

## Study on Improving the Performance of Trans Jateng Bus Services on the Solo - Sragen Route

**Sapto Adiputro**

Faculty of Economy, Sultan Agung Islamic University, Semarang, Indonesia, E-mail: [SaptoAdiputro.std@unissula.ac.id](mailto:SaptoAdiputro.std@unissula.ac.id)

**Abstract.** Of the seven Trans Jateng routes that have been operating, the Bus Occupancy Rate (Load Factor) of Trans Jateng Solo - Sragen Route has the lowest value. This study aims to determine the performance of Trans Jateng Solo - Sragen Route transportation and to determine the extent to which the variables of security, safety, comfort, affordability, equality and regularity influence the satisfaction of service users and to compare the expectations and reality of the service as a recommendation in an effort to improve the quality of Trans Jateng Solo-Sragen Route services. Performance measurement is carried out using a direct measurement survey method in the field. Performance assessment indicators are the time between, passenger waiting time, travel speed and passenger occupancy rate. While the measurement of user perception is carried out using a questionnaire method with a Likert scale. The results of the study obtained the time between / headway = 31 minutes; passenger waiting time = 15.5 minutes, travel speed = 15.5 km / hour and passenger occupancy rate / load factor = 65%. The results of multiple linear regression analysis  $Y = 1.991 - 1.131X_1 + 0.65X_2 + 0.82X_3 + 0.119X_4 + 0.269X_5 + 0.102X_6 + \mu$  and simultaneous test (F) significance value of 0.00, this indicates that the independent variable has a significant effect on the dependent variable. Meanwhile, from the results of the Importance Performance Analysis analysis, it is known that there is a gap (GAP) = -0.48 which means that Trans Jateng's performance has not met the expectations of service users.

**Keywords:** Perception; Performance; Safety; Security.

### 1. Introduction

Transportation is a very important means in supporting the success of development, especially in supporting the economic activities of the community. Therefore, the urban transportation system must be well planned in order to fulfill its function in supporting economic growth in a city. Currently, almost all developing cities in Indonesia have the same problems for the existing transportation system, especially for the provision of mass transportation facilities. This problem also applies to areas in Central Java Province, especially in big cities.

In several big cities in Indonesia, congestion occurs because travel demand is not comparable to the increase in road network capacity. Therefore, the efficiency of road space usage must be increased by reducing the use of private vehicles and increasing the role of public

transportation. In order to realize the efficiency of road space usage, good public transportation services must be realized with "Public Transportation Management of Road Transportation" (Subarto, Bambang Istianto, Arif Anwar, 2011). The form of realization of good public transportation services has several indicators related to security, safety, comfort, affordability, equality and regularity as indicators of service quality.

The fulfillment of the ideal public transportation criteria is realized by the Central Java Provincial Government through the Central Java Provincial Transportation Agency with the operation of the Trans Jateng Bus service. The Trans Jateng mass transportation mode uses a medium bus fleet with a carrying capacity of 40 passengers. The Trans Jateng Bus is expected to reduce traffic congestion in several agglomeration cities in Central Java. Currently, there are 7 Trans Jateng Bus Mass Public Transportation services in 4 Development Areas in Central Java. The seven routes are: Kedungsepur Development Area 3 Routes (Semarang-Bawen Route, Semarang-Kendal Route and Semarang-Gubug Route, Barlingmascakeb Development Area 1 Route (Purwokerto-Purbalingga Route), Purwomanggung Development Area 1 Route (Magelang-Purworejo) and Subosukawonosraten Development Area 2 Routes (Solo-Sragen Route) and (Solo-Sukoharjo-Wonogiri Route). Trans Jateng's operational management system, the Central Java Provincial Government in this case the Transportation Agency purchases services by calculating the Vehicle Operating Cost (BOK) to the designated operator or with the term Buy the Service. From the results of the evaluation of routes that have been operating, the average Bus Occupancy Rate (Load Factor) for Trans Jateng from January to August 2024, the Solo - Sragen Route has the lowest value of 67.6%, while for the six Trans Jateng routes others have a value of > 70% with the following details: Semarang-Bawen Route 80.61%, Purwokerto-Purbalingga Route 85.05%, Semarang-Kendal Route 90.75%, Magelang-Purworejo Route 88.67%, Semarang-Gubug Route 87.64% and Solo-Sukoharjo-Wonogiri Route 102.64%.

In terms of security, safety and comfort, Trans Jateng Solo-Sragen Route has satisfactory service. However, in terms of affordability, equality and regularity of the service aspect, Trans Jateng still cannot be said to be superior as an integrated mass transportation. Indicators such as integration of feeder transportation and the availability of special spaces for the disabled are factors in the low aspects of affordability and equality. Regularity determined by the availability of the fleet at all times, punctuality of arrival and arrival at the destination, and short total travel time cannot be guaranteed with the current performance of Trans Jateng Bus. This is because the travel time of Trans Jateng Bus is still affected by unpredictable road traffic conditions because the operational concept of Trans Jateng Bus still uses mix traffic and does not use a special BRT lane. If the road conditions are congested, Trans Jateng Bus will also experience congestion on the road so that the travel time will be longer and vice versa.

In addition to the above phenomena, there are different research results (research gap) from several previous findings that motivated the author to conduct further research related to the variables that influence passenger satisfaction as users of public services. Doni Muliadi Hafid et al. (2022) concluded that the variable that most influences the level of satisfaction of users

of Teman Bus transportation services, corridor IV, Unhas Engineering Campus, Gowa - Panakkukang Mall, is the affordability variable through the indicator of ease of using Teman Bus Transportation. Syamsul Amien et al. (2022) concluded that the variable that most influences the level of user satisfaction with Teman Bus Transportation services, Corridor III, Campus II PNUP - Campus II PIP in Makassar City is in terms of passenger comfort through the indicator of the empathy of officers. Widodo et al. (2018) concluded that the Security variable is the main thing that must be done to increase BRT Bandar Lampung customer satisfaction by increasing security at bus stops. Meanwhile, Dyah Ayu Retnoningtyas and Ketut Dewi Martha Erli Handayani concluded that the variables of regularity in terms of waiting time, regularity of schedules, and availability of modes are the main factors that need to be improved in increasing the level of satisfaction of public transportation passengers in Kediri City.

## 2. Research Methods

Data collection methods are a series of important processes in supporting a study to obtain data used as support in transportation planning policies. According to Sugiyono (2016) data collection techniques are the most important step in research because the main purpose of the study is to obtain data. Without knowing the data collection technique, the study will not obtain data that meets the established standards.

Sugiyono (2014) stated that data analysis is the process of systematically compiling data obtained from field notes, documentation, and interviews. This process includes organizing data into categories, describing them into units, synthesizing them, arranging them into patterns, determining what is important and what should be studied, and drawing conclusions so that the data becomes easily understood by individuals and others.

## 3. Analysis and Discussion

### Existing Condition of Trans Jateng Bus

Trans Jateng agglomeration transportation or better known as Trans Jateng is a road-based mass public transportation that operates in the agglomeration area of Central Java Province. Trans Jateng has been operating since 2017 with a Buy The Service pattern or buying services with the calculation of Vehicle Operational Costs (BOK). The emergence of Trans Jateng was motivated by the mandate of Law of the Republic of Indonesia Number 22 of 2009, Article 139 paragraph (2) concerning LLAJ, that the Provincial Government is obliged to guarantee the availability of public transportation for intercity transportation services for people and/or goods within the province.

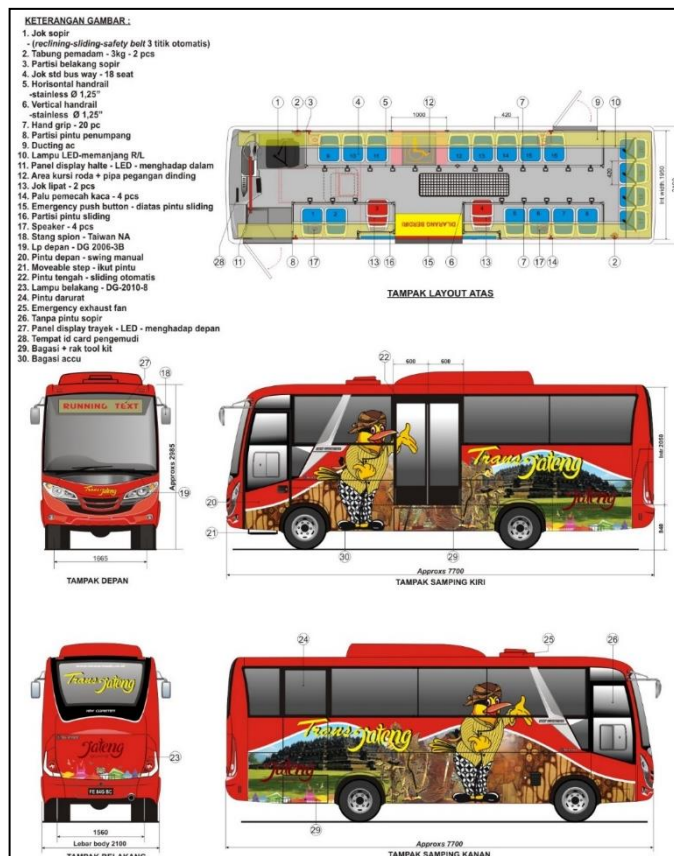
Considering this, the Central Java Provincial Government has realized it through the vision, mission and work program of the Governor and Deputy Governor of Central Java in the 2018-2023 Central Java Provincial Medium-Term Regional Plan (RPJMD), that the development of mass transportation is one of the priority work programs of the Central Java Provincial Government.

Over time, Trans Jateng has expanded its operations in the agglomeration area of Central Java Province. Since 2017-2024. Trans Jateng already has 7 (seven) service routes, namely:

- a. Semarang-Bawen (2017);
- b. Purwokerto-Purbalingga (2018);
- c. Semarang-Kendal (2019);
- d. Solo-Sragen (2020);
- e. Magelang-Purworejo (Year 2020);
- f. Semarang-Grobogan (2021); and
- g. Solo-Wonogiri (Year 2023).

Through the operational engineering of public transportation, Trans Jateng Solo - Sragen Route currently has no competitors/operators on the same service route (not overlapping), so that Trans Jateng Solo - Sragen Route in its operation can run optimally to serve the community in the Solo Raya area as a whole. In its operation, the number of Trans Jateng Bus fleets operating is 14 units. Trans Jateng services start at 05.00 WIB and the last departure time is at 17.30 WIB. Each bus serves 6 trips with a crew of one driver and one attendant who serves passengers during the trip. The Trans Jateng Bus fleet uses medium buses with low-floor access with a bus body length of 7.7 meters, a width of 2.1 meters, and a height of 2.9 meters. The layout of the Trans Jateng Bus is as follows:

Source: Central Java Provincial Transportation Agency, 2024



From the picture above, it can be seen that the passenger capacity of the Trans Jateng Bus is 40 passengers with details of 20 sitting passengers and 20 standing passengers. The seats on the Trans Jateng Bus are arranged at the front specifically for male passengers while the back is for female passengers. The red seats near the entrance and exit are intended for the elderly and pregnant women. In addition, the Trans Jateng Bus is also facilitated with a special room for the disabled.

Trans Jateng Bus Service Solo – Sragen Route with departure point of Terminal Type A Tirttonadi in Surakarta City to the final terminal Terminal Type C Sumberlawang Sragen Regency or vice versa via Sangiran National Tourism Strategic Area (KSPN) with a route length of 35 km and has 96 bus stop facilities with an average distance between stops between 500 – 1000 meters. The locations of the 96 points are as follows:

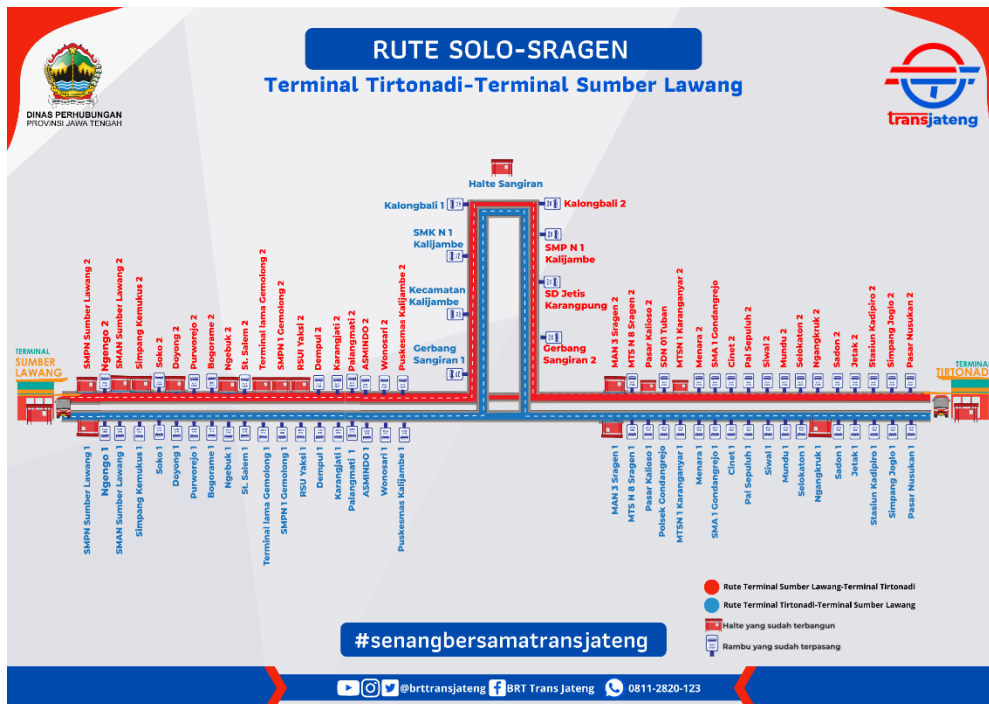


Image of Trans Jateng Bus Stop Points on the Solo – Sragen Route

Source: Central Java Provincial Transportation Agency, 2024

Trans Jateng Bus Stop Location Table

No.	ROUTE: SOLO - SRAGEN	No	ROUTE: SRAGEN - SOLO
1	TIRTONADI TERMINAL SOLO	1	SUMBERLAWANG TERMINAL
2	SHEIKH ZAYED MOSQUE	2	SMP N 1 SUMBERLAWANG
3	JOGLO CROSSING	3	NGENGO
4	ST. KADIPIRO	4	STATE SENIOR HIGH SCHOOL 1 SUMBERLAWANG
5	JETAK	5	KEMUKUS INTERMEDIATION
6	SADON	6	SOCO
7	ANGLING	7	INCLINED
8	SELOKATON	8	PURWOREJO

9	THE MUNDU	9	BOGORAME
10	SIWAL	10	THUMBLING
11	PAL TEN	11	ST. SALEM
12	CINET	12	GEMOLONG
13	SENIOR HIGH SCHOOL 1 GONDANGREJO	13	SMP N 1 GEMOLONG
14	TOWER	14	YAKSI Hospital
15	MTS N 1 KARANGANYAR	15	PUTTY
16	GONDANGREJO POLICE SECTION	16	KARANGJATI
17	KALIOSO MARKET	17	PALANGMATI
18	MTS N 8 SRAGEN	18	ASMINDO
19	MAN 3 SRAGEN	19	WONOSARI
20	SANGIRAN GATE 1	20	KALIJAMBE PUBLIC HEALTH CENTER
21	KALIJAMBE DISTRICT	21	SANGIRAN GATE 1
22	STATE VOCATIONAL SCHOOL 1 KALIJAMBE	22	KALIJAMBE DISTRICT
23	BALI KALONG 1	23	STATE VOCATIONAL SCHOOL 1 KALIJAMBE
24	SANGIRAN	24	BALI KALONG 1
25	BALI KALONG 2	25	SANGIRAN
26	JUNIOR HIGH SCHOOL 1 KALIJAMBE	26	BALI KALONG 2
27	ELEMENTARY SCHOOL JETIS KARANGPUNG 1	27	JUNIOR HIGH SCHOOL 1 KALIJAMBE
28	SANGIRAN GATE 2	28	ELEMENTARY SCHOOL JETIS KARANGPUNG 1
29	KALIJAMBE PUBLIC HEALTH CENTER	29	SANGIRAN GATE 2
30	WONOSARI	30	MAN 3 SRAGEN
31	ASMINDO	31	MTS N 8 SRAGEN
32	PALANGMATI	32	KALIOSO MARKET
33	KARANGJATI	33	ELEMENTARY SCHOOL TUBAN 01
34	PUTTY	34	MTS N 1 KARANGANYAR
35	YAKSI Hospital	35	TOWER
36	SMP N 1 GEMOLONG	36	SENIOR HIGH SCHOOL 1 GONDANGREJO
37	GEMOLONG	37	CINET
38	ST. SALEM	38	PAL TEN
39	THUMBLING	39	SIWAL
40	BOGORAME	40	THE MUNDU
41	PURWOREJO	41	SELOKATON
42	INCLINED	42	ANGLING
43	SOCO	43	SADON
44	KEMUKUS INTERMEDIATION	44	JETAK
45	STATE SENIOR HIGH SCHOOL 1 SUMBERLAWANG	45	ST. KADIPIRO
46	NGENGO	46	JOGLO CROSSING
47	SMP N 1 SUMBERLAWANG	47	NUSUKAN MARKET
48	SUMBERLAWANG TERMINAL	48	TIRTONADI TERMINAL SOLO

Source: Central Java Provincial Transportation Agency, 2024

## Operational Performance

### a. Headway (Time Between)

From the results of a static survey that was conducted in one day of Trans Jateng Bus operations, the Headway (Time Between) of Trans Jateng Buses was obtained as follows:

**Trans Jateng Bus Service Headway Table (Time Between)**

Bus No.	RIT 1	RIT 2	RIT 3	RIT 4	RIT 5	RIT 6	Bus No.	RIT 1	RIT 2	RIT 3	RIT 4	RIT 5	RIT 6
1	05.00		09.15		13.50		8	05.00		09.15		13.50	
2	05.20		09.35		14.05		9	05.20		09.35		14.05	
3	05.35		09.55		14.20		10	05.35		09.55		14.20	
4	05.50		10.15		14.35		11	05.50		10.15		14.35	
5	06.05		10.35		14.50		12	06.05		10.35		14.50	
6	06.20		10.55		15.05		13	06.20		10.55		15.05	
7	06.35		11.15		15.20		14	06.35		11.15		15.20	
8		06.50		11.35		15.35	1		06.50		11.35		15.35
9		07.10		11.55		15.50	2		07.10		11.55		15.50
10		07.30		12.15		16.10	3		07.30		12.15		16.10
11		07.50		12.35		16.30	4		07.50		12.35		16.30
12		08.10		12.55		16.50	5		08.10		12.55		16.50
13		08.32		13.15		17.10	6		08.32		13.15		17.10
14		08.55		13.35		17.30	7		08.55		13.35		17.30

Source: Primary Data Survey, 2024

### b. Waiting Time

The calculation of public transportation waiting time can be measured from half the headway. The calculation assumes that the level of random passenger arrivals and public transportation headway have a normal distribution. From the survey results, the average headway of the Trans Jateng Bus was 31 minutes, so the waiting time was as follows:

$$WT = \frac{h}{2}$$

$$WT = \frac{31}{2}$$

$$WT = 15,5 \text{ minute}$$

Based on the calculation results above, the average waiting time for Trans Jateng Bus passengers is 15.5 minutes. Regulation of the Minister of Transportation of the Republic of Indonesia Number 10 of 2012, regulates the minimum size for waiting time during peak hours of a maximum of 7 minutes and non-peak hours of a maximum of 15 minutes, so that the waiting time value for Trans Jateng Bus has not met the established standards. This is because the headway is relatively high, causing the waiting time for passengers to be high.

### c. Travel speed

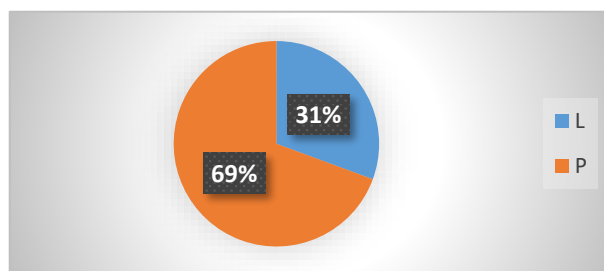
From the results of the dynamic survey conducted, the average travel time for the Trans Jateng Bus was 2 hours 15 minutes.

### Passenger Characteristics

Passenger characteristics in this discussion are only to describe descriptively Trans Jateng passengers on the Solo - Sragen route in terms of gender, age, education level and purpose of travel.

**a. Gender**

Based on the results of the Trans Jateng Bus passenger interview survey, the characteristics of Trans Jateng Bus passengers based on gender were as follows.



Percentage of Passengers by Gender

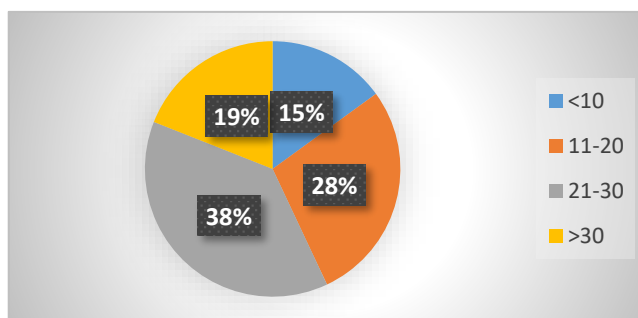
Source: Data Analysis, 2024

Based on the image, it can be seen that the majority of Trans Jateng Bus passengers are female, namely 69%, while male passengers are only 31%.

**b. Age**

Based on the results of the Trans Jateng Bus passenger interview survey, the characteristics of Trans Jateng Bus passengers based on age were as follows.

Passenger Percentage Figure by Age



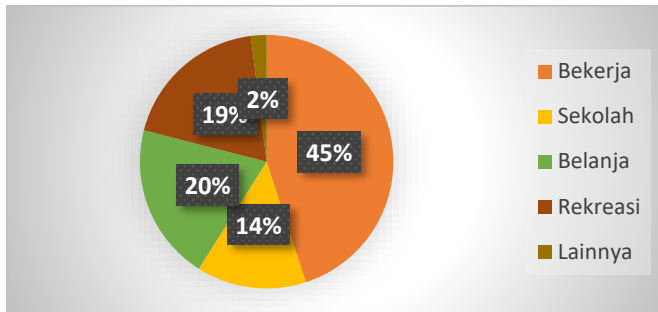
Source: Data Analysis, 2024

Based on the image, it can be seen that the majority of Trans Jateng Bus passengers are aged between 21-30 years, which is 38%, while the second largest number of passengers are aged between 11-20 years, which is 28%, passengers aged over 30 years are 19% and passengers aged under 10 years are 15%.

**c. Purpose of Travel**

Based on the results of the Trans Jateng Bus passenger interview survey, the characteristics of Trans Jateng Bus passengers based on age were as follows.





**Percentage of Passengers Based on Travel Intention**

Source: Data Analysis, 2024

Based on Figure 4.6, it can be seen that the majority of Trans Jateng Bus passengers are for work purposes, which is 45%, while passengers for shopping purposes are 20%, passengers for recreational purposes are 19%, passengers for school purposes are 14%, and others are 2%.

### Respondent Response Characteristics

According to Bluman (2012), a frequency table is a method of entering survey data into a table framework to calculate frequencies and percentages. After determining the scope of performance evaluation and user expectations of the Trans-Jateng Solo-Sragen route service, the frequency distribution of each questionnaire item can be compiled using the SPSS 25 and Microsoft Excel tools as follows:

### Validity and Reliability Test

In the study of the level of satisfaction of Trans Jateng users on the Solo - Sragen Route, there were 25 questions given to 100 respondents. After conducting interviews with respondents, the researcher then conducted a data quality test.

#### Validity Test

Validity testing is needed to determine whether the questionnaire results are valid or not, testing is carried out on the answers to expectations and performance. The requirements for validity testing and how to determine the  $r$  table are as follows:

- If  $r$  count  $>$   $r$  table, then the question item is declared valid.
- $Df = n - 2 = 100 - 2 = 98$
- Significance level = 0.01
- So  $r$  table = 0.025

#### Reliability Test

Reliability testing in this study is based on the Standard Alpha reference of 0.700 (Ghozali, 2016).

#### Hypothesis Testing

#### T-test

T-test is used to determine whether the independent variables (security, safety, comfort, affordability, equality, and regularity) partially affect the dependent variable (customer satisfaction). The following formula can be used to calculate the T-test:

- a. If T count > T table then Ha is accepted;
- b. If T count < T table then Ha is rejected;
- c. Number of respondents (n) = 100
- d. Number of Independent Variables (k) = 6
- e. Significance level ( $\alpha$ ) = 0.050
- f. T Table = T ( $\alpha/2$  ; nk-1) = T (0.025 ; 93), then T Table = 1.985

T-Test Output Table

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.991	.941		2.116	.037
	Keamanan	-.131	.124	-.162	-1.056	.294
	Keselamatan	.065	.094	.098	.693	.490
	Kenyamanan	.082	.055	.146	1.482	.142
	Keterjangkauan	.119	.084	.208	1.413	.161
	Kesetaraan	.269	.069	.358	3.911	.000
	Keteraturan	.102	.030	.311	3.400	.001

a. Dependent Variable: Kepuasan Pelanggan

Source: Analysis Results, 2024

This table is the output of the T-test data analysis at the performance level using the SPSS 25 application. From these results it can be concluded that:

- a. The partial T-value between the security variable (X1) and the service user satisfaction variable (Y) is -1.056 or lower than the T table (1.985), with a significance value of 0.294. The output results show that the security variable (X1) does not have a significant partial impact on the service user satisfaction variable (Y).
- b. The partial T-value between the safety variable (X2) and the service user satisfaction variable (Y) is 0.693 or lower than the T table of (1.985) with a significance value of 0.490. The output results show that the safety variable (X2) does not have a significant partial impact on the service user satisfaction variable (Y).
- c. The partial T-value between the comfort variable (X3) and the service user satisfaction variable (Y) is 1.482 or lower than the T table of (1.985) with a significance value of 0.142. The output results show that the comfort variable (X3) does not have a significant partial effect on the service user satisfaction variable (Y).
- d. The partial T-value between the affordability variable (X4) and the service user satisfaction variable (Y) is 1.413 or lower than the T table of (1.985) with a significance value of 0.161. The

output results show that the affordability variable (X4) does not have a significant partial effect on the service user satisfaction variable (Y).

e. The partial T-value between the equality variable (X5) and the service user satisfaction variable (Y) shows a T-value of 3.911 or greater than the T table of (1.985) with a significance value of 0.000. From the output results, it can be interpreted that the equality variable (X5) has a significant partial effect on the service user satisfaction variable (Y).

f. The partial T-value between the regularity variable (X6) and the service user satisfaction variable (Y) shows a T-value of 3.4 or greater than the T table of (1.985) with a significance value of 0.001. From the output results, it can be interpreted that the regularity variable (X6) has a significant partial effect on the service user satisfaction variable (Y).

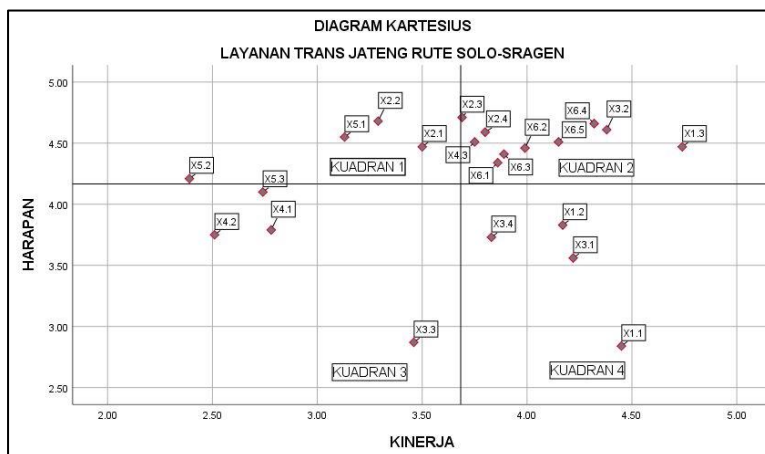
### a. Conformity Level Analysis

Izal et al. (2014) stated that the analysis of the level of conformity is used to evaluate how much customers (passengers) are satisfied with the performance of Trans Jateng Solo-Sragen Route and how much the service provider understands what customers want about the quality of service they offer. The analysis of the level of conformity consists of the analysis of the level of conformity per question item and the analysis of the total level of conformity, which is carried out with the following grouping criteria:

- The level of conformity < 100% is stated as "Quite Satisfied";
- Level of conformity = 100%, then declared "Satisfied";
- The level of conformity > 100% is declared "Very Satisfied".

### b. Cartesian diagram

To examine the division of the quadrant area against the indicators used for the calculation, namely the level of expectation and the level of performance of the Trans Jateng Solo-Sragen Route service, a Cartesian diagram is needed. The researcher conducted the analysis at this stage using the SPSS 25 program tool.



Cartesian diagram image. Source: Analysis Results, 2024

Looking at the results of the analysis output using SPSS version 25 in the image. the author concludes the following:

▪ **Quadrant I**

Indicators included in quadrant I include:

- a. X2.1: Availability of emergency equipment (glass breaker hammer, fire extinguisher, automatic door opener button), as well as instructions for use.
- b. X2.2: Availability of first aid equipment
- c. X5.1: Availability of priority seats for pregnant women, the elderly, and people with disabilities.
- d. X5.2: Infrastructure at bus stops and buses provides convenience for people with disabilities.

The indicators in quadrant I must be considered to fulfill the satisfaction of passengers as users of Trans Jateng Bus services and their handling needs to be given top priority by the operator as a service provider, while in terms of implementation it still does not satisfy passengers.

▪ **Quadrant II**

Indicators included in quadrant II include:

- a. X1.3: Officers maintain order and security on the bus.
- b. X2.3: Availability of emergency response information in the form of stickers containing telephone numbers and/or complaint SMS.
- c. X2.4: Standing passenger handrail facilities are available.
- d. X4.3: Affordable ticket prices.
- e. X6.1: Waiting time for bus arrival.
- f. X6.2: Average speed of travel.
- g. X6.3: Bus stopping time at each stop
- h. X6.4: Information about the stops the bus will pass.
- i. X6.5: The ticket purchasing method provides convenience, speed and transparency.

The indicators in quadrant II need to be maintained by operators as service providers in providing services to passengers, because the hopes and interests of passengers have been implemented by the operator so that they will be able to provide satisfactory service..

▪ **Quadrant III**

Indicators included in quadrant III include:

- a. X3.3: Trash bins are available on the bus.
- b. X4.1: Ease of changing passenger modes from origin to final destination (maximum two changes).
- c. X4.2: Availability of integration of Trans Jateng onward/feeder transportation.

- d. X5.3: Access facilities to bus stops provide convenience for pregnant women, the elderly, and people with disabilities.

The indicators in this quadrant are not so important for passengers, but because the operator carries it out well, users feel satisfied with the service provided. It's just that the risk for the operator is that the costs that must be incurred are too high for needs that are not really expected by passengers..

#### ▪ Quadrant IV

Indicators included in quadrant IV include:

- a. X1.1: Availability of information on the officer's identity board/card placed on the vehicle dashboard.
- b. X1.2: Sufficient lighting conditions inside the bus.
- c. X3.1: The number of passengers does not exceed the vehicle's carrying capacity (maximum 40 passengers).
- d. X3.4: Comfort of passenger movement while on the bus.

The indicators in this quadrant are not that important for passengers, while their implementation by operators is also not that good, so that passengers do not feel satisfied with the service, this kind of thing is not a top priority for both passengers and public transportation service operators..

#### 4. Conclusion

Operational performance of Trans Jateng Bus The average Trans Jateng Bus headway is 31 minutes. In the public transportation service standard indicator, it is known that the maximum headway parameter is 15 minutes during peak hours and a maximum of 30 minutes during non-peak hours, so that the Trans Jateng Bus headway value has not met the established standards. The average waiting time for Trans Jateng Bus passengers is 31 minutes. In the public transportation service standard indicator, it is known that the maximum waiting time during peak hours is 7 minutes and the maximum waiting time during non-peak hours is 15 minutes, so that the Trans Jateng Bus waiting time value has not met the established standards. The average travel speed of the Trans Jateng Bus is 15.55 km/hour. In the public transportation service standard indicator, it is known that Travel speed parameters at peak times are 30 km/h and non-peak times are 50 km/h.. So that the value Trans Jateng Bus travel speed does not meet the established standards. The average load factor of Trans Jateng Bus is 65%. In the public transportation service standard indicator, it is known that The standard load factor set is 70%. The value of *load factor* average Trans Jateng Bus still does not meet the established standards. The results of the gap analysis (GAP) study between performance and expectations on the quality of Trans Jateng Solo - Sragen Route services have a total gap level with an average GAP of -0.48. So it can be said that the variables of security, safety, comfort, affordability, equality and regularity in Trans Jateng Solo - Sragen Route services have not been able to meet the satisfaction of service users.

## 5. References

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