Ida Fitrianti

Kepada Yth. Bapak/Ibu

*Perkenalkan nama saya Nur Ida Fitrianti, mahasiswa double degree antara Magister Transportasi ITB dan Master program Perencanaan Infrastruktur dan Lingkungan Universitas Groningen/ Environmental & Infrastructure Planning Rijksuniversiteit Groningen di Belanda. Saat ini saya sedang mengerjakan penelitian tesis tentang **“Bagaimana partisipasi publik dapat meningkatkan penerapan infrastruktur sepeda dengan studi kasus penerapan lajur sepeda Taman Ayodya-Blok M (Jakarta Selatan) dan Banjir Kanal Timur (Jakarta Timur)”**. Penelitian ini bertujuan untuk meningkatkan kualitas dan performansi lajur sepeda sebagai bahan masukan rekomendasi kebijakan bagi Pemerintah Jakarta. Saya mohon bantuan Bapak/Ibu untuk mengisi pertanyaan-pertanyaan berikut. Respon dan jawaban Bapak/ibu tidak akan disalahgunakan. Jika Bapak/Ibu ingin mengetahui hasil survey ini, Bapak/Ibu dapat menghubungi saya ke alamat email: nurida.fitrianti@yahoo.co.id.*

A. CHARACTERISTICS OF RESPONDENT (*KARAKTERISTIK RESPONDEN*)

Name / *Nama* :
Age / *usia* :

1. GENDER / *Jenis Kelamin*
 - a. Male
 - b. Female
2. What's your OCCUPATION? / *Apa pekerjaan Anda?*
 - a. Student / *Pelajar/mahasiswa*
 - b. Government employees (*PNS/TNI/POLRI*) / *pegawai pemerintah*

- c. Private employees / pegawai swasta
- d. Entrepreneur / wiraswasta
- e. Others / lainnya

B. CHARACTERISTICS OF BIKE FACILITIES (KARAKTERISTIK FASILITAS SEPEDA)

1. What DESTINATION do you usually do by using bike in your daily activities?
Apa tujuan perjalanan yang biasa Anda lakukan dengan bersepeda di keseharian aktivitas Anda?
 - a. School /sekolah
 - b. Office /bekerja
 - c. Shopping/belanja
 - d. Social activities/aktivitas sosial
 - e. Other/lainnya

2. How many times do you usually use bike in your daily activities or INTENSITY OF BIKE USE?
Berapa kali biasanya Anda menggunakan sepeda di keseharian aktifitas Anda atau intensitas penggunaan sepeda?
 - a. Once per week/sekali seminggu
 - b. Twice per week/2 kali seminggu
 - c. Three times per week/3 kali seminggu
 - d. Four times per week/4 kali seminggu
 - e. More than four times per week/lebih dari 4 kali seminggu
 - f. Never use bicycle/tidak pernah menggunakan sepeda

3. There are two type of barriers identified on the bike infrastructure implementation in *Taman Ayodya - Blok M* (South Jakarta) and *Banjir Kanal Timur* (East Jakarta) bike lanes, encompass physical and non-physical barriers. In order to improve the bike infrastructure implementation, through referring to the pictures below you can assess the current condition of bike lanes using the likert scale (1 until 5). Scale 5 is the highest scale (**you are only allowed to choose one answer**).

Terdapat beberapa kendala yang dihadapi dalam penerapan lajur sepeda pada rute Taman Ayodya-Blok M (Jakarta Selatan) dan Banjir Kanal Timur (Jakarta Timur), meliputi Kendala Fisik Dan Kendala Non-Fisik. Dalam rangka meningkatkan penerapan infrastruktur lajur sepeda, Anda diminta untuk menjawab beberapa pertanyaan dengan menggunakan skala likert (1 sampai dengan 5) dengan mengacu pada gambar kondisi eksisting lajur sepeda di kedua rute tersebut (Anda hanya diperbolehkan memilih satu jawaban).



Figure 1. Bike lane in *Taman Ayodya-Blok M* (South Jakarta)



Figure 2. Bike lane in *Banjir Kanal Timur* (East Jakarta)

Please, answer this questions using mark (√) / Mohon menjawab dengan menggunakan tanda (√)

No.	Description / Uraian	Likert scale / Skala likert				
		1	2	3	4	5
		Strongly disagree / Sangat setuju	Disagree / Tidak setuju	Neutral / netral	Agree / Setuju	Strongly agree / Sangat tidak setuju
PHYSICAL BARRIERS / Kendala Fisik						
1.	Convenience to be passed <i>Lajur sepeda nyaman untuk dilewati</i>					
2.	The existence of bike facilities (e.g. parking, bike signs and markings). <i>Keberadaan fasilitas sepeda seperti parkir, rambu dan marka sepeda.</i>					
3.	The existence of park & ride facilities (e.g. railway & bus stations). <i>Keberadaan fasilitas park and ride (parkir sepeda di terminal / stasiun kemudian naik angkutan umum).</i>					
4.	Bike lanes have an easy access from residential to other destinations (e.g. school, office, shopping center) <i>Lajur sepeda memiliki akses yang mudah dari lokasi perumahan ke lokasi lain seperti ke sekolah, perkantoran, pusat perbelanjaan.</i>					
5.	Bike lanes is free from street vendors. <i>Lajur sepeda terbebas dari pedagang kaki lima.</i>					
6.	Security aspect compliance (e.g. less crime) <i>Lajur sepeda sudah memenuhi aspek keamanan (terhindar dari kejahatan).</i>					
7.	Safety aspect compliance (e.g. less accident) <i>Lajur sepeda sudah memenuhi aspek keselamatan (terhindar dari kecelakaan lalu lintas).</i>					
8.	Bike lanes are still mixed traffic					

No.	Description / Uraian	Likert scale / Skala likert				
		1	2	3	4	5
		Strongly disagree / Sangat setuju	Disagree / Tidak setuju	Neutral / netral	Agree / Setuju	Strongly agree / Sangat tidak setuju
	with motor vehicles. <i>Lajur sepeda saat ini masih bercampur dengan lalu lintas kendaraan bermotor.</i>					
9.	The existence of traffic light priority for cyclists particularly in intersection. <i>Keberadaan penyediaan lampu lalu lintas khusus pengguna sepeda terutama pemberian prioritas di persimpangan.</i>					
10.	Bike lanes are free from traffic congestion. <i>Lajur sepeda terbebas dari kemacetan lalu lintas</i>					
NON-PHYSICAL BARRIERS / Kendala non-fisik						
1.	The existence of government regulation on bicycling (including bicyclists' rights) <i>Keberadaan Peraturan Pemerintah (PP) tentang sepeda termasuk peraturan tentang hak-hak pengguna sepeda.</i>					
2.	Lack of surveillance function from government official on the road about the abuse of bike lane usage. <i>Kurangnya fungsi pengawasan di jalan dari aparat Pemerintah tentang sanksi penyalahgunaan penggunaan lajur sepeda oleh kendaraan bermotor.</i>					
3.	The existence of bike campaign programs conducted by government (e.g. bike socialization program to citizens). <i>Keberadaan program kampanye sepeda yang dilakukan oleh Pemerintah Jakarta seperti program</i>					

No.	Description / Uraian	Likert scale / Skala likert				
		1	2	3	4	5
		Strongly disagree / Sangat setuju	Disagree / Tidak setuju	Neutral / netral	Agree / Setuju	Strongly agree / Sangat tidak setuju
	<i>sosialisasi penggunaan sepeda ke masyarakat.</i>					
4.	The policy enactment on bicycling (e.g. bike free day in the weekend). <i>Pemberlakuan kebijakan sepeda seperti hari untuk sepeda (bike day) atau hari bebas kendaraan bermotor.</i>					
5.	Collaboration actions among stakeholders (government institutions, NGO and public/citizens). <i>Adanya tindakan kolaborasi antar stakeholder seperti institusi pemerintah, sektor swasta, NGO dna masyarakat.</i>					

4. Guiding to the barriers encountered (question number 3), what is your opinions and suggestions to improve the bike infrastructure implementation in Taman Ayodya-Blok M and Banjir Kanal Timur bike lanes?

Terkait kendala-kendala yang dihadapi pada penerapan lajur sepeda di Jakarta, berikan opini dan saran untuk mengatasi kendala-kendala tersebut guna meningkatkan infrastruktur lajur sepeda di Taman Ayodya-Blok M dan Banjir Kanal Timur?

Explanation / penjelasan:...

C. PUBLIC PARTICIPATION QUESTIONS (*PERTANYAN PARTISIPASI PUBLIK*)

1. In this questions, you are asked to choose an appropriate answer (YES or NO) in the following questions below that relate to the public participation concept

Pada bagian pertanyaan ini, Anda diminta untuk memilih jawaban yang sesuai (Ya atau Tidak) terkait konsep partisipasi publik dengan memberikan tanda (√)

No.	Questions / Pertanyaan	Answer / Jawaban	
		Yes / Ya	No / Tidak
1a.	Do you ever be involved by Jakarta's government to participate in giving the opinions on the bike infrastructure implementation in Taman Ayodya-Blok M and Banjir Kanal Timur bike lanes? <i>Apakah Anda pernah dilibatkan oleh Pemerintah Jakarta untuk berpartisipasi dalam memberikan pendapat dan masukan mengenai penerapan infrastruktur lajur sepeda di Jakarta</i>		

No.	Questions / <i>Pertanyaan</i>	Answer / <i>Jawaban</i>	
		Yes / <i>Ya</i>	No / <i>Tidak</i>
	<i>khususnya pada rute Taman Ayodya-Blok M dan Banjir Kanal Timur?</i>		
1b.	Do the public need to be involved in evaluating the bike lanes in order to improve the bike infrastructure implementation? <i>Menurut Anda, apakah publik (masyarakat) perlu dilibatkan dalam melakukan evaluasi penerapan lajur sepeda di Jakarta?</i>		
1c.	Is there the participation method for public to involve in giving the opinions on the bike infrastructure implementation in the present? <i>Menurut Anda, apakah saat ini ada metode partisipasi publik (masyarakat) untuk memberikan pendapat dan masukan terhadap penerapan infrastruktur lajur sepeda di Jakarta?</i>		
1d.	Is there participation procedure for public to involve in giving the opinions on the bike infrastructure implementation? <i>Menurut Anda, apakah saat ini ada prosedur bagi publik (masyarakat) untuk memberikan pendapat terhadap penerapan infrastruktur lajur sepeda di Jakarta?</i>		
1e.	Do you know the existence of Jakarta Transportation Council/Dewan Transportasi Kota Jakarta (DTKJ) as the coordination and the consultation forum to convey the public' opinions on transportation field? <i>Apakah Anda mengetahui keberadaan Dewan Transportasi Kota Jakarta (DTKJ) sebagai forum koordinasi dan konsultasi untuk menyampaikan opini publik terkait bidang transportasi?</i>		

2. If the bike infrastructure implementation are evaluated by involving public, how **an appropriate participation procedure** to involve them?

*Jika penerapan infrastruktur sepeda dievaluasi dengan melibatkan publik (masyarakat), menurut Anda bagaimana **prosedur partisipasi yang tepat untuk melibatkan mereka?***

- a. **Direct participation** – public address their opinions and complaints directly on the bike infrastructure implementation to local government or involving them without the presence of individual representative (e.g. through government website and citizen's blog etc.)

Partisipasi langsung – publik menyampaikan pendapat dan keluhan mereka ke Pemerintah secara langsung tanpa ada perwakilan individu (public representative) seperti melalui website Pemerintah atau blog Pemerintah khusus untuk masyarakat.

- b. **Indirect participation** – public convey their opinions and complaints indirectly through individual representative who have the expertise in transportation field, for example individual representative addresses their opinions and complaints through institution/body/forum (e.g. Jakarta Transportation Council/DTKJ, traffic and road transport forum/Forum LLAJ, local transportation agency).

Partisipasi tidak langsung – publik menyampaikan pendapat dan keluhan mereka secara tidak langsung melalui perwakilan individu (public representative) yang memiliki kemampuan dan keahlian di bidang transportasi, seperti penyampaian secara tidak langsung melalui institusi.

If you choose indirect participation, please **choose the following answer with mark (√)**.

Jika Anda memilih partisipasi tidak langsung, mohon pilih jawaban berikut ini dengan menggunakan tanda (√).

(b.1) Through DTKJ as mediator and coordinator that accommodate all aspirations from public and stakeholders; and Forum LLAJ as mediator to accommodate the inputs from inter-government institutions that subsequently Forum LLAJ will address them to DTKJ combined with public aspirations. Finally, all inputs and aspirations collected both DTKH and Forum LLAJ will be addressed directly to the Jakarta's Governor in making policies.

Melalui DTKJ sebagai mediator dan koordinator yang mengakomodir semua aspirasi masyarakat, sektor swasta dan NGO; dan Forum LLAJ sebagai mediator dan koordinator untuk mengakomodasi masukan antar institusi Pemerintah dan selanjutnya Forum LLAJ menyampaikan masukan tersebut ke DTKJ yang digabungkan dengan aspirasi public. Akhirnya, semua aspirasi dan/atau masukan yang terkumpul akan disampaikan oleh DTKJ secara langsung ke Gubernur DKI Jakarta untuk pembuatan kebijakan.

(b.2) Through Forum LLAJ as mediator and coordinator that accommodate all aspirations from public, inter-government institutions, DTKJ and other stakeholders. Forum LLAJ will address directly all inputs and aspirations to the Jakarta's Governor in making policies.

Melalui Forum LLAJ sebagai mediator dan koordinator yang mengakomodir semua aspirasi masyarakat, antar institusi Pemerintah, DTKJ, sektor swasta dan NGO. Selanjutnya, Forum LLAJ secara langsung menyampaikan semua aspirasi dan/atau masukan mereka ke Gubernur DKI Jakarta untuk pembuatan kebijakan.

(b.3) Through Local Transportation Agency as mediator and coordinator to accommodate all aspirations from public, inter-government institutions, DTKJ and other stakeholders, then transportation agency will address all aspirations to the Jakarta's Governor in making policies.

Melalui Dinas Perhubungan DKI Jakarta sebagai mediator dan koordinator yang mengakomodir semua aspirasi dan/atau masukan dari masyarakat, antar institusi Pemerintah, DTKJ, sector swasta dan NGO. Selanjutnya Dinas Perhubungan DKI Jakarta akan menyampaikan semua aspirasi dan/atau masukan mereka ke Gubernur DKI Jakarta untuk pembuatan kebijakan.

(b.4) Other procedure / Prosedur lain:...

3. If you are ever be involved by Jakarta's government in giving opinions on the bike infrastructure implementation, **what the participation methods that have been conducted in the present? What an appropriate participation method** that should be employed by Jakarta's government to involve the public in order to improve the bike infrastructure implementation **for future?** To answer both questions, please choose the participation methods in the present and for future with the mark (√) in the table below.

Jika Anda pernah dilibatkan oleh Pemerintah Jakarta untuk memberikan pendapat mengenai penerapan infrastruktur sepeda, apa metode partisipasi yang pernah dilakukan oleh mereka saat ini (present)? (Anda diminta untuk menjawab pada kolom Ya Pernah atau Tidak Pernah di setiap tipe metode partisipasi).

No.	Category of participation / Kategori Partisipasi	Type of participation (Tipe Partisipasi)	Participation Methods (Metode partisipasi)	
			Present (Saat ini)	Future (Mendatang)
1.	CONSULT (Konsultasi)	a. Fact sheets / <i>layanan pemberitahuan</i>		
		b. Web sites / <i>web sites</i>		
		c. Open houses / <i>silaturahmi</i>		
2.	INFORM (Informasi)	a. Public comment / <i>masukan masyarakat</i>		
		b. Focus group / <i>diskusi kelompok</i>		
		c. Surveys / <i>survei</i>		
		d. Public meetings / <i>rembug warga</i>		
3.	INVOLVE (Terlibat)	a. Workshops / <i>loka karya</i>		
		b. Deliberative polling / <i>poling suara</i>		
4.	COLLABORATE (Berkolaborasi)	a. Citizen advisory committees / <i>dewan penasihat</i>		
		b. Consensus building / <i>konsensus</i>		
		c. Participatory decision-making / <i>partisipasi pada saat pengambilan keputusan</i>		
5.	EMPOWER (Pemberdayaan)	a. Citizen juries / <i>dewan juri warga</i>		
		b. Ballots / <i>surat suara</i>		
		c. Delegated decision / <i>keputusan yang didelegasikan</i>		

Thank you very much for your participation / *Terima kasih atas partisipasi Anda*

Appendix 2

Survey Guidance for Local Transportation Agency

Dear Mr. / Mrs.

My name is Nur Ida Fitrianti. I am a student of Double Degree Master in Bandung Institute of Technology (Indonesia) for Transportation Program and University of Groningen (The Netherlands) for Environmental and Infrastructure Planning Program. Today, I am doing the thesis research on “**How public participation can improve bicycle infrastructure implementation: the Case of Taman Ayodya-Blok M and Banjir Kanal Timur bike lanes in Jakarta (Indonesia)**”. This research aims to improve the quality and performance of bike infrastructure implementation as the policy recommendation for Jakarta's Government in making decision on bicycling. I need your help to fill out and answer some questions below. Additionally, your individual response will not be abused and it will be recorded anonymously. If you want to know the result of this survey, please do not hesitate to contact me through email nurida.fitrianti@yahoo.co.id

Regards,
Nur Ida Fitrianti

Kepada Yth. Bapak/Ibu

Perkenalkan nama saya Nur Ida Fitrianti, mahasiswa double degree antara Magister Transportasi ITB dan Master program Perencanaan Infrastruktur dan Lingkungan Universitas Groningen/ Environmental & Infrastructure Planning Rijksuniversiteit Groningen di Belanda. Saat ini saya sedang mengerjakan penelitian tesis tentang “Bagaimana partisipasi publik dapat meningkatkan penerapan infrastruktur sepeda dengan studi kasus penerapan lajur sepeda Taman Ayodya-Blok M (Jakarta Selatan) dan Banjir Kanal Timur (Jakarta Timur)”. Penelitian ini bertujuan untuk meningkatkan kualitas dan performansi lajur sepeda sebagai bahan masukan rekomendasi kebijakan bagi Pemerintah Jakarta. Saya mohon bantuan Bapak/Ibu untuk mengisi pertanyaan-pertanyaan berikut. Respon dan jawaban Bapak/ibu tidak akan disalahgunakan. Jika Bapak/Ibu ingin mengetahui hasil survey ini, Bapak/Ibu dapat menghubungi saya ke alamat email: nurida.fitrianti@yahoo.co.id.

Salam hormat,
Nur Ida Fitrianti

A. PUBLIC PARTICIPATION QUESTIONS (*PERTANYAAN PARTISIPASI PUBLIK*)

1. If the bike infrastructure implementation are evaluated by involving public, how **an appropriate participation procedure** to involve them?

Jika penerapan infrastruktur lajur sepeda dievaluasi dengan melibatkan publik, bagaimana prosedur partisipasi yang tepat untuk melibatkan mereka.

Public (citizens) can address their aspirations either direct or indirect participation. Direct participation can be conveyed through websites, namely Public Opinion Response System in social media, such as twitter, facebook and/or email, in which this method has been running.

Masyarakat dapat menyampaikan aspirasinya baik secara langsung atau tidak langsung. Partisipasi secara langsung dapat disampaikan melalui Sistem Respon Opini Publik (ROP), dalam media website, twitter, Facebook atau email. Saat ini metode ini telah berjalan.

- a. **Direct participation** – public address their opinions and complaints directly on the bike infrastructure implementation to local government or involving them without the presence of individual representative (e.g. through government website and citizen's blog etc.)

Partisipasi langsung – publik menyampaikan pendapat dan keluhan mereka ke Pemerintah secara langsung tanpa ada perwakilan individu (public representative) seperti melalui website Pemerintah atau blog Pemerintah khusus untuk masyarakat.

- b. **Indirect participation** – public convey their opinions and complaints indirectly through individual representative who have the expertise in transportation field, for example individual representative addresses their opinions and complaints through institution/body/forum (e.g. Jakarta Transportation Council/DTKJ, traffic and road transport forum/Forum LLAJ, local transportation agency).

Partisipasi tidak langsung – publik menyampaikan pendapat dan keluhan mereka secara tidak langsung melalui perwakilan individu (public representative) yang memiliki kemampuan dan keahlian di bidang transportasi, seperti penyampaian secara tidak langsung melalui institusi pemerintah/lembaga/forum (Dewan Transportasi Kota Jakarta/DTKJ, Forum Lalu Lintas dan Angkutan Jalan/Forum LLAJ, Dinas Perhubungan DKI Jakarta).

If you choose indirect participation, please **choose the following answer with mark (√)**.

Jika Anda memilih partisipasi tidak langsung, mohon pilih jawaban berikut ini dengan menggunakan tanda (√).

(b.1) Through DTKJ as mediator and coordinator that accommodate all aspirations from public and stakeholders; and Forum LLAJ as mediator to accommodate the inputs from inter-government institutions that subsequently Forum LLAJ will address them to DTKJ combined with public aspirations. Finally, all inputs and aspirations collected both DTKH and Forum LLAJ will be addressed directly to the Jakarta's Governor in making policies.

Melalui DTKJ sebagai mediator dan koordinator yang mengakomodir semua aspirasi masyarakat, sektor swasta dan NGO; dan Forum LLAJ sebagai mediator dan koordinator untuk mengakomodasi masukan antar institusi Pemerintah dan selanjutnya Forum LLAJ menyampaikan masukan tersebut ke DTKJ yang digabungkan dengan aspirasi public. Akhirnya, semua aspirasi dan/atau masukan yang terkumpul akan disampaikan oleh DTKJ secara langsung ke Gubernur DKI Jakarta untuk pembuatan kebijakan.

(b.2) Through Forum LLAJ as mediator and coordinator that accommodate all aspirations from public, inter-government institutions, DTKJ and other stakeholders. Forum LLAJ will address directly all inputs and aspirations to the Jakarta's Governor in making policies.

Melalui Forum LLAJ sebagai mediator dan koordinator yang mengakomodir semua aspirasi masyarakat, antar institusi Pemerintah, DTKJ, sektor swasta dan NGO. Selanjutnya, Forum LLAJ secara langsung menyampaikan semua aspirasi dan/atau masukan mereka ke Gubernur DKI Jakarta untuk pembuatan kebijakan.

(b.3) Through Local Transportation Agency as mediator and coordinator to accommodate all aspirations from public, inter-government institutions, DTKJ and other stakeholders, then transportation agency will address all aspirations to the Jakarta's Governor in making policies.

Melalui Dinas Perhubungan DKI Jakarta sebagai mediator dan koordinator yang mengakomodir semua aspirasi dan/atau masukan dari masyarakat, antar institusi Pemerintah, DTKJ, sector swasta dan NGO. Selanjutnya Dinas Perhubungan DKI Jakarta akan menyampaikan semua aspirasi dan/atau masukan mereka ke Gubernur DKI Jakarta untuk pembuatan kebijakan.

(b.4) Other procedure / Prosedur lain:...

Point A and B have been running in Local Transportation Agency, in which the legal basis of Forum LLAJ has been shaped, but it has not been legitimized by Jakarta's Governor. The other method conducted is through development planning meetings known as *Musrenbang/Musyawah Perencanaan Pembangunan* in sub-district level.

Poin A dan C telah berjalan di Dinas Perhubungan dan Transportasi Provinsi DKI Jakarta, selanjutnya melalui Forum LLAJ tetapi sampai sejauh ini telah dibentuk dasar hukum Forum LLAJ tetapi pada saat ini belum dikukuhkan oleh Gubernur Provinsi DKI Jakarta. Metode lainnya yang dilakukan yaitu dengan *Musrembang, musyawarah* dari RT/RW hingga kekelurahan.

4. What **planning and policy** conducted by Local Transportation Agency to improve the bike infrastructure implementation in the present and future?

Perencanaan dan Kebijakan apa yang dilakukan oleh Dinas Perhubungan Provinsi DKI Jakarta untuk meningkatkan penerapan lajur sepeda di Jakarta saat ini (present) dan di masa mendatang (future)?

No.	PLANNING	
	Present	Future
1.	Review of bike lane points. <i>Melakukan Kaji Ulang untuk titik Jalur sepeda.</i>	Improve the physical construction of bike lanes. <i>Menambah pembangunan fisik di jalur sepeda.</i>
2.	-	Socialization of bike lanes construction in residential area. <i>Mensosialisasikan pembangunan jalur sepeda di lingkungan perumahan.</i>
3.	-	Develop budget for bike lane construction in fiscal year. <i>Menganggarkan pembangunan jalur sepeda pada tahun anggaran.</i>

No.	POLICIES	
	Present	Future
1.	<p>Revise Transport Master Plan (<i>Rencana Induk Transportasi</i>) instead of Macro Transportation Pattern or <i>Pola Transportasi Makro / PTM</i> that include the exercise of bike lane implementation in Jakarta.</p> <p><i>Saat ini melakukan revisi Rencana induk transportasi, pengganti Pola Transportasi Makro / PTM yang di dalamnya juga ada tentang pelaksanaan jalur sepeda.</i></p>	<p>Arrange draft of governor regulation on bicycling as derivation of government regulation No.4/2013 about transportation.</p> <p><i>Membuat draft pergub terkait dengan jalur sepeda yang merupakan turunan dari Perda nomor 4 tahun 2013 tentang transportasi.</i></p>

Thank you very much for your participation / *Terima kasih atas partisipasi anda*

Note:

Questionnaire sent on 25th June 2015 and replied on 28th June 2015

Appendix 3

Survey Guidance for Non-governmental Organization/NGO (Institute for Transportation and Development Policy/ITDP)

Dear Mr. / Mrs.

My name is Nur Ida Fitrianti. I am a student of Double Degree Master in Bandung Institute of Technology (Indonesia) for Transportation Program and University of Groningen (The Netherlands) for Environmental and Infrastructure Planning Program. Today, I am doing the thesis research on “**How public participation can improve bicycle infrastructure implementation: the Case of Taman Ayodya-Blok M and Banjir Kanal Timur bike lanes in Jakarta (Indonesia)**”. This research aims to improve the quality and performance of bike infrastructure implementation as the policy recommendation for Jakarta's Government in making decision on bicycling. I need your help to fill out and answer some questions below. Additionally, your individual response will not be abused and it will be recorded anonymously. If you want to know the result of this survey, please do not hesitate to contact me through email nurida.fitrianti@yahoo.co.id.

Regards,
Nur Ida Fitrianti

Kepada Yth. Bapak/Ibu

Perkenalkan nama saya Nur Ida Fitrianti, mahasiswa double degree antara Magister Transportasi ITB dan Master program Perencanaan Infrastruktur dan Lingkungan Universitas Groningen/ Environmental & Infrastructure Planning Rijksuniversiteit Groningen di Belanda. Saat ini saya sedang mengerjakan penelitian tesis tentang “Bagaimana partisipasi publik dapat meningkatkan penerapan infrastruktur sepeda dengan studi kasus penerapan lajur sepeda Taman Ayodya-Blok M (Jakarta Selatan) dan Banjir Kanal Timur (Jakarta Timur)”. Penelitian ini bertujuan untuk meningkatkan kualitas dan performansi lajur sepeda sebagai bahan masukan rekomendasi kebijakan bagi Pemerintah Jakarta. Saya mohon bantuan Bapak/Ibu untuk mengisi pertanyaan-pertanyaan berikut. Respon dan jawaban Bapak/ibu tidak akan disalahgunakan. Jika Bapak/Ibu ingin mengetahui hasil survey ini, Bapak/Ibu dapat menghubungi saya ke alamat email: nurida.fitrianti@yahoo.co.id.

*Salam hormat,
Nur Ida Fitrianti*

A. PUBLIC PARTICIPATION QUESTIONS (*PERTANYAAN PARTISIPASI PUBLIK*)

1. If the bike infrastructure implementation are evaluated by involving public, how **an appropriate participation procedure** to involve them?

Jika penerapan infrastruktur sepeda dievaluasi dengan melibatkan publik (masyarakat), menurut Anda bagaimana prosedur partisipasi yang tepat untuk melibatkan mereka?

Answer / Jawaban: Direct participation / Partisipasi langsung

- a. **Direct participation** – public address their opinions and complaints directly on the bike infrastructure implementation to local government or involving them without the presence of individual representative (e.g. through government website and citizen's blog etc.)

Partisipasi langsung – publik menyampaikan pendapat dan keluhan mereka ke Pemerintah secara langsung tanpa ada perwakilan individu (public representative) seperti melalui website Pemerintah atau blog Pemerintah khusus untuk masyarakat.

- b. **Indirect participation** – public convey their opinions and complaints indirectly through individual representative who have the expertise in transportation field, for example individual representative addresses their opinions and complaints through institution/body/forum (e.g. Jakarta Transportation Council/DTKJ, traffic and road transport forum/Forum LLAJ, local transportation agency).

Partisipasi tidak langsung – publik menyampaikan pendapat dan keluhan mereka secara tidak langsung melalui perwakilan individu (public representative) yang memiliki kemampuan dan keahlian di bidang transportasi, seperti penyampaian secara tidak langsung melalui institusi pemerintah/lembaga/forum (Dewan Transportasi Kota Jakarta/DTKJ, Forum Lalu Lintas dan Angkutan Jalan/Forum LLAJ, Dinas Perhubungan DKI Jakarta).

If you choose indirect participation, please **choose the following answer with mark (√)**.

Jika Anda memilih partisipasi tidak langsung, mohon pilih jawaban berikut ini dengan menggunakan tanda (√).

(b.1) **Through DTKJ** as mediator and coordinator that accommodate all aspirations from public and stakeholders; and Forum LLAJ as mediator to accommodate the inputs from inter-government institutions that subsequently Forum LLAJ will address them to DTKJ combined with public aspirations. Finally, all inputs and aspirations collected both DTKH and Forum LLAJ will be addressed directly to the Jakarta's Governor in making policies.

Melalui DTKJ sebagai mediator dan koordinator yang mengakomodir semua aspirasi masyarakat, sektor swasta dan NGO; dan Forum LLAJ sebagai mediator dan koordinator untuk mengakomodasi masukan antar institusi Pemerintah dan selanjutnya Forum LLAJ menyampaikan masukan tersebut ke DTKJ yang digabungkan dengan aspirasi public. Akhirnya, semua aspirasi dan/atau masukan yang terkumpul akan disampaikan oleh DTKJ secara langsung ke Gubernur DKI Jakarta untuk pembuatan kebijakan.

(b.2) **Through Forum LLAJ** as mediator and coordinator that accommodate all aspirations from public, inter-government institutions, DTKJ and other stakeholders. Forum LLAJ will address directly all inputs and aspirations to the Jakarta's Governor in making policies.

Melalui Forum LLAJ sebagai mediator dan koordinator yang mengakomodir semua aspirasi masyarakat, antar institusi Pemerintah, DTKJ, sektor swasta dan NGO. Selanjutnya, Forum LLAJ secara langsung menyampaikan semua aspirasi dan/atau masukan mereka ke Gubernur DKI Jakarta untuk pembuatan kebijakan.

(b.3) **Through Local Transportation Agency** as mediator and coordinator to accommodate all aspirations from public, inter-government institutions, DTKJ and other stakeholders, then transportation agency will address all aspirations to the Jakarta's Governor in making policies.

Melalui Dinas Perhubungan DKI Jakarta sebagai mediator dan koordinator yang mengakomodir semua aspirasi dan/atau masukan dari masyarakat, antar institusi Pemerintah, DTKJ, sector swasta dan NGO. Selanjutnya Dinas Perhubungan DKI Jakarta akan menyampaikan semua aspirasi dan/atau masukan mereka ke Gubernur DKI Jakarta untuk pembuatan kebijakan.

(b.4) Other procedure / Prosedur lain: ...

2. What programs conducted by ITDP to support Jakarta's government and to encourage public in improving the bike infrastructure implementation in the present and future?

Program apa yang dilakukan ITDP untuk mendukung Pemerintah Jakarta dan mendorong publik (masyarakat) dalam rangka meningkatkan penerapan infrastruktur lajur sepeda di Jakarta saat ini (present) dan di masa mendatang (future)?

No.	PROGRAM	
	Saat ini (<i>present</i>)	Mendatang (<i>future</i>)
1.	Bike sharing implementation in Jakarta <i>Implementasi bike sharing</i>	Bike sharing implementation in Jakarta <i>Implementasi bike sharing</i>
2.	-	-
3.	-	-

Thank you very much for your participation / *Terima kasih atas partisipasi anda*

Note:

Questionnaire sent on 25th June 2015 and replied on 26th June 2015

Appendix 4

Survey Guidance for Jakarta Transportation Council / DTKJ

Dear Mr. / Mrs.

My name is Nur Ida Fitrianti. I am a student of Double Degree Master in Bandung Institute of Technology (Indonesia) for Transportation Program and University of Groningen (The Netherlands) for Environmental and Infrastructure Planning Program. Today, I am doing the thesis research on “**How public participation can improve bicycle infrastructure implementation: the Case of Taman Ayodya-Blok M and Banjir Kanal Timur bike lanes in Jakarta (Indonesia)**”. This research aims to improve the quality and performance of bike infrastructure implementation as the policy recommendation for Jakarta's Government in making decision on bicycling. I need your help to fill out and answer some questions below. Additionally, your individual response will not be abused and it will be recorded anonymously. If you want to know the result of this survey, please do not hesitate to contact me through email nurida.fitrianti@yahoo.co.id.

Regards,
Nur Ida Fitrianti

Kepada Yth. Bapak/Ibu

Perkenalkan nama saya Nur Ida Fitrianti, mahasiswa double degree antara Magister Transportasi ITB dan Master program Perencanaan Infrastruktur dan Lingkungan Universitas Groningen/ Environmental & Infrastructure Planning Rijksuniversiteit Groningen di Belanda. Saat ini saya sedang mengerjakan penelitian tesis tentang “Bagaimana partisipasi publik dapat meningkatkan penerapan infrastruktur sepeda dengan studi kasus penerapan lajur sepeda Taman Ayodya-Blok M (Jakarta Selatan) dan Banjir Kanal Timur (Jakarta Timur)”. Penelitian ini bertujuan untuk meningkatkan kualitas dan performansi lajur sepeda sebagai bahan masukan rekomendasi kebijakan bagi Pemerintah Jakarta. Saya mohon bantuan Bapak/Ibu untuk mengisi pertanyaan-pertanyaan berikut. Respon dan jawaban Bapak/ibu tidak akan disalahgunakan. Jika Bapak/Ibu ingin mengetahui hasil survey ini, Bapak/Ibu dapat menghubungi saya ke alamat email: nurida.fitrianti@yahoo.co.id.

*Salam hormat,
Nur Ida Fitrianti*

A. PUBLIC PARTICIPATION QUESTIONS (*PERTANYAAN PARTISIPASI PUBLIK*)

1. If the bike infrastructure implementation are evaluated by involving public, how **an appropriate participation procedure** to involve them?

Jika penerapan infrastruktur sepeda dievaluasi dengan melibatkan publik (masyarakat), menurut Anda bagaimana prosedur partisipasi yang tepat untuk melibatkan mereka?

Answer / Jawaban: Both direct and indirect participation / Partisipasi langsung dan tidak langsung

- c. **Direct participation** – public address their opinions and complaints directly on the bike infrastructure implementation to local government or involving them without the presence of individual representative (e.g. through government website and citizen's blog etc.)

Partisipasi langsung – publik menyampaikan pendapat dan keluhan mereka ke Pemerintah secara langsung tanpa ada perwakilan individu (public representative) seperti melalui website Pemerintah atau blog Pemerintah khusus untuk masyarakat.

- d. **Indirect participation** – public convey their opinions and complaints indirectly through individual representative who have the expertise in transportation field, for example individual representative addresses their opinions and complaints through institution/body/forum (e.g. Jakarta Transportation Council/DTKJ, traffic and road transport forum/Forum LLAJ, local transportation agency).

Partisipasi tidak langsung – publik menyampaikan pendapat dan keluhan mereka secara tidak langsung melalui perwakilan individu (public representative) yang memiliki kemampuan dan keahlian di bidang transportasi, seperti penyampaian secara tidak langsung melalui institusi pemerintah/lembaga/forum (Dewan Transportasi Kota Jakarta/DTKJ, Forum Lalu Lintas dan Angkutan Jalan/Forum LLAJ, Dinas Perhubungan DKI Jakarta).

If you choose indirect participation, please **choose the following answer with mark (√)**.

Jika Anda memilih partisipasi tidak langsung, mohon pilih jawaban berikut ini dengan menggunakan tanda (√).

Answer / Jawaban: Through DTKJ, Forum LLAJ and Local transportation Agency / bisa melalui DTKJ, Forum LLAJ and Dinas Perhubungan DKI Jakarta

(b.1) Through DTKJ as mediator and coordinator that accommodate all aspirations from public and stakeholders; and Forum LLAJ as mediator to accommodate the inputs from inter-government institutions that subsequently Forum LLAJ will address them to DTKJ combined with public aspirations. Finally, all inputs and aspirations collected both DTKH and Forum LLAJ will be addressed directly to the Jakarta's Governor in making policies.

Melalui DTKJ sebagai mediator dan koordinator yang mengakomodir semua aspirasi masyarakat, sektor swasta dan NGO; dan Forum LLAJ sebagai mediator dan koordinator untuk mengakomodasi masukan antar institusi Pemerintah dan selanjutnya Forum LLAJ menyampaikan masukan tersebut ke DTKJ yang digabungkan dengan aspirasi public. Akhirnya, semua aspirasi dan/atau masukan yang terkumpul akan disampaikan oleh DTKJ secara langsung ke Gubernur DKI Jakarta untuk pembuatan kebijakan.

(b.2) Through Forum LLAJ as mediator and coordinator that accommodate all aspirations from public, inter-government institutions, DTKJ and other stakeholders. Forum LLAJ will address directly all inputs and aspirations to the Jakarta's Governor in making policies.

Melalui Forum LLAJ sebagai mediator dan koordinator yang mengakomodir semua aspirasi masyarakat, antar institusi Pemerintah, DTKJ, sektor swasta dan NGO. Selanjutnya, Forum LLAJ secara langsung menyampaikan semua aspirasi dan/atau masukan mereka ke Gubernur DKI Jakarta untuk pembuatan kebijakan.

(b.3) **Through Local Transportation Agency** as mediator and coordinator to accommodate all aspirations from public, inter-government institutions, DTKJ and other stakeholders, then transportation agency will address all aspirations to the Jakarta's Governor in making policies.

Melalui Dinas Perhubungan DKI Jakarta sebagai mediator dan koordinator yang mengakomodir semua aspirasi dan/atau masukan dari masyarakat, antar institusi Pemerintah, DTKJ, sector swasta dan NGO. Selanjutnya Dinas Perhubungan DKI Jakarta akan menyampaikan semua aspirasi dan/atau masukan mereka ke Gubernur DKI Jakarta untuk pembuatan kebijakan.

(b.4) *Other procedure / Prosedur lain: ...*

2. What programs conducted by ITDP to support Jakarta's government and to encourage public in improving the bike infrastructure implementation in the present and future?

Program apa yang dilakukan ITDP untuk mendukung Pemerintah Jakarta dan mendorong publik (masyarakat) dalam rangka meningkatkan penerapan infrastruktur lajur sepeda di Jakarta saat ini (present) dan di masa mendatang (future)?

No.	PROGRAM	
	Saat ini (<i>present</i>)	Mendatang (<i>future</i>)
1.	Review the non-motorized transport system (NMT) <i>Mengkaji sistem NMT</i>	Socialization on NMT <i>Sosialisasi NMT</i>
2.	Conducting public dialogue <i>Melakukan dialog publik</i>	Conducting public dialogue <i>Melakukan dialog publik</i>
3.	-	-

Thank you very much for your participation / *Terima kasih atas partisipasi anda*

Note:

Questionnaire sent on 25th June 2015 and replied on 6th July 2015