

ANALYSIS OF THE DETERMINATION OF THE LOCATION OF THE CONSTRUCTION OF BUS RAPID TRANSIT (BRT) SHELTERS AT BS 13 LAPANGAN MERDEKA MEDAN CITY

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Keywords:

Bus stop, location,
Government, Society,
Congestion

Abstract

This research was conducted to find out: analyze the determination of the location of bus stop construction (Rapid Transit (BRT)), land use and public perception in BS 13 Lapangan Merdeka Medan city by using qualitative methods. Based on the response of the informant community as road users after the construction of the bus stop. It was found that the policy implementation process that has been taken is still not optimal for the BRT policy in Merdeka Square to be an alternative that serves to overcome traffic congestion in Medan City, especially on the corridor route that is passed such as Jalan Balai Kota-Kesawan. This makes the narrowing of the road that has become increasingly narrow in the City Hall which makes the Mebidang BRT Stop on Jalan Balai Kota Medan jammed for hours. There are several suggestions from the research, namely: based on the identification of the impact of site selection that will arise, it is necessary to organize and arrange road sections, and manage the area in accordance with the density of road users..

INTRODUCTION

In the current economic era, various activities have a close relationship between other activities, both in the form of relationships that have a positive and negative impact on the economy. Transportation has an important role in everyday life that can help the mobility of people and goods so that the success of this transportation can be seen from its ability to encourage and improve the national, regional and local economy. Various indicators that can support transportation can run well include road capacity, quality of service, accessibility, and others. Medan is a Metropolitan City that is ranked fourth in Indonesia. Medan is one of the cities that has rapid development among other cities such as Jakarta, Surabaya, Makassar, and Bandung. In 2023 the population reached 2,536,271 people (Central Bureau of Statistics of Medan City in 2023) with a total area of 26,510 hectares in 2024 based on data from the Directorate General of Population and Civil Registration (Dukcapil), 2024. Medan City as the capital of North Sumatra Province cannot be separated from interactions with other regencies/cities because it is the center of trade, industry and business and is one of the largest cities. With a high population, it results in an increase in the number of needs for facilities and infrastructure to reach places and community destinations.

In fulfilling and supporting the provision of public transportation for people in urban areas, the Medan City Government has launched BRT electric buses with a commitment to improve services for the community, especially in the field of transportation by developing modern and environmentally friendly mass transportation with the hope that the operation of BRT can reduce the high level of traffic jams in Medan City. Buses are one of the most efficient and affordable means of public transportation with high effectiveness and are considered as public transportation with the lowest overhead and maintenance costs. In several major cities in Indonesia buses have become an important transportation element in the public transformation system. Therefore, bus stops and terminals have a very important role in such infrastructure. Some of the components that must be present in a city bus stop include a stopping area with shelter facilities, seats, lighting, public telephones, information on routes and schedules. In addition, bus stops are also expected to be easily accessible, the availability of close toilets, places to eat and drink and can provide a sense of security to users of the bus infrastructure.

Indeed, in making these changes, many parties must work together seriously. Both from the bus company, the government and also the community as the users who feel the existence of these regulations the most.

Figure 1: Day-to-day congestion in Medan City



Source: [www. Antarafoto.com](http://www.Antarafoto.com)

The Medan city government has provided Bus Rapid Transit (BRT) facilities as a mode of public transportation for the community with a budget of 1.9 trillion, the provision of BRT is intended to support the provision of urban public transportation that is efficient, safe, comfortable, reliable and affordable in accordance with the purchasing power of the community. The construction of the BS13 BRT pilot stop has begun at Merdeka Field and will be targeted for completion in December 2024. The BRT will have 32 BRT Stations, 527 Bus Units, and 696 bus stops, and serve 13 travel routes along 561 km and 21 km of special lanes.

The BRT direct route services include BRT01 Flamboyan-Amplas, BRT02 Lau Cih-Development Gas Station, BRT03 Amplas-Pinang Baris, BRT04 Medan Labuhan-Amplas, BRT05 Pinang Baris-Cemara, BRT06 Lapangan Merdeka-Belawan, BRT07 Karya Wisata-Medan Mall, BRT08 Deli Tua- Bandar Khalifa Railway Station, BRT09 Adam Malik Hospital-Citraland Gama City, BRT10 Pancur Batu-Plaza Medan Fair, BRT11 Lubuk Pakam-Amplas Terminal, BRT12 Whale Terminal-Medan Mall, BRT13 Amplas-Pinang Baris (ring road).

Determining the location and number of bus stops has a very impactful and strategic role related to the location point chosen as a bus stop so as not to disturb or narrow the existing traffic lane. The development of inappropriate bus stops can lead to new problems if the placement of bus stops is not adjusted to the land use around the placement of bus stop locations. Bus stop design is expected to become a more advanced Smart City by following technological developments and paying attention to the needs of today's society. Bus stops must be able to blend in with the city's architectural landscape, consider appropriate waiting times (headways), and load factors so as to attract people to use bus services through visual appearance and the resulting psychological effects. BRT bus stops are different from other public bus stops. A bus stop is a form of terminal on a small scale. BRT does not have a large terminal and only picks up and drops off passengers at special stops that are only used by BRT.

In the theory put forward by Grindle that the role of policy actors will greatly affect the success of a public policy, this is based on content variables or context variables in policy implementation activities in which there is a statement stating that the success of public policy implementation activities will be greatly influenced by the position held by the actor, the implementer of the policy by the actor, power, institutional characteristics, and the initiative of the actor. To ensure that the BRT BS 13 Lapangan Merdeka bus stop construction project in front of the Medan City Post Office provides optimal benefits to the community, it is important to conduct a comprehensive analysis so as to identify existing problems, provide recommendations and ensure that the bus stop construction contributes to improving the quality of public transportation services in Medan City.

METHODS

This research was conducted at the BRT BS 13 bus stop at Merdeka Square, precisely in front of the Medan City Post Office on Jalan Balai Kota Kesawan. The research method used is qualitative. Qualitative research is based on the philosophy of postpositivism, because it is used to research on natural conditions (Sugiyono, 2019). Determination of sources using snowball technique with the help of key informants. The initial informants in this study were the Medan City Government, the Transportation Office, the Medan City BRT Public Service Agency and the community. The data sources in this study used primary data derived from observations and interviews with research informants, then secondary data came from literature study activities. Data collection techniques were carried out by observation interviews and documentation. Data analysis in this study was carried out by data reduction, data presentation and drawing conclusions.

RESULTS AND DISCUSSION

Results

Based on the implementation process of the Merdeka Field BRT policy that has been taken, it is found that the Merdeka Field BRT policy is still not optimal as an alternative policy that serves to overcome traffic congestion in Medan City, especially on the corridor route that is passed such as Jalan Balai Kota-Kesawan. "The construction of the Mebidang BRT Stop on Jalan Balai Kota Medan has caused traffic jams for hours" in *tribunnews.com* *Tribun medan*, conveyed that the long traffic jam that occurred not only occurred in the Balai Kota road area, but from the direction of Jalan Kapten Maulana Lubis to Jalan Perdana also experienced congestion. The congestion that occurs on Jalan Kapten Maulana Lubis and Perdana is due to the narrowing of the road at Medan City Hall. This congestion does not only occur during commuting hours or after work. Even during the day, Jalan Kapten Maulana Lubis, Perdana and City Hall become jammed and vehicles cannot even move. One of the road users as an informant, "According to him, the construction of this BRT is not yet needed. Because, there are still many Pemko projects around Merdeka Square that are still being worked on".

In research conducted by (Basuki, 2017) in the analysis of comparing products and regulations in the system approach to community and government activity systems found that bus stops are in a low level of service caused by long distances of stops, poor conditions and users are not accustomed to using stops causing corridor friction and adding to traffic congestion. Bus Rapi Transit (BRT) as a mode of transportation is expected to increase the attractiveness of the public in using public transportation so that the impact is positive in suppressing private vehicle users.

Locations that are currently built need to review the location and number of stops that play a role for BRT users. Improper construction of bus stops will result in more transportation problems. In this study, the location determination and location determination at Merdeka Square, precisely in front of the Medan City Post Office on Jalan Balai Kota Kesawan, was carried out to identify the right location and the high level of public demand at the candidate bus stop location.

Discussion

It is very important to design bus stops that meet the aspects of good criteria to increase user satisfaction. According to (Cao et. al 2016), one of the main attributes that affect BRT user satisfaction is safety and comfort while transiting at stops or terminals. So as to increase satisfaction, it is necessary to design the right bus stop without disturbing the smoothness of other transportation as road users. Then the role of all elements is needed to make a contribution that has a positive impact on the progress of Medan city. The Medan City Government as a key player is assessed based on the interests or values carried by the Medan City Government as an actor in the implementation of the Medan BRT policy is high, this comes from political interests, institutions or groups, personal self and the value of the policies carried. The Department of Transportation as a subject has a role as an extension of the Medan City Government so that here the interests carried by the Department of Transportation are in line with the interests carried by the Medan City Government with high power, the Department of Transportation has control over the Medan BRT Public Service Agency, because it is directly under the Technical Service Unit of the Department of Transportation. Medan BRT Public Service Agency as the content setter and Medan BRT Road users as the Crowd. Drivers and Barriers to Government Success.

A. Drivers and Barriers to Government Success

1. Government Participation

The Medan City Government is the sector leader in the process of implementing the Medan BRT policy, meaning that here the Government's participation as the main actor involved in the emergence of this policy includes the formulation of implementation issues monitoring and evaluation of policies. However, the researcher's findings show that government participation has not been optimal in monitoring the smoothness of the policy implementation process, so that here the Medan BRT policy is still not optimal in overcoming the problem of traffic congestion in Medan City.

2. Access

The Medan City Government has very broad access including conveying information or giving instructions to other actors and making legal products that regulate the administration of the policy process.

3. Communication strategies used by a communicative government.

4. Resources

The Medan City Government has financial resources derived from the Medan City APBD, the second is human resources in this case employees and the last is partnership resources as a support in the running of the Medan BRT policy implementation. Resources owned by the Medan City BRT Public Service Agency in the form of financial resources / capital derived from the Medan City APBD and the target of retribution from BRT

operations amounting to 1.9 billion Rupiah. Furthermore, human resources consist of employees and leaders, here improving the quality of employee resources of the Medan City BRT Public Service Agency is carried out with training activities such as for example BRT drivers are involved with the police in providing the basics of driving training.

B. Function of Bus Stop

A bus stop is a place where public vehicles stop to pick up and drop off passengers. In the mode of transportation in Medan City, there are special bus stops called bus stops. The goal is to improve discipline in using transportation facilities. Based on the Minimum Service Standards, bus stops are expected to have facilities that support passengers both seating passengers to wait for the arrival of the bus, have a roof so that passengers are not hot during the day and rainy and the floor surface of the bus stop is high (Parallel to the height of the bus floor). On the other hand, bus stops can reach passengers so that buses in picking up and dropping off passengers become more optimal, which in its implementation is expected to be supervised by the bus stop manager.

Thus, determining the right location of bus stops is a necessity and the impact is not detrimental to other parties who do not use bus stops as daily transportation. This means that all groups feel the positive impact received for the presence of the bus stop, not the other way around. In determining the right location to be used as a bus stop, one of the important factors to consider is knowing the location of demand and the available road area at the construction site. The location of the bus stop demand is a source of attraction for the community in determining the transportation options that will be used every day.

C. Public Perception of Bus Stops

The construction of the BRT BS 13 bus stop at Merdeka Square in front of the Medan City Post Office on Jalan Balai Kota Kesawan generated various responses from the public. Based on interviews from road users and perceptions conveyed about the bus stop. This was taken to determine the extent to which the community felt the benefits of the bus stop with the following assumptions:

1. All Medan residents are aware of the BS 13 BRT stop at Lapangan merdeka due to its location in the city center.
2. 65% of people do not use bus transportation as a means of transportation to travel.
3. Quite a number of people consider the location of the bus stop to be inappropriate, adding to traffic congestion as a result of the narrowing of the road.
4. The community considers that this is not in accordance with the needs of the community so that it seems a rushed project
5. The community also has hopes for young transportation and the provision of bus stops in Medan City can:
 - Expect the provision of good bus stop facilities and infrastructure.
 - Good service that already exists to be improved
 - Cleanliness is maintained
 - The accuracy of the bus stop
 - Strategic location of bus stops that do not have a negative impact on other transportation users. The information above also shows that the need for bus stops is the first thing and needs a more mature thinking effort to assess and make policies by looking at the needs of the community from all aspects of both bus users, people who use private transportation, and all other types of public and private transportation (Angkot, motorbikes, taxis, pedicabs).

CONCLUSION

It was found that the Implementation of the Medan City BRT (Bus Rapid Transit) Policy in overcoming traffic congestion in Medan City is still not optimal, it can be concluded that the Medan City Government, the Transportation Office and the Medan City BRT Public Service Agency have a big role in implementing the Medan City BRT policy seen from the interests (Interest) and power (Power) owned by actors in achieving policy implementation goals. But besides that, it is necessary to finalize a policy before realizing it so that the impact of the policy carried out does not increase the percentage of congestion and the support or role played by the community is still relatively small.

ACKNOWLEDGMENT

Some suggestions are proposed as follows:

1. To improve the government's performance in achieving its vision and mission for the sake of progress and providing services to the community, it is better to hold a survey or open dialogue for stakeholders by considering factors such as population density, accessibility, potential population growth, and integration of decisions taken with other modes of transportation. So that in making decisions that become policies that have an orientation for the community.
2. The construction of BRT stops in front of the Medan Post Office or on the Balai Kota road is not adorned by congestion every day, so the Medan city government's BRT project should be carried out on Bukit Barisan road in Medan City.

3. Functional bus stop design: can be friendly for all people including people with disabilities.
Provide guaranteed service and security for users by providing CCTV facilities and security officers.

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Internasional Journal of Economic, Agribisnis and Development Studies

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