

Analysis of Basic Transportation Rates for Public Transport (Angkot) (Case Study in Route of Central Market - Minasa Upa)

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ABSTRACT

Analysis of public transport tariffs is one of the supporting factors for public transportation for the Makassar community. Especially people who use transportation transportation services on the Central route - Minasa Upa or vice versa. The purpose of this research is to obtain a detailed description of the of the costs of the Central Market public transport route - Minasa Upa in Makassar City and analyze transport fares on Central Market routes - Minasa Upa and from Minasa Upa - Central Market. The data collection method used in this study was conducted by conducting interviews and questionnaire distribution to the transportation management (Angkot) routes of the Central Market-Minasa Upa. The calculation results of Central Market transport rates - Minasa Upa which consists of two types of vehicles, namely, Suzuki Carry produces a basic tariff for public transportation of Rp. 4000, - / Route and Student Transportation Tariff of Rp. 2600, - / Route, while for the type of Daihatsu Grand Max 1500 cc, the basic tariff for public transportation of Rp. 5000, - / Route and student transportation tariff of Rp. 3400, - / Route.

Keywords: *Basic Rates, Public Transportation*

INTRODUCTION

This public transport fare analysis is one of the supporting factors for public transportation for the people of Makassar in general. Especially people who use transportation services with the Central Market – Minasa Upa route or vice versa. I did this research to analyze the actual cost of public transport transportation with the Central Market route - Minasa Upa or vice versa by considering: 1. Vehicle capacity. 2. Number of vehicles. 3. The average number of passengers per day. 4. Central Market journey cycle – Minasa Upa and vice versa. Basically, we realize that the public transport fare process is sometimes not in accordance with what some people and government regulations currently expect. (fare), waiting time costs, passenger inconvenience and so on. Meanwhile, from the public transport operator, the costs that must be incurred are in the form of costs to operate public transport at a certain level of service. This research is necessary to find solutions for the benefit of the community and transport owners so that no one of them feels disadvantaged. In this paper, we try to discuss the Analysis of Public Transportation Fares with the Central Market - Minasa Upa route based on field data and the people who use these transportation services. Although this research is still

very limited, it is hoped that it can provide contributions and ideas for all parties with an interest in public transportation in the city of Makassar.

LITELATURE REVIEW

Public transport fares are a list containing prices for users of transportation services which are arranged regularly as well as fees or charges received or incurred by public transport operators (managers), users of transportation services (passengers) for a certain distance. This public transport fare analysis is calculated to include:

- Mileage.
- Transport capacity.
- Operational costs and revenue costs.
- Fleet efficiency. Mileage.

Mileage is the distance traveled by a public transport fleet from one terminal to another, this distance is calculated based on the route taken with the distance per kilometer and at a certain cost. Meanwhile, the time required to reach one terminal to another is one factor that is also taken into account. In urban areas the time taken to reach a terminal is longer than in rural areas with the same distance. This is due, among other things

- Traffic congestion.
- The existence of traffic signs (traffic signal).
- Number of vehicles (traffic density).
- The existence of a certain stopping place (Halte).

Traffic congestion. In urban areas traffic jams are relatively large compared to rural areas, this can result in greater travel times per kilometer. This traffic jam usually occurs in the morning from 07.00 to 09.00 WIB and in the afternoon from 16.00 to 19.00 WIB. Where in these hours is the time needed by employees and students to carry out their activities. Transport Capacity. Transport capacity is the ability of a means of transportation to transport cargo or passengers from one place to another within a certain time. The elements of transportation capacity consist of the number of passengers, the distance traveled and the time required for the transportation.

METHOD

Research Methodology and Approach. To analyze the fare of the Central Market - Minasa Upa public transportation in the city of Makassar, several stages are used, such as data collection and data analysis. The steps in data collection include: Primary data, namely field data sourced directly from surveys, among others.

- Measuring the length of the travel route.
- Finding data on vehicle operating costs.
- Know your daily income.
- Secondary Data, namely field data sourced from the owner of the vehicle.
- The data is analyzed and evaluated, then with the existing literature a tariff/pnp/km (rate per passenger per kilometer) is determined.

Data Analysis Methods. To determine the research location, the criterion that the author uses is based on the frequency of public transportation at that location which is known based on field data obtained from the transportation party. The steps for determining the research location are as follows:

- The number of vehicles that have a frequency for the Central Market – Minasa Upa route
- From the number of passengers or service users for the Central Market – Minasa Upa route
- The location is then determined as a research location.

Furthermore, observations were made at the location to see the physical condition of the vehicles and the large number of public transport fleets from the Central Market - Minasa Upa. By knowing these conditions, simple handling is attempted for public transportation services in the city of Makassar.

FINDING AND DISCUSSION

Analysis of the results of calculating public passenger fares for the Central Market – Minasa Upa is the calculation of transport fares / pnp / km. From the calculation results in table V, the average total BOK (X) is obtained: Suzuki Carry 1500 cc.

Average BOK (X) = $(\sum Xi)/N = (Rp.4,089,598.60)/25 = Rp.163,583.94,-/per$ day Daihatsu Grand Max 1500 cc.

Average BOK (X) = $(\sum Xi)/N = (Rp.2,265,212.80)/15 = Rp.151,014.18,-/per$ day Assuming the student passengers transported per trip are: Suzuki Carry 1500 cc. : 10 people (5 people each way). Daihatsu Grand Max 1500 cc. : 10 people (5 people each way). Then the amount of the fare per passenger according to the kilometer is: Suzuki Carry 1500 cc.

Price (Rp/pnp/Km) = $BOK_{total}/((J_{pu} + (Y \times J_{pp})) \times J_{rtx}(0,5 \times J_{rk})) = IDR 365,514.03 (12 + (2/3 \times 5)) \times 4 \times (0.5 \times 30) = IDR 365,514.03 \times 919.8 = Rp. 397.38/pnp/Km.$

Daihatsu Grand Max 1500 cc. Tariff (Rp/pnp/Km) = $BOK_{total}/((J_{pu} + (Y \times J_{pp})) \times J_{rtx}(0,5 \times J_{rk})) = IDR 467,975.27 (12 + (2/3 \times 5)) \times 4 \times (0.5 \times 30) = IDR 467,975.27 \times 919.8 = Rp. 509,067 /pnp/Km.$

The results of the fare calculation above are for 1 trip, so the amount of the fare/fee for one public passenger from the Central Market to Minasa Upa is as follows: Suzuki Carry 1500 cc.

General Passengers = $Rp. 397.38 \times 10. = IDR 3,973.80 / pnp / Relay. = IDR 4,000.00 / pnp / Relay.$ Student Passenger = $2/3 \times$ general passenger fare. = $2/3 \times IDR 3,973.80 = IDR 2,649.20 / pnp / Relay. = IDR 2,600.00 / pnp / Relay.$ Daihatsu Grand Max 1500 cc. General Passengers = $Rp. 509,067 \times 10. = IDR 5,090.67 / pnp / Relay. = IDR 5,000.00 / pnp / Relay.$

Student Passenger = $2/3 \times$ general passenger fare. = $2/3 \times IDR 5,090.67 = IDR 3,393.78 / pnp / Relay. = IDR 3,400.00 / pnp / Relay.$

Suzuki Carry 1500 cc. General Passengers = $Rp. 397.38 \times 10. = IDR 3,973.80 / pnp / Relay. = IDR 4,000.00 / pnp / Relay.$ Student Passenger = $2/3 \times$ general passenger fare. = $2/3 \times IDR 3,973.80 = IDR 2,649.20 / pnp / Relay. = IDR 2,600.00 / pnp / Relay.$

Daihatsu Grand Max 1500 cc. General Passengers = Rp. 509,067 x 10. = IDR 5,090.67 / pnp / Relay. = IDR 5,000.00 / pnp / Relay. Student Passenger = 2/3 x general passenger fare. = 2/3 x IDR 5,090.67 = IDR 3,393.78 / pnp / Relay. = IDR 3,400.00 / pnp / Relay.

Considering that recently the economic crisis occurred in Indonesia which was caused by rising fuel prices, this had an impact on rising prices for vehicle spare parts, which automatically had a direct impact on the passenger transportation business. In conditions like today with the high prices of vehicle spare parts and the current passenger rates, which can be said to be not comparable with the high prices of spare parts, coupled with the increasingly tight competition among fellow passenger carriers in the field, the question arises to us, From the results of observations in the field, it turns out that they do various ways to overcome the problems they face, as for their methods as follows: During operation, public transport vehicles do not get passengers half way, so they will turn back to the nearest terminal to look for other passengers.

They do this in addition to getting passengers as well as to save fuel. Caring for vehicles where the oil leaks or runs out prematurely (damaged), they do by simply adding oil instead of exchanging it with new oil, which, even if it has a bad impact on the vehicle's engine. All of this they do just to reduce the cost of vehicle expenses. Likewise with the maintenance of vehicle spare parts, in general they don't replace them with new spare parts if they don't have to, but they replace them with used (second hand) vehicle parts which are cheaper, for example when replacing a vehicle spark plug, they will try rub the spark plugs themselves even though the spark plugs are no longer suitable for use, as well as in replacing vehicle tires, they usually replace them with cooking tires, and there are also those who replace them with used private car tires whose prices are cheaper than cooking tires.

CONCLUSION

The results of the calculation of the Central Market - Minasa Upa transportation fare which consists of two types of vehicles, namely: 1. Suzuki Carry 1500 cc 2. Daihatsu Grand Max 1500 cc are as follows : No. Vehicle. Public transportation fare. Student transportation fare Per Relay (Rp/pnp) Per Km (Rp/pnp) Per Relay (Rp/pnp) Per Km (Rp/pnp) 1. Suzuki Carry 1500 cc Rp. 4,000, - Rp. 266, - Rp. 2,600, - Rp. 173, - 2. Daihatsu Grand Max 1500 cc Rp. 5,000, - Rp. 333, - Rp. 3,400, ' Rp. 226, - Average fare IDR 8,000,- IDR 300,- IDR 5,000,- IDR 200,- These results are based on: The price of fuel oil, namely Premium, is still the old price of IDR 6,500 / liter. Prices for vehicles and spare parts as a result of field surveys were up to two times higher than at the time of purchasing vehicles and buying spare parts, which were released around 1990 and at the time before the monetary policy. Suggestion After calculating the fare for the Central Market - Minasa Upa public transport vehicle, we will provide several suggestions, including: It is hoped that all parties (Regional Government, vehicle owners, community service users) will hold joint deliberations to determine the appropriate public transport fare for the Central Market – Minasa Upa route so that vehicle owners and passengers do not feel disadvantaged. It is necessary to enact Regional Government regulations to set

appropriate fares, so that drivers will not increase rates beyond the provisions of the Regional Government Regulations.

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