

CITIES 2015 International Conference, Intelligent Planning Towards Smart Cities, CITIES 2015,
3-4 November 2015, Surabaya, Indonesia

Traffic impact assesment practice in Indonesia

Karda. D. Yayat^{a*}, B. Kombaitan^a, Pradono^a, Heru Purboyo HP^a

^aDepartement of Transportation, Bandung Institute of Technology, Bandung, 40132 Indonesia

Abstract

Construction of a new traffic should consider its effect on the road network around the construction. Effect on the road network seen by the size of the building will be planned. Assessment is done by looking at whether the development affects the access roads around the building (*site impact*), affecting access roads and intersections in one direction around (*traffic impact*), or to affect the road network in the city that need consideration to change the city development master plan (*master plan*).

Analysis of the impact of traffic in Indonesia has become a liability since the issuance of Law No. 22 Year 2009 regarding Traffic and Road Transportation but in practice they face many obstacles because the Act is not equipped with its implementing regulations. The existence of these guidelines it is important to harmonize the implementation of the traffic impact analysis in the area (provincial / district / city).

Benefits of Traffic Impact Analysis is quite large but is still faced with some fairly complicated problems when applied in developing countries. Limapornwanitch (2020) has studied *the Implementation of Traffic Impact Assessment in Southeast Asian Cities: Case Studies of Thailand and The Philippines* and stated that the implementation of the analysis of the impact of traffic in Southeast Asia are faced with major problems that trouble the institution (institutional), no / not available procedures / standards, lack of knowledge and lack of budget. These four problems if left unchecked can accumulate into a bigger problem is the uncontrolled land use. Limapornwanitch (2020). For the condition of Indonesia, the biggest problems facing today is the lack of determination of a standard model to be applied in the analysis of traffic impacts.

© 2016 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Peer-review under responsibility of the organizing committee of CITIES 2015

Keywords: new development, traffic impact analysis, practice, Indonesia

* Corresponding author. Tel.: +62 85860140140; fax: +0-000-000-0000 .
E-mail address: karda.d.yayat@gmail.com

1. Introduction

Traffic impact analysis model which has been developed in developed countries and is helpful for handling the problem of the transport disruption caused by construction / development centers. But the model of effective traffic impact analysis applied in the developed countries faced obstacles when applied in Indonesia. Differences condition in Indonesia with other countries good views of the conditions of transport (mode used, the activity in the street, the behavior of road users, etc.), environment, culture, until the land use planning make application traffic impact analysis model face problems like that (has been) described Limapornwanitch (2020). Technically, the difference in land use planning may be the differentiator between Indonesia than developed countries is if the developed countries because it has a setting of strict land use, even in great detail. As for the condition of Indonesia, land use is still very difficult to control. These differences create application traffic impact analysis model which has been developed in developed countries need to be adjusted. Research on how the traffic impact analysis model most suitable for conditions in Indonesia is considered very important given the lack of analysis of the application of the standards led to mishandling (Lei, 2009). Mishandling This in turn may result in a bigger problem that is increasingly well-organized land use (Cahyono, 2010).

1. Methodes

The method in this study using a literature study is to compare several traffic impact analysis model applied in other countries. Look at the advantages and disadvantages of the models used then choose the best model that can be applied in Indonesia.

2. Stages of Traffic Impact Analysis Model

In brief comparative analysis of the impact of traffic in various countries above shown in the following table:

Table 1 Comparison of Traffic Impact Analysis practice in various countries

<i>Fill hint</i>	<i>Australia</i>	<i>Hongkong</i>	<i>Singapore</i>	<i>English</i>	<i>American</i>	<i>Indonesia *)</i>
<i>Regulations</i>	<i>not</i>	<i>Yes- part of the planning manual</i>	<i>yes</i>	<i>yes</i>	<i>not</i>	<i>Already available</i>
<i>Limitation (threshold)</i>	<i>Not mentioned in the instructions</i>	<i>Not mentioned in the instructions</i>	<i>mentioned</i>	<i>mentioned</i>	<i>mentioned</i>	<i>Already available</i>
<i>Instructions method</i>	<i>yes</i>	<i>Ya-checklist</i>	<i>yes</i>	<i>yes</i>	<i>yes</i>	<i>na</i>
<i>Limitation of the study area</i>	<i>not</i>	<i>not</i>	<i>not</i>	<i>not</i>	<i>yes</i>	<i>na</i>
<i>Assessment development plan</i>	<i>yes</i>	<i>yes</i>	<i>yes</i>	<i>Ya-governmental local</i>	<i>Ya-governmental local</i>	<i>na</i>
<i>Time period</i>	<i>Unspecified</i>	<i>5 years</i>	<i>5 years</i>	<i>5 years to 15 years</i>	<i>5 years</i>	<i>na</i>
<i>Assessment at the crossroads</i>	<i>Key intersection of (certain)</i>	<i>Access except large</i>	<i>All intersections</i>	<i>Depending scope</i>	<i>Simpang Los affected should have good</i>	<i>na</i>

Source: Land Transport New Zealand Research Report, 2007 with the modification of the author, 2014

Remarks: *) for conditions in Indonesia, because the manual is not available then the model is highly dependent executor constituent traffic impact analysis. The author argues is necessary to add criteria for traffic impact analysis that will be discussed further.

The above table shows that rules and regulations should not be there, in Australia and America, traffic impact analysis was not mentioned in the legislation but its implementation has been so good. There are countries which

Download English Version:

<https://daneshyari.com/en/article/1107287>

Download Persian Version:

<https://daneshyari.com/article/1107287>

[Daneshyari.com](https://daneshyari.com)