Study of transportation density towards population economy in the Gajah Mada Street, Kaliwates Sub District, Jember District

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Abstract
This study aims to determine whether there is a relationship between transportation density and the economy of the population on Jalan Gajah Mada, Kaliwates District, Jember Regency. The focus of this study is the density of transportation found on Jalan Gajah Mada and its impact on traders and pedicab drivers on the economic aspect. The research method used in this research is descriptive quantitative. Primary data were obtained from pedicab traders and pedicab drivers. Data collection techniques using observation and interview techniques. Data analysis techniques using descriptive analysis. The results showed that the density of transportation is dominated by motorcycle vehicles, where most of these motorbikes are from online transportation riders. Also, the highway is dominated by private cars and public transport such as lin. The population's economy will increase due to congested transportation. This is due to the ease of access to shops close to the highway, so it becomes an attractive factor for buyers to buy souvenirs. The location of the shops that are easily accessible from the road affects economic improvement along the highway area. There is no relationship between transportation density and lack of buyers/passengers. Because over time, the population will increase, and competition will be increasingly fierce, and traditional vehicles will be replaced by modern vehicles that use technology in their applications. The more cars, the more people take the opportunity to trade. Therefore, the economy remains stable, with more competition in the business world.

1. Introduction
As time goes on, as human activities are increasingly diverse and increasingly competing companies to create various types of vehicles, where the discussion about the importance of transport for the community began to be a topic of conversation. With the rapid advancement of an era, many of the significant changes that occur in it. One of the biggest differences lies in the transportation sector. Transport can be defined as activity-haul transport and move-move cargo, whether goods or people, from the point of origin to the end of the destination. In terms of usefulness, [1] reveals that transport can create a second purpose, namely to place (place utility) and to time (time utility).

Speaking of transportation, demanding public transportation must have specific criteria that referred to why people more interest in the forms of transport. Based on the narrative [4] rules for transport convenience not only depend on the infrastructure, operations, and types of ingredients, but the convenience of transportation is also very dependent on the environment, the characteristics of passengers, as well as service delivery. The service system is required to be considered for the convenience of passengers. Not only that, the completeness of the existing facilities on the same vehicle must be considered as well. 2013) criteria for transport convenience not only depend on the infrastructure, operations, and types of ingredients, but the convenience of transportation is also very dependent on the environment, the characteristics of passengers, as well as service delivery. The service system is required to be considered for the convenience of passengers. Not only that, the completeness of the existing facilities on the same vehicle must be considered as well. 2013) criteria for transport convenience not only depend on the infrastructure, operations, and types of ingredients,
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Transport services have become the basic needs of society. Therefore continuity availability of transportation services to meet the needs of the activity of production, consumption, and distribution must be addressed on an ongoing basis. This is in line with the opinion [5] declare that Transportation is the effort or how to transport or move an item or person, which was initially located on the first point as the point of origin to the next point as the destination point. This is reinforced by [3,11], which states that transportation is the basis for economic growth and development of society and the growth of industrialization. So, the industry today, not far from the existing transport role.

The research objective is lifted to determine whether there is a relationship between the density of the existing transportation with the booming population economy Jalan Gajah Mada, District Kaliwates, Jember. Related discussions that will be addressed in this study, there are two aspects: first, researchers will discuss how the associated transport density conditions contained in Jalan Gajah Mada, District Kaliwates, Jember. The second, which is related to how people's economic situation Jalan Gajah Mada, District Kaliwates, Jember. After knowing these two aspects, it will be concluded whether there is a relationship between the density of transport to the community's economy.

Initial conditions of transport density in Jalan Gajah Mada, District Kaliwates, Jember is crowded at the time of departure hours of work/school and the hours after work/school. Conditions were thronged as the morning and evening, which occurred at 6:30 to 08:00 and 16:00 to 18:00. Conditions during the day are very stable, not as busy as the morning and evening. Initial conditions in the resident economy Jalan Gajah Mada, District Kaliwates, Jember is very high, in the sense that the economy is so raised due to the amount of competitiveness in the business world is limited. The lifting of the economy makes lifted the number of incomes.

Continuity of availability of transportation services is required so that the continuity of community activities can proceed smoothly due to the availability and ensuring transport services in the area. The public will more easily meet their daily activities if access to such infrastructure to where the events are within easy reach. One of the aspects of this infrastructure, namely transport services. Whether there is an excellent transport service and poor transportation services will have an impact on the activities that the general public did. The more natural the transportation services in an area, the easier it is also his public activities. The public economy at the curb will be lifted when the transportation is getting crowded. And the increasing number of vehicles passing.

2. Methods
This research was held from August 30 2019 until 4th October 2019. This research uses descriptive quantitative research methods. Quantitative research methods according [10] can be interpreted as a method of research based on the philosophy of positivism, is used to examine the population or a particular sample, data collection using research instruments, statistical analysis of quantitative data, in order to test the hypothesis that has been set. In this study, researchers conducted a counting vehicles passing the location of observation for an hour three times a day.

The object of this study in the form of vehicles passing per minute up to one hour. Source data from this study are primary and secondary data sources. Sources of primary data from this study is data obtained directly from observations in the field by counting the number of vehicles that pass a certain time period. While the source of secondary data obtained from journals, books, google maps application, and more. Data collection techniques with field research techniques (Field Research), among others, observation and documentation. The field research is research conducted directly at the agency investigated with a view to obtaining primary data is data obtained through: 1) Observation (Observation), namely data collection techniques by directly observing the object of researchers. 2)
Technical documentation is a technique used to obtain information through shooting with the camera on the ongoing process of interviews with sources and the voice recording process [8]. In addition to using field research techniques (Field Research), role in this study the researchers also used the technique of the research literature (Library Research) and internet research (Online Research). Research Library (Library Research) is a data collection techniques to obtain secondary data by conducting a literature study in order to obtain a theoretical basis in solving problems examined. Data from the literature are useful as consideration on the data obtained from the study. Internet Research (Online Research) is a data collection techniques derived from websites or websites that carried out by utilizing the Internet and the sites associated with the information needed in research studied [10]. Data analysis techniques used in this research is descriptive analysis of Miles and Hubberman. Data obtained in the form of the figure and described processed into a sentence. In this study, researchers species go through the stages of analysis include data reduction, data presentation, and conclusion [7].

3. Result and Discussion

According to the results of the observations that have been made, the observations related to the calculation of the amount of vehicle that will be associated with the transportation density, the data obtained during the first-month results of the calculation, namely:

| DATE       | TIME  | MOTOR CYCLE | CAR | PUBLIC TRANSPORT | TRUCK | PEDICAB |
|------------|-------|-------------|-----|------------------|-------|---------|
| 30/08/2019 | MORNING | 3167        | 809 | 14               | 14    | 2       |
|            | AFTERNOON | 2485        | 870 | 49               | 10    | 30      |
|            | AFTERNOON | 3840        | 1273| 17               | 6     | 6       |
| 01/09/2019 | MORNING | 2035        | 742 | 90               | 10    | 16      |
|            | AFTERNOON | 2086        | 1336| 37               | 7     | 9       |
|            | AFTERNOON | 2391        | 1200| 20               | 0     | 10      |
| 02/09/2019 | MORNING | 4298        | 814 | 55               | 7     | 22      |
|            | AFTERNOON | 2883        | 970 | 38               | 9     | 9       |
|            | AFTERNOON | 3120        | 913 | 46               | 8     | 15      |
| 03/09/2019 | MORNING | 2468        | 802 | 53               | 13    | 14      |
|            | AFTERNOON | 2750        | 1152| 36               | 5     | 9       |
|            | AFTERNOON | 3307        | 1273| 41               | 8     | 9       |
| 04/09/2019 | MORNING | 2272        | 963 | 43               | 13    | 11      |
|            | AFTERNOON | 2616        | 831 | 27               | 10    | 3       |
|            | AFTERNOON | 3493        | 897 | 43               | 5     | 11      |
| 05/09/2019 | MORNING | 3285        | 774 | 53               | 3     | 20      |
|            | AFTERNOON | 2983        | 851 | 52               | 9     | 12      |
|            | AFTERNOON | 3718        | 919 | 44               | 19    | 6       |
| 06/09/2019 | MORNING | 3023        | 869 | 54               | 9     | 19      |
|            | AFTERNOON | 3460        | 933 | 38               | 5     | 1       |
|            | AFTERNOON | 3563        | 961 | 28               | 9     | 6       |
| 07/09/2019 | MORNING | 2968        | 594 | 47               | 6     | 19      |
|            | AFTERNOON | 2864        | 956 | 47               | 3     | 10      |
| Date       | Morning | Afternoon | Size | Deviation | Height |
|-----------|---------|-----------|------|-----------|--------|
| 08/9/2019 | 3110    | 1080      | 38   | 1         | 8      |
| 08/9/2019 | 1710    | 335       | 20   | 2         | 13     |
| 08/9/2019 | 2723    | 1038      | 38   | 2         | 5      |
| 08/9/2019 | 2828    | 1101      | 30   | 2         | 9      |
| 09/9/2019 | 5512    | 857       | 58   | 4         | 11     |
| 09/9/2019 | 3382    | 878       | 40   | 5         | 12     |
| 09/9/2019 | 3509    | 990       | 46   | 5         | 7      |
| 10/9/2019 | 2368    | 851       | 27   | 4         | 14     |
| 10/9/2019 | 2775    | 804       | 40   | 8         | 9      |
| 10/9/2019 | 3414    | 912       | 49   | 9         | 11     |
| 11/9/2019 | 2489    | 828       | 2    | 4         | 17     |
| 11/9/2019 | 3716    | 916       | 0    | 5         | 5      |
| 12/9/2019 | 3048    | 643       | 0    | 7         | 19     |
| 12/9/2019 | 2583    | 930       | 2    | 10        | 2      |
| 12/9/2019 | 4174    | 1022      | 1    | 8         | 6      |
| 13/9/2019 | 3287    | 899       | 2    | 32        | 24     |
| 13/9/2019 | 3072    | 923       | 1    | 12        | 13     |
| 13/9/2019 | 4650    | 901       | 0    | 12        | 11     |
| 17/9/2019 | 2891    | 839       | 37   | 6         | 20     |
| 17/9/2019 | 3164    | 861       | 31   | 5         | 5      |
| 19/9/2019 | 3289    | 573       | 39   | 9         | 19     |
| 19/9/2019 | 1178    | 590       | 29   | 7         | 3      |
| 20/9/2019 | 2841    | 727       | 38   | 18        | 12     |
| 20/9/2019 | 2925    | 924       | 53   | 14        | 22     |
| 20/9/2019 | 1676    | 450       | 24   | 7         | 7      |
| 21/9/2019 | 4648    | 721       | 58   | 6         | 19     |
| 21/9/2019 | 3031    | 1015      | 26   | 3         | 12     |
| 21/9/2019 | 3429    | 1072      | 26   | 7         | 6      |
| 22/9/2019 | 2087    | 1054      | 26   | 2         | 9      |
| 22/9/2019 | 2598    | 1062      | 34   | 3         | 7      |
| 23/9/2019 | 6014    | 825       | 67   | 8         | 30     |
| 23/9/2019 | 2816    | 1150      | 45   | 10        | 9      |
| 23/9/2019 | 2471    | 817       | 45   | 18        | 16     |
| 24/9/2019 | 2710    | 773       | 50   | 10        | 20     |
| 24/9/2019 | 2838    | 922       | 58   | 11        | 17     |
| 25/9/2019 | 3731    | 946       | 33   | 5         | 5      |
| 25/9/2019 | 2469    | 919       | 46   | 17        | 13     |
Observation results indicate that motorbikes, cars, public transportation, and goods transport vehicles that have the highest number of counts on the highway or in other words, these vehicles are more dominant in filling the highway capacity. The density of transportation occurs in the morning and evening, which can be seen from the calculation table of the number of vehicles, the morning and evening time is the time when the vehicle calculation is more than the time of day. This is because the morning time is the time where all activities will begin, both educational events and work activities. Likewise, the afternoon is the time for the completion of all activities.

How is the relationship between the density of transport with population economy around Jalan Gajah Mada. It can be concluded that along with Jalan Gajah Mada many shops. Shops more dominating than the residential population. With so many shops that can improve the economy of residents around Jalan Gajah Mada. Besides, the number of motorcycles that most online transport also affects the economy of the surrounding community. Their economies are appointed by motorcycle taxi jobs online. Besides that, the number of public transport will also affect the revenues Area pedicab road at the elephant mada. Because of them, public transport passengers are accustomed to using transportation becak rather than online.

The number of motorcycles on the highway which is dominated by transport workers online due to the quality provided by this online transportation. These qualities will attract a lot of people who are more inclined to use online motorcycle transportation services than other transportation services. According to [9] says that there are five indicators of quality of service to be provided, namely product quality, service quality, emotional, prices, and costs. From these indicators, the better the achievement of five symbols, the more satisfied the public also enjoy the service in addition to the statement. [6] and [2] based on the results in the journal, said that the price variables and the variable quality of service has a positive and significant impact on customer satisfaction. How not related to the price or tariff issued by the company should certainly be considered first, whether it is based on the travel time or even how mileage destination. Results of interviews with two informants around Jalan Gajah Mada is a population of approximately:

According to the father slamet that her as a pedicab driver, who is a resident in the vicinity of Jalan Gajah Mada, he said that the number of transport which are on the road elephant mada nothing to do with crowded or lonely passengers who will use rickshaws as ground transportation in the city. However, the technology being hyper congested and lonely passenger rickshaw. "If problem deserted or not, from the beginning I had no passengers, but since I only rely hp old school, I feel left behind by technology, according to the narrative father slamet)" related income, he recalled in 2008, money of 40,000 is precious and can spend for any purpose, but for the money 200,000 now where everything is expensive.

According to the father shopkeeper by the center-by, he said the same thing with Mr. pedicab driver, who has described the relationship between the density of transport with revenue earned each day. Mr. souvenir shop keepers are told "more and more each passing day, more and number of passing vehicles, but the more rivals are set up the same effort with the effort we make. If a lot of rivals, then the income will shrink every time. The unpleasant work, work there is no contest at all. "Some of the bursts of the sentence that you have described related to the relationship between population density with the distance of the shops by the roadside.

|                  | AFTERNOON | AM | PM | 24 | TOTAL | 3651 | 901 | 36 | 8 | 8 |
|------------------|-----------|----|----|----|-------|------|-----|----|---|---|
| NUMBER OF VEHICLES | 187 882   | 54751 | 2167 | 494 | 724 |
| AVERAGE           | 3080.033  | 897.5574 | 35.52459 | 8.098361 | 11.86885 |
| LARGEST NUMBER    | 6014      | 1336 | 90  | 32 | 30 |
| LOWEST TOTAL      | 1178      | 335 | 0  | 0 | 1 |

Table 1. Observations Calculation of total vehicle
Conclusions can be drawn from both the informant interviews that the income of both informants continues to increase if no rival in the work and mastering technology that is easy to interact with passengers. Both informants said there was no relationship between the density of transport with a lonely or whether the buyer/passenger. Because over time, the population will increase, and competition will be intense as well as traditional vehicles will be replaced with modern vehicles that use technology to apply.

4. Conclusions
Conclusions based on discussions related to whether there is a relationship between the density of the surrounding population of transportation economics, that there is no relationship between the frequency of transport and lack of buyers/passenger. Because over time, the population will increase, and competition will be more fierce, and traditional vehicles will be replaced by modern vehicles that use the technology in their applications. More and more vehicles, more and more people take the opportunity to trade. Because of that, the economy remains stable with the increasing competition in the business world.

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