

User Statements of Cibitung—Cilincing Toll Road Route Operation During Pandemic Covid-19



Pamuka Prasetya Primantara and Lita Sari Barus

Abstract The purposes of this research are to determine the potential and usefulness of Cibitung Cilincing toll road roles during pandemic covid-19. Despite regulation of movement restrictions in Indonesia, the Bekasi district area residents also demand efficient time & cost terms of their mobilities. This research uses the theory of city access concepts and urban mobility. The author used the survey method, a literature study. This research is expected to explore and measure the roles of Cibitung Cilincing Toll Road to shorten mobilities distance and more affordable costs incurred with general comparison before and after the Cibitung Cilincing Toll Road partially operated 2,75 km in August 2021. The results of this study will describe the user statements considered and related to cost, time, and their characteristics. Increased mobility in this area will undoubtedly gain potential regional development from a social perspective.

Keywords Cibitung Cilincing Toll Road · Mobilities · User statements · Digital questionnaire · Covid-19

1 Introduction

Covid-19 pandemic hit Indonesia in all sectors, we are still struggling to improve the situation and conditions in all aspects, not only in terms of vaccines but also to look after the people infected the Covid-19. Economic and business activity also rapidly decreased from march during pandemic. Therefore, the government also needs to improve the community's mobility so that it returns to normal. In the past, the public has learned that there are some regulations and restrictions on people's movement and mobility to prevent the spread of Covid-19, from March 2020 until September 2021. The government has also started exploring new standard policies. The movement of people is associated with the efficiency of travel costs, and congestion is often

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one of the reasons obstacles. People want fast and smooth access to reduce their mobility time during this covid-19 pandemic and minimize costs. The construction of the Cibitung toll road to Tanjung Priok Port is part of the government's mandate to realize the 2015–2019 Medium-Term Development Program, which provides road infrastructure to support the national economic growth strategy.

2 Literature Review

The concept of the city associated with access Kevin Lynch can be classified according to the features/what is provided by the access and to whom the access is granted. The most basic is probably access to other places in the sense of the word community movement: Access to relatives, to friends, to business partners, and various other networks. Humans are social creatures, and in essence, will often communicate and will regularly meet their relatives [2]. At least one day a week, there is a meeting between members of a social group, and according to Kevin Lynch, this need is a basic need for the welfare of society. Primitive societies also classify their places of residence according to this rule, and so do modern societies. However, electronic communication can develop and nowadays almost replace physical proximity to digital communication. Nevertheless, travelling to visit other people is still an essential component of travel and access for urban communities. What is also important is the community's access to their activities. The primary activities for many adults may include work and housing, but we must also have essential services such as activities; financial, health, recreational, educational, and religious activities. This activity is essentially an opportunity for the person to survive, such as work, worship, study, or recreating the harmony of community life, for example. During the pandemic Covid-19 condition, this theory is also essential for accessing health facilities, particularly in emergency conditions such as roads to hospitals. However, the most significant number of recorded city trips are still primary: business trips, going from home to work, transportation of goods and services, and others. As stated by Frederic Stout & Le Gates, in *City Reader; Sixth Edition*, which is about new urban mobility [3]. First, the impact of mobile technology on critical aspects of city life, such as the existence of legal and government/regulatory functions in this case, such as the existence of a market function, the part of economic production and trade, as well as the role of the individual community, family, environment, and local culture. Second, the influence of globalization in urban areas on aspirations that arise due to the mobility of the two main constituencies that will become new policies in future technology in developing countries (middle class) and countries with "millennial" residents, namely those born in the 90s. And the third, is the ways that will emerge in the digital era, and communication technology and urbanization itself which can process over time. And will most likely answer the challenges of population growth, demographic bonuses, and social equality that will shift to the urban urbanization paradigm.

The new geographic, economic theory emphasizes circular causality mechanisms to explain the spatial concentration of economic activity [4]. In this model, the centripetal strength comes from the variation in consumption or the variety of intermediate goods on the production side. The centrifugal force stems from the pressure exerted by the geographic concentration of local input markets that offer higher prices and spread demand. If transportation costs are low enough, aggregation will occur. In the technology externality model, knowledge transfer between firms provides an incentive for the aggregation of economic activity. Because these interactions are informal, the extent of information exchange decreases with increasing distance. This incentivizes entrepreneurs to be located close to other companies resulting in agglomeration [5].

3 Research Method

The research method that the author uses in this research is the survey method. The survey research method is research in which the primary source of data and information is obtained from respondents as research samples using or questionnaires as data collection instruments. Individuals are the sample utilized as the unit of analysis in most cases. Other branches of study, such as homes, groups, enterprises, and the state, can be used. The author attempts to use this survey approach as one that is based on accurate data and avoids terrible data, such as data from unreliable websites. When conducting survey research, one thing to remember is that samples are used as the primary data source. According to Darmadi, conducting this literature study is carried out by researchers after they determine the research topic and the formulation of the issues before they go into the field to collect the data needed in research as evidence in conducting analysis and making conclusions on a desired study or research. academic-based [6]. Assignment (Figs. 1, 2, 3, 4, 5, 6, 7, 8, and 9).

Fig. 1 Respondent's gender

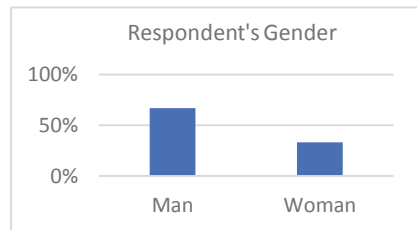


Fig. 2 Respondent's age

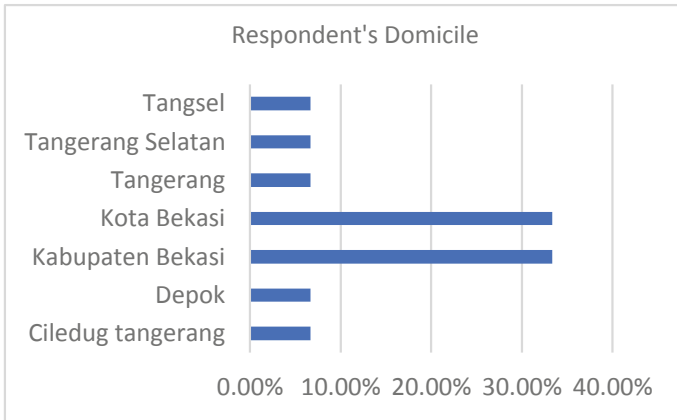
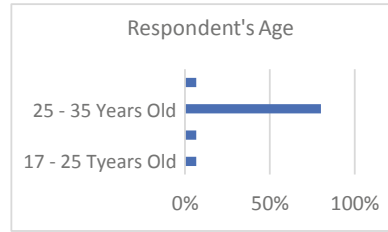


Fig. 3 Respondent's Domicile

Fig. 4 Respondent's satisfaction

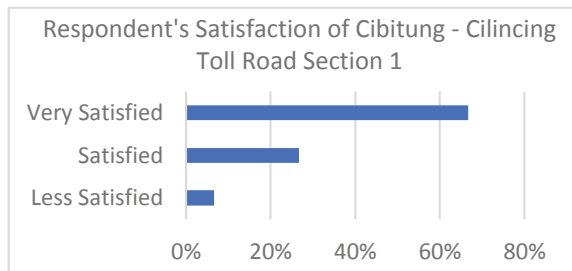


Fig. 5 Respondent's cost satisfaction

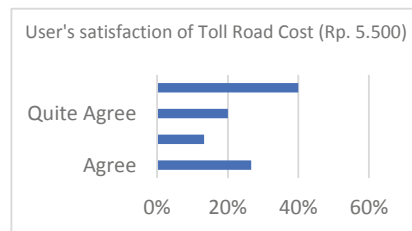


Fig. 6 Respondent's work location

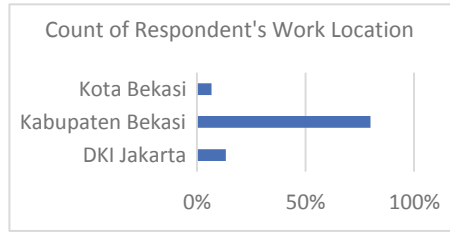


Fig. 7 Respondent's times passes Cibitung–Cilincing Toll Road

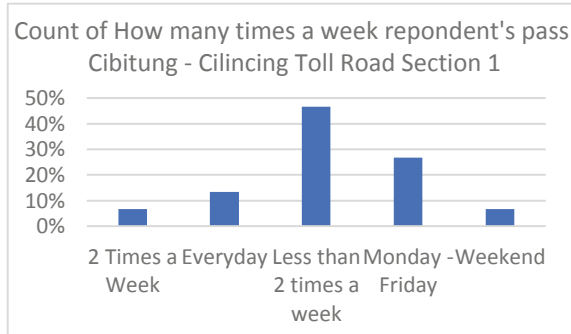


Fig. 8 Respondent's travel time before Cibitung–Cilincing Toll Road operated

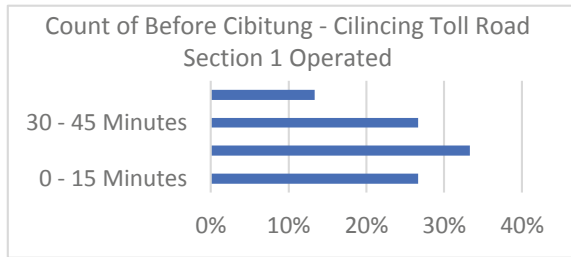
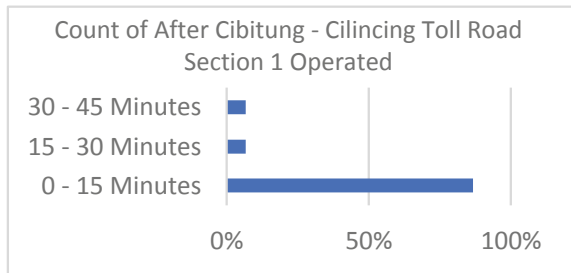


Fig. 9 Respondent's travel time after Cibitung–Cilincing Toll Road operated



4 Results and Discussion

Regarding the survey results, the author doing the bench-marking analyses and expected to get a comparison between; Before Cibitung Cilincing Toll Road Operation from Cibitung Junction to Telaga Asih Junction During covid-19 pandemic. After Cibitung Cilincing Toll Road Partially Operation from Cibitung Junction to Telaga Asih Junction during the covid-19 pandemic. The result of this survey was average travel time before the Cibitung Cilincing toll road operation was 30–45 min, and after the Cibitung Cilincing, toll road operations decreased to 0–15 min. The result shows the travel time decreased averages significantly from 15–30 min decrease. It will save the residents time mobilities, and it is the more affordable cost compared to non-toll access roads during the movement with their vehicles. There are several issues that will discover related to access and connectivity that will arise with time and cost comparison conditions in terms of access inter-regional in the Bekasi district area, as follows: Bekasi district area has several industrial & commercial areas, and the residential area around that need good access & mobilities. Bekasi district area does not yet have direct access to JORR 1 and access to Tanjung Priok Port. Bekasi district area, which intersects with the Cibitung Cilincing Toll Road, only has a local frontage road that is also across the national road, which the capacity has limited road width. In terms of mobilities frequency of the areas, Bekasi district residents mobilities were relatively high in intensity, mainly related to the economic level of the community and the frequency. Therefore, the mobility requires considerable time and cost considering the closest access to the surrounding Toll Roads and connectivity to the commercial area, education area, and public facilities, Hospital, public services, station, shelter.

4.1 Potential Connectivity Around Bekasi District Area: Goods & Services Flow Benefits

The unequal distribution of resources creates disparities in the rate of economic growth between regions. This resource inequality is reflected in the concentration of economic activity that occurs in certain areas only. Areas, where the concentration of economic activity occurs benefit are called agglomeration economies. Agglomeration economy is an external resulting from the geographical proximity of economic activities [7]. Furthermore, the existence of an agglomeration economy can positively influence the rate of economic growth. As a result, areas included in agglomeration generally have a higher growth rate than those not agglomerated. The positive relationship between geographic agglomeration of economic activities and economic growth has been widely demonstrated is in line [8]. Agglomeration produces spatial differences in income levels. The more spatially agglomerated an economy will increase its growth. Areas with many processing industries grow faster than areas with few processing industries. The reason is that regions that have more processing

industries have accumulated capital. In other words, areas with a concentration of processing industry grow faster than areas without the attention of the processing industry. Given the facts above, this study will analyze the impact of aggregation on the economic growth of Bekasi Regency as the impact caused by the construction of the Cibitung Cilincing Toll Road.

4.2 Inter-regional Benefits in Bekasi District Area

4.2.1 Inter-regional Connectivity Potential of Bekasi District Area

The Cibitung Cilincing Toll Road was built in the National Strategic Project (*PSN: Proyek Strategis Nasional*) [9]. In Bekasi Regency itself, the Cibitung Cilincing Toll Road passes through the following areas at the toll gate area. Transportation of goods, logistics, and private vehicles will go to the Bekasi district, particularly Cibitung, Tambelang, & Tarumajaya areas. Of course, it will be easier if the Cibitung toll road is completed and immediately operated from all sections. Among the regions mentioned above, particularly in Bekasi Regency, many MSMEs, small industries, logistics centers, housing, educational facilities, public facilities, and local government offices will provide mutual benefits, particularly road connectivity. A toll road will significantly impact travel time and regional development from economic, social, and environmental aspects in terms of connectivity. The area that is passed is an area that, from the author's view, it will have a significant impact due to the passage of the Cibitung Cilincing Toll Road, particularly in the toll gate area, which allows vehicles to enter and leave, and it is hoped that there will be economic development and impact on the surrounding community, including; Support the emergence of new MSME around toll gates, Support the emergence of new residential land due to access to toll roads, Support the emergence of new commercial areas around toll gates, The emergence of new health facilities & public health facilities due to many new residential areas, The increased flow of goods & services passing through the area. Congestion is one of the urban issues, particularly in big cities in Indonesia in general and particularly in agglomeration areas such as *Jabodetabek & Bekasi* Regency areas, in this case, the places that I researched. The flow of traffic passing by daily vehicles determines how smooth traffic is, the volume that occurs, and the condition of the existing roads. When it comes to non-toll roads, many factors affect congestion in the area, including Traffic Lights [10].

5 Conclusion

The distribution of goods and services is one of the main things in regional development and the economic development of a region, particularly during pandemic covid-19. Therefore, the development of the area around the toll road can also grow

the regional economy so that the flow of goods and services that are not disrupted due to traffic factors can minimize additional costs due to the disruption of the flow. In addition, commodity prices remain stable and follow market conditions not to increase fees in obtaining goods and services. Traffic factors and also delivery time influence the flow of goods & services. Therefore, time and smooth traffic are the main supporting factors to distribute commodities properly by using toll roads/expressways. Moreover, JORR II has been connected by the toll road to Tanjung Priok Port. Therefore, with the opening of the Cibitung Cilincing Toll Road, the flow of loading and unloading goods, exports and imports, and others will be faster with each other from and to the Tanjung Priok Port. The existence of toll road construction has affected the distribution of development results and justice and the surrounding economic development. The toll road itself belongs to the upper class and big industrial side and the benefit of people from all walks of life, including those felt by the people of Bekasi Regency, the Cibitung Cilincing Toll Road passes. Moreover, Cibitung Toll Road can move the economy around its area. As follows: Opening Jobs for the community around the construction of the Cibitung Cilincing Toll Road, provide access to residential areas to reduce transportation costs, providing light for new MSMEs that will open their businesses around Toll Roads, Integrated rest areas/Rest Areas can become new land & business opportunities for the surrounding community, Reducing the level of congestion so that travel time in work and activities becomes shorter.

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