

Toward Child-Friendly Transportation Planning

A Comparative Analysis of Child-Friendly Transportation Practice between Canada,
United Kingdom and Indonesia

Thesis

A Thesis submitted in partial fulfillment of the requirements for
The EIP Master Degree from University of Groningen and
The Master Degree from Institute of Technology Bandung

By:
HANDIYANA
RuG: S1822365
ITB: 25407070

DOUBLE MASTER DEGREE PROGRAM

ENVIRONMENTAL AND INFRASTRUCTURE PLANNING
FACULTY OF SPATIAL SCIENCES
UNIVERSITY OF GRONINGEN



AND



DEVELOPMENT PLANNING AND INFRASTRUCTURE MANAGEMENT
SCHOOL OF ARCHITECTURE, PLANNING, AND POLICY DEVELOPMENT
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Institut Teknologi Bandung

Approved
Supervisors

Date: August, 2009

Super visor 1

Super visor 2

Dr. Femke Niekerk

Dr. Heru Purboyo Hidayat P.

Guideline for Using Thesis

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Abstract

Children are a vulnerable part of the community that could be a “victim” of rapid urban development. The meaning of victim here is degradation of their quality of life including diseases caused by heavy traffic pollution, limited independent mobility of children and youth and also children injury or death caused by traffic accident. In Canada, road traffic crashes are the leading causes of injury death for children over the age of one year. A study in the United Kingdom found that one third of children who survive in traffic crashes may suffer from post-traumatic stress disorder. In Indonesia, about 65% of injury deaths from pedestrian group are women and children. These conditions push some developed countries to accommodate children needs and right in urban transportation infrastructure planning. They issued regulations, policies and guidelines which are accommodating children rights and needs.

This research will explore the possibility to more promote and implement CFTP initiative in Indonesia by learning some experiences from Canada and UK. The main research objective is to formulate recommendations to legal and policy instrument reformation toward children-transport planning in Indonesia and to formulate possible approaches or methods that can be applied or adopted fit to Indonesia condition. This research is using descriptive and comparative analysis to discover political will, regulation, CFTP initiative development and children participation method in planning process.

The result of this research discovers several things that should be put into account for CFTP implementation in Indonesia. Those things are government commitment and strong political will for the initiative, bundle of regulation and legal instrument for protect children right in transportation sector, intensive public campaign to promote CFTP initiative, exploration for children participation method.

This research recommends some programs, ideas, initiative that can be adopted to be implemented in Indonesia. Those programs are School Travel Plan (STP) initiative, Child-Friendly transportation Guidelines, interactive public campaign using internet, and scholarly children participation method approach.

Keywords: Children, child-friendly, transportation, participation, regulation

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Handiyana
August 2009
Groningen, the Netherlands

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Acronyms and Abbreviations

ASRTS	Active and Safe Route to School (Canada)
CFC	Child-Friendly City
CFTP	Child-Friendly Transportation Planning
CIT	Canadian Institute of Planner
DfES	Department fro Education and Skills
DfT	Department for Transportation (United Kingdom)
MOST	Moving on Sustainable Transportation (Canada)
NGO	Non-Government Organization
OECD	Organization for Economic Co-operation and Development
PPG	Planning Policy Guidelines (UK)
RDTR	Rencana Detail Tata Ruang (Detail Spatial Plan)
RTR	Rencana Tata Ruang (Spatial Plan)
RTRW	Rencana Tata Ruang Wilayah (General Spatial Plan)
STP	School Travel Planning (Canada and UK)
UK	United Kingdom
ZoSS	Zona Selamat Sekolah (School Safety Zone) (Indonesia)

Chapter 1 Introduction

1.1 Background

Children are a vulnerable part of the community that could be a “victim” of rapid urban development. The meaning of victim here is degradation of their quality of life including diseases caused by heavy traffic pollution¹, limited independent mobility of children and youth² and also children injury or death caused by traffic accident³. In Canada, road traffic crashes are the leading causes of injury death for children over the age of one year⁴. A study in the United Kingdom found that one third of children who survive in traffic crashes may suffer from post-traumatic stress disorder⁵. In Indonesia, about 65% of injury deaths from pedestrian group are women and children⁶. These conditions push some developed countries to accommodate children needs and right in urban transportation infrastructure planning. They issued regulations, policies and guidelines which are accommodating children rights and needs.

How about Indonesia’s policy and regulation concerning children right in general and in transportation especially? In 2003, Government issued a law related to children protection (number 23). In this law (chapter 22) mentions that government is responsible to provide appropriate facilities and infrastructure for child protection. This law indicates that every infrastructure and facility development should consider children needs. In the transportation sector, there are two main laws that relate to transportation infrastructure and facilities provision, Law no.38/2004 regarding road and Law no.14/1992 regarding Road traffic and transportation. Under these laws, there are Government regulations that explain more detail of those laws. They are Government regulation no.34/2006 regarding road, Government regulation no.43/1993 regarding Road infrastructure. And of course for implementation purpose, there are so many regulations on the level of a ministry decree. However, based on my review for all those laws, none of those laws and regulations mentions or regulate transportation infrastructure and facilities especially for children or stressing on providing firm legal instrument toward children- friendly transportation infrastructure. Although in Law no 23 which issued in 2003 it has mentioned that transportation infrastructure provision should consider children need but in law no 34 regarding road which is issued in 2006 this issues was not considered. There is lack to accommodate children need in laws that regulate transportation infrastructure and facilities and seems that among laws were not supporting each other. There is also a gap in process

¹Peason, R., Watchel, H.,Ebi, K.(2000) Distance-weighted traffic density in proximity to a home is a risk factor for leukemia and other childhood cancers, *Journal of the Air & Waste Management Association*, 50, pp. 175-80

² Tranter, P., Doyle, J.(1996) Reclaiming the residential street as play space, *International Play Journal*, 4,pp. 1-97

³ Canadian Institute of Child Health (2000) *The Health of Canada’s Children*, Third edition, Canadian Institute of Child Health, Ottawa

⁴ The data on traffic injuries and mortality of the Transport Canada Web site; <http://www.tc.gc.ca/roadsafety/tp/tp13951/2001/page3.htm> accessed on 7 April 2009

⁵ Stallard P, Velleman R, Baldwin S, Prospective study of post-traumatic stress disorder in children involved in road traffic accidents. *British Medical Journal*, 317,1619-1623, 1998.

⁶ Rahmah A. Transportasi ramah anak; <http://anak.i2.co.id/beritabaruberita.asp> accessed 14 February 2008

on how we can gather children participation for determining transportation policy. The question arises are: how to put children rights and needs in transportation policy and planning on the right legal instrument.

- How to include children's rights and need in transportation planning?
- To what extent do existing laws and policies accommodate children's rights and needs?
- What instruments are available to include these rights?
- How can current practice in Indonesia be improved?

1.2 Research objective

The main research objective is to formulate recommendations to legal and instrumental reformation toward children-transport planning in Indonesia and to formulate possible approaches or methods that can be applied or adopted fit to Indonesia conditions. The research will examines how the legal instrument has being developed to secure children need in land-use and transport planning and what are the instruments or methods that can be used to accommodate children and youth needs and rights in transportation. The research will also examines the effort of developed countries, especially Canada and UK, and others in developing legal instrument and method has been used to encourage regarding to children-friendly transportation planning compare to Indonesia's experience or effort. This research also will discuss about transferability of children participatory method and possibility to be implemented in Indonesia.

1.3 Research questions

To fulfill the objective of this research, the research will be based on several research questions as follows:

1. What is the main concept of Children-friendly transportation planning?
This research question will direct the research activity to find more concepts, theories and reasons which underlie the children-friendly transportation planning.
2. How far is the development and the implementation of child-friendly transportation planning (CFTP) in Canada and UK?
Through this question, I will elaborate the development and implementation of CFTP in Canada and UK. I will explain the effort that has been made and what kind of laws, regulations and methods that had been made to support CTPF in Canada and UK.
3. How far policy development in Indonesia supports the concept of children-friendly transportation planning?
This research question will convey me to elaborate the existence of regulation due to CFTP. I will examine the policies and regulations of each transportation element to discover the gaps between them to support CFTP.
4. Are the policy or legal instrument of transportation element (land use, traffic and network) connected each other to support children-friendly transportation planning? If not, what is the effort can be considered to integrate the policies? To what extent the CFTP policies and methods in Canada can be transferred to be implemented in Indonesia?

This question will lead me to the activity which trying to find the interconnection between laws and regulations of each transportation element that support the CFTP.

5. How to get insight in children needs and what methods can be used to encourage children participation in planning process?

Through this question I will explore the methods that can be applied for gaining children need in transportation planning. I will compare all the methods for many cases and try to examine the appropriate methods for Indonesia context.

1.4 Research methodology

1.4.1 Theoretical framework

Theoretical framework for this research is laid on the transportation planning concept that there are 4 systems in transportation: traffic system, network system, activity system or land-use and institutional system. Institutional system here is including legal, organization, personal and fund. Policy in transportation has strong influence to form 3 other transportation systems (traffic, network and activity) and is required for influencing long-term transportation decision making (Bouwman and Linden, 2004). Policy in transportation will influence the direction of what have to be concerned more between demand and supply side (O'Flathery, 1997). This research will much more elaborate the policy development (act, regulation, and guideline) and find the relation between each other to support children-friendly transportation. The laws, policies and plans have to be interconnected each other to ensure children and youth. The research will also identify the methods or approaches to gather children aspiration which can be used as inputs for establishing policies for every element in transportation sector.

To achieve Child-Friendly transport planning, some measures should be developed in every level of planning: local, regional and national. On National and Regional level, the measure is emphasized on legal development which ensuring that infrastructure provision will accommodate children needs and giving opportunity for youth and children to involve in planning process and decision making. On local and project level, instrument that can be used toward CFTP is children participatory methods for defining their need in transportation planning and transportation infrastructure provision (bicycle path, pedestrian path, crossing etc).

Figure 1-1 shows the theoretical framework for this research.

This research is based on hypothesis that the laws and regulations do not accommodate children and youth need yet in Indonesia. CFTP concept can be implemented if all laws and regulation of transportation elements ensuring children have a 'room' to be considered and all these laws supporting each other. In figure 1, top scheme shows the condition of transportation element laws and regulations nowadays. Lack of connection between each other is shown by dash line. To achieve CFTP, children participation method can be considered as a way for establishing laws and regulations for each transportation element which consider the children need in transportation.

Conceptual framework of this research is starting from discovering the definition of CFTP and the position of CFTP from bigger planning umbrella (spatial plan or other policy) and also reviewing instruments (laws, regulations, children participation methods) toward CFTP. Next step, after exploration of CFTP literatures, is comparing what instruments have been used in Canada and UK regarding CFTP concepts against literatures, which methods have been used for children and youth participation, which one is used the most and background beyond the reason why they use it, what Canadian's law or regulation that accommodate children need, how Canadian positioning CFTP concept on National, regional and local level. Similar steps and questions are also used to discover Indonesia existing condition regarding CFTP. Comparison method is used to compare the implementation of CFTP in both countries and what can be learned from Canada and UK to be implemented in Indonesia. Transferability of the Canadian's and UK's experience will be examined based on factors (economic, culture, political, social and environment) that could be the constraints for implementation.

1.4.2 Research methodology

The research will be conducted based on literature study. Most analysis in this research is exploratory and descriptive analysis. Babbie (1992) states that exploratory study and its analysis are done for three purposes which are to satisfy the researcher's curiosity and desire for better understanding; to test the feasibility of undertaking a more careful study; and to develop the methods to be employed in more careful study.

Methodological steps of this research are presented as follows:

1. Reviewing and developing theoretical framework
2. Describing of existing condition of CFTP practice in Indonesia.
3. Describing CFTP practice and experiences from Canada and UK in child-friendly transportation planning and what method had being used for involving children in planning process
4. Comparison analysis of CFTP practice between three countries and analyzing the possibility and transferability of CFTP initiative component in Indonesia
5. Concluding and recommendation toward implementation of CFTP in Indonesia.

Data that are used for this study is rely on secondary data or literature study. This method is used because some limitation in collecting primary data and time constraints to conduct the research. Some data needed in this research are related to the Canada, UK and Indonesia so that it is difficult to collect data directly in those countries because the researcher studies in the Netherlands. The data for this study is used for building a theoretical framework and then is used for analysis part about CFTP. Main collection of data comprise of: definition of Child-friendly transportation, sustainable transportation concepts, transportation planning system, transportation legal instrument, CFTP guidelines, CFTP initiative campaign children involvement methods in Canada, UK and Indonesia. Source of data consist of previous research findings, comparative study/report, publication such as journal, text book, article and other relevant source from internet.

1.5 Research structure

The structure of this research will be elaborated in six chapters. The diagram of thesis framework describing the relation among chapters is illustrated in Figure 1. The content of each chapter can be described as follows:

Chapter 1 : Introduction

This chapter consists of background, research objectives, and research questions, theoretical framework, research methodology, and structure of research. It will illustrate the background of the study as the a trigger and reason beyond conducting research for CFTP.

Chapter 2: Literature Review

This chapter will elaborate theoretical concepts of sustainable transportation, the importance of CFTP, definition of CFTP. This chapter also discuss about children participation in planning and its methods. Finally, at the end of this chapter, the analytical framework is discussed to conduct comparative analysis of component CFTP

Chapter 3: CFTP Practice in Indonesia

This chapter will describe transportation planning culture in Indonesia, which is consist of transportation planning actors, regulation and law related to transportation sector and children right. CFTP practice in Indonesia is also discussed in this chapter. The last section of this chapter will try to discover of the evidence of children participation.

Chapter 4: CFTP Practice in Canada and UK

Similar discussion structure of CFTP practice Indonesia is applied to discuss CFTP practice in 2 developed countries. This chapter describes the implementation of CFTP in Canada as one of advanced countries in conducting the CFTP.

Chapter 5 : Comparison analysis CFTP implementation between UK, Canada and Indonesia

Comparison analysis about components toward CFTP initiative is the main discussion filled this chapter. Through this comparison analysis, similarities and differences of current practice and effort are revealed and some practices can be adopted to be implemented in Indonesia.

Chapter 6 : Conclusion and Recommendations

The final chapter consists of conclusion and recommendations. This chapter will provide some recommendations for Indonesia toward CFTP initiative implementation. These recommendations are made as adjustment from Canada experiences and also consider Indonesian condition/context.

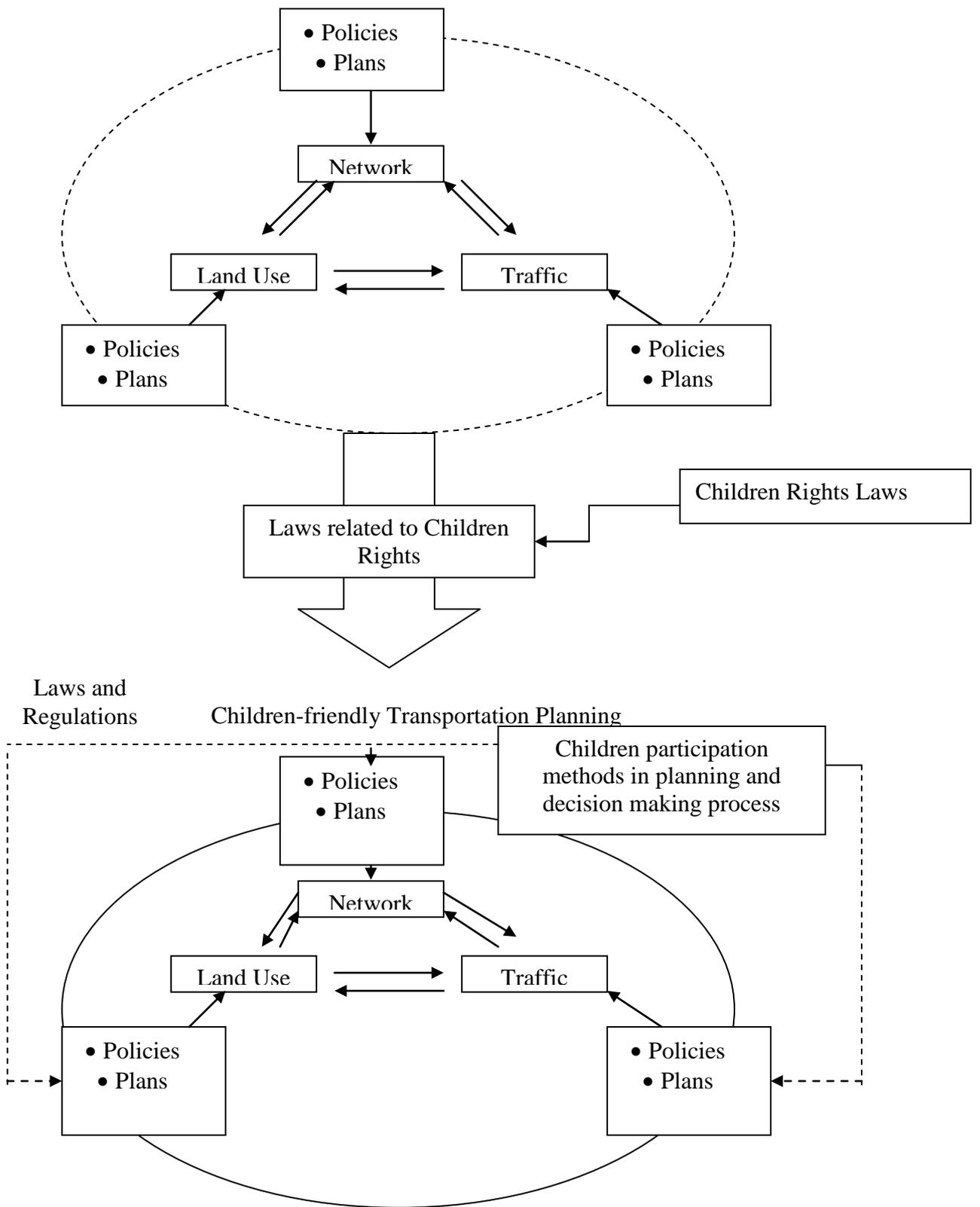


Figure 1-1 Theoretical framework

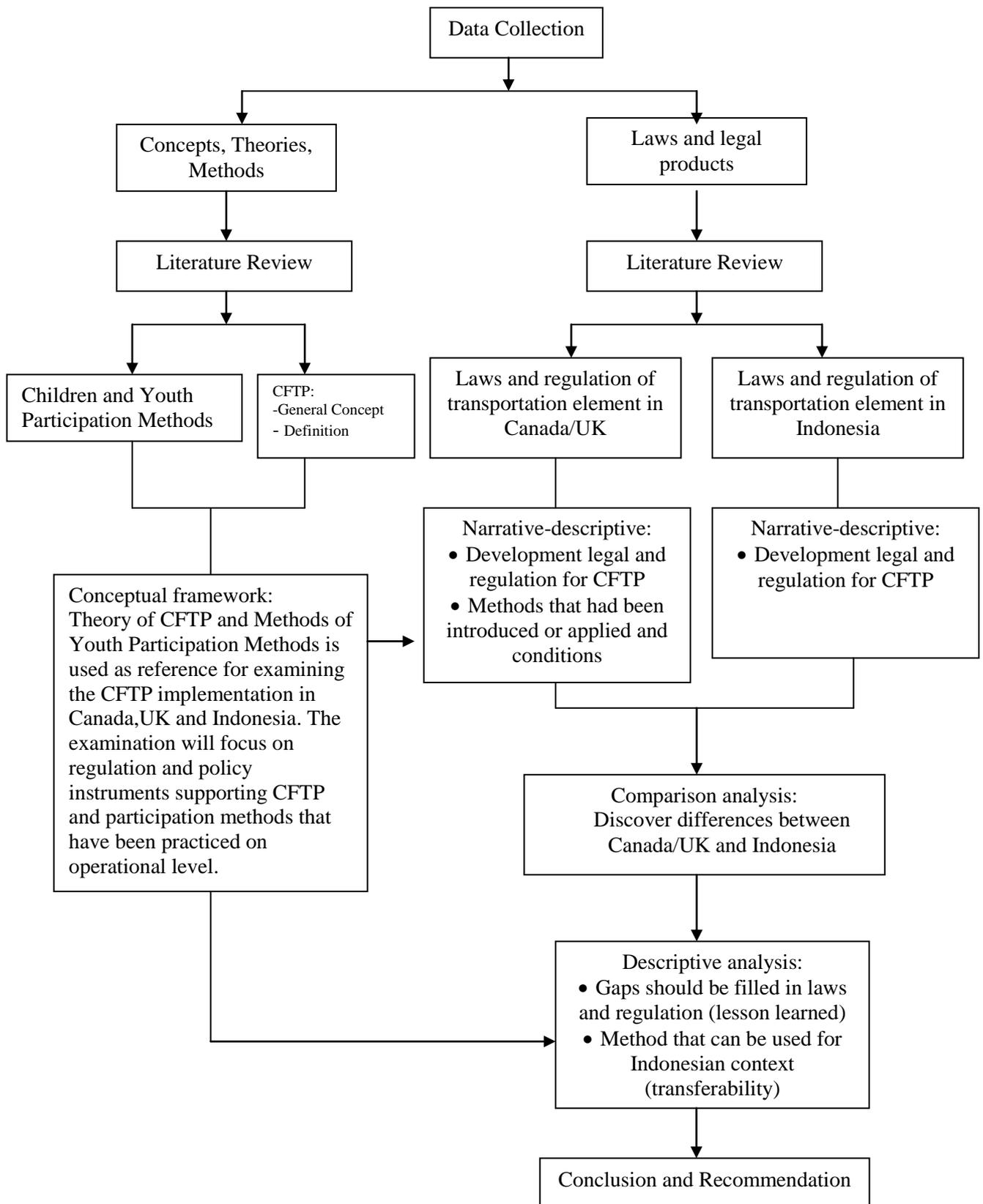


Figure 1-2 Research methodology

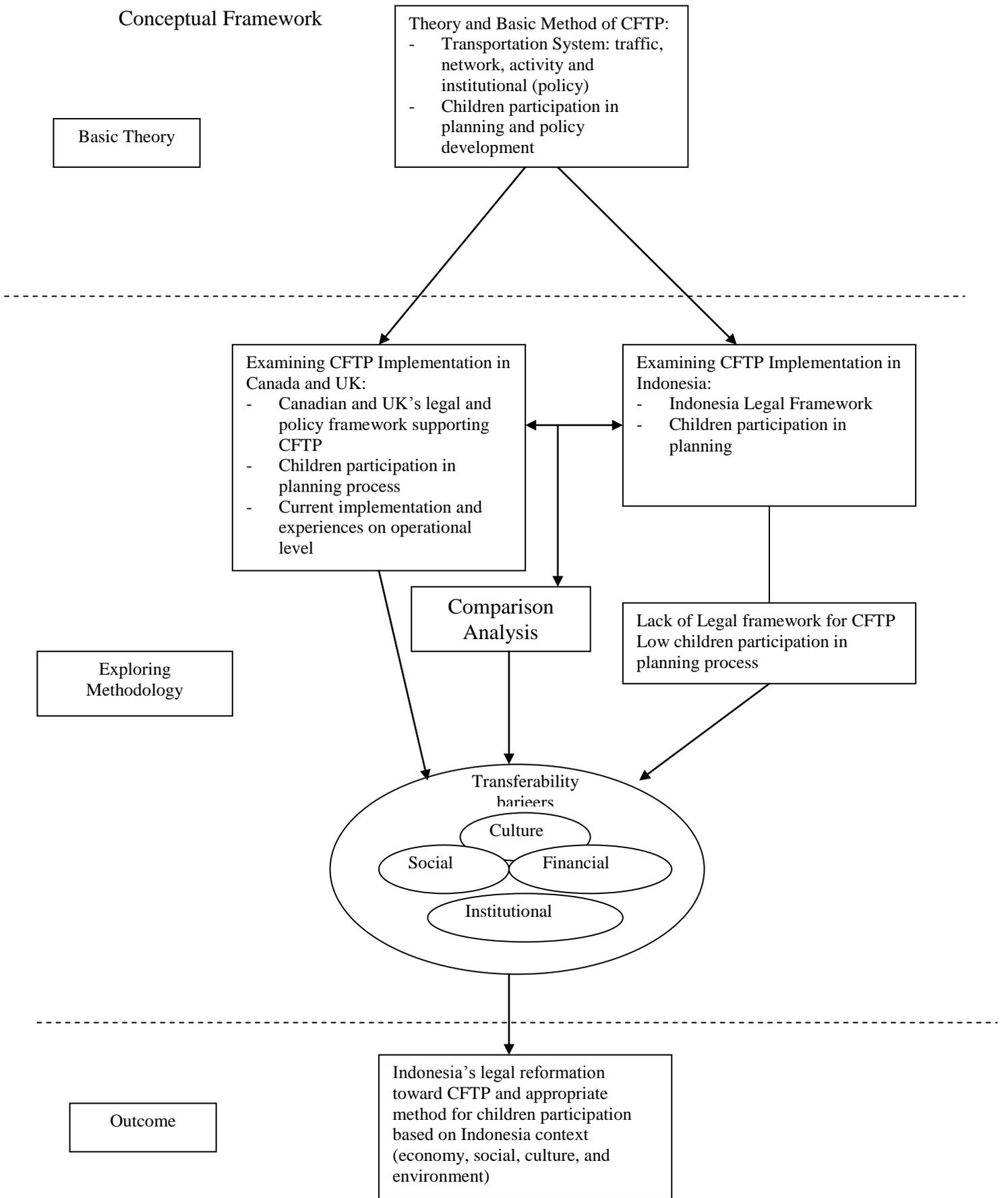


Figure 1-3 Conceptual framework

Chapter 2 Theoretical review

2.1 Introduction

This chapter will discuss the theoretical background of CFTP concept. In the beginning of the chapter, the statistic of the number of accident involving children will describe the foundation the importance of CFTP. Next section will explains sustainable transport concept which is the foundation of CFTP that will focus on human interest. Transportation system will be next discussion which will figure the area of this research. This section will show the position of this research in transportation system elements which will focus on Institutional elements. Following subchapter will discuss CFTP concept in detail, what the concept is and what the background beyond. Then the methods involving children in planning will give the picture of the method that has been introduced. This chapter will be ended with an analytical framework of this research where several elements have been proposed as important point toward CFTP.

2.2 The importance of CFTP

The concept of CFTP is to secure children rights and needs in the transportation sector. The aim is to give them more safety for their trips. Children and youth are vulnerable road users and fragile to traffic crashes. The importance of CFTP is laid on the fact that many traffic crashes involving this vulnerable group age: children and youth.

Globally, road traffic accident leads children and youth between 10 and 24 years old to the death. One third or 1.2 million people who lose their live in road traffic accident are youth and their age is under 25 years. And about 90 % of these traffic accidents were occurred in low in-come and middle-income countries.⁷ In many European countries, accident involving children fatalities show same comparable figures.

Based on OECD report, from 1983 when the last OECD report on children's transport safety was published until recently, about 100.000 children became victims of road-related crashes. Obviously, this number is huge and this level is un-acceptable.⁸

For illustration, In The Netherlands, every year about 53 children aged up to 14 years old are killed because of traffic accident and about 906 in patients are registered (the average of 1998-2002). Actual number of In-patient is probably higher than registered.⁹ Similar situation happened in Canada while traffic fatalities become a major cause of injury and death for children aged 1 and older.

⁷ Youth declaration for road safety, www.who.int accessed 16 July 2009

⁸ Keeping children safe in traffic, www.oecd.org accessed 16 July 2009

⁹ SWOV fact sheet, February 2004

In Indonesia, hardly to find definite number of children involve in traffic accident or report related to this problem. But one article reports that approximately 65% on injury death from pedestrian group are women and children.¹⁰

"Based on competence resource, in Indonesia, approximately 11 thousand people lost their life every year in road traffic accident with economic loss about 2,17% from total gross domestic product.¹¹

High number of children killed in traffic accident becomes global awareness to promote initiatives which give the children more secure environment. One of the initiative is how to provide transportation system become more child-friendly where children can feel more secure, comfort for doing their trip.

2.3 Sustainable transportation concept

Transportation for children and youth is part of sustainable transportation objective which has principle that sustainable transportation should 'continuing'. Its meant is that transportation systems have to ensure that the next generation will get more, in health, safety, accessibility or at least same benefit.

The Center of Sustainable Transportation of Canada introduces several definitions¹², and criteria of what of sustainable transportation should be. A sustainable transportation system is system that:

Box 2-1 Sustainable transportation criteria

- allows the basic access needs of individuals and societies to be met safely and in a manner consistent with human and ecosystem health, and with equity within and between generations;
- is affordable, operates efficiently, offers choice of transport mode, and supports a vibrant economy;
- limits emissions and waste within the planet's ability to absorb them, minimizes consumption of non-renewable resources, limits consumption of renewable resources to the sustainable yield level, reuses and recycles its components, and minimizes the use of land and the production of noise.

Source: The Centre for Sustainable Transportation, 2002

To become more sustainable The Center for Sustainable Transportation gives several points that can be considered. The sustainable transportation put the respect to 3 pillars of sustainable: society, economy and environment. Some conditions are proposed by The Center for Sustainable Transportation to achieve sustainable transportation is shown in Box 2-2

¹⁰ Rahman A, Transportasi ramah anak; <http://anak.i2.co.id/beritabarub/berita.asp> accessed 14 February 2008

¹¹ <http://www.presidentri.go.id> ;accessed on 2 July 2009

¹² Definition and vision of sustainable transportation, The Centre for Sustainable Transportation, October 2002 (www.cst.uwinnipeg.ca/documents/)

Box 2-2 Sustainable transportation condition

<p>With respect to society, transportation systems should:</p> <ul style="list-style-type: none"> • Meet basic human needs for health, comfort, and convenience in ways that do not stress the social fabric. • Allow and support development at a human scale, and provide for a reasonable choice of transport modes, types of housing and community, and living styles. • Produce no more noise than is acceptable by communities. • Be safe for people and their property. <p>With respect to the economy, transportation systems should:</p> <ul style="list-style-type: none"> • Provide cost-effective service and capacity. • Be financially affordable in each generation. • Support vibrant, sustainable economic activity. <p>With respect to the environment, transportation systems should:</p> <ul style="list-style-type: none"> • Make use of land in a way that has little or no impact on the integrity of ecosystems. • Use sparingly energy sources that are essentially not renewable or inexhaustible. • Use other resources that are renewable or inexhaustible, achieved in part through the reuse of items and the recycling of materials used in vehicles and infrastructure. • Produce no more emissions and waste than can be accommodated by the planet's restorative ability.
--

Source: The Center of Sustainable Transportation (2002)

Sustainable mobility is an alternative and contemporary approach in transportation planning. One of the items of this approach is focusing heavily the social dimension instead of physical dimension as well as people focus instead of Traffic focus (see table 2-1). This approach also put pedestrian and cyclist on their top priority or hierarchy instead of car user.

The differences of approaches of transportation planning (Banister, 2008) is shown in table 2-1

Table 2-1 Two transportation planning approaches differences

The conventional approach-transport planning and engineering	An alternative approach - sustainable mobility
Physical dimensions	Social dimensions
Mobility	Accessibility
Traffic focus, particularly on the car	People focus, either in (or on) a vehicle or on foot
Scale : Large	Scale : Local

Street as a road	Street as a space
Motorised transport	All modes of transport: pedestrian and cyclist on top hierarchy and car users at bottom.
Forecasting traffic	Visioning on cities
Modeling approaches	Scenario development and modeling
Economic evaluation	Multi-criteria analysis to take account of environmental and social concern
Travel as a derived demand	Travel as a valued activity and a derived demand as well
Demand based	Management based
Speeding up traffic	Slow down the movement
Travel time minimization	Reasonable travel times and travel time reliability
Segregation of people and traffic	Integration of people and traffic

Source: adapted from Marshall (2001) in Banister (2007)

Banister (2008) states that there are four actions to achieve sustainable transportation or mobility as follows:

1. Reducing travel needs
2. Transport policies measure: focus on modal shifting
3. Land use policies measure: focus on reducing travel distance
4. Technological innovation: increasing efficiency

Furthermore, Banister (2008) argues that involving people in transport planning is essential. This will give “*an understanding of the rationale behind the policy changes*” and in the end will lead to behavioral change. It will give more understanding on what should be changed to meet people need. Banister states that successful implementation of radical change is laid on public acceptability and also community and stakeholder commitment in planning process (discussion, decision making and implementation) must be involved.

Moreover, Banister suggests 4 key elements as the principle of sustainable mobility paradigm which in the last has to be combined into a series of consistent policy measure. Four key elements are:

1. Making the best use of technology
2. Pricing regulation, reasonable pricing
3. Planning and regulation integration
4. Information for clear target personal

To promote public acceptability of sustainable mobility, Banister explains at least 7 key elements that should be considered see box 2-3

Box 2-3 Key elements in promoting the public acceptability of sustainable mobility

Information	Education, awareness campaigns and promotion through media and social pressure are an essential starting point
Involvement and communication	The process must be inclusive, with clear

	aims and an understanding of the consequences to those on whom the strategy will impact
Packaging	Push and pull policies measures need to be combined I mutually supporting packages
Selling the benefits	It is necessary to widely publicize the benefits, even if there are costs, inconvenience and sacrifice.
Adopt controversial policies in stages	Support needs to be built up in terms of positive outcomes and measureable improvements in the quality of life.
Consistency between different measures and policy sectors	Some measures (e.g. pricing) that are common to all futures
Adaptability	Decision today should not unnecessarily restrict the scope for future decisions, so that the adaptive behaviour of individuals and agencies can be assessed.

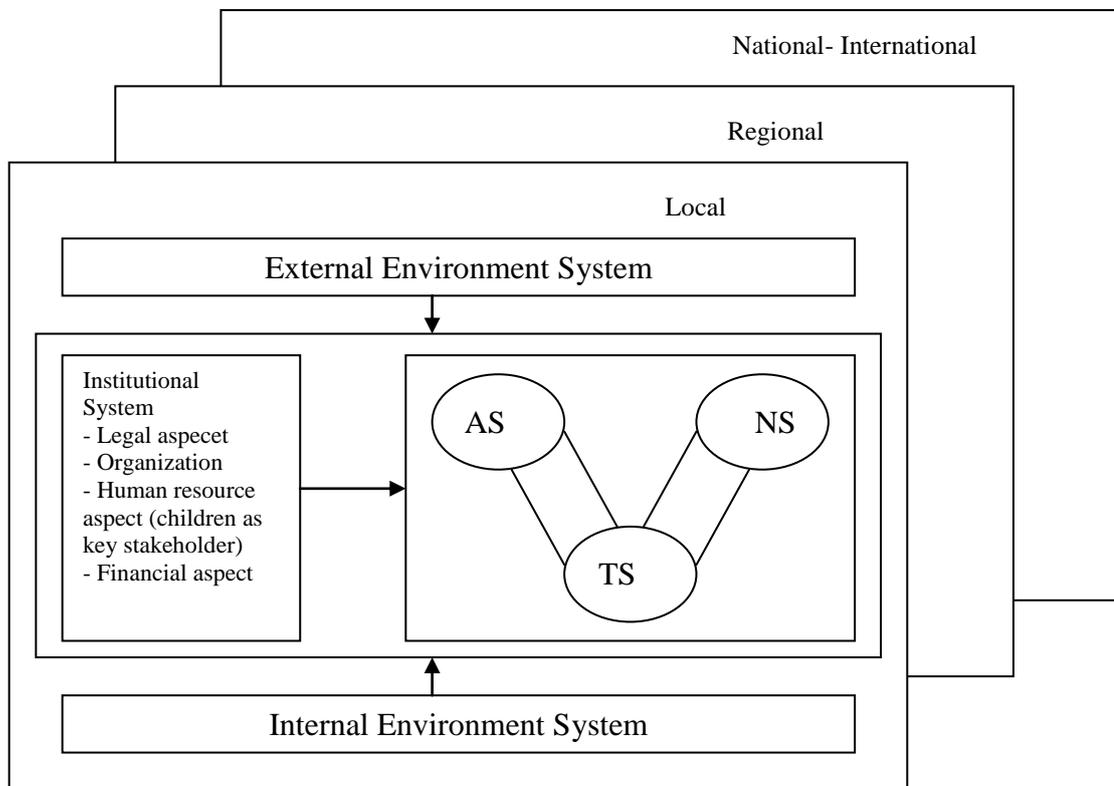
Source: Banister (2008)

As part of the society, children safety in transportation should be taken into account because they are important stakeholders and should be safe and convenience. Above this children have their own perspective what is good for them. In the last, the child friendly planning is acceptable for all society. What is good for children is good for people as well.

2.4 Transportation system

In this section, I will explain factors that support transportation systems and factors that are influencing the system.

Basically, transportation systems are supported by three sub-systems, namely, activity system, network system and traffic system. These sub-systems are interconnected with each other and influencing each other. Changes in activity system will affect traffic system and in the end will influence network system. But transportation system is not only influenced by these physical sub-systems but also by other systems, namely, institutional system, internal and external environment system and spatial system. (Kusbiantoro, 2007)



Source: (Kusbiantoro, 2007)

Figure 2-1 Transportation system

Aspects that can be grouped under the institutional system are legal aspect, institution or organization, human resources and financial aspect. While aspects that influence internal and external environment system can be categorized as:

1. Economic aspects
This aspect related to economic activity development of one area, for instance the land use changing from agriculture to industry
2. Social aspects
This aspect related to social status/level of citizen of people, number of productive ages, urbanization level.
3. Cultural aspects
This aspect related to cultural condition of one area, norm and behavior.
4. Political aspects
This aspect related political condition, political conflict, political stability,
5. Geographical-Physical aspects
This aspect related to geographical condition of one area; flat, hilly, mountainous.

Internal environment system is more likely related to condition or situation which is influencing the transportation system within one administration boundary such as district, city, metropolitan area, province and country. External environment system has same aspects with internal environment system but this system is influenced by global and international environment outside the internal system, for instant travel banned for one country. In this research I will use this concept incorporating with policy implement barriers that proposed by Banister to identify transferability of CFTP initiative for Indonesia. I think internal and external environment aspects can be approached and treated as policy instrument implementation barrier.

Furthermore, Kusbiantoro explains aspects in institutional system as follows:

1. Legal Aspect
Legal aspect covers various regulations, acts and laws, policies, provincial and local regulations.
2. Organization Aspect
Organization aspect covers existence and readiness of organization needed from every planning process step and also the responsibility of each organizational tier.
3. Human resource aspect
Human resource aspect includes readiness, competence and human resources culture of various stakeholders (government, private and citizens). This aspect has strong relation with next section which discusses more detail about children participation and its methods as a member or citizen/society and one of transportation stakeholders (see section 2.6 and 2.7). To implement CFTP, we should consider this aspects especially its key stakeholder, children.
4. Financial Aspect
Financial aspect covers fund availability due to planning and action program for every period (short, medium, long)

Every interconnected transportation system is laid on a spatial system which is distinguished into 3 levels: Local/Municipality, Regional/Provincial and National or international.

In this research I will focus on institutional development to support CFTP and discuss the possibility and transferability of the concept by considering some aspects in internal and external environments system which can be approached by identifying policy implementation barriers proposed by Banister.

2.5 Children Friendly Transportation Planning concept

Definition and Background of CFTP

Child-Friendly transportation Planning (CFTP) is a new terminology. There is not many literature or planning documents that discuss or explore this terminology. Limitation of the theoretical literature subject to this terminology conveys difficulties for searching what the definition is. In practice, there are so many probabilities that this terminology has been used in several countries in different term. Based on The Centre for Sustainable Transportation research, sources of information on CFTP are

based on two potential similar sources of CFTP. One source is design guidelines for children which is published by The Dutch institute for Design and another is *Barnperspektiv pa planeringen* (Child's perspective on planning) publishes by Nic Nilsson in Swedish. But there is no further information to explain the definition of CFTP in detail.

This is new concept has strong related concept with Child-Friendly city (CFC). The lead is the CFC initiative of the United Nations Children's Fund (UNICEF), which is at the forefront of efforts to consider children needs and aspirations in an urban environment. CFC is responding to the global trend towards urbanization, to recognition that children constitute between 20-50 percent of populations, and to commitments made in respect of the United Nations Convention on the Rights of the Child.

The City summit in Istanbul in 1996 highlighted that well-being of children in the city is the best indicator of how the healthy city is. A Child Friendly City is a people friendly city, encouraging the participation of citizen – young and old- in its services and its planning.

Box 2-4 Child-friendly city concept

A Child Friendly City is a local system of good governance committed to fulfilling children's right. It is actively engaged in fulfilling the right of every young citizen to:

- Influence decision about their city
- Express their opinion on the city they want
- Participate in family, community and social life
- Receive basic services (health care and education)
- Drink save water and have access to proper sanitation
- Be protected fro exploitation, violence and abuse
- Walk safely in the streets on their own
- Meet friends and play
- Have green spaces for plants and animals
- Live in an unpolluted environment
- Participate in cultural and social events
- Be an equal citizen of their city with access to every service, regardless of ethnic origin, religion, income, gender or disability.

Source: The definition of CFC is taken from: www.childfriendlycities.org
(accessed on 48/08/2009)

Meanwhile, based on Building Child Friendly Cities document (Unicef,2000), there is nine characteristic for determining whether a city has put "children first"¹³ as follows:

1. Children's participation: promoting children's active involvement in issues that affect them; listening to their views and taking them into consideration in decision-making processes

¹³ Building child friendly cities: A framework for action: UNICEF, 2000

2. A child friendly legal framework: ensuring legislation, regulatory frameworks and procedures which consistently promote and protect the rights of all children
3. A city-wide Children's Rights Strategy: developing a detailed, comprehensive strategy or agenda for building a Child Friendly City, based on the Convention
4. A Children's Rights Unit or coordinating mechanism: developing permanent structures in local government to ensure priority consideration of children's perspective
5. Child impact assessment and evaluation: ensuring that there is a systematic process to assess the impact of law, policy and practice on children - in advance, during and after implementation
6. A children's budget: ensuring adequate resource commitment and budget analysis for children
7. A regular State of the City's Children Report: ensuring sufficient monitoring and data collection on the state of children and their rights
8. Making children's rights known: ensuring awareness of children's rights among adults and children
9. Independent advocacy for children: supporting non-governmental organization and developing independent human right institutions-children's ombudspeople or commissioners for children-to promote children's rights.

The concept of a child friendly city is not based on an ideal end state or a standard model. It is a framework to assist any city to become more child friendly in all aspect of its environment, governance and services including in transportation sector.

To form a Child-friendly city, there are 4 keys principle of convention (Riggio,2002):

1. Non discrimination (article 2) : a child friendly city should be inclusive for all children
2. Best Interest (article 3): Interests of the child are priority. Policy maker should aware the impact of the policy to the child
3. Every child's right to life and maximum development (article 6): CFC providing the optimal condition for childhood
4. Listening to children and respecting their views (article 12):

From those 4 key principles and also the right of children in Child Friendly City will endorse the need for providing better access for children in transportation. That children have right to get a good environment, can participate to give recommendation for their development, to feel safely from accident, have right to determine what transportation infrastructure needed for their travel.

Old paradigm that said that 'a city fit for adults is also good for children' has been changed. Now, the new perspective is that a city which is designed for children will fit also for adults.

Before going further, it is important to determine which age group that can be categorized as child and youth. According to the UN convention on the Rights of the Child, article-1, a child is defined as follow:

“A child means every human being below the age of eighteen years unless, under the law applicable to the child, majority is attained earlier.”

This age group makes children and youth as vulnerable road user because of their incapability and this group should have special attention and special policy.

“Road users who have a high casualty rate and therefore should receive special attention in safety policy, are often referred to as ‘vulnerable road users’. Vulnerable road users can be subdivided by mode of transport or by age. In the first place vulnerable road users are unprotected, leading to a modal split subdivision (i.e. pedestrians and cyclists) and the second based on incapability in certain amount, leading to an age subdivision (i.e. the young and the elderly).”
(*SWOV February 2007*)

This definition will lead to the importance of CFTP based on fact that children safety is in danger regarding to number of traffic injury which involving children as has been explained in the first section. Not only road safety issue but also paradigm shifting that transportation planning which fit for children will fit for adult as well.

In Canada, Child-Friendly Transportation Planning terminology come arises from the need and requirement of such kind guideline of land-use and transport planning which giving more attention to children and youth.

“The terminology arises from work conducted in Toronto. The project is supported by the Ontario Trillium Foundation and entitled Kids on the move which examining children’s travel in those two suburban regions through examination of available data...”

The concept itself “arises from the need that a set of provincially endorsed child-friendly land-use and transport planning guidelines” (O’Brien,2004)

CFTP concept has another terminology. In Europe, it is much known as ‘children admitted’ principle.

”.....schematic form the conceptual contents of a programme of actions to promote mobility based on the ‘children admitted’ principle as well as an overview of what can be done, through a transport policy, to give children and young people their due as regards mobility and well-being in towns and cities”¹⁴ (*Kids on the move, 2002*)

The conceptual contents of a programme of mobility based on the “children admitted” principle (*Kids on the move,2002*)

A. Decision of Principle

- 1) *Political recognition of the reality of the problem*: children’s mobility is the issue and a factor that determining quality-of-life adult and children.
- 2) *Political commitment/will* : as a tangible expression of this recognition of the problem, your town or city can lay down principled objectives (reduction the number of victims, promotion children friendly transportation modes)

¹⁴ Kids on the move, European communities, 2002

B. Framework measures

- 1) *Legitimization of the actions*: with a view to ensuring a proper perception of the problems, expectations and most effective lines of attack in terms of your policy objectives
- 2) *Structure*: in order to ensure the long-term coordination of the various actions, it is preferable not only to place someone in charge but also to create a forum bringing all the players together

C. Actions.

- 1) *Planning and Urban Design*: Compact city (short distance urban planning) introduction of special measures in the immediate vicinity of school.
- 2) *A.Organisation of an inter-school competition*: (ex. Mobility plan for pupils or for teachers)
B.Participation in existing events:
C.Organization of pilot experiments:
D.Participation in existing competitions:

From those discourses, I can conclude that CFTP can be defined as a planning process, from establishing policy to actual implementation, particularly in transportation which focuses on children and youth needs to give them better safety, accessibility, and security in transportation and also accessibility for them to participate actively in decision making processes.

2.6 Methods of children participation in planning

Children involvement in planning become important issues that should be considered. The reason is not only because this issue becomes a global issue but also children and youth are part of society and their perspective and their voice should be considered.

“Children and young people are an important stakeholder group in every society; they constitute 34% of the world’s citizens and their opinions and action will determine our collective future.....Since the early 1990s there has been increasing international activity in children’s participation. The refugee literature contributed rich insights into why listening to children is essential in the quest to rebuild shattered community “(Hinton, 2008)

There are benefits of including children in planning processes: ‘first, the personal and intellectual growth of the individual involved; second, the synergy of ideas created by organizing groups to educate themselves and to propel (to drive) them to turn their ideas into action; and, third, the creation of another area in which community development can take place’ (Checkoway, Pothukuchi, and Finn 1995 in Knowles-Yanez,2005).

There are four approaches to involve children in planning process as follows: scholarly, practice, educational and right based.(Knowles-Yanez,2009).

- **Scholarly (Non-Right-Based) Approaches**
This approach and land use practices are grouped together because of the following: they tend to lack a tight link to a practice outcome, are conducted by academic researchers in geography and planning, and do not make the right-based claimed of the last category this review.
This scholarly approach is sometime overlaps with the educational approach. See (Doddridge 2000; Talen and Coffindanfer (1999))
- **Practice Approaches**
The practice approach to involving children in land use planning activities takes place in three sometimes overlapping realms: public agency, planning consultant, and not-for-profit (NFP)
- **Educational Approaches**
The educational approach does what education does best – allow children the freedom to dream big, with no fear of real damage being caused by their doings. In these approaches, children learn that there are constrains as well as great possibilities.
- **Right-Based Approaches**
This approach explores children’s rights to participate in decisions that affect their lives. Two subcategories inside right-based approach is: (1) approach to use child development data and then draw recommendation for the policy (2) approach that “ learn on how children evaluate the place what they desire”.

As a part of society, children have right to be involved in decision making process. With their huge population in the world, about one third of world population, their thought and action are important factor in determining our ‘collective future’. Their involvement and their perception become one of the important factors for shaping and forming regulation and legal aspect as part of Institutional system in transportation systems .Knowles-Yanez (2009) categorizes 4 approaches in a matter children participation in planning process. Later, in next sections, these approaches will be used as instruments to identify children participation practices in several action programs to serve and protect children mobility.

2.7 Analytical framework

To analyze implementation of CFTP of three countries, Indonesia and Canada and UK, some components will be checked are based on criteria toward CFTP. There are no “fixed’ criteria how to determine what Child-friendly transport planning look like. For that aim, I will adopt ‘criteria’ for child-friendly city and sustainable transportation to be used as component or tool for checking child friendly transportation planning.

Political decision has been taken in several municipalities all around the world to create their cities become more child-friendly. The process toward CFC is inline with Children right convention implementation in a local governance level setting. This process incorporates a number of characteristics to put children on front.

Since there is no firm tool for assessing the successfulness of CFTP implementation, I will use combination criteria or conditions that are used for “assessing” CFC and Sustainable mobility (see section 2.5) combined with several criteria for achieving

sustainable transportation which is introduced by Banister in previous section and criteria for CFC, I can group them at least into 5 points as a tool for assessing how CFTP has been introduced or implemented.

From those 2 approaches, I can make a summarization what is needed for achieving child-friendly transportation planning. There are at least 4 points that should be considered as a reference to check how far the CFTP has been implemented. Factors that could be considered for achieving CFTP are:

1. Political will

Government support is the key point for successfulness an initiative. Without political pressure and government intervention, it is hardly to implement such kind of program nationally or globally. It is important to understand what political will is and the essence of Political will terminology. Using Post et al definition, I am going to identify political will component that has been used for promoting Children-friendly initiative in selected countries. Post et. al (2008) proposed their thought to explain what the political will is. Their ideal-type of political will definition requires that “ *a sufficient set of political actors with common understanding of a particular problem on the public agenda genuinely intends to support a commonly perceived, potentially effective policy solution*”. From that definition, we can make an excerption that at least 4 components which can be used for identify the existence of ‘political will’ (Post et al,2008), they are:

a. A sufficient set of political actors

Actors here can be determined as official actors in governmental regime which has authority to decision making. In generating political will, many non-governmental actors are also can influential but these players are not the key for making decisions. In democratic regime, A sufficient set of actor can be key bureaucratic actors in government structure or political party in legislative.

b. Common understanding of a particular problem on the public agenda

Political actors agree for a specific condition or issues can not be ignored and need the government intervention. Political actors have similar view for certain problem and they agree that the problem need government action. For achieving this common understanding, campaign is a useful tool to create public will and political will as well. The final aim is to form common and better understanding to specific issues among political actors and public as well.

c. Genuinely intends to support

Next necessary component is actors’ intending to support the initiative. Statement, numbers of policies and regulation is an indicator how far actors’

d. Common perceived, potentially effective policy solution

This last component is strongly related to previous component.. Previous component is relate to actors willingness to overcome the problem on the public agenda while the last component is relate to the real action program which is can be a potential effective policy solution.

2. Regulations and guidelines supporting CFTP

CFTP implementation will be succeeded if it is supported by regulation and guidelines. These regulation and guideline are useful to give reference to all parties for making better planning for putting children in front. This factor can be

part of political factor as well, and can be a measure tool for identify actors' genuine support.

3. Public Campaign or Public Information

Campaign for promoting the importance of CFTP is one point that should be highlighted, because it will make public aware that they have to do something to better transportation system for their children. This also can be a media for pressing the government to take into an action for issuing legal, policy and regulation for CFTP. This factor can be part of political factor as well, and can be a measure tool for identify actors' understanding of particular problem.

4. Public involvement (including children and youth) in decision making.

Involving children and youth in transportation decision making will direct planning product to meet children and youth needs and ensuring acceptability for all stakeholder.

Moreover I will analyze CFTP practice based on component (see figure 2-2) that I propose which also interconnected with institutional system component (section 2.4).

First component is 'political will' .Based on Post et .al. the definition of political will is "a sufficient set of political actors with common understanding of a particular problem on the public agenda genuinely intends to support a commonly perceived, potentially effective policy solution". 'A set of political actors here can be interpreted as organization aspect that involved in determines such kind policies or initiative. Actors' genuine intends to support effective policy solution can be considered how readiness the actor or organization to support the initiative including supporting in financial aspect, how readiness organization allocate the budget for the initiative. And this component is related to financial aspect in institutional system. Second component is regulation which is clear that this is also institutional component. Third component is public campaign and this component does not have connection with institutional aspect. Fourth component is children involvement. Children as a part of society and one of stakeholder are become important to involve in decision making related to transportation system. Their readiness to be involved and part in planning process is related to human resource aspect in institutional system.

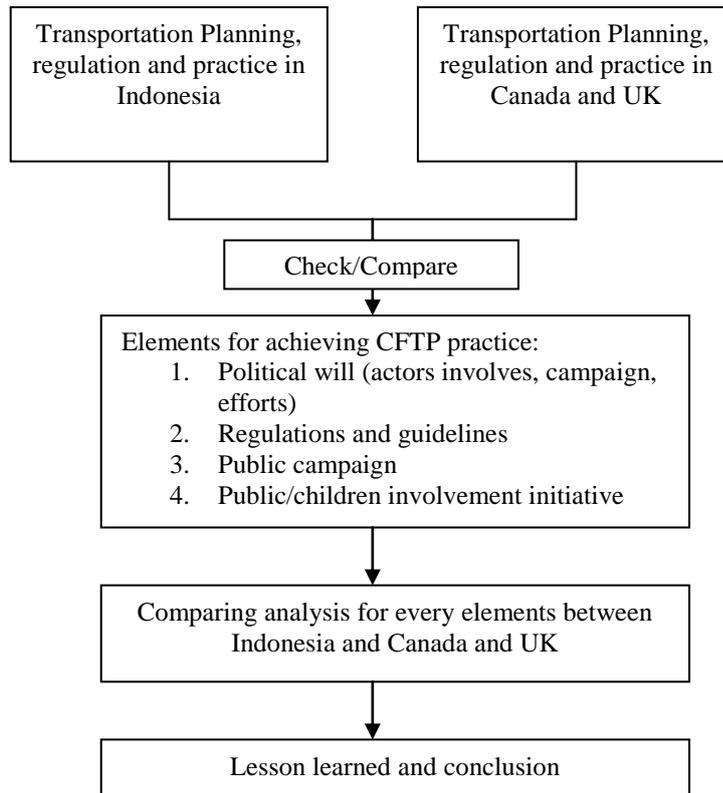


Figure 2-2 Analytical framework

Figure 2-2 shows analytical framework of this research. The activity is begin with explaining and elaborating transportation planning practice, regulation and CFTP practice in Indonesia and two developed countries, Canada and UK. All the transportation planning practice, regulations and CFTP practice in each country will be dissembled and groped into four components which later will be compared each other. In the end, the research will propose what ideas, initiatives or program can be learned and conclusion.

2.8 Concluding remarks

Statistic shows that attention for children safety and convenience should be main consideration in transportation planning. Fatal injury or even death is happened to children and youth in traffic-related crash and the number is enormous in low and middle-income countries. This figure is awaking global society to endorse countries to comply elements to create better city to become more sustain, more child-friendly. Some elements are embedded in sustainable urban development and Child-friendly cities while transportation sector has a main role to support both concepts.

This new concept (CFTP) leads to difficulty to find what its means. But the point of this concept is to put children in front and center of transportation planning, giving more accessibility, security and safety for their mobility and give them more space in giving their perspective on transportation planning process.

Four elements are proposed to be a reference for evaluating the degree of CFTP implementation from an institutional perspective. The 4 elements are political will/support for CFTP, regulation and guidelines that have been produced for putting child-friendly transportation in front, public campaign for forming public view about child-friendly transportation and how far children are involved in transportation plans decision making.

Chapter 3 Child-Friendly Transportation Planning in Indonesia

3.1 Introduction

This chapter will discuss current transportation planning in Indonesia. In the beginning of this chapter, I will explore the governmental agencies as actors whose has main role for defining strategic plan for transportation sector in Indonesia. These actors are important for successfulness CFTP implementing. Regulation, law and other legal instrument related to children is also elaborated in the next section. This chapter will be ended by section that explains about the development/state of the art of CFTP practice in Indonesia and Children participation method in Indonesia.

3.2 Transportation planning in Indonesia

3.2.1 Transportation planning actors

There are several main actors who direct or indirectly have big influence on transportation planning in Indonesia. On national level, Central government department have main task to provide strategic plan for transportation infrastructure and provision services. For strategic plan at National level, Department of Public Work has responsibility for managing transportation network system, particularly road and activities system while traffic system is managed by Department of Transportation.

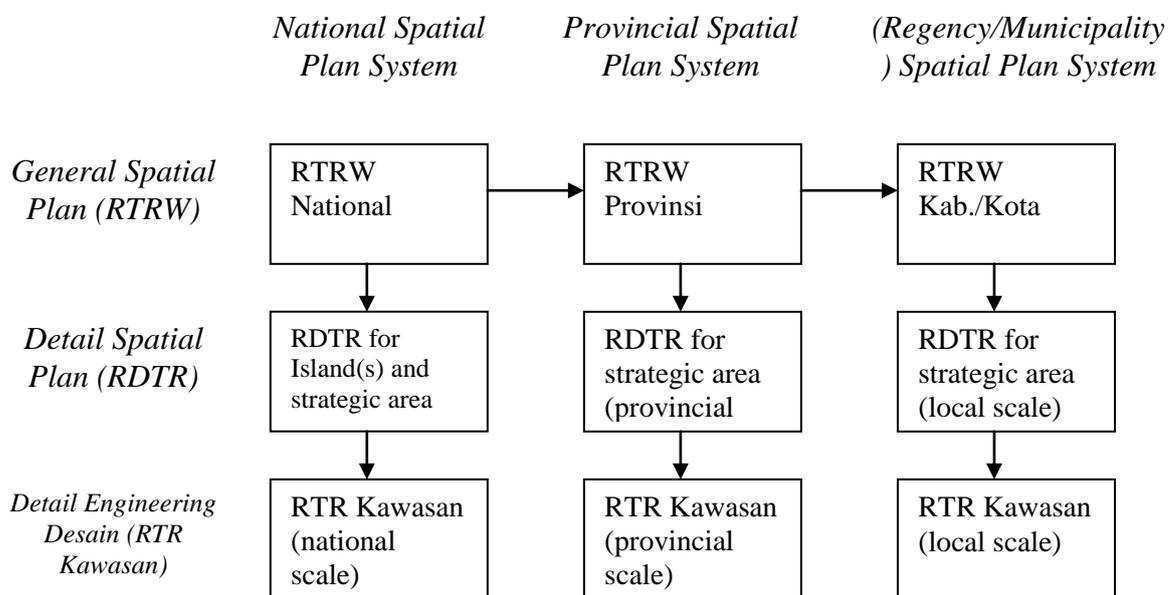
On regional level and local level, government agencies can vary in every region/district/local. Before decentralization era, every central government agencies had representative office at provincial and municipality. Since decentralization, every provincial, district or city government has right and autonomy to establish their government institution based on their need. Therefore, the institution name or terminology can be different from one province/district/city to another. It is possible that in one district or city, responsibility two institutions can be merged to only one institution. For instance, responsibility for maintaining public park and public road is under authority of one institution in one city but in other administration we can find that this responsibility is under different institution.

Table 3-1 Executive actors in transportation system policy

	Network system	Traffic system	Activities system
Main responsibility	Providing road network	Providing transportation service (transportation mode)	Providing spatial plan for supporting transportation plan
National Level	Department of	Department of	Department of

	Public work	Transportation	Public work
Regional Level	Province Public work agencies/section (probably different term for each regional)	Province Transportation agencies (probably different term for each regional)	Bappeda through RTRW-P(probably different term for each regional)
District/Local level	District Public work agencies (probably different term for each regional)	District Transportation agencies (probably different term for each regional)	Bappeda (probably different term for each regional)

Figure 3-1 shows hierarchical spatial planning system in Indonesia.



Source: Hudalah and Woltjer, 2007

Figure 3-1 Hierarchical spatial planning system in Indonesia

Notes for figure 3-1:

RTRW : Rencana Tata Ruang Wilayah (*regional spatial plan*)

RDTR : Rencana Detail Tata Ruang (*detail spatial plan*)

From that picture we can see that every government level has their general spatial plan for every detail level spatial plan. Obviously the system is hierarchical, means that lower level of spatial plan instrument both scale (national, provincial, municipal) and the level of detail should refer to higher level. Figure above show that plan making is always refer to higher level plans and this also has been stated by Miharja,2009 “ ...even though decentralization has changed Indonesian governance structure from a centralistic-hierarchical to a less hierarchical one, in specific implication to spatial planning, it is clear that both acts (spatial planning act and

decentralization act) actually urge the importance of hierarchical spatial planning system”.

Furthermore, in transportation planning, Miharja (2009) states that despite executive/government as an actor for transportation planning there are four other actors who influence Indonesia transportation planning, that are National/province/local people house of representative, private actors, experts and NGO (Miharja, 2009)

Indonesia transport planning since decentralization is shown in figure 3-2

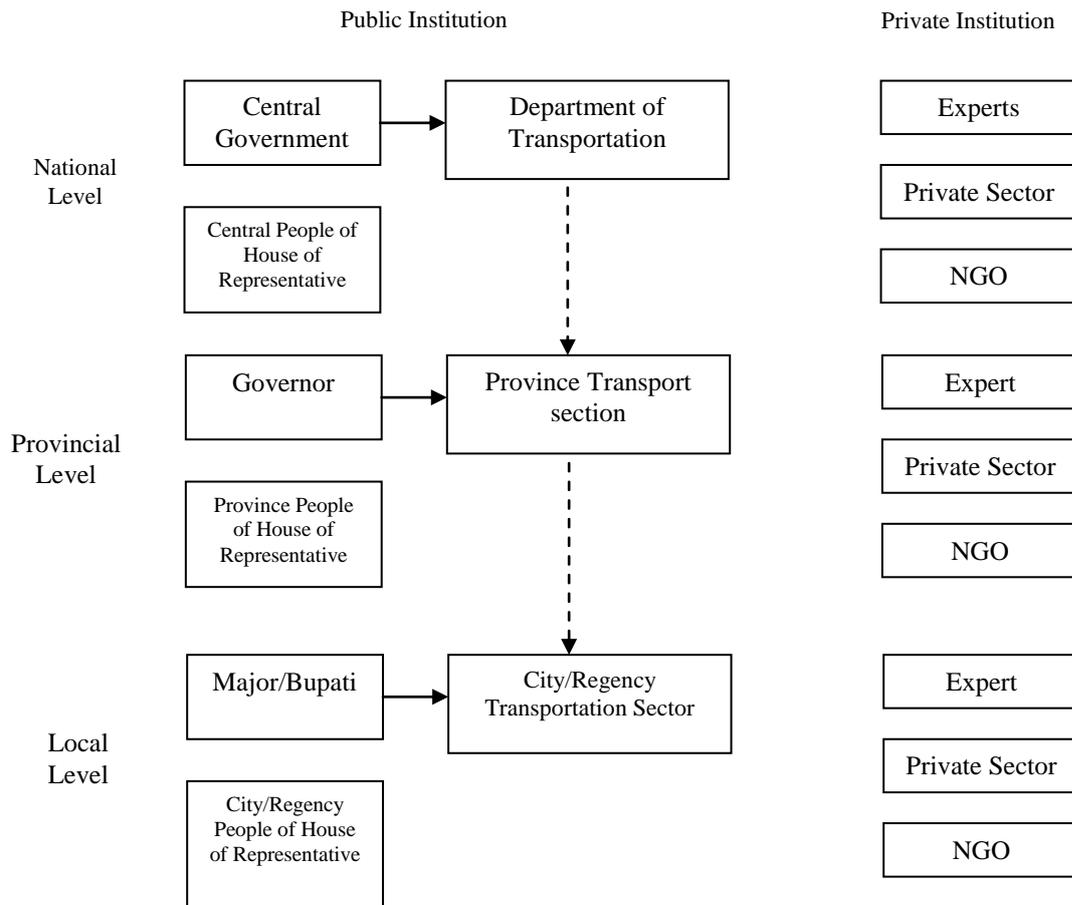


Figure 3-2 Indonesian transport planning since decentralization

Source: Miharja, 2009

Table 3-1 shows actors’ responsibility to establish regulations and policies regarding to transportation system. Each actor on every government tier has important role for establishing policy instruments

We can conclude that government agencies are varies for every government level and transportation system element. With this various form and different task of government institution, different view on how to provide good infrastructure for children probably huge. Children safety provision probably not the most important issue for one institution but for other institution that is less important so sometimes

regulations and policy instrument, which are produced by institution, do not support each other to answer the problem. With various institutions who engage in the responsibility relate to transportation sector planning, integration of their view and their perceptions to one issue become a thread and a barrier. There should be a strong political will and campaign of one issue so then every institution can achieved same perception of one issue and put it as important issue and in the end will establish regulation and policy instrument which support the issue. Integration of perception of the issues is not only on horizontal relation (between transportation system elements) but also on vertical relation (between government tiers).

Tabel 3-1 and figure 3-2 shows that there are so many actors, especially on government as policy maker that should be considered toward CFTP. It is meant that integration of their view for valuing specific issues is important for successfulness of program implementation. More illustrative explanation will present in next section.

3.2.2 Regulations and laws

On national level, Acts and Government regulations are the umbrellas for others policy instruments. Those two policies have function as the strategic policies. Acts contains article that regulate broader while government regulation will describing acts in more details. Under those policy instruments there would be possible other instrument relate to each sector/system (network, traffic and activities). Other policy intruments below acts and regulation they are Keputusan Presiden (Presidential decree), Peraturan Presiden (Presidential regulation), Instruksi Presiden (Presidential Instruction), Keputusan Menteri (Ministrial Decree), Keputusan Direktorat Jendral (Directorate General Decree)

For every transportation system, General plans for every government level are created as a strategic plan for certain period. These plans are renewed in certain period to answer the development and much more technical and detail from Acts and regulation. In example, in National Road General Plan, corridor for new road development has been plotted on detail map as well for road improvement and road maintenance.

Table 3-2 Policy instrument for transportation sector

	Network system	Traffic	Activities
National Level	Road Act; Government regulation	Traffic and road transportation act; Government regulation	Land use act; Government regulation, RTRW-N
Provincial Level	Local Regulation (Provincial level) ,Governor Decree	Local Regulation (Provincial level) ,Governor Decree	Local Regulation (Provincial level) ,Governor Decree, RTRW-P
District/Local level	Local Regulation (Municipality level) Major Decree	Local Regulation (Municipality level) Major Decree	Local Regulation (Municipality level) Major Decree, RTRW-City

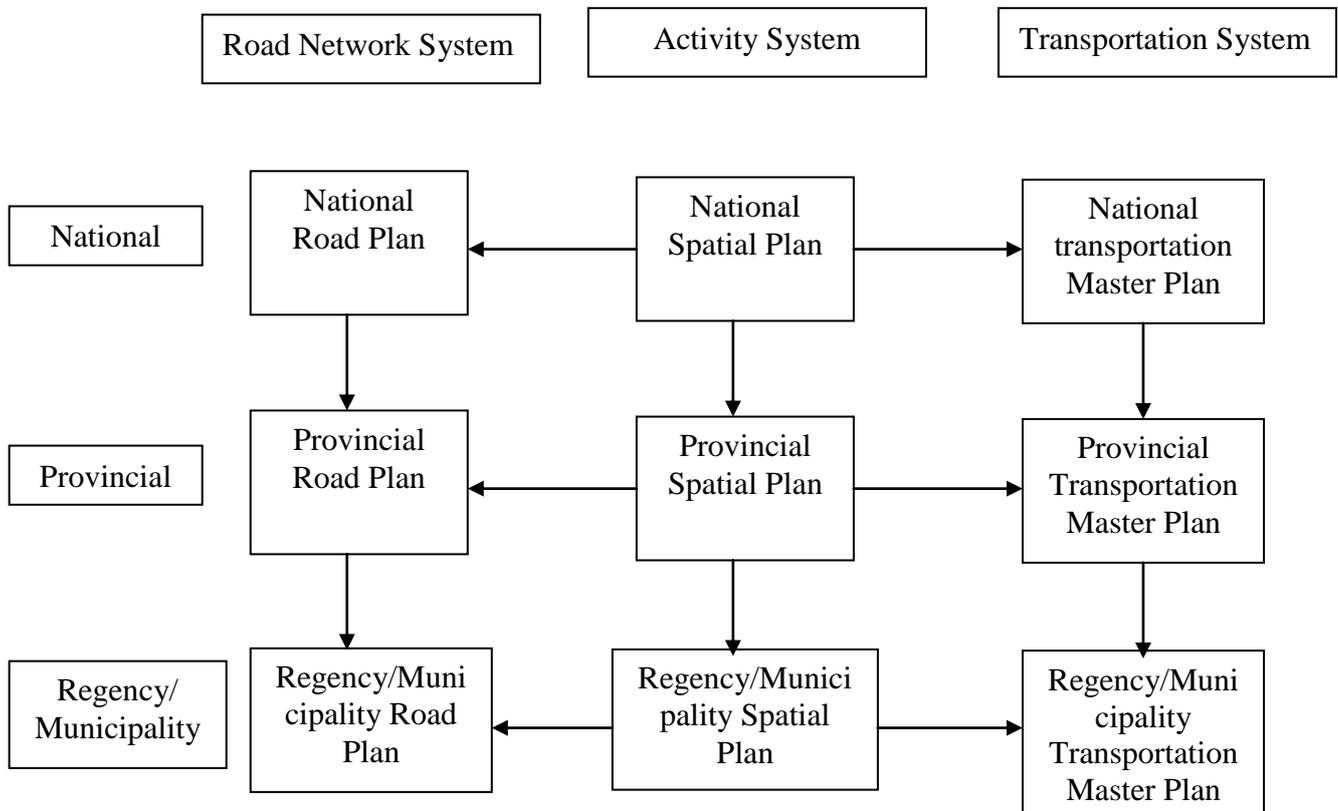


Figure 3-3 Inter-connection transportation system planning instruments

Road act 38/2004 article 18 to article 21 states that road network master plan is distinguished into 3 road network master plans, as follows:

1. National government has responsibility to establish National road network Master Plan: article 18 (paragraph 2 point c)
2. Provincial government has responsibility to establish Provincial road network master plan : article 19 (point e)
3. Regency/Municipality government has responsibility to produce Regency/Municipality road network master plan: article 20 (point d) and article 21 (point d)

Moreover, road government regulation no 34/2006 article 6 par.2 states road network plan should refer to spatial plan.

While for transportation system, the newest traffic and road transportation act 22/2009 article 14 par.3 mentions that every government level should make transportation system plan, they are:

1. National traffic and road transportation master plan,
2. Provincial traffic and road transportation master plan,
3. Regency and municipality traffic and transportation master plan,

Moreover, Article 15 par.3 states that establishing national traffic and road transportation master plan should refer to national spatial plan. Lower policy

instruments are also having similar pattern that provincial transportation master plan should refer provincial spatial plan and regency/municipality transportation plan should refer to regency/municipality spatial plan.

From those national level act or regulation none of the articles that mentioned or stated children needs. This shows that political will, particularly in transportation sector, to put children as part of society and awareness for children need and their aspiration is still weak.

All policies instrument only states that all the planning for every system should consider all people needs but none of them states the children need specifically. Disabled people are only one vulnerable group that is mentioned in transportation acts (article 49).

Regulation instrument for Children protection

Since 2002, Children Protection act no23 has been enacted by Government of Indonesia. This act can be considered as respond to global issue of children rights. Formerly, there is an act that regulates about children prosperity (Act no4/1979).

Children protection means, according to this law that action that aim to ensure and protect children and their rights so they can develop, live and participate optimally and also they get protection form child-abuse and discrimination.

Article 10 of Children Protection Act states that every child has right to give their perception and to be heard, to gather, to seek and to give information based on their intellectual level and their age. Article 24 is also state that government assurance children to use their right to give their perception.

Furthermore, article 22 of Children Protection Act states about government responsibility to provide service and infrastructure for children need.

In general, no doubt that this children protection act obliges government to:

- Provide appropriate service and infrastructure for children and can be interpreted also for giving service and infrastructure in transportation sector
- Government obligation to give children information, and to get and to know children perception for their need including in transportation sector.

These two points are can be used as foundation for actors, especially government, who involved in transportation planning sector to produce policy instrument (land use measure, infrastructure provision etc which provide better safety and accessibility for children.

3.3 CFTP practice in Indonesia

Not many CFTP initiatives has been introduced or implemented in Indonesia. One clear example of CFTP initiative is Zona Selamat Sekolah (ZoSS), in English School Safety Zone (SSZ).

Zona Selamat Sekolah (School Safety Zone/SSZ) is a kind of program that was established under commitment of Department of Public work, Department of Transportation, Department of Health, Department of Education and Indonesian

Police. This initiative program can be said as a campaign for increasing road safety for children. This program has been introduced in 2006 and has been implemented at 18 elementary schools of 11 cities in Java.

This program is executed and supervised by Department of Transportation. The legal foundation to run this program was laid on local policy within Department of transportation and the level was only Land Transportation Directorate General Regulation (SK3236/AJ403/DRJD/2006). This regulation was about policy to run ZoSS pilot project in 11 municipalities. This program was one of reflection of higher acts, laws and regulation which is regulating children protection and rights and also commitment from government to increase children safety in transportation sector.

Based on ZoSS guidelines, every school has right to implement ZoSS, but priority has been made for school which has characteristic:

- Every school located on national road.
- Traffic condition that indicated un-friendly to children (high risk of accident).
- Low accessibility for children to walking, cycling and using public transport to school.

ZoSS itself can be bottom-up initiative or vice versa. For implementing ZoSS, every school can write proposal letter to local government and later Local government will form ZoSS Committee. Top-Down approach in this situation when Local government directly form ZoSS committee without any proposals from school. ZoSS committee is executing unit which its member is local transportation agency, public work agency, education agency, health agency, police and citizen.

Based on evaluation report issued by Directorate General Land Transportation, Department of Transportation, about effectiveness of ZoSS, there are no actual data which present the effectiveness of program to secure children safety. So it is difficult to conclude how far the effectiveness of this program regarding to children safety issue. The evaluation report provides data that show the percentage of children crossing behavior before and after program implemented. In this report, there was decreasing number or percentage student crossing accompanied by their parent after program was implemented. The percentage of children who are crossing without accompanied by their parent was increasing from 27% to 31%. The children are basic elementary pupil and their age is between 6 – 12 years old. It means that children have confidence for crossing the road independently. Accessibility for them has been provided and improved. This means that one of the aim of CFTP has been achieved that to provide better accessibility for the children.

3.4 Children participation in Indonesia

Based on ZoSS experience and refer to ZoSS guideline to provide safer children transportation infrastructure especially at school zone, there is no room for children to be involved to determine appropriate road transportation infrastructure based on their perception. Questioner for gathering children travel pattern is dedicated to and to be filled by parents and most of questions are delivered in pre-defined option. There is no indication that children perception is accommodated to implement ZoSS for instance

what kind of road furniture needed for them to give them more accessibility and safer for their travel from and to school.

3.5 Concluding remarks

Based on the discussion of CFTP in Indonesia, fact that we can get that awareness for providing better and safer transportation infrastructure for children is shown through ZoSS program. It is a good sign toward CFTP initiative to be implemented in Indonesia nationally. However, there are some lacks for speeding up implementation CFTP since there is no enough legal instrument can be used for ensuring that transportation infrastructure and services should accommodate children need. The only acts that oblige government to giving appropriate infrastructure for children in Children protection act but act that regulate transportation infrastructure (road act) and services (traffic and road transportation act) do not state children right in it.

Chapter 4 Child-Friendly Transportation Planning in Canada and UK

4.1 Introduction

This chapter will discuss transport planning practice in Canada and UK especially related to CFTP initiatives. This chapter will elaborate the transportation planning agents that influence for developing or establishing transportation policy for each spatial level (Federal, Regional, and Municipality). Furthermore, this chapter will discover the policy development regard to child-friendly policy and some effort for making better transportation for children. Each section of this chapter will be ended by children participation method has being used by these countries for their action programs or initiatives.

4.2 Canada

4.2.1 Transportation planning in Canada

4.2.1.1 Transportation planning actors

Transportation planning cannot be separated from spatial planning. They are closely interwoven. To understand how transportation planning has been conducted in Canada, I will also elaborate spatial planning practice approaching since transportation planning is considered as spatial planning differentiate.

Planning in Canada

Planning system in Canada is more likely administrative compare to, for instance, United Kingdom which is discretionary (Wolfe,2005).Moreover, Wolfe explains that ‘urban and regional planning, along with municipal government, is a provincial matter under the constitutional division of power’. Under supervision of provincial government, every province and territory has its own planning legislation and they can create their local governments system,. Local governments do not have constitutional rights. Province’s policies, which they are situated, entirely dictate their status, duties and obligations.

In Canadian planning system, Federal government does not have direct planning authority. However, it applies indirect influence in municipalities in several of way for example control large land holdings such as ports, airports, canals, railroads.

Provincial and Territorial governments organize and control municipal governments and their planning activities through legislation (its meaning that they put it in laws and acts), sometimes known as the Municipal Act, or sound-like terminology and a Planning Act. ‘*Broad policy directive are made at the provincial level (usually related to environment, transportation, affordable housing, and the protection of national*

resources such as farmland, mineral and water). Regional, county or metropolitan plans direct the general structure of a region..

Furthermore, the heart of the planning system is laid on Municipal government. Their responsibility is preparing a detailed plan and their plan must be in conformity with the regional scheme even they are part of a region. *Municipalities prepare detailed land use plan, and importantly, are responsible for land use control and regulation*

According to public involvement in planning process, Canada is one country that put the attention most. Most of planning act writes about public participation. Through various participatory techniques, plans are prepared with high input from public/citizen. The techniques are varying from public hearing, focus groups, and consultation with major stakeholder. In fact, *The Canadian planning process can be described as collaborative, and at the local level, consensual (Wolfe,2005).*

Hatzopoulou et al (2008) states that policies and programs targeting the national transportation system in Canada are laid on federal government. Moreover, federal government also has responsibility for international issues in transportation, new vehicle standards, aviation, and with some exceptions, marine transportation as well as national and interprovincial rail, bus and truck transportation. On federal level, Transport Canada is the main regulator and policy maker.

On provincial level, government has role as decision maker for intra-provincial transportation, economic regulation of inter-provincial trucking. The provincial government also has responsibility to construct and maintain major highways, vehicle licensing and inspection, as well as enforcement of traffic rules. Involvement other department, public work and economic and environment department, for decision making in transportation are common in most province. To provide for a more sensitive delivery of services, frequently, provincial government pass-on responsibilities to regional and local municipal governments.

Local planning decisions, such as municipal transportation, development transport plans, public transit, and parking fee are Municipalities responsibility. Mainly, their responsibilities are depending on the degree of provincial government delegation. Smaller municipalities will generally have less scope for action than larger municipality

Beside three level of government, agencies also have important role as a proxy to regional municipalities. The role of these agencies is ‘to link and connect vision between municipal and provincial’. Other role of these agencies is to integrate various actors who have part in transport decision making; example of these agencies are Greater Vancouver Regional District (GVRD).

Tabel 4-1 Canadian’s actors transportation planning responsibility distribution

Government level	Responsibility	Function
Federal Government	<ul style="list-style-type: none"> - policies on national transportation system - international transportation issues - vehicle standard - interprovincial 	Main regulator and policy maker

	transportation	
Provincial Government	<ul style="list-style-type: none"> - intra –provincial transportation - economic regulation of inter-provincial trucking - construction and maintenance of major highway - vehicle licensing and inspection - traffic enforcement 	Decision maker in transportation in cooperation with their department of transportation, public works, economic and environment development
Municipality Government	<ul style="list-style-type: none"> - local planning decision; for instance municipal transportation, transport plans development, public transportation and parking fees. 	Decision maker for local transport plan.

Source : excerpted from Hatzopoulou,2008

Beside government institution there are several professional and non-profit organizations which actively involve supporting government according to transportation safety issues. Particularly in child-friendly transportation, those organizations are:

- The centre for sustainable transportation. They developed Child-and Youth-friendly Land-Use and Transport Planning guidelines for Ontario
- Transportation association of Canada. This association is developing guidelines called School and Playground Areas and Zones: Guidelines for Application and Implementation

These actors, government and NGO, are playing important role in transportation planning in Canada. On federal level the main actors in transportation system is Transport Canada, while in Provincial government has important role for directing transportation system on municipal level. Municipal government is main key in planning including transportation planning for their administration. Other actors which can be ignored are non-governmental organizations which are actively in producing such guidelines.

4.2.1.2 Regulations and laws

The Constitution of Canada divided the responsibilities of the Government into federal and provincial jurisdictions. It also provided for the possibility of the provincial governments to delegate some of its responsibilities to a municipal government¹⁵

¹⁵ <http://www.craigmarlatt.com/canada/government/government.html> accessed 18 July 2009

The main federal legislation governing transportation in Canada is the Canadian Transportation Act 1996. A recent review of the Act included assessment of both its overall environmental impact and government powers to support sustainable development objectives. (National profile, sustainable summit)

Federal government has authority and responsibility for transportation policies and program. Through its agency, Transport Canada has a mission is to serve the public interest through the promotion of a safe and secure, efficient and environmentally responsible transportation system. For that aim, Federal government issues Canadian Transportation Act (S.C 1996, c.10) as a general policy in transportation sector. This act is used as general policy for transportation sector on national level.

In order to support sustainable development, Transport Canada also issues such kind land use guidelines that complement increased use of sustainable transportation options (e.g. development approval policies that mandate access to transit services).

To improve road safety, Transportation Canada issues road safety vision 2009-2010¹⁶. This document will guide Canadian's government to achieve road safety improvement including children's safety improvement.

As a federal confederation country, beside federal government can produce acts, provincial government have an authority to enact their own acts. For comparison, Ontario province is chosen as a case. Ontario Government has issued acts related to transportation system. In road transportation sector, Ontario province government issued Highway traffic act (1990) while in planning area Planning Act has been enacted in 1990 as a policy for Municipality government for their land use planning. Municipality government does not have authority to issues the acts.

For regulate children right, Ontario government also issued act relate to children: Children's Law reformation act.

4.2.2 CFTP practice in Canada

There are several programs both on national level as well on provincial and/or local level which relate to promote safer and more accessible children transportation.

One national scale program relate to children safety in Canada is Active and safe routes to school (ASRTS). ASRTS is a national program to increase active travel by children on the home-school journey. It is one for the projects that has received funding through Moving on Sustainable Transportation (MOST). MOST itself is Transport Canada's program that promotes awareness and the development of innovative approach to sustainable transportation. This program also has an aim to improve health, traffic safety, air quality and community connections. One form of ASRTS project is school travel planning (STP), a comprehensive national program that will help to maximize active transportation and its benefit. STP is a policy document as well as a process; addressing the issues of sustainability, safety and health associated with the school trips using collaborative community-based

¹⁶ Canada's Road Safety Targets to 2010, Transport Canada.

approach. This program involves key stakeholders to identify and solve their own school transportation problem. The plans which are developed at the local level (community level) are fully integrated with broader school and municipal plan and policies. One of the objectives of the program is to encourage children to use sustainable mode (walking and cycling) for their trip from and to school. And to support children independent mobility coordination with local municipal engineer, planner is needed to design and implement engineering improvement.

This program conveys some benefit for safety and children health. Essentially, one of main benefits of the program is improving children's safety. These similar programs in the Europe 'have led to an 85 reduction in traffic-related injuries in children'¹⁷.

Other programs that promote child-friendly transport are conducted locally on provincial/regional and local level. Several action programs to increase child independent mobility and child-friendly transport as follows:

- In Waterloo, program *You can Clear the Air* includes a bus tour with the region's transit authority, Grand River Transit (GRT). In this program, children learn how to board on a bus safely, and are quizzed on the neighborhood the travel through, with an eye toward making children feel safer and more comfortable using public transit. GRT bus drivers participate in the program, providing information on transit services and answering questions.
- The City of Calgary's *City hall school* combines several issues into one program aimed at promoting a better understanding among students of the role of municipal government. Among its many partners is Calgary transit. Children were starting the week-long program by taking a bus to city hall. In some cases, this is the first time students have ever ridden a city bus.
- The *Bike Smarts* program was introduced in Lochside Elementary School in Victoria, BC to educate students about bicycle safety and to encourage them to travel by bicycle. As the part of the program, the students' parents were also involved. Once the program was completed, most of the parents allowed their children to ride to school more often, and 25% of parents reported cycling at least 20% more than they used to.

In Canada, every level of government has already put their awareness to increase children safety in transportation and has conducted some action programs to support children independent mobility. This effort and action shows government commitment and willingness to support child-friendly transportation initiative. The result shows that children injury resulted from traffic accident is decreasing in line with increasing of children mobility.

Beside real program to support child-friendly transport, some private actors (NGO) support the initiative by producing guidelines to be used by professional or government agent to establish child-friendly plans and to involve them in planning practice. The Center of sustainable transportation established Child- and Youth – friendly land use and transportation planning Guidelines while Canadian Institute of

¹⁷ School travel planning: Review and Recommendation, Green Communities 2007.

Planner (CIT) released A Kid's Guide in Building Great Communities: A Manual For Planners and Educator.

4.2.3 Children participation in Canada

Canada government and other planning actor awareness for involving children in transportation planning activities is relatively high. It is shown by their effort to produce some guidelines for triggering children involvement and also children involvement in their action program, for instance by recording their trip for mapping their travel behavior.

To accelerate children involvement for building the communities, Canadian Institute of planner, one of professional community, issued A Kid's Guide in Building Great Communities: A Manual For Planners and Educator.' The 80 pages guide provides planners and educators of ideas and instruction on how to teach planning concepts and principles. This manual contains ready-made exercises and materials and it can be used with children and youth of all ages and in a variety of settings. It is principally useful for the classroom, as the topics fit in easily with many other areas of existing curriculum, for instance social studies, language arts, science and mathematics'¹⁸

Other example children involvement to define their infrastructure is one of ASRTS research project was carried out in Peterborough. This research program had an aim to initiate a school-based active travel program in Peterborough. By collaborating with local university student, data collection activities have been carried out to collect travel pattern data from specific school communities. University student had role to interview families for asking their children's school pattern and observed all dropping and picking up children at the school. To gather children travel pattern from themselves, University student made a list of pre-selected answer and gave to children to be identified regarding how they had traveled everyday or by interacting between them.

Others Safe Routes projects involve kids and adults in surveying routes, identifying problems, and suggesting possible solutions. Some projects have gone "high tech," putting small personal data accessories (PDAs) in kids' hands to record their travel pattern. One such project is in the works under the sponsorship of the Active Living Resource Center (ALRC) and the University of Oregon.

Whatever approach is taken, involving kids and their parents can help create more kid-friendly environments and more physically active kids.¹⁹

Involvement children by using such kind guidelines such as 'A Kid's Guide in building community can be categorized as Educational Approach. This approaches using methods which has aim to educate children about planning. This approach gives opportunity for children to give their idea freely without fear about what their doing.

Other approach is more likely scholarly approach where those activities made an observation about children mobility behavior. Scholarly approach method included field observation, surveys, focus groups and in-depth interviews with children.

¹⁸ Canadian Institute of Planner, www.cip-icu.ca, accessed on 24 August 2009

¹⁹ www.activelivingresource.org accessed on 2 August 2009

4.3 United Kingdom

4.3.1 Transportation planning In UK

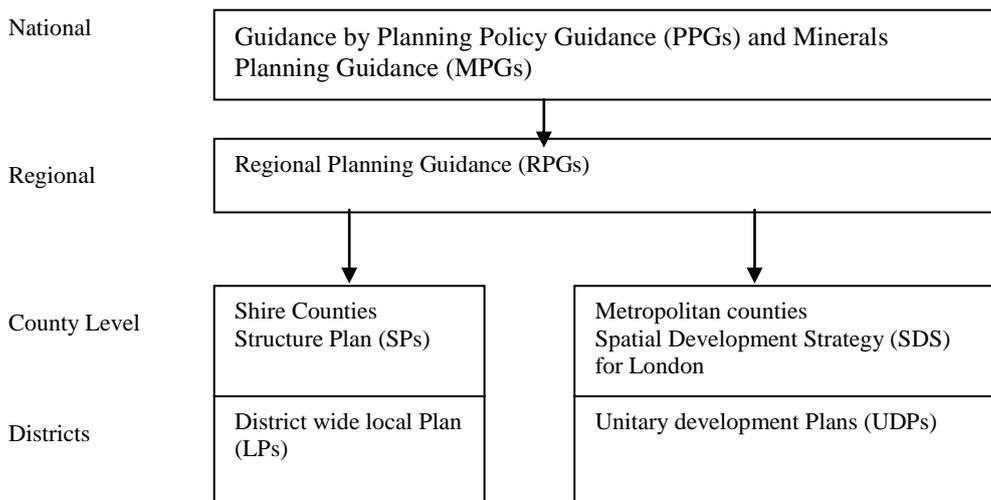
4.3.1.1 Transportation planning actors

In UK, National government establishes Planning Policy Guidance as a reference for Local government to establish their own Local Plan. Each District in UK has full authority to create transportation plan based on their needs. Planning Policy Guidance 13 is the National guidance for transport sector. To integrate National Guidance and Local Plan, in 1994, “*regional institutional building was initiated through the creation of the government offices for the region to coordinate economic development and regeneration, transport infrastructure and land-use planning*” (Banister,2002).

The regional Development Agencies has a responsibility to prepare Regional Planning guidance (RPG). More specifically, they were charged with (Banister,2002):

1. Environmentally sustainable development policies – the regional sustainable development frameworks.
2. Integrated regional transport policies – Regional Transport Strategy.
3. Achievement of regional economic growth strategies over a 10 year period – the Regional Economic Strategy.
4. Developing a renewable energy strategy – the Regional Renewable Energy Capacity Assessment.

Regional Transport Strategy, as an integral part of RPG, has role to sets out the regional transport policies and objectives, including the priorities for investment in and management of transport and infrastructure across all modes. It has a wide ranging brief, and includes parking standards, demand management, transport accessibility criteria and measures to improve transport choice. The intention of RTS is to make policies more consistent across regions and to view transport issues in a truly multi-modal perspective rather than as a set of competing modes.



Source: Thomas and Roberts,2000 in Banister 2002

Figure 4-1 The strategic planning framework in England since 1995

In UK, policy related to transportation sector for National Level is under authority of Department of Transportation.

The role of the Department for Transport is to determine overall transport strategy and to manage relationships with the agencies responsible for the delivery of that vision.

Department for Transport was set up to provide a stronger focus on delivering the Government's transport strategy. The role of the centre of the Department is to set strategy and policy context, and to establish and manage relationships with the organizations that are responsible for delivery. The centre of the Department has been structured to reflect this role with a strong central strategy, delivery, communications and finance group.

The Department for Transport's aim is transport that works for everyone. This means a transport system that balances the needs of the **economy**, the **environment** and **society**. In support of this aim the Department has five strategic objectives which focus on the core area of our business:

1. To support national economic competitiveness and growth, by delivering reliable and efficient transport networks.
2. To reduce transport's emissions of carbon dioxide and other greenhouse gases, with the desired outcome of avoiding dangerous climate change.
3. To contribute to better safety, security and health and longer life-expectancy through reducing the risk of death, injury or illness arising from transport, and promoting travel modes that are beneficial to health.
4. To promote greater equality of opportunity for all citizens, with the desired outcome of achieving a fairer society.
5. To improve quality of life for transport users and non-transport users, and to promote a healthy natural environment

Four last objectives have strong relation with how to achieve Child-friendly transport since children are a vulnerable group of air pollution and traffic accident as well as third objective. As a part of society, children also have equal opportunity in mobility and equal right to get better quality of life. According to those core business, DfT plays important role in providing and overarching strategic framework for delivering transport service, to facilitate the movement of people and good and to plan for future transport needs especially for children need on National Level.

Beside government, as main key to provide guidance to support child transportation actively, there are non-government organization which has main activity to promote children safety as well. One of NGO is Sustrans²⁰, one of non profitable organization the UK's and leading sustainable transport charity. Their vision is 'a world in which people choose to travel in ways that benefit their health and the environment'.

4.3.1.2 Regulations and laws

According to planning system in UK, there is no act regarding to regulate transportation sector although National government issued PPG13 as guidance for regional and municipal government to prepare their plan. However, there are acts that issued by government concerning children need and road safety.

²⁰ <http://www.sustrans.org.uk/> (accessed on 5/08/09)

In general, United Kingdom acts related to children and safety as follow:

- Children act 2004, chapter 13: This act was issued to improve children well being through Children commissioner which has responsibility to ensure children interests has been accommodated;
- Road safety act 2006: in general this acts has function to make provision about road traffic, registration plates, vehicle and driver information etc. There is no evidence that child right is accommodated.

From all those acts which represent each transportation sub-system, none of acts' articles have put attention to children needs. All the acts regulate and distinguish the responsibility between National government and local government.

Despite children needs and right does not accommodate clearly in those act, National government through Department for Transportation (DfT) has issued policy instruments and initiatives for promoting and enhancing safer child-friendly transportation. They also put their vision to increase children safety and children and youth involvement in decision making, for instance they issued action plan for involving children and young people 1n 2003 to get better understanding about their transportation need.

Child-friendly initiative is promoted or elaborated on Ministerial level, it means that Department for Transportation (DfT) has a main role to endorse child protection program in transportation sector. Vision and mission have been made to achieve some goals in securing child safety. DfT put its goals for child road safety in Child road safety target²¹.

4.3.2 CFTP practice in UK

United Kingdom is one of Europeans countries which in front on promoting child-friendly transportation practice. Children active transportation is one of UK commitments to support sustainability transportation. Reflection of the commitment is stated in UK Agenda 21 document which promised that one of the UK aims is to see as many children as using public transport, walking, cycling to travel to and from school.

Similar to Canada, UK also has School travel plan (STP) and UK is a world-leader in term school travel plan development and implementation²².

Strong commitment for children safety in transportation is reflected form financial support for successfulness school travel plans. In September 2003, DfT and Department for Education and skills set a target that all school will have travel plan in places by 2010. New funding allocated for school travel over 2 years (2004-2006) was about 50 million poundsterling, a large amount of money. Government also provides financial support to make infrastructure changes identified in School Travel Plans through the Local Transport Plan process. Such infrastructure changes might include new footpaths and cycle routes, change to road layout; traffic management (one-way

²¹ Child road safety, Achieving the 2010 target, Department for Transport, UK.

²² Review of international school travel planning best practices, Green communities 2007)

system); traffic calming; and new road crossing. Road Infrastructure changes at local may vary based on infrastructure changes identified in STP

In September 2003, The Department for Transport (DfT) and the Department for Education and Skills (DfES) jointly launched a national Traveling to School initiative that encourages all schools to develop School Travel plans. These two departments share their responsibility for management of STP Project through a board called Traveling to School Project Board (TTSPB) and each of these departments develops their own initiative and funding streams. This board, TTSPB, is responsible for managing of the project; providing funding; setting standard for project implementation; informing project objectives to internal and external stakeholders and monitoring progress of the project and reporting to Ministers.

The achievement of STP in UK, in term of modal shifting, shows positive results. The review study about implementation of STP reported 28 of schools that had data about how total car use had changed. At these schools, the weighted average car reduction in car use was 23%, some schools close to 50%. In term of safety, the STP practice in Hertfordshire, in the UK, demonstrate that the safety of all modes is improving. There were about 515 of 536 schools in Hertfordshire that have been engaged in developing and implementing safer routes to school. The area of 30 km/h zones around schools as part of an area wide traffic management plan has been introduced as a main component of the work. There was significant decreasing of percentage of child casualties on the school journey from 1998 to 2002. Data shows, in Hertfordshire, that significant decreasing number children injury happened for every travel mode (Pedestrian, cyclist, car user, and public service) and the percentage of decreasing vary between 17 % and 51%.

Beside full support in SPT program, in 2004, Department for Transportation (DfT) undertook a research and consultation project entitled Understanding Young People Transport Needs. This project was involving young people which will draw out their transport need and views as an information project to inform policy development and encourage them to use and transportation providers to provide appropriate transport. In same year the DfT also produced guidance for all in DfT (agencies in DfT) on engaging children and young people..

To serve young people to make school travel, DfT is encouraging local authorities a school to develop travel plans to reduce the need for the present level of car use.

To support young independent school travel, DfT has producing a guideline for safer journeys to school. Moreover, DfT has also establishing a cycling project fund of over 3 million pound sterling from which schools and young people will benefit enabling more people to be able to cycle to school and colleges.

As it mentioned before that actors actively conduct similar project to promote sustainable transportation and child-friendly transportation is not only government but also NGO, such as Sustrans. Sustrans has several projects to promote sustainable transportation and to support children mobility such as:

- Safe route to school
This project has aims to inspire and support safe, sustainable and healthy school journeys
- Bike it
The aim Project is to encourage children to cycle to school. The project has already quadrupled number of children cycle to school.

- Active play and travels
This initiative contributes toward increasing physical activity in children through active travels those children making their journey independently

UK has long history and abundant experience regarding child-friendly transportation initiative especially concern more about children safety abundant. Their commitment is shown by budget allocation for achieving safer transportation for children. Their work for supporting CFTP practice is worthy since the result of the CFTP program showed satisfied result (see STP program). The child-friendly initiative is also supported by non-government organizations, such as Sustran, which have main activity to promote sustainable transportation.

4.3.3 Children participation in UK

In UK, based on ‘a subsequent English survey in 2003-2004 (Oldfield and Fowler, 2004), funded this time by Government, reported an increasing level of participation activities. Of responses, 79% of statutory and 81% of voluntary sector organizations reported that they currently involved children and young people in decision making. Children and young people were most likely to be involved in generating ideas about existing and new policies or services and less likely to be involved in service delivery, monitoring and evaluation, and issues that were not considered child-specific (regeneration, transport or housing). The most common approaches to reach children and young people were researching their needs and views, informal discussions, and youth councils or fora. Moreover, a national English survey of 1387 children and young people and found that 20% of the respondents was thinking their local council was good or very good at listening to them and only 18% thinking that the government was bad (Kirby et al 2003, in Tisdal et al 2008)

In effort to involving children and young people in transportation, DfT had announced action plan to involve children more in 2003-2004. This action plan had aim to achieve children perception about appropriate transport system and to engage them to determine what transportation system they needed. For that purposes, the department for transport used a range of consultation techniques. These consultations are around specific policy issues and services. Their approaches include (Involving children and young people, Department for transport, UK):

1. Development of the road safety resources involves testing text and concepts with children and young people.
2. Working with an external market research company to test the responses of 11-16 year olds to different creative approaches of communicating road safety, as cinema, radio and poster adverts.
3. Encouraging local authorities (local government) to actively involve children and young people in the development of Home Zone schemes. A Traffic Advisory Leaflet provides guidance on how all residents living in a proposed Home Zone could be involved in the development of the scheme.
4. Research into young people and crime on public transport included a questionnaire designed by young people.
5. ‘Escorted group’ of young people on public transport routes.

Based on Kirby reports (Kirby et al 2003, in Tisdal et al 2008) according to approaches that are common to reach children and young people in decision making, I think that this approach can be categorized as scholarly approach. Scholarly approach is using discussion, observation and interview with children to gather their views. Similar approach is also used by DfT in involving children. They gather children view through consultation and communication both directly (interview, discussion) and indirectly (questioner)

4.4 Concluding remarks

As a developed country, Canada has a strong commitment to support CFTP practice. In Canada, every level of government has already put their awareness to increase children safety in transportation. Beside real program to support child-friendly transport, some private actors (NGO) support the initiative by producing guidelines to be used by professional or government agent to establish child-friendly plans and to involve them in planning practice. The Center of sustainable transportation established Child- and Youth –friendly land use and transportation planning Guidelines while Canadian Institute of Planner (CIT) released A Kid’s Guide in Building Great Communities: A Manual For Planners and Educator.

United Kingdom can be said a mature country that has put a lot of effort to provide child-friendly transport which is emphasis in children safety on the road. A number of legal instruments have been produced due to road safety and child right as well. These acts do not mention specifically about child need protection in transportation but in general mentions about the direction to pay attention for safety and transportation provision to all society groups.

On National Level, Department for Transportation (Dft) has a responsibility to set kinds of policies to be implemented on local level. DFT has a responsibility to review all Local Transports Plans (LTPs) to assess local transport provision for young people. To promote child-friendly transport initiative, many studies has been carried out in UK and also a lot of money has been allocated for pilot project. These studies also involved children and youth.

Chapter 5 CFTP implementation comparison analysis

5.1 Introduction

This chapter will compare how far CFTP has been implemented in the three countries. Through this comparison the differences can be found and will be analyzed to find the opportunity or chance to move toward CFTP in Indonesia. At the end of this chapter, Elements of CFTP will be analyzed to find which of these elements could be improved or transferred from other country experience to Indonesia. What methods, ideas or initiatives are appropriate to be used in Indonesia and what are the barriers to implement CFTP and method for involving children.

5.2 Comparison CFTP initiative between Indonesia, Canada and UK

Comparison between Indonesia and UK will be based on pre-condition elements for CFTP which has been proposed in Chapter 2. Before comparing those items I explain why those items are important to be considered and compared.

Planning system: why planning system is important to be discussed?

Planning system is related to government structure, it reflects the inside culture within. Through knowing planning system in a certain country, we can know the power or responsibility for every government level. We can track back the nature of planning practice and various actors who will have great influence in policy decision making for each government tier or the scope of planning itself. Planning system shows relation between government tiers and what their scope of responsibility. Moreover, transportation planning is always part of planning system, so become important to be explored. Legal and regulatory frameworks for planning practice are provided by planning system (Miharja, 2009). Through knowing planning system which is implemented in countries, we will find institutional arrangement for planning work. It means that we can distinguish responsibility for planning work between actor involved. By knowing distribution responsibility of actors engaged in planning system we will be able to find and identify on which level that CFTP has huge chance to be introduced and implemented and in the end can be implemented for whole regions.

Canada

Planning system in Canada can be categorized as administrative system (Wolfe, 2005), it means that there is distribution role between government level, in other word this system close to decentralization (Hatzopoulou, 2008). The federal government is responsible for making policies and target of national transportation system. The provincial government is responsible for intra-provincial transportation and control municipal government through Municipal act and Planning Act (Wolfe, 2005). The Municipal government is responsible for local planning decision and 'heart of the planning system'. Detail plan is prepared by Municipal government.

UK

In UK, Central government has important role in planning system. National Government has responsibility to supervise and control of the planning system and issues national planning policy guidance and makes an approval and also issues regional planning guidance. Its role is to control and review all municipal plans whether the plan following the Planning policy Guidance or not. There is no constitutional right of duties in relation to spatial planning. The important level for plan making is on Local government but this level government does not have right to produce legislation, policy and guidance

Indonesia

While in Indonesia, “According to Act 24/1992 and draft of spatial planning act 2005, Indonesian planning system indicates an incomplete adoption of the integrated-comprehensive approach” (Hudalah and Woltjer, 2007). By Europe commission this planning approach as define when “spatial planning is conducted through a very systematic and formal hierarchy of plans from national to local level, which coordinate public sector activity across different sectors but focus more specifically on spatial coordination than economic development” (Hudalah and Woltjer, 2007). In Indonesia, since 2004, after Decentralization act number 232/2004, power are considerable distributed to local government. This power distribution is also supported by coordination in provincial level (Miharja, 2009). However, the newest spatial planning act no 26/2007 basically implements ‘centralize planning system through a single structure of planning system. The act states how very importance of coordination and higher level plan would be a reference for a lower plan.

Even so, different planning system and different power of every level of government, I think effort toward CFTP initiative is mainly on National Government. Central government still has important role for implementing CFTP although in some countries provincial government and municipal government have main role. However, central government function is still needed for implementing CFTP nationally.

Regulation and Planning instruments:

Planning instruments become important for planning activities as a base for making plans and it will be a reference for planning practice. Discovering planning instrument will lead us to know how far planning actors aware for some issues or how much the issues is important for them by putting them into a bundle of policy instruments. These instruments will force planning actors to follow all things that have been put in.

Canada

As has been mention in previous chapter, central government does not have direct authority in planning (Wolfe,2005). Its role is gives the general framework policies and relate to national scope or administration. General policy framework for National transportation in Canada is Transportation Act. Regard to government and planning system in Canada, Every Provincial government can issue their own municipal act, planning act and several directives which will oblige every municipal plan to refer to acts and directives. Provincial government also can issue the acts relate to transportation system, for instance Ontario Government, there are several act has been issued relate transportation particularly road transportation such as Highway act.

Regarding to CFTP issues, children need in transportation is not accommodated yet in particular acts. However, many programs and initiatives on local level has been promoted and run to protecting and servicing children need in transportation and there are many guidelines which were published by non profit organization or professional organization not only to accommodate children right (Children friendly and land use guidelines by Centre of sustainable transportation) and need in transportation but also to provide space for children in planning process including transportation sector (A kid's guide in Building Great Communities).

UK

Integration of planning and transport at the national, regional, strategic and local lever is the one of the objectives of Planning Policy Guidance 13's (PPG13) and that guidance was issued by Central Government. Other objectives of PPG13 are to encourage more sustainable transportation modes for carrying people and goods, to promote accessibility to activities by public transport, walking and cycling. PPG13 also guide the local government several conditions which local authorities should follow. The conditions are much more relate to ensuring that local authorities must put several matter such as spatial, sustainable issues, disable people, into account in their plan.

No indication in PPG 13 which stating relate to children-friendly matter or stating that transportation infrastructure provision should put children right into account. Besides PPG 13, there are other 24 PPG's in UK national guidance framework

To support children safety and child-friendly transportation, DfT produce guidelines, vision and target regarding children safety and participation to define their transportation need. Dft produces 'Guidelines for safer journey to school', 'On the Safe Side' which provide teaching ideas for primary and secondary school children.

Indonesia

In Indonesia, National government has obligation to issue Act as instruments for planning activities. According to spatial planning, Spatial planning act no 24/1992 has role to regulate all things relate to activity system and later is renewed by Spatial Planning act no 26/2007. To manage road development, Government of Indonesia has issued a new Road acts that is Road act no 38/2004. For managing traffic system, government has issued traffic and road transportation ac no 14/1992 and amended by later act that is no22/2009. These 3 acts are main planning instrument related to transportation system. Among those 3 acts, no indication has been found that regulate things related to provide better and safer access to children, not specifically mentioned. Disable people are mention clearly in Road Act but not including children and young people within. However, Children Protection Act 2009 article 22, state that government has obligation and responsibility to provide appropriate infrastructure for children. It means that Indonesia has put more awareness for giving better infrastructure for children and no excuse for technical department and agency to ignore children need particularly in transportation services and infrastructures. Act is the highest hierarchy in legal framework and has a force every actor mentioned within to fulfill their obligation.

By knowing every government level's role and responsibility to produce policies or regulations, we will be able to propose right recommendation to put children right in transportation sector in proper regulation framework, for instance to put children right in the highest level of regulation framework. It would be a great impact if the initiative can be accommodate on the highest level of regulation (acts). However, we can not make a generalization that acts is one and only one instrument that has a big impact. This is also interconnected with planning system culture of the country. For example, in UK there is no acts that regulate transportation planning but they instrument is known as Guidance. This guidance has similar function with acts that central government will use this guidance for reviewing and controlling plans that is made by municipality. Through understanding the regulatory framework and its 'position', we can identify any chances for encouraging CFTP to be accommodated in legal or regulatory framework and has broad impact. For instance, if PPG 13 accommodates children right in its document so automatically all municipalities in UK (England) will put children right in their plans. Different situation apparently find in Canada, putting children right will give more impact if it is written on provincial Planning act.²³ Transportation act that is issued by Canadian federal government is more likely to regulate transportation on national scope whether CFTP is a form sustainable transportation concept which will be effective if implemented on local scope or maximum on municipality level (see School Travel Plan).

Political will

In order to elaborate political will of compared countries, I will dismantle 'political will' terminology refer to 4 components that are proposed by Lory (2002) as follows: (1) *a sufficient set of political actors*; (2) *common understanding of a particular problem on the public agenda*; (3) *genuinely intends to support*; (4) *a commonly perceived, potentially effective policy solution*. For point (2), I will translate this point to be a public campaign activity because paradigm forming of one issue is starting from how intensive public campaign is. Elaboration of point (3) and (4) will be combined because these two points are interconnecting and influencing each other.

1) Actors involved to support the initiative

Actors who play key role in transportation sector decision are not only government who has an obligation to produce some kind regulations but also several bodies outside government. Miharja (2009) mentions that there are two main institutions that involve in transportation planning they are Public institution and Private institution. Public institution can be distinguished into 2 bodies: Government and House of representative while private institutions consist of Expert, Private sector and Non governmental organization (NGO) (see section 3.2.1).

Canada

Due to government and planning system in Canada, every government level has their own responsibility to manage several sectors (see table 4-1). It means that federal government will put their effort to manage only to sectors which relate to national scope. National government will produce instruments which only regulate all matter

²³ Recommendation of The Center of Sustainable Transportation in Child-and Youth Friendly Land Use and Transportation Planning Guideline.

on national level for instance transportation system serving between provinces. Provincial government and municipal government are also will concentrate on their own. They will engage in producing polices and plans for all matters within their administration. In Canada, Transportation Canada, one of central government agency, is a key actor to establish kind of rule regarding transportation system especially for national scope. But for smaller scope, provincial and municipal governments are important actor for planning matters. Provincial government issues Municipal act to control their municipal government and planning act.

According to CFTP practice, many initiatives have been arouse from lowest government level or municipal government. This level of government much more sensitive to the issue on local level and they have to make plan to overcome the problem or issue. In practice level, municipal level is the key actors to develop and to implement the CFTP initiative. For instance, the project to provide kind of guidelines which integrating child-friendly land use and transportation planning was funded by Ontario Government. Furthermore, the guidelines also proposed to revise Ontario's planning act for including children need (propose to put the additional sentence in article that accommodate children interest)

UK

In UK, especially in England, Central Government has a main role in spatial planning even municipal government have the main responsibility for land use planning (EU Compendium, 2007). For National level, Department of the environment is the main actor and play a main role for spatial planning function. Particularly, Department of National Heritage and Department of transport (set up in 2002) are also having planning responsibility (EU compendium, p39).In transportation sector, Department for Transportation is the key role in providing strategic framework for the delivery of transport services. DfT has important role to facilitate the movement of people and goods and to plan for future transport needs. As it has been explained in previous section, the dominant influence of central government in planning system will lead to high effectiveness of CFTP implementation throughout the country if CFTP initiative is introduced on this level. In UK, central government react actively to global issues, including children safety in road transportation, through establishing several guidelines as a reference to be used by municipality government.

Indonesia

In Indonesia, on National level, Department of Public Work and Department of Transportation are the main actor for executing transportation system planning for national scope for instance national spatial plan, national road network, inter-province public transport system etc. These departments are also having responsibility to establish guidelines, standards norms for transportation infrastructure. These guidelines and standards are used for giving consistent service for whole transportation infrastructure and these standards also are used by lower actors in provincial and municipality for providing transportation infrastructure in their regions.

In Indonesia, initiative from central government still has influences even in decentralization era (see Miharja, 2009) and has a strategic position to direct planning work (see section 3.2.1). For instance, for establishing road master plan, municipal road master plan should refer to provincial road master plan and so on (see figure3-1).

In context CFTP implementation which is effective in local scope, Indonesia central government role apparent important for establishing regulation instrument and policy instrument (technical guidelines).

For those comparison, central government is still has great influence to implement CFTP, especially in UK and Indonesia.. In UK, central government has main role in planning system so that it would be easy if CFTP is introduced on this level and will be having huge influence for CFTP to be implemented in every municipality. But in Canada, where every province can produce their planning act, it has huge probability that the concept is not found in every province. It is depends on how province government look one issues whether it is important or not. In this case, central government has responsibility to lift CFTP issue up to be considered as national issue.

2) Actors' genuine intending to support a commonly perceived, effective policy solution.

To find actors' genuine intending to support the initiative, I will explore what actors' proposed through their policy statement or actions program that have been made.

This section, obviously, is combination of 2 conditions of Lori's proposal in explaining political will. Lori (2008) describes how to identify the actors' common understanding of the issue. He states that one of the clearest indicators 'when political actors make credible, binding statements or undertake actions of a similar nature'. It means that we can identify how much actors' supporting the initiative by looking for 'binding statement' or numbers of actions program.

I think it would be better if I discuss these two condition simultaneously because policy solution, actors' statement, actions program can be used as a measure to scale actors' support for an initiative or issue.

Canada

Canadian Government shows serious attention for giving safer transportation system for children. To support the issue, Canadian government through Transportation Canada, issued guidelines, action plans and actions program to give guidance for local government to provide better access for children. Non-govern and professional organization support the initiative by also producing guidelines²⁴ to be used for planner. Canada government commitment to support sustainable transportation was showed by providing funding approximately \$ 437.500 per year over eight years for sustainable transportation project including ASRTS program.

UK

UK government support for child-friendly and safe transportation is strong. In 'Involving children and young people: action plan 2003-2004', Department for transportation has commitment to deliver better services to children and young people, giving contribution to improved social inclusion and reducing poverty, and giving children and young people participation opportunities. The last commitment is

²⁴ Child-friendly transportation planning by Centre for sustainable transportation and A Kid's Guide to Building Great Communities: A Manual for Planners and Educators by Canadian Institute of Planners (CIP)

also supported by Hinton et al (2008) statement²⁵, , that you can find ‘ ..high level of government commitments to children’s participation ’ in UK. To support program UK government has financed and funded several programs for enhancing safer children transportation such as cycling project fund and School Travel Plan (STP) (see section 4.3.1). Fund for this project was about 3 million poundsterling. Moreover, it was noted that Department of Transport has provided about 3.5 million pound to local authorities in 2001 – 2003 for project dedicated to improve safety for children on local road. This commitment shows how much UK government concern and intending to support the initiative.

Indonesia

The pilot project that has been executed regarding to children safety matter is school safety zone (Zona Selamat Sekolah (ZoSS)). The pilot project has been run since 2006 and has been implemented in eleven municipalities in Java. This project was central government responsibility and Department of transportation through Directorate general of land transportation as executing agency. This project has aim to give safer road environment for children around their school and improve children accessibility to cross the road safely by giving speed reduction zone and pedestrian crossing or zebra cross. This program is a significant initiative related to CFTP implementation in Indonesia. It was difficult to find out how much budget had been allocated for this pilot project but this project show Indonesia government commitment for support child-friendly transportation.

Positive government support is shown for CFTP implementation in these 3 countries. Based on developed countries’ experiences, Canada and UK has allocated large amount financial support for CFTP initiative implementation. Several actions program and guidelines have been carried out and established in those two countries. Non-governmental organizations were also involved actively to support this initiative. In Indonesia, government supporting for improving child-friendly transportation initiative is still not as much as intensive Canada and UK. It is hardly to find Organization non governments that put their activity concern to children right in transportation seriously. However, there is positive sign from Indonesia government to CFTP initiative through ZoSS program. Financial support for this initiative is not as much as Canada and UK according to different economic orientation and prioritization.

Public Campaign

How intensive public campaign has been carried out to promote such kind issues can be use to identify how much actors’ understanding of one issue in transportation planning sector. With intense promotion and publication of specific issues will shift old view to certain issues or form a new one not only among planning actors but also in society. Promotion and publication will put the issue on the center of government and public view.

Canada

Awareness to the issues has been aroused not only from government but also from other actors such as NGO. ‘Green Communities Active & Safe Routes to School is a

²⁵ In introduction of International Journal of Children’s Right vol.16

comprehensive community-based initiative that concern about the increasingly urgent demand for safe and walk-distance neighborhoods. Active & Safe Routes to School promotes the use of active and efficient transportation for the daily trip to school, addressing health and traffic safety issues.’ These communities actively promote programs that support sustainable transportation particularly active and safe route to school. Active means children can make trip to school independently by walking or cycling. Promotion and public thought forming are delivered through various media such as post card and internet homepage. Henry Orsini’s post card²⁶ is one example of publication using postcard media that express child opinion about fair-tariff for children. This effort will change public view for putting children need in front as citizen and their voice need to be heard.

UK

UK can be said as one of world-leader countries for road transportation safety including children safety..UK government was actively assessing different creative approaches to promote pedestrian road safety using cinema, radio and poster campaign. Promotions are also using world wide-web as a media to educate children for more awareness for their safety and teach them how to be safer in their mobility. The Hedgehog campaigns which have been run since 1997 is one of examples²⁷. These campaigns remain a popular and effective form of advertising simple road safety message to young children.

Transportation actors, not only government, are actively engage and participate for promoting and making program and project to support child-friendly transportation which also to support sustainable transportation. One of non governmental actors who actively promote sustainable and child-friendly transportation is Sustrans. Sustrans²⁸ is one of non profitable organization the UK's and leading sustainable transport charity. This organization has promoted and conducted several projects related to sustainable transportation.

Indonesia

In Indonesia, public campaign and programs regarding to child-friendly and child-safety in transportation sound weak. However, there are signs that government start to promote more sustainable, environment and child-friendly transportation. Program car free day is one program which encourages citizen to use bicycle and public transportation for their journey²⁹. NGO participation for publicizing child-friendly transportation seems not very serious. I found very limited governmental organizations that put their concern for child-friendly transportation or children safety.

Apparently, public campaign is an effective measure for forming a political will to support an initiative or idea. A frequent public campaign will shape public opinion for the importance of one program or initiative. Canada and UK are countries that are actively engage in children safety campaign and child-friendly transportation campaign. One of the reasons is because children safety has become important and main issues. Different condition is happened in Indonesia while government does not

²⁶ Transportation Canada leaflet

²⁷ www.hedgehogs.gov.uk accessed 19 August 2009.

²⁸ <http://www.sustrans.org.uk/> accessed 5 August 2009.

²⁹ <http://megapolitan.kompas.com/read/xml/2009/02/19/17270058/jakarta.gelar.car.free.day.dua.kali.seb.ulan> accessed on 24 August 2009.

put attention seriously on children safety issues. The easiest indicator for this condition is difficulty to find accurate data number children involved in traffic accident. Public campaign program to educate people about the importance of children safety and child-friendly transportation is still limited.

Public/Children Involvement

Canada

Public involvement, particularly children involvement, in transportation planning shows increasing. Not many studies have been carried out to explore children involvement in planning process especially transportation planning process. However several projects relate to safe route to school used discussion and observation method to find out children travel pattern. One of the projects used high tech equipment (PDA) to track children travel pattern. One of professional association was also establish manual to involve children in building their community. This manual is dedicated to planner as guidance to gather children opinion.

Other practice shows that children involvement to express their preferences about transportation service and environmental condition are revealed through various media such as web homepage and postcard (explained in chapter).

According to those practices, most children involvements in Canada are more likely adopting scholarly approach and/or educational (sometime overlaps, Yanez 2005) which observation and interviewing with the children is the most common method of these approach.

UK

‘Children and young people’s participation – at least as recognized and supported by adults (Prout, 2003)- has largely been a top-down development rather than bottom-up (Badham and Davies, 2007). It has been promoted by Government in various ways, with strong support of devolved administrations at various times and the hey day of the children’s and young people unit in Westminster. There was an attempt by the unit to ‘mainstream’ children and young people’s participation in the work of government, by requiring annual action plans (Tisdal et al, 2008)

In Uk, Tisdal (2008) explains that ‘regularization and institutionalization of children and young people’s participation have also grown, primarily through two structural mechanisms: school or pupil councils; youth fora or parliaments, at local and national government. Furthermore, For instance, he says that ‘In wales, in all level of schools, school councils are mandatory’. Similar condition is also happened in England and Scotland although there is no legal requirement yet. It has been reported that in both countries approximately 85% of secondary school having school council in 2007.

But in one article, Arnot (2008) conclude that children involvement in policy making and decision making process is still relatively limited. However, she is no doubt that there are signs that UK government are trying to extend the policy areas where children are considered as ‘policy participants’. Government policy has stirred headed and lead the way for protecting children’s right and protecting them as well.

The awareness of this important issues and common understanding of this problem has infiltrated to every actors whether they are political actors or not, including children. It is noted (Tisdall 2008,p.349) that children and young people actively

being member of council member. It shows that children have the awareness for their right that their voice need to be heard.

Children involvement in UK much more close to Scholarly approach that public agency, planning consultant and non-profit involved children in planning practice or study project through school activities³⁰. Base on English survey in 2003-2004 (Oldfield and fowler, 2004 in Tisdal et al 2008), children and youth were almost certainly to be involved for generating idea about existing and new policies or service. Approaches to gather their view was using informal discussion.

Indonesia

In Indonesia, children involvement in planning seems not developed yet. For instance Technical guidelines³¹ for developing School safety zone (Zona selamat sekolah,ZoSS) programs does not put children involvement or children perception into account. All the method is standardize and become same in every spot. Children travel pattern data were gathered from interviewing with parent and children behavior for crossing road is based on observation without any interviewing with them to get more detail data about the impact of ZoSS initiative for them.

The development of children participation in planning process and decision making has developed in Canada and UK. Culture in expressing the thought has been firmly formed in children culture. It is common and used to for children in UK and Canada to express and to give their opinion. No doubt, if children in those countries will actively involve and give their opinion about appropriate transportation infrastructure provision for them. Cultural background of Indonesia is different from those two countries especially in education culture and system. Indonesia children are not used to express their thought freely. This would be a challenge to find good method to involve them in decision making process.

³⁰ Home Zone-Public Participation. Traffic Advisory Leaflet 8/02, Department for Transport, UK.

³¹ Technical guidelines School safety Zones, Directorate of Land transportation safety, Department of Transportation

Table 5-1 CFTP components comparison table

Elements	Canada	United Kingdom (England)	Indonesia
Planning System	Administrative, close to decentralization; Municipal government the key role of the planning system (Wolfe, 2005; Hatzopoulou,2008))	Discretionary; Central government has important role spatial planning system (EU compendium)	Decentralization, Distribution of government role between national, provincial and local government
Planning Instrument : Keys, Legislation - Guidelines	<ul style="list-style-type: none"> - Transportation Act on National Level - Planning act and Municipal on Provincial level 	<ul style="list-style-type: none"> - No binding regulation, Just guidance from National Government. - Spatial plans are not produce on national Level 	<ul style="list-style-type: none"> - Planning act issued by National Government National :Spatial Plan Act, RTRWN)- - Road Act - Traffic and Road Transportation Act
	<ul style="list-style-type: none"> - On National Level, transportation act as an umbrella for National transportation system - Planning act is issued on Provincial or Regional level to control municipal governments and their planning activities 	<ul style="list-style-type: none"> - No constitutional right or duties due to spatial planning. Only guidance for spatial planning. - In England: the main piece of spatial planning legislation is Town and country planning act, amended by the Planning and Compensation act 1991; Planning act 1990 (list building and conservation area; Hazardous substance) - Transportation: Road safety act - National government produce National Planning Policy guidelines (PPG; for transportation : PPG 13) - regional planning policy guidelines is prepared at regional level but issued by national level 	<ul style="list-style-type: none"> - Plans are bundled in act and regulation for every government level. Act for every transportation system on national level is available (Activity, traffic and network) - No regulation specifically related to children need in transportation. - Children protection act obliges government to provide services and infrastructure for children
Child-friendly transportation related guidelines	Child- and Youth-Friendly Land Use and transport planning Guidelines	Guidelines for safer journeys to school	ZoSS Technical guidelines
Political will			
- <i>Actors involved</i>	<ul style="list-style-type: none"> - Provincial and Municipal government have important role to initiate children-friendly - Government agency is key actor for issuing policies - NGO, such as Center for Sustainable Transportation (CST) and Canadian Institute of Planner (CIP) are actively promoting child-friendly matters. 	<ul style="list-style-type: none"> National government through its agency (Department of Transportation) actively promote child safety in transportation sector - Sustrans: non-profit organization that concern about child-friendly transportation. 	<ul style="list-style-type: none"> Recently, only one government agency who concern to promote a program related to children safety. - Not many NGO are concern about children safety in transportation
- <i>Actors' understanding of child-safety problem and the importance of child-friendly</i>	High level of children safety promotion to create public will of the children safety	Intensive campaign to promote and to inform public the importance of children safety and child-friendly	Partial, not all actors are aware to the issues and problem. Not every government institution

<i>transportation (including Public Campaign)</i>	importance	transport. Cooperation between DfT and DfES for STP program and create a board to manage the (TTSPB) program	care to child safety issue
<i>- Actors' intending to support the initiative/issue and policy solution/actual program</i>	High awareness of child-friendly transportation planning . Many program related children safety issues has been implemented	Show high intention of actors involved to support the initiative (Central government produce guidelines and review municipalities plan) Guidelines and pilot project due to children safety are intensively promoted and carried out	Show high awareness to start put attention for children safety through local safety zone. Limited project regard to children safety, only ZOSS is intensively promoted. Government concentration for implementing ZOSS program.
Public/Children Involvement	Intensive program and effort to put children ahead in involving children in decision making -Method classification: Scholarly and educational approach , No formal institution identified for young or children participation	Increasing awareness in involving children in decision making process; through active interaction to gather children's views. Methods: interviews, surveys, - Method classification: Scholarly approach and educational approach. Formal organizational or institutional for children aspiration has grown through school/pupil council	No evidence that children has been involved in policy making or studies that discuss about children participation in transport plan decision making . No evidence has shown there is formal institution for children participation

Table 5-1 shows similarities, differences of components toward child-friendly transportation planning of three countries. Through comparing those components we can see clearly 'pot' that we have to 'fill' by learning from other countries that are in advance for providing safer and better access to children. Are our legal instruments appropriate to support the initiative? Do we have to promote the initiative intensively to get political will? Is this an effective way? These questions will convey to pick which one of the component that probably can be adopted.

By listing countries' experiences and effort we can find their effort for realizing CFTP. The listing table shows how CFTP can be formed refer to those components. We can see that in countries where CFTP has been promoted and implemented well, the condition of component toward CFTP show positive tendency. We can see that political will component, including actors' support; public campaign; actions program, and public/children involvement shows high, strong and intensive motivation. Comparing to Indonesia context, some components still have to be improved for supporting CFTP even the awareness to provide better access and safety for children has been showed through ZoSS pilot project. The Indonesia weakness to the process of CFTP is no specific transportation system regulation on high level (Act, Government regulation) for ensuring that children are protected and serviced by good transportation infrastructure. A way to go there is by forming political will and in the end regulator maker, Government and house of representative, will put their attention to accommodate children right in regulation products. To forming the political will, public campaign has an important role. It will form the paradigm of transportation actor, public and private, to support the initiative and endorse transportation regulator and decision maker to put children need in policy bundle. And based on Indonesia context, public campaign to promote the importance of CFTP is still weak.

From those analyses, I can make a conclusion that supporting of actor involvement is one of the keys to speed up the implementation. Building same perception among related actors for one specific issue is important so together they can put their attention and arrange their program to solve the issue or the problem successfully. Intensive and frequent public campaigns are a key to form same view for such kind issues. I can see that Indonesia has already number of acts for every parts related to transportation system. This is a good starting point that Indonesia has those acts which become a foundation to establish regulation (Government regulation, Ministry decrees) to support children-friendly transportation planning.

5.3 Road to CFTP implementation in Indonesia

5.3.1 Implementation barriers

This section will elaborate the threats and barriers of CFTP implementation and practice in Indonesia on the point of view of internal and external environment system. As I mentioned in section 2.4 internal and external environment system can be approached and connected by implementation barriers proposed by Banister since the components within both are similar.

Banister (2002) states that there are at least 6 barriers of policy implementation, they are:

1. Resource Barriers
To implement a policy measure, an enough amount of financial and physical resources have to be available. The implementation will be delayed or even canceled if these resources are not available in time and in the proper amount.
2. Institutional and Policy barriers
These barriers relate to coordination problems between government and/or private organization bodies and also conflicts with other policies. In transport provision, a number of government and private bodies are involved and sometime this condition is often difficult to achieve good coordination action by the implementing agency.
3. Social and Cultural Barriers
These barriers concern the public acceptability of measures. While some measures may theoretically be effective at promoting sustainable transport, their effectiveness is minimal if people do not accept their introduction or implementation.
4. Legal barriers
Many transport policies and measures need adjustment of laws and regulations, within on outside the realm of transport. If implementation is complicated by legal requirement or even made impossible by law, legal barriers are raised.
5. Side effects
If implementation of measure has serious side effects, this may hinder other activities to such an extent that implementation becomes too complicated, even though these side effects may only have limited effects on the success of the measure itself.
6. Other (Physical) barriers
These barriers could take the form of space restriction of are related to the topography on an area. This could be become important consideration when

policy to use a specific mode will be implemented. For instance to increase cycling mode in city, physical condition (terrain) become important factor that should be taken into account.

These barriers are used to identify transferability for implementing policy instrument, initiatives or methods. This is important to find chance for establishing and implementation toward CFTP based on Indonesia context.

5.3.2 Lesson learnt possibility (transferability)

From comparison analysis which is presented in table 5.1 the differences between three countries in promoting and implementing Child-friendly transportation planning is revealed. Canada and UK are leading in campaigning and forming actor's views to start putting their attention for the issue, Indonesia is still weak. From those comparisons Indonesia seems still left behind in several components but some of components show similar condition. Dolowitz and Marsh (1996) state there are seven objects that could be transferred, namely: policy goals, structure and content, policy instruments or administrative techniques, institutions, ideology, ideas, attitudes and concepts and negative lessons. Based on Dolowitz statement, I am searching the form of what has been mentioned by Dolowitz to every CFTP initiative, practice, method that I had elaborated in previous section. I identify some practices, concepts and ideas to be adopted and can be objects to be learned and copied. These ideas and practices are:

1. School Travel Planning

School Travel Planning (STP) initiative is one of the concepts that can be transferred to be implemented in Indonesia. Beside ZoSS program that has already run, STP can be other way toward CFTP implementation in Indonesia. STP is a global initiative that means this initiative is not only can be found in UK or Canada but also other countries such as New Zealand, Australia and United States. This initiative shows great effectiveness in several countries and can reduce children fatal injury and improve children independent mobility. STP can give more opportunity for key stakeholders to participate since these stakeholders should involve in identifying and solving their own transportation problem. Based on developed countries experiences, the STP required a huge amount of money and running in long term. According to UK's experience, government funding allocation for the program was about 50 million pound sterling over 2 year. Budget requirement for funding this initiative could be a barrier for Indonesia context since economic condition is not similar with those developed country.

STP initiative needs massive institutional coordination and management between government agencies. UK's experience showed there were share responsibility between DfT and DfES to carry out STP program and this sharing responsibility need a good coordination between them. Sharing responsibility is not only happened on horizontal manner but also vertical. This means that provincial and municipal governments have their own part for this initiative. This institutional coordination will be a challenge toward STP implementation in Indonesia both on horizontal coordination between executing agencies and on vertical coordination between hierarchical organization (national, provincial and municipal).

2. Producing guidelines for child friendly transportation planning

Other idea that probably can be carried out in Indonesia is guidelines for support CFTP initiative. For Indonesia context, central government is main actor to produce such kind of guidelines because this task is national government responsibility and guidelines which are produced by central government are usually used as reference for lower lever government and private sector.. Central government, especially Department of Public Work, has issued many guidelines, standard and norms related to infrastructure provision as references for private sector in providing better infrastructure and services. Barrier for adopting this idea seems not too hard. Acceptability is perhaps can be barrier for guideline since every municipality and region has their culture and norm. One lesson that can be adopted is that possibility for local private sector or local non-government organization can involve in producing such guidelines and the guidelines can be adjusted according to local condition. With private and NGO involvement in producing guidelines, chance for acceptability this instrument is high because these actor are close to practical and operational matter. This idea is adoptable to be implemented in Indonesia.

3. Public campaign method

One thing can be learned from public campaign method is starting to use interactive media using world-wide web to educate not only children but also adult for improve their awareness about children right in mobility and road safety. One of good practice is introduced by UK government who launched interactive homepage to educate children on how making a safer trip and how to behave on the road (www.hedgehogs.gov.uk). I think this idea is implementable as an alternative of public campaign method except other conventional public campaign methods such as billboard, TV and Paper advertising. Otherwise this idea doesn't have a huge barrier to be implemented rather than action programs campaign, such as cycling program, which has to be careful according to physical barrier (hilly and mountainous area).

4. Children participation methods

Scholarly method is an option method to be considered to be adopted. This method is frequently used in UK and Canada as a method to gather children perception for making a better plan which can accommodate their need. This method is using observation, interview, drawing, mapping or using educational drawing tool to look at children's conception. Apparently, this method can be implemented in developed country or area where children are used to give their perception. This method could be implemented in Indonesia. Barrier for this idea is more likely social and cultural barriers since every place, city and municipality in Indonesia has their own characteristic regarding to social and culture. It means that one scholarly method was successful in one community could not be generalized for other city. This scholarly method need an adjustment refer to social and cultural condition.

Those 4 initiatives have a chance to be applied in Indonesia based on the practices and effectiveness of the program in UK and Canada. Adaptation of these initiatives obviously is not by 'all in' copying regard to barriers that will be faced. An

adjustment should be considered for the initiative to be fitted with Indonesia condition.

5.4 Concluding remarks

By comparing CFTP component of three countries we can find the lack of one component relative to another and the possibility to learn and to adopt the idea toward CFTP. Based on comparative analysis, Indonesia is still a step behind in effort to involve children in planning process to define their need and also commitment between planning actors to support CFTP initiative. Not all of government agencies put their awareness for supporting CFTP initiative. It has been noted that Department of Transportation which has an action program to initiate CFTP practice through ZoSS program.

Comparison analysis has results the indication of a number of programs that can be transferred or adopted by Indonesia. The programs that can be implemented in Indonesia by learning from developed countries experiences are:

- School travel Program
- Guidelines related to CFTP practice
- Public campaign method
- Children participation method

Chapter 6 Conclusion and Recommendation

6.1 Introduction

This chapter will conclude elements and the most influential factor that should be considered and put great attention toward CFTP in Indonesia by comparing with European countries, UK, which a leader road safety including children safety and North American countries, Canada, which apparently has been a step forward in child-friendly transportation experiences. These factors could be adopted and would be a 'references factors' for implementing CFTP practice in Indonesia. In the end of this chapter, I propose several recommendations for starting to put CFTP practice in Indonesia. What things especially in child-friendly initiative campaign and children involvement that we have to be prioritized, developed, promoted and established.

6.2 Conclusion

This section is mainly elaborating the finding of this research by trying to answer research questions which are stated in Chapter 1.

What is the main concept of Child-Friendly Transportation Planning?

The Child-Friendly Transportation Planning terminology is new terminology introduced by the centre of sustainable transportation in Canada. However, the concept is not quite brand new. UK is a country which has abundant experience in this concept especially in one specific sector, safety. Whatever the terminologies are and how you define 'child-friendly transportation' is the most important is the concept and vision behind it. I think, Vision of child-friendly transportation planning is to put children as part of society who have right to be involved in decision making and planning process and in the end transportation provision that suit to their need can be achieved.

I propose the definition of Child-friendly transportation planning as a set a planning process, from establishing policy to actual implementation, particularly in transportation which focuses on children and youth needs to give them better safety, accessibility, and security in transportation and also accessibility for them to participate actively in decision making process.

How far is or to what extend development and the implementation of child-friendly transportation planning in Canada and UK?

CFTP concept has developed in advanced in Canada and United Kingdom. These two countries have practicing child-friendly transportation through the concept (policy, guidance) as well as the actions (pilot projects, projects etc).

UK and Canada are also leading in involving children for planning decision making process. The children participation methods that they used are mostly practice approach, scholarly and educational approach. The last two approaches sometimes overlaps each others. I think, tendency why they uses these approach because their

children are ready to be involved directly into planning where they can be actively giving their thoughts for the plan or existing condition. The educational system and children's behavior in the class (2 direction learning process between teacher and pupils) are also become the background why these approaches are widely used in those two countries.

How far policy development in Indonesia supports the concepts of CFTP?

After reformation era in Indonesia, central government has no longer dominated. Decentralization Act 32/2004 regulates distribution power to local government. In Decentralization act 32/2004, transport sector is not central government obligation but part of local government obligation (par 22, point (g) and (i)). However, Central government still has role to produce regulatory tool (Acts, guidelines) as foundation and reference for local government for their planning work. There are three acts that influence most transportation system in Indonesia, they are: Road act 38/2004, Spatial Planning act 26/2007, Traffic and Road Transportation Act 14/1992 and revised by no 22/2009, and one act that protecting children right is Children protection act no 23/2003. Among three acts that regulate transportation system, none of them are accommodating children right to take account. No article mention about children matter to be considered clearly. However traffic and road transportation act 22/2009 article 25 par (1) mentions that road should be equipped by bicycle trek, pedestrian path and disable infrastructure. Government regulation no 34/2006 article 86 par (5) also states that road technical plan should consider pedestrian and disable. Children protection act clearly states that Government has obligation and responsibility to provide service and infrastructure for children (art.22). Related to children right to express their aspiration, art.24 obliges government for ensuring that children get their right.

Based on above explanation, there is still a gap meaning that current regulations are missed to promoting CFTP. Only disable people have been mentioned in among acts that important in transportation system. Whether, not all transportation system acts put children right in to account, but children protection act require government to provide appropriate services and infrastructure for them. This will be 'a first step' toward CFTP and will be a 'base stone' for establishing lower level legal instrument (Government regulation and Ministerial decree).

Are the policy or legal instrument of transportation element interconnected each-other to support child-friendly transportation planning?

Integrated and interconnected between acts and regulation are still not formed and shaped yet and sometime overlapping. Government obligations for providing bicycle path and pedestrian path and infrastructure for disable on road is stated in traffic and road transportation acts but it does not accommodate in acts that regulate road infrastructure. The government obligation for providing access for disable is only found in road's government regulation which has lower hierarchy than acts. What I want to stress that regulation that oblige government to provide appropriate infrastructure is not put on equal level hierarchical. That will lead to the conclusion that the acts and regulations seem established independently, do not integrate each other. This will be a barrier for CFTP implementation since regulations in transportations system are not supporting each other. For instance, if in road act children right is accommodated while in traffic and road transportation acts do not, this will convey to the confliction on operational level.

How to get insight in children needs and what methods can be used to encourage children participation in planning process?

Right based approach is apparently the first appropriate method to be used in Indonesia. This approach has two subcategories '(1) approaches that look at the data available on child development and draw recommendations for child-friendly planning policy and (2) approaches that "learn from children themselves how they evaluate the places where they live and how they would like to live and then use this dialogue to bring children and adults together in participatory program to improve the urban environment" (Chawala 2002 in Yanez, 2005). First subcategory is more likely one direction approach when child-friendly planning policies is drawn by a set analysis from child development data. However, this is the first step that can be taken if still hardly gathering data for children by interviewing. Second subcategory is more two way interaction when we can learn for children how they evaluate their place. I think this approach is more suitable than other approaches since children in Indonesia, in general, are not ready yet to be involved directly in decision making process or to be engaged for making plans. This approach is moderate to be adopted for Indonesia context. This approach gives an opportunity to observe local condition, based on children development data, before going further putting the plans. By knowing children's view for their surrounding environment before involve them further in planning work is important step especially for Indonesia context since culture diversity is an important issues and barriers in Indonesia. Scholarly method can also be alternative method by learning what it has been done in UK and Canada. Observation and informal discussion with children, I think the most possible method to be implemented in Indonesia.

6.3 Research reflection

The concept of Child-Friendly Transportation Planning (CFTP) is to put children mobility need in front to give them better and safer accessibility in transportation without ignoring their voice and to be involved in planning process. CFTP is a form of sustainable transportation whereas this initiative encourages children for more independent in mobility by using sustainable transportation modes, such as walking, cycling and public transport for their daily trip. CFTP can not be divided from Child Friendly City (CFC) concept and apparently is part of CFC. CFTP is one of pillars to achieve CFC. We cannot achieve CFC without good CFTP. To create child-friendly transportation, several components are identified as important keys for achieving transportation system with child-friendly. Kids on the move explain several content of 'children admitted' mobility which has component: 1) Decision of Principle: this is relate to actors commitment and political will; 2) Framework measure: related to policy packaging through regulation and policy instruments and also coordination; 3) Actions: relate to practical program and participation. This conceptual content of 'children admitted' mobility and concept embedding in CFC, I propose several components that are needed as way for achieving CFTP. As a form of sustainable mobility, CFTP concept focus on children as part of society, giving more attention to their accessibility for them and encourage people using sustainable transportation mode, walking, cycling rather than motorized transport.

Comparative analysis of this study is between two developed countries and one developing country. This condition will lead to unbalance comparison since the comparison is between three different countries with a big gap in economic, culture, political situation and social. This gap will end up to the huge different situation between them in political view, development prioritizing and the awareness of the issues. This gap can be viewed as a weakness of this study. However, this condition common and make a sense since the aim of the study is to learn something from host country and possibilities of the experiences to be adopted and transferred to be implemented in Indonesia. By comparing proposed component for assessing CFTP initiative and implementation, we can find out what components that should be improved for Indonesia context and which of components from developed country can be adopted under some limitations and barriers.

6.4 Recommendation

Indonesia has shown the awareness of child-friendly transportation initiative through several action programs such as ZoSS, car free day (in Jakarta) and other initiatives or campaign, but the lack of it is there is need to have a kind of policy packages to bundle this initiative. Other lacks and limitations are financial support to promote and actualize the program more frequent, un-frequent public campaign, but above all is strong commitment among actors involved.

There are at least 4 points that should be considered or questioned on how CFTP can be introduced or may be can be more promoted in Indonesia.

1. How government to bundle the policy which is integrated between policies related transportation system (activity, network, and traffic) for supporting child-friendly transportation planning as political will reflection from government?
2. How to create good coordination environment between government agencies, based on their own responsibility or task, for establishing guidance supporting children need and these guidance are supported and interconnected each other?
3. How far public campaign has been carried out for increasing public/citizen awareness regarding to the importance of providing better and safer transportation services and infrastructures for children as their next generation?
4. How intense and frequent children have been involved for being actively in determining their need in transportation sector and to define what 'child-friendly transportation' is for them. Therefore, their appropriate involvement in many planning process is paramount and needed to ensure that their aspiration is accommodated in plans?

Due to those questions, several recommendations are proposed for triggering and speeding up the CFTP Implementation in Indonesia.

These things could be options for putting CFTP in front:

1. Political support and government intervention are the main factor for introducing and implementing CFTP concept. Government has responsibility to protect and to serve their citizen including children particularly. Children protection act states this government's task. Political will or support is not only about government's matters and it can not be separated from public and private support. One of effort is to increase coordination between actors to form same perception, same view for children safety and issues. But above the all, central government should have commitment to this initiative and putting this issues in their action programs or their strategic plan (short term, medium term and long term)
2. Legislation strengthens regulation and guidelines that related with child-friendly transportation service and infrastructure provision. Recently, there is not many regulation and legislation which protecting and securing child right in transportation. It is the time for Government to establish such guidelines and standard for transportation infrastructure provision which also consider children need. For instance, government publish a guidelines for residential developer on how providing bicycle path on their major road or government issues road standard which accommodate child-friendly transportation infrastructure inside. Putting an article in regulation product (acts, government regulation) consider to child-friendly transportation is needed. Acts Amendment is an option to putting children need in the acts that related to transportation system (Road acts, traffic and road transportation acts, spatial planning acts)
3. More frequent public campaign regarding to child-friendly transportation. The simplest way for public campaign is using conventional media: such as billboard, leaflet or by using other media such us television, newspaper. World-wide web can be used as a media for promote awareness about child-friendly transportation. Real action program and an event is also form of public campaign, for instance car-free day, biking day etc. And this kind of event is begin promoted in Indonesia, what we have to do now is to increase the frequency.
4. Now, child right in all sector is become global issue, it is not only government's responsibility but also private sector or institution. Private and citizen can actively to support the initiative. The residential and commercial land developers can start make plan on their land development by providing such infrastructure which support child-friendly matter for instance bicycle path, convenient pedestrian path etc. Their experience for providing children transportation facilities can be an input for government to legalize the concept to become a standard or guidelines.
5. Further and deep study for exploring children need and participation in transportation planning needs to be improved. This is important to find better and appropriate methods for involving children in transportation planning based on specific Indonesia condition. The study can be carried out by government itself or joint venture with private sector (consultant) or government give the task to consultant.
6. To improve the quality of traffic accident causalities data base. This is important to evaluate the result of child-friendly transportation initiative, plan and program. Until recently, traffic accident data record is not good. Many institutions issued different version of road accident. Without good traffic data

accident, it will difficult to evaluate the achievement of the program by finding how many children are involved in traffic accident year by year.

Apparently, it seems too good to be true for realizing Child-friendly transport in Indonesia in short term planning time frame. This daunting task needs actors' commitment for realizing the programs and to form the 'similar understanding to the issues' intensive campaign should be conducted regularly to form public and political will to support the program.

Child-friendly transportation concept implementation need long process and actors have put this issue ahead and seriously. The actor here is not only government but also private and public sector (NGO, community etc). No doubt that the most influential actor toward CFTP practice is government role on every tier not only central government but also provincial and municipal government. That would be the government's responsibility and their task to secure their citizen need and right including children. Nonetheless, support and force from citizen, private and public sector is also important factor for realizing the concept. The awareness is commonly come arise from bottom because their need to improve their well-being and one of the effort is by protecting their children in making trip. From developed countries experience, particularly Canada, local government has actively conduct the action program and initiative for promoting and providing safer transportation for children since this government tier has main role in planning. Contrast with what been happening in UK when Central government play important role in planning. This local initiative would be trigger for central government for issuing higher regulation that will 'tie' or force every lower lever government to start making plan accommodate the children need. To increase set of actors' awareness to the issues, first step can emerge from bottom to up, means from local community to central government or vice versa.

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