The 1st International Conference on Social Sciences University of Muhammadiyah Jakarta, Indonesia, 1–2 November 2017 Toward Community, Environmental, and Sustainable Development Deslida Saidah, et al: Land Transportation User Analysis in Bekasi ISBN: 978-602-6309-44-2

LAND TRANSPORTATION USER ANALYSIS IN BEKASI

Deslida Saidah, Mustika Sari & Danang Darunanto

STMT Trisakti, Jakarta, Indonesia

adibahalfi@gmail.com; mustika001@gmail.com; ddarunanto@yahoo.com

Abstact

The purpose of this research is to know the cause of the city transport driver to be disorderly and frequent accidents, to realize safe, convenient and safe transportation in Bekasi in accordance with the Law of the Republic of Indonesia Number 22 Year 2009 on Traffic and Road Transportation, facility development, transportation facilities and infrastructure in accordance with the standards and how to make people aware of traffic for road users, in accordance with the Law of the Republic of Indonesia Number 22 Year 2009 on Traffic and Road Transportation. This research method is using qualitative descriptive method with data analysis technique using interview, observation, documentation and triangulation of source. The results of this year's research (2017) the number of city transportation exceeds the ideal number, facilities and infrastructure in Bekasi is very good, extension and awareness activities in order to create road safety and secure of road users are always socialized to the community and in schools.

Keywords: User Transportation, Violation, City Transportation

INTRODUCTION

Bakaria. Bekasi continues to undertake development and improvement of all aspects, one of which is public transportation. City transportation (Angkot) is one of the public transportation facilities operating in Bekasi. Bekasi has many problems related to public transportation, especially in angkot. Many accidents and accidents by public transportation in Bekasi are worthy of serious attention, it can be seen from the many traffic tickets issued and the number of traffic accidents that continue to increase every year.

The level of traffic accidents in Bekasi city is still high, with 1,467 casualties recorded in traffic accident in 2013 until 2014. Accidents happened because of human error factor (Republika, 2015). Congestion in Bekasi occurs when going-to-office or school and even vacation. Many factors that cause the condition of vehicles, roads, driver behavior and passengers, facilities, tool and infrastructure are bad. Based on the Law of the Republic of Indonesia No. 22 Year 2009 on Road Traffic and Transport The government is obliged to provide a sense of security and safety for road users. The cause of the violation occurs because the behavior of chauffeurs who pursue deposits so that do traffic violations in between stops and parked at random place angkot passengers continue to decrease so that angkot drivers waiting for passengers in indiscriminate place. Traffic accidents in Bekasi occur because one of them is facilities, tool and infrastructure damaged. And the behavior of irregular riders as well as vehicles that are not worth the way. Law is the whole condition whereby the free will of the people can adapt to the free will of others (Mudakir Iskandar, 2008).

The higher the level of legal awareness of a person the higher the obedience to the law and the lower the legal awareness of a person the lower the obedience to the law.

Based on Law No. 22 In 2009, traffic management and engineering is a series of businesses and activities including planning, procurement, installation, arrangement and maintenance of road equipment facilities in order to realize, support and maintain security, safety, order and smoothness of traffic. The cause of traffic accidents is the result of poor attention to traffic safety. Accidents caused by driver mistakes can be reduced in a way that is age limitation in the provision of Driver's License

The 1st International Conference on Social Sciences
University of Muhammadiyah Jakarta, Indonesia, 1–2 November 2017
Toward Community, Environmental, and Sustainable Development
Deslida Saidah, et al: Land Transportation User Analysis in Bekasi
ISBN: 978-602-6309-44-2

(SIM), restrictions on length of restless driving, driver examinations, seat belt use, extension and traffic safety campaigns (Suwardjoko, 2002).

RESEARCH METHODS

This research uses qualitative research, Bogdan and Taylor (1992) said qualitative method is as a research procedure that produces descriptive data in the form of words written or oral from the people or behavior observed by using descriptive research type. Primary data sources in this study were obtained from direct observation in the field, and written records conducted through interviews obtained from informants. The object in this data source is angkot driver, Local Government Apparatus, Police Officer. Data collection techniques used interviews, observation and documentation. In this research, the validity of data is checked by triangulation technique. Methods of data analysis of data collection, data reduction, data presentation and conclusion and data verification.

RESULTS AND DISCUSSION

Unconditional Causes and Angkot Accidents

Angkot (City Transport) in Bekasi exceeds the ideal number there are 3,200-3,500 units with various routes. According to the Head of Transportation Agency (Department of Transportation) Bekasi City Yayan Yuliana said Ideally, the number of angkot in Bekasi City is 1,600 units, but now it has exceeded the stipulation, reaching 3,200 to 3,500 units with various routes. While the ideal amount of angkot is measured by road capacity and passenger route needs in 12 sub-districts of 1,600 units. The impact of swelling of the angkot amount is congestion and also the violation of operational licensing (antar. news, 2016).

The number of angkot rivals with other vehicles such as online-based vehicles, Trans Bekasi, and school shuttle vehicles or laborers make angkot-ignore the rules and order traffic to get passengers. At this time Online transportation has become an opiate among the people of Indonesia. Its existence is increasingly mushrooming, even triggering a dispute with conventional transport drivers. Protests arose in a number of areas, regarding the use of online angkot. Some were successfully resolved peacefully, others were strongly opposed to online transport.

The large number of shopping and market centers in Bekasi, Bekasi terminal, Kranji station and Bekasi station or the quarters of the streets of Bekasi, where angkot stops for passengers and sometimes angkot wait until fully loaded. The absence of authorized officers in crowded places such as malls, causing angkot to stop long to find passengers even make the base place for angkotnya fully charged.

Angkot has a lot of unfit road because it has not been rejuvenated and did not participate in the feasibility test to strike in the middle of the road. Thousands of bulging angkot were allegedly over the age of 15 years, and the condition is not road worthy.

Land Transportation Improvement in Bekasi

The congestion is the situation or the faltering condition or even the cessation of traffic caused by the number of vehicles exceeding the road capacity. Congestion can occur for several reasons: the first reason that the current through the road has exceeded the capacity of the road. The second reason there is a flood so the vehicle slows down the vehicle. The third reason for road improvement. The fourth reason there is a certain section of road that is landslide. The fourth reason for the avalanche of roads for this reason does not occur in Bekasi. The fifth reason is the wild parking of an activity. The sixth reason is the rigid traffic light setting that does not follow the high flow of traffic. And the last reason due to accidents that occur and the activity of activities of society / organization disrupt Traffic

From the results of interviews with Department of Transportation said all public transportation in Bekasi city must use air conditioner. Based on Ministry of Transportation Regulation targets all

The 1st International Conference on Social Sciences
University of Muhammadiyah Jakarta, Indonesia, 1–2 November 2017
Toward Community, Environmental, and Sustainable Development
Deslida Saidah, et al: Land Transportation User Analysis in Bekasi
ISBN: 978-602-6309-44-2

urban transport (angkot) in Indonesia is equipped with air conditioning system or air conditioner (AC) no later than February 2018. The purpose of angkot air-conditioned to improve the level of angkot convenience so that will be re-interested by the community.

The level of accidents that occurred in Bekasi, did not explain the vehicles involved in traffic accidents in Bekasi so it can not be known the number of angkot involved in the accident. This deposit system can cause disorderly drivers such as speeding fellow angkot, stop not at bus stop, stop for passengers with long stops and rarely driver to destination or always pass passengers to other angkot, based on Police and Driver interview. the results of interviews and supported by research Santi (2016) concluded against the types of traffic on the street highway generally the public transportation drivers know and understand the types of traffic signs but the driver of public transportation less know about the law number 22 of 2009 on traffic and road transport, but they are considered to know when the law has been enacted.

Steps to Solve Congestion and Congestion Limitations Acceptable by the Highway

There are several steps that can be taken to solve the traffic congestion problem that must be formulated in a comprehensive plan that is the first step of capacity building, in increasing the capacity of roads / infrastructure such as widening the road, adding to the traffic lane as long as it is possible, changing the traffic circulation into one-way roads, to reduce conflicts across the boundaries of a particular current, usually the most dominant limits of right turning currents, in increasing the intersection capacity through traffic lights, intersection not a plot / flyover, developing intelligent transport systems, imposing sanctions if there is a violation.

The second step is to support the public transport, in improving the carrying capacity of the road network by optimizing for efficient transportation in the use of road space by way of the development of public transport service network, the development of lanes or special lanes of buses or special buses in Jakarta known as Busway, development of city railway, known as metro in France, Subway in America, MRT in Singapore, direct subsidies as applied to city transportation in Transjakarta, Batam or Jogjakarta or indirectly through automobile tax relief, import duties to public transport.

The third step is usually unpopular but if the congestion gets worse the more extreme traffic management is limiting the use of private vehicles to a certain area as planned to be implemented in Jakarta through Electronic Road Pricing (ERP). Other forms with the implementation of parking policies that can be done with the application of high parking rates in the area to be restricted traffic, or limitation of parking space availability in the area to be restricted traffic, and restrictions on private vehicle ownership through increased vehicle ownership costs, fuel taxes, motor vehicle taxes, high import duties. And certain traffic restrictions enter certain areas or roads, as applied in Jakarta known as the 3 in 1 area or another example of motorcycle restrictions entering the protocol road.

Acceptable Highway Congestion levels are designed specifically for a particular level of service, so as to serve motor vehicle users without exceeding a certain level according to AASHTO (1993), there are several basic principles to help determine acceptable congestion levels are first principles of traffic needs not allowed to exceed the capacity of the highway, even for a short time interval though. The second principle of design traffic volume per lane is not allowed to exceed a level at which the traffic can still escape the long queue. The third principle of vehicle users should be given a little flexibility in determining the speed (speed can be influenced by the length of travel. The fourth principle of operational conditions must provide a little more freedom from the driver's pressure, adjusted for the length and duration of the trip. The fifth principle of the practical limitations of an ideal toll and the last principle of vehicle user behavior against poor operational conditions is influenced by their awareness of development costs and the cost of the right of way cost required to improve service. With the steps to solve the congestion and some basic principles to determine the acceptable congestion level limitations, it is expected that Bekasi Local Government in this case Department of Transportation Bekasi city can help reduce the daily congestion occurred in the city of Bekasi.

The 1st International Conference on Social Sciences University of Muhammadiyah Jakarta, Indonesia, 1–2 November 2017 Toward Community, Environmental, and Sustainable Development Deslida Saidah, et al: Land Transportation User Analysis in Bekasi ISBN: 978-602-6309-44-2

Settlement Action Plan 19 Bullet Traffic Congestion Point Bekasi by the Department of Transportation in Bekasi

Arrangement of Land Transportation in Bekasi must be implemented in order to create transportation in Bekasi secure and safe and comfortable in accordance with the Law of the Republic of Indonesia No. 22 Year 2009 on Traffic and Road Transportation. The solution of transportation problems has become one of the main tasks to be undertaken by Central government and local governments. The problem of transport is increasing, regardless of the amount of annual expenditure to develop various transportation systems and facilities.

If there is one inferior conclusion from the study of the great cities of the world, it is the fact that all humans are dissatisfied, often expressed in open protest, against their transport conditions, of their development and their impact on the city they are habitable (Thomson, 1998). As there is a problem in our traffic movements, especially during rush hours, resulting in transport users experiencing a delay of millions of hours. In line with this problem is the increasing number of accidents (Jotin, 2005).

By completing the 19 hazard-prone points in the city of Bekasi, it is hoped that congestion can be reduced or the absence of congestion thus reducing transportation problematics and can reduce annual expenditure in terms of transportation costs.

Implementation of Transportation Development Concepts

One application of Bekasi Smart City is Smart Mobility, Bus Rapid Transit, Parking meters. In addition to orderly parking and discipline for the riders, as well as to increase the income of the city of Bekasi, will also implement the Transit Oriented Development which is one approach to urban development that adopts mixed spatial layout and the maximization of the use of mass transit such as Busway / BRT, rail city (MRT), light rail (LRT), and equipped with a pedestrian / bicycle network. The trip will be dominated by using public transport that is connected directly with the purpose of travel (voice of Bekasi)

Facility Condition, Facilities and Transport Infrastructure in Bekasi

According to the data from Department of Transportation that facilities, tool and infrastructure there is no shortage. There is some facilities, tool and infrastructure need routine maintenance and need to be repaired if there is damage that might be caused by accident, development or natural factors such as fallen or flooded trees. Based on interviews with drivers, police and Department of Transportation, all said that facilities, facilities and markets are very good only some are damaged such as bus stops and roads due to the construction of Becakayu toll road (Bekasi-Cawang-Kp. Melayu).

Based on Bekasi Regional Regulation Number 8 Year 2005 concerning the operation of road traffic and motor vehicle workshop in Bekasi sub-district: the fourth part of the inspection and maintenance of Article 17 and the fifth part, the procurement and maintenance of road equipment in Article 18-20 is very clear that the Regional Regulation has arranged facilities, tool and infrastructure of traffic in Bekasi in checking, maintaining, holding maintenance of road equipment. If facilities, tool and infrastructure damaged by the development of the developer / development company is obliged to fix it.

Increase Legal Awareness and Ethics of society in Traffic

Many ways that can be done in raising legal awareness as expressed Kuncorowati (2009) through the way that is education, both formal and non-formal schools from the beginning need to be instilled legal awareness, counseling or socialization. Legal counseling as a form of awareness, and transformation values and norms that have the purpose to realize, understand and implement the provisions of the rules of law as a guide to behave and act in public life, the role of law enforcement officers.

Laksamana (2010) discloses realizing the legal awareness of society for traffic can be done through the first way of creating a law-abiding culture of society for orderly passage. Second, enforcing traffic law as an effort to create public legal awareness for the creation of order. Third, improve traffic safety

The 1st International Conference on Social Sciences
University of Muhammadiyah Jakarta, Indonesia, 1–2 November 2017
Toward Community, Environmental, and Sustainable Development
Deslida Saidah, et al: Land Transportation User Analysis in Bekasi
ISBN: 978-602-6309-44-2

A person's legal consciousness can be improved through unnecessary by violent means such as threatening by coercion. Legal awareness can not be forced and impossible created by coercion, because the consciousness comes from within oneself. One will consciously recognize the existence of a certain rule of law, an awareness of one's rights and duties as a good Indonesian Citizen.

To awareness of the people to obey the traffic, The city government of Bekasi must be in accordance with the Law of the Republic of Indonesia Number 22 Year 2009 on Traffic and Road Transport.

In accordance with Regional Regulation of Bekasi Regency Number 8 Year 2005 regarding the Implementation of Road Traffic and Motor Vehicle Workshop in Bekasi district area and in raising the legal and ethical awareness of the community in traffic, the Department of Transportation of Bekasi city takes the first step by supervising, controlling by setting the policy of regulating traffic on a particular network or road segments and providing guidance and counseling to the community concerning the rights and obligations of the community in the implementation of the policy of regulating traffic on certain road networks or sections (in accordance with articles 7, 9 and 10).

The second step in terms of road safety, always socialize to every compulsory road users to comply with the traffic requirements stated in traffic signs, road markings and traffic regulators. In this article also regulates road damage due to road users, the prohibition of transporting materials endangering safety and public health (articles 24 and 25).

The third step prohibits committing acts that could damage some roads or entire road bodies, endanger safety and undermine traffic regulatory policies and may disrupt traffic (Article 26).

Fourth step in terms of building road users Bekasi city government permits the establishment of motor vehicle driving education, aims to educate and train prospective drivers of motor vehicles to become drivers who have knowledge in the field of road transport, skilled, responsible and behave and be mentally which is good in traffic (Articles 42-47).

The fifth step was to create Bakorlantas (Traffic Coordinating Agency) to accommodate the aspirations of the community and to give consideration to the extension of local government policy in the field of transportation. (article 50).

The sixth step of every school in Bekasi, it is recommended to establish a school security patrol that is an extracurricular activity, besides guarding the disturbance of security and order, also a small police officer for elementary school, they are taught about traffic order and building discipline awareness and responsibility.

The seventh step of carrying out traffic operations / raids is often held for the security and safety of traffic held by the police and the city of Bekasi every week or month. And the last step is always to awaken the public, through socialization with counseling and guidance with campaigns in schools and crowded places.

CONCLUSION

Angkot in Bekasi exceeds the ideal number reaching 3,200 to 3,500 units with various routes, while the ideal amount of angkot is measured by road capacity and passenger route needs in 12 districts of 1,600 units.

In the improvement of land transportation In Bekasi by determining the acceptable level of congestion according to AASHTO (2001) and formulating the step of a comprehensive plan to solve traffic congestion problems, and secondly by completing 19 jam prone points in the city of Bekasi. Then implement the concept of transportation development. The land transportation improvements are running well, expected congestion can be reduced or no congestion, thereby reducing transport problems and can reduce annual expenditure in transport

The condition of facilities, tool and infrastructure in Bekasi is very good, only some are damaged due to the development of Becakayu toll or natural factors, but have been partially replaced or tidied up again based with the Regional Regulation of Bekasi Regency Number: 8 Year 2005.

In increasing the awareness of law and ethics of the community traffic by implementing Bekasi Regency Regional Regulation No. 8 Year 2005 on The Implementation of Road Traffic And Motor Vehicle Workshop In Region Kapubaten Bekasi. To implement Law No. 22 of 2009 on traffic

The 1st International Conference on Social Sciences
University of Muhammadiyah Jakarta, Indonesia, 1–2 November 2017
Toward Community, Environmental, and Sustainable Development
Deslida Saidah, et al: Land Transportation User Analysis in Bekasi
ISBN: 978-602-6309-44-2

management and engineering is a series of businesses and activities including planning, procurement, installation, arrangement and maintenance of road equipment facilities in order to realize, support and maintain security, safety, order and smoothness of traffic.

REFERENCES

- AASHTO. (1993). American Assosiation of State Highway and Transportation Officials. Guide for Design of Pavement Structure.
- Bogdan, Robert C. & Taylor, Steven J. (1992). *Introduction to Qualitative Research Methods: A Phenomenological Approach in the Social Sciences*, alih bahasa Arief Furchan. Surabaya: Usaha Nasional.
- Firdaus, Andi. "Angkot Di Bekasi Lampaui Jumlah Ideal." Antaranews Online 11 Agustus 2016 (http://www.antaranews.com/berita/578183/Department of Transportation-angkot-di-bekasi-lampaui-jumlah-ideal. Diakses 02 Febuari 2017.
- Gross, J.J. & Thompson, Ross A. (1998). Antecedent and response focused emotion regulation: Divergen consequences for experience and physiology. *Journal of Personality and Social Psychology* 74: 224-237
- Iskandar, Mudakir. (2008). *Pengantar ilmu hukum dan tata hukum Indonesia*. Jakarta: CV. Sagung Seto.
- Khisty, Jotin C. & Lall, Kent B. (2005). *Dasar-dasar rekayasa transportasi*. Jakarta: Penerbit Erlangga
- Kuncorowati, Wulandari P. (2009). Menurunnya tingkat kesadaran hukum masyarakat di Indonesia. Jurnal civics media 6(1): 60
- Laksamana. (2010). Kesadaran berlalu lintas untuk mencegah angka kecelakaan. Jurnal Ilmiah Abadi Ilmu 3(1):
- Peraturan Daerah Kabupaten Bekasi Nomor: 8 Tahun 2005 Tentang Penyelenggaraan Lalu Lintas Jalan Dan Perbengkelan Kendaraan Bermotor Di Wilayah Kapubaten Bekasi
- Santi & Firman.`(2016). Kesadaran hukum berlalu lintas pengemudi angkutan kota trayek kode E di Makassar. Jurnal tomalebbi III (3): 160-173
- Sugiyono. (2014). Metode penelitian kuantitatif, kualitatif, dan kombinasi (mixed methods). Bandung : Alfabet
- Syaikhu, Ahmad. "Proyeksi Transportasi Kota Bekasi hingga 2025." Voice Of Bekasi 09 Desember 2016 (http://www.radiosuarabekasi.com/berita-seputar-bekasi-raya/ voice-of-bekasi/2931-proyeksi-transportasi-kota-bekasi-hingga-2025. Diakses 02 Februari 2017)
- "Tingkat Kecelakaan di Bekasi Tinggi". Republik. 27 September 2017.(http://www.republika.co.id/berita/koran/urbana/15/02/12/njnicr33-tingkat-kecelakaan-di-bekasi-tinggi. Diakses 02 Februari 2017)
- Undang-Undang Republik Indonesia Nomor 22 tahun 2009, tentang Lalu Lintas dan Angkutan Ialan
- Warpani, Suwardjoko P. (2002). Pengelolaan lalu lintas dan angkutan jalan. Bandung: Penerbit ITB. "Kemacetan". Wikipedia (https://id.wikipedia.org/wiki/Kemacetan. Diakses 02 Febuari 2017)