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Performance Analysis of Pedestrian Roads Around the Andi Pangeran Pettarani Road Corridor, Makassar City

Lili[1], Muhammad Yamin Jinca[2], Idawarni J. Asmal[3]
[1,2,3]*Universitas Hasanuddin, Makassar, Indonesia*
liliqu1234@gmail.com, my_jinca@yahoo.com, idawarniasmal@yahoo.com

Abstract

Street Andi Pangeran Pettarani is one of the protocol roads in Makassar City and is located in a strategic area. Residential buildings along the Andi Pangeran Pettarani axis road have now turned into commercial buildings such as culinary or restaurant buildings, shops, hotels, offices, non-formal formal educational institutions, and even health services such as clinics and hospitals. The owner of the building builds in the border area of the building for these commercial activities. This then causes the unavailability of parking space for vehicles. Visitors who have vehicles will use sidewalks, road shoulders and even part of the road as a parking lot so that pedestrian paths in the form of sidewalks become unsafe and comfortable. The study was conducted on the sidewalk along the corridor of Andi Pangeran Pettarani, Panakkukang District, Makassar City. The 4 kilometer long axis road is divided into 6 segments for easy observation. This study aims to evaluate the utilization and availability of sidewalk support facilities and the level of pedestrian satisfaction with the sidewalks along the Andi Pangeran Pettarani road corridor. The method used is descriptive analysis method to describe the results of observations of the use and availability of sidewalk supporting facilities; IPA (Importance Performance Analysis) analysis to determine the level of performance and importance of each supporting facility in order to prepare recommendations for the direction of the pedestrian path improvement plan.

Keywords
pedestrian paths; sidewalks; settlements

I. Introduction

Makassar is one of the big cities that is growing rapidly, both in terms of economy and population. To support the activities and development of the city of Makassar, physical and non-physical infrastructure is needed properly so as not to hinder the process. Physical infrastructure includes infrastructure, use, and design and non-physical includes social relations, as well as economic activities. The economic condition of the population is a condition that describes human life that has economic score (Shah et al, 2020). The need for physical infrastructure is very important to support the ease of accessibility of activities and developments in urban areas. Physical infrastructure, for example, is a pedestrian path. The pedestrian path is one of the physical infrastructure infrastructure in the form of a road intended for pedestrian activities.

Currently, the Andi Pangeran Pettarani Elevated Toll Road (Ujung Padang Toll Section 3) has been built and has been operating since March 19, 2021. The Andi Pangeran Pettarani Elevated Toll Road will become one of the new icons of Makassar City pride. This location has a lot of potential for movement. Most of the pedestrians in this study area are generated by residential, commercial, and educational areas. Pedestrian flow in this research location follows the pattern of the road network which is equipped with inadequate facilities, both sidewalks and the provision of other facilities.

One of the factors that cause deviations from the sidewalk function is the lack of a clear functional suitability for pedestrian paths, bicycle lanes and motorized vehicle lanes as well as sidewalk supporting facilities. This is reinforced by Law Number 22 of 2009 concerning Road Traffic and Transportation in article 13 that pedestrians have the right to the availability of supporting facilities in the form of sidewalks, crossings and other facilities. Based on the Circular Letter of the Minister of PUPR Number: 02/SE/M/2018 concerning Technical Planning of Pedestrian Facilities, pedestrian facilities must be able to meet the aspects of the integration of environmental management systems, transportation systems and accessibility between regions, can meet the aspect of continuity, namely connecting the place of origin and place purpose, can meet the aspects of safety and security as well as aspects of comfort. The circular also explains that pedestrian facilities must be accessible to all users, including users with physical limitations.

The reality in the field of physical development for pedestrian paths along the Andi Pangeran Pettarani road corridor is still inadequate, this is proven by the many points of pedestrian paths that have been damaged, etc. cause problems on the pedestrian path itself. The number of problems certainly disturbs pedestrian activities from feeling safe, comfortable, and humane.

Figure 1. *The condition of the pedestrian path on Jalan Andi Pangeran Pettarani*

In connection with the above explanation, it is deemed necessary to conduct an assessment of the utilization and availability of supporting facilities for pedestrian paths along the Andi Pangeran Pettarani road corridor. The assessment was carried out through field observations and an assessment of the level of pedestrian satisfaction with the sidewalks, both in quality and quantity in accordance with certain standards and criteria. The results obtained will be used in compiling recommendations for pedestrian-friendly sidewalk planning directions that refer to the level of user satisfaction, so that proposals and recommendations can be drawn up in terms of increasing comfort, both physical comfort and the five senses of pedestrian path users. These improvements are expected to increase user comfort so that it can be applied and utilized on other pedestrian paths and restores the actual function of the sidewalk.

The scope of this research is focused on facilities for pedestrians. As for the study material is the sidewalk. The scope of the area in this research is the sidewalk along the corridor of Jalan Andi Pangeran Pettarani.

II. Research Method

Qualitative and quantitative descriptive analysis methods are the methods of this research. Qualitative descriptive analysis was used to determine the physical condition of the pavement, the purpose and intensity of the use of the sidewalk and the availability of supporting facilities for the sidewalk. Quantitative descriptive analysis method is used to analyze the level of service of the sidewalk to pedestrians. The process consists of data collection, data compilation, and data analysis. The final result of this research is in the form of conclusions and directions for development planning. This research was conducted along the pedestrian path of Jl. Andi Prince Pettarani. The observed pedestrian paths are two sides, the east side and the west side. The east side is the book park up to the Divre 7 PT. Telkom, the west side of the UMI postgraduate building to the MAN 2 Makassar school building. The total length of the research area is 4080 m.

The time of the research was carried out in July 2021 until it was completed. Data obtained directly from the object of research using measurement tools, recording tools and data collection tools through field observation methods and interview methods. To obtain secondary data, researchers collect existing data from other parties or related agencies and study literature. Secondary data can be in the form of administrative and demographic data for Makassar City, especially along the Jalan AP corridor. Pettarani. Literature data in the form of books, documents and journals as well as previous research that has been done and related to the topic in this research.

The independent variables in this study are the variables that affect the performance of the pedestrian path along the Andi Pangeran Pettarani road corridor, in terms of the comfort factors of the pedestrian path. The dependent variable being reviewed in this study is the comfort of pedestrians along the road corridor andi Pangeran Pettarani. The independent variable (X) in this study is the comfort factors of the pedestrian path and the dependent variable (Y) is the comfort of the pedestrian path.

The population in this study were all pedestrian path users along the AP road corridor. Pettarani. The number of pedestrian path users cannot be determined because it is every day and there is no accurate data about it. The determination of this sample is because it is not known exactly how many users pass the pedestrian path along the Andi Pangeran Pettarani road corridor. Therefore, the researchers looked for respondents who were met by chance, who passed the pedestrian path. Therefore, this study performs sample calculations using digital software, namely the sample size calculator by Raosoft, Inc., with a tolerable margin of error of 10%, confident level of 90%, assuming an unknown population of 20,000 . In this study, it was determined that the sample population used was 30 people in each segment so that the total respondents in the 6 segments of the research location amounted to 180 people

In this study, data analysis methods include the IPA Analysis Method (Importance Performance Analysis) and Methods of Perception Analysis Questionnaire (percentage description).

III. Results and Discussion

3.1 Pavement Utilization Analysis

a. Traffic Circulation of Axis Road Users Andi Pangeran Pettarani

The Andi Pangeran pettarani road corridor has a fairly solid activity. The road users who are active along the axis road consist of motorists, pedestrians, building owners and users as well as economic activity actors. To identify the circulation of movement from the

left and right sides of the Andi Pangeran Pettarani axis road users, observations were made through video recording and photos from above using drones.

1. Point of Observation

Sampling points in taking pictures are carried out from the left and right sides starting from the parking area of shop houses to fast food restaurants which are the boundary between segment 1 and segment 2. The location determination is based on the consideration that circulation at that location has the most dense vehicle movement and building functions. in the vicinity of the most complex such as housing, offices, banks, hospitals, educational institutions, shops and restaurants. In addition, the majority of people who live in these locations have middle to upper economic levels, most of whom use cars.

2. Video and Image Capture Time

Observations were made when the circulation of vehicle and pedestrian movements would be congested, namely Monday at 7:00, o'clock 12.00, Time 17.00

b. Purpose and Intensity of Pavement Use

To obtain data regarding the purpose and intensity of using the sidewalk, a structured interview or questionnaire was conducted by taking a sample of 180 respondents who were using the sidewalk. Sampling of respondents divided by 30 people in each segment of the road. From the process of distributing the questionnaires, it was found that the age group of respondents, namely teenagers (15-25 years) as many as 57 people, adults (26-45 years) as many as 114 people and the elderly age (46-65 years) as many as 9 people.

Table 1. Results Questionnaire Objective Use Track Pedestrian

Objective Use	Intensity Use				
	Very Seldom	**Seldom**	**Currently**	**Often**	**Very Often**
	%	%	%	%	%
Switch from one building to the building other	21 , 11	2 9 , 03	**47 , 64**	2 , 22	0
Sport / jogging	40	1 0	1 5	32.22	2.78
Street relax / chat	**40**	3 6, 67	1 3, 33	10	0
Waiting vehicle general	2 0.56	10	**3 3 , 34**	19.44	3.33
Parking vehicle	7 , 22	2 8 , 70	23 , 15	**3 3 , 15**	7.78
Shop in trader foot five	1 1.11	13.33	2 6 , 12	**36 , 11**	13.33

c. Intensity of Pavement Use

Data on the intensity of sidewalk use is based on usage time which is divided into 3 time spans, namely morning to noon, afternoon to evening and afternoon to night. Based on the results of the questionnaire, the use of sidewalks from morning to afternoon is relatively rare where based on the results of respondents' answers, 37.78% said they rarely use the sidewalk at that time. During the afternoon to evening, the pedestrian path is used with moderate intensity based on the results of the highest answer of respondents as much as 36.67% answered moderate. The intensity of the use of pedestrian paths from evening to

night is classified as high with reference to the accumulated answers of respondents, which is 36.67 % saying they often use sidewalks at that time.

Table 2. Results Questionnaire Intensity Use Track Pedestrian

Time an user	Intensity Use				
	Very Seldom	Seldom	Currently	Often	Very Often
	%	%	%	%	%
Morning-Afternoon	19.44	**37.78**	28.89	12.22	1.66
Afternoon	22.22	27.78	**36.67**	3.33	10
Afternoon -Night	26.67	13.33	20	**36.67**	3.33

3.2 Analysis of Availability of Pavement Supporting Facilities

The length of the corridor of Jalan Andi Pangeran Pettarani which is the object of research is 4.08 km starting from the red light on Jalan Urip Sumoharjo which is the entrance to the Ujung Pandang toll road to the physical boundary of Sultan Alauddin Road or the location is right under the Pettarani Flyover Toll Road. Meanwhile, the width of Andi Pangeran Pettarani's axis road takes a limit based on the width of the Road's Space or Rumija. Identification is done by dividing the axis road into 6 segments based on the intersection boundary with the consideration that a typical pedestrian path between intersections physically has a relatively similar shape so that it is easier to make observations. The sidewalk facilities and infrastructure are analyzed by categorizing them into several aspects based on the function of each of these supporting facilities, including continuity, safety and security, and comfort and accessibility.

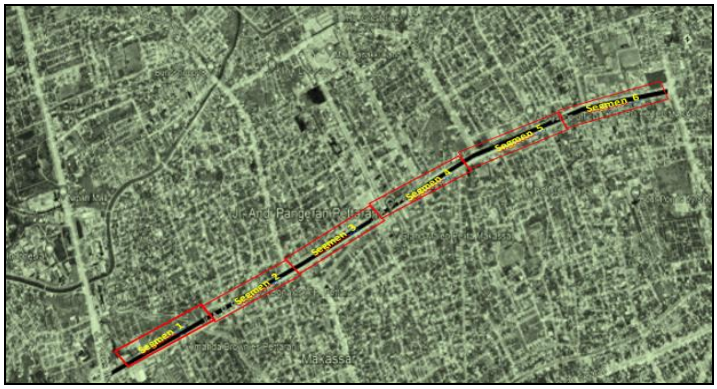

Figure 2. *Segment Division Map*

a. Continuity

Good pavement infrastructure planning must support the smooth running of pedestrians in achieving their goals. The main thing that needs to be considered is the dimensions and material of the pavement covering and the sidewalk that is free from significant obstacles.

b. Sidewalk Dimensions and Materials

Conditions that occur in general on the Andi Pangeran Pettarani Axis roads tend to have quite heavy vehicle traffic during peak hours. Although vehicles and pedestrians have their own space for the movement of their respective activities, due to the condition of the sidewalks generally having the same elevation as the road, motorized vehicles and pedestrians overlap each other. Therefore, identification of the physical condition of parts of the road on the Andi Pangeran Pettarani shaft road was carried out and identified obstacles or obstacles on the sidewalk.

Table 3. Dimension Ru maja Segment 1-6

Segmen	Jalur	Pedestrian		Jalur	Drainase		Lebar	Median Jalan		
		Lebar (m)	Elevasi (cm)	Lanskap (m)	Lebar (m)	Dalam (m)	Jalur lalu lintas (m)	Lebar (m)	Elevasi (cm)	
1	Left	1.25+	10	1,250,50,75.5					2	+ 40
2	Right	1.25-		21,250,50,75.5						
	Left	1.45-	110,560,65,25						2	+ 40
	Right	1.65-		20,80,640,55,25						
3	Left	1.32-	1-1,831.385						2,5	10
4	Right	2.00-	1-1,61,075.09						3,14	- 2
	Left	1.43-	1-0,7250,85,9						2,3	+ 33
5	Right	0.420.0-	11,15,93 _						2,25	- 2,7
	Left	2-	1-1,751,46,1							
6	Right	1,10,0-	1,51,26,2 _							
	Left	2-	1-20.866							
	Right	1.1-		1-1,590,85,9						

c. Road Spread

Based on observations in this study, it was found that crossing facilities were not available in all right and left lanes of each road segment along the Andi Pangeran Pettarani road corridor. Currently, the activity of crossing the road is still not regular, where crossing the road can be done anywhere without a zebra crossing. This can be seen when making observations in the field showing the disruption of traffic activities on the road caused by crossing the road in any place.

3.3 Stop

Based on the results of observations in this study, it was found that supporting facilities in the form of shelters were only found on the left lane segment 1 and segment 2 and the right lane on segments 3 and 4. can be used and used by users. However, at this time the bus stop is unused and increasingly neglected, so it is often used as a go-jek base which is filled with parking for motorbike riders who are waiting for passengers and the seat at the stop is used as a place to rest or wait for passengers for motorbike taxi drivers.

a. Security and Safety

Based on the results of observations regarding these facilities, the following data were obtained:

1. Speed Controller
   Based on the observations of researchers in the Bumi Tamalanrea Permai settlement, no speed control facilities were found along this road from segment 1 to segment 6. Straight road conditions make this road condition dangerous without speed control facilities.
2. Lighting
   Based on the results of observations in this study, it was found that supporting facilities in the form of lighting were found along the corridor of Jalan Andi Pangeran Pettarani. The lighting is placed in the median of the road and is currently still functioning well, judging from the light that is still bright and all the lights are still on at night. Lighting along the road is assisted by lighting from buildings along the Andi Pangeran Pettarani axis road.
3. Bolar
   Based on observations in this study, it was found that supporting facilities in the form of balls were only available at several points along the Andi Pangeran Pettarani road corridor. This is one of the reasons why the pedestrian path is easy to turn into a vehicle parking area along this path.
4. Wait Lapak
   Based on the results of observations in this study, it was found that supporting facilities in the form of waiting stalls on the median road were only found in segment 3, which was 1 unit, segment 4 was 1 unit, and Semen 5 was 2 units. Currently, the waiting stalls are not functioning properly by the community in carrying out crossing activities along this route. The condition of the currently available waiting stalls is easy to identify as waiting stalls because they are marked by barriers in the form of ball poles in the median of the road in segment 3, segment 4, and segment 5.

b. Comfort

1. Green Line
   Apart from being a shade, green lanes can also function as guides and barriers on sidewalks and can reduce pollution from motorized vehicles. The green lane located at the median of the road is available but the green lane on the median of the road has concrete pots in the middle of the sidewalk and is available from segment 1 to segment 5, while in segment 6 there is no green lane on the median road at the research location.
2. Bench/Seat
   Based on the results of observations in this study, it was found that supporting facilities in the form of benches were not available on the pedestrian path along the Andi Pangeran Pettarani road corridor.

3. Rubbish bin
   Based on observations in this study, it was found that supporting facilities in the form of trash bins were not available along this residential route. Trash facilities available at this time There are several but these are personal trash bins from the building owners which are placed outside the building fence.
4. Drainage
   Based on the results of observations in this study, it was found that supporting facilities in the form of water channels or drainage are located along the road axis of this settlement. This water channel is placed on the outer edge of the road shoulder and is still functioning properly. The condition of this water channel is closed and open. Closed drainage is generally used as a pedestrian path.

c. Accessibility

1. Facilities for Pedestrians with Special Needs
   Based on the results of observations in this study, it was not found that there were no facilities for pedestrians with special needs in the form of guide lines, both guiding blocks and warning blocks for pedestrians with special needs along this pedestrian path. The physical condition of the pedestrian path is still considered dangerous for people with disabilities.
2. Traffic Signs and Marking
   There are 6 units of supporting facilities for pedestrian paths in the form of no parking signs at the entrance of segment 1. The condition of these road signs is still in a fairly good condition, namely the signs are quite clearly visible making it easier for road users to obey traffic signs. As for the road signs in the form of traffic lights, 1 unit was found on the right lane and 1 unit on the left lane in segment 1. The condition of these traffic lights is still in good condition where the lights are still brightly lit and the support poles are still standing firmly.

3.4 Pedestrian Satisfaction Analysis

a. Validity Test

Table 4. Test Validation Question Questionnaire

Indicator		Question		Test Validity	Note:
Continuity	P 1	P 1.1	How easy is it to reachobjective with use the sidewalk?	0.377	VALID
		P 1.2	What is the level of interference from vehicle motorized who parked in onsidewalk ?	1.029	VALID
		P 1.3	What is the level of interference from trader foot five which selling in on sidewalk ?	0.860	VALID
		P 1.4	How level disturbance from element *hardscape* (tree/pole) which is at in on sidewalk ?	1.002	VALID
		P 1.5	How availability means supporting facilities crossing Street?	0.942	VALID

		P 1.6	How availability means supporter in the form of stop?	0.874	VALID
		P 1.7	What is the means of crossing the roadworking?	1.029	VALID
		P 1.8	is means stop working?	0.881	VALID
Safetyand Security	P 2	P 2.1	How availability means support in the form of controller speed?	1.004	VALID
		P 2.2	How is the availability of facilities? supporter in the form of light lighting?	1.010	VALID
		P 2.3	How availability means supporter spherical?	0.926	VALID
		P 2.4	How is the availability of facilities? supporter in the form of stall wait?	0.893	VALID
		P 2.5	is means controller speed working?	0.900	VALID
		P 2.6	is means light lighting working?	0.951	VALID
		P 2.7	is means ball working?	0.882	VALID

Indicator			**Question**	**Test Validity**	**Note:**
		P 2.8	is means stall wait working?	0.838	VALID
Comfort	P 3	P 3.1	How is the availability and function of the linegreen (tree) as protector/shade ?	1.056	VALID
		P 3.2	How availability bench/placesit?	0.911	VALID
		P 3.3	How is the space available rubbish?	1.003	VALID
		P 3.4	How is the availability of drainage/channel water in along sidewalk?	1.018	VALID
		P 3.5	How comfort walk insidewalk?	1.065	VALID
		P 3.6	How comfort thermal/temperature (hot or shady)?	1.018	VALID
		P 3.7	How level cleanliness sidewalk?	1.019	VALID
		P 4.1	How easy is it to reachsidewalk from the place you?	1.029	VALID

Accessibility	P 4	P 4.2	What is the level of availability of facilities? sidewalks for people with disabilities in the form of lane guide in the form of tile director andlane guide in the form of tile warning?	0.906	VALID
		P 4.3	how level availability means sidewalk in the form of mark and sign thencross?	0.888	VALID
		P 4.4	is mark and sign then crossdoes it work?	1.058	VALID

b. IPA analysis (Importance Performance Analysis)

The results of the pedestrian assessment of the performance and importance of the 4 indicators are described in detail in each questionnaire question to be used as a reference in determining future planning. The description of the performance and reality can be seen in the table below.

Table 5. Results Evaluation Pedestrian Foot to Performance and Interest

No		**Question**	**Level Score Interest (hope)**	***Importance Weight Factor (WF)***	**Score Level Performance (reality)**	***Weihgted*** **Score (WS)**
P 1	P 1.1	Level convenience walk insidewalk	3.0	0.06	1.31	0.07
	P 1.2	Level disturbance from motor vehicle which parking in sidewalk	2.31	0.04	1.56	0.07
	P 1.3	The level of interference from the merchantfoot five which selling in sidewalk	2.12	0.04	1.37	0.05
	P 1.4	Level disturbance from element *hardscape* which is at in on sidewalk	2.60	0.05	1.85	0.09
	P 1.5	Availability crossing Street	2.71	0.05	1.96	0.10
	P 1.6	Availability stop	1.19	0.02	1.64	0.04
	P 1.7	Function crossing Street	2.31	0.04	1.96	0.08

No		**Question**	**Level Score Interest (hope)**	***Importance Weight Factor (WF)***	**Score Level Performance (reality)**	***Weihgted*** **Score (WS)**
	P 1.8	Function stop	1.41	0.03	1.66	0.04
	P 2.1	Controller availabilityspeed	1.52	0.03	1.77	0.05
	P 2.2	Availability light lighting	1.90	0.04	2.65	0.09
	P 2.3	Availability ball	1.37	0.03	1.62	0.04
	P 2.4	Availability means stall wait	1.86	0.03	2.11	0.07

P 2	P 2.5	Function means controller speed	1.83	0.03	2.08	0.07
	P 2.6	Lighting functionworking	1.29	0.02	2.94	0.07
	P 2.7	Function ball	1.79	0.03	2.04	0.07
	P 2.8	What is the waiting stall facility?working?	1.69	0.03	1.94	0.06
P 3	P 3.1	Path availability and functionalitygreen (tree) as protector/shade	2.11	0.04	2.76	0.11
	P 3.2	Availability of seats/places sit	1.97	0.04	2.02	0.07
	P 3.3	Availability the place rubbish	2.27	0.04	1.62	0.07
	P 3.4	Availability of drainage/water channel alongsidewalk	1.49	0.03	2.74	0.08
	P 3.5	Comfort walk in sidewalk	1.88	0.04	2.63	0.09
	P 3.6	Comfort thermal/temperature (hotor shady)	1.32	0.02	2.57	0.06
	P 3.7	Cleanliness sidewalk	2.71	0.05	2.96	0.15
P 4	P 4.1	Level of ease of reaching sidewalk	1.66	0.03	0.53	0.02
	P 4.2	Availability means sidewalk forpeople with disabilities in the form of lanes guide in the form of guiding tiles and lane guide in the form of tile warning	3.05	0.06	1.30	0.07
	P 4.3	Availability of sidewalk facilities in the form of mark and sign then cross	2.08	0.04	1.93	0.08
	P 4.4	Function mark and sign thencross	2.13	0.04	1.98	0.08
TOTAL			53.58		53.51	1.96
Coordinate Line Axis Upright Straight			1.98		1.98	

On table in on, attributes which has calculated level interest and its performance is described on a Cartesian diagram with the aim of make it easier to formulate recommendations and directive plans for repair to problem which found.

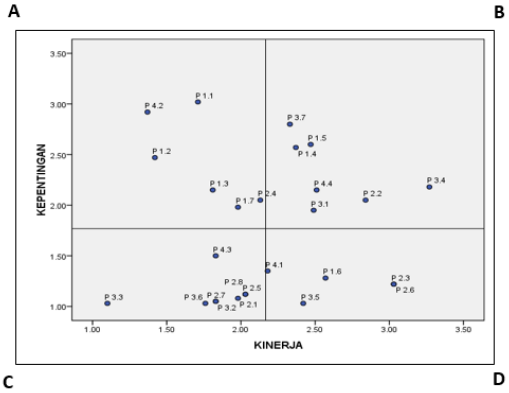

Figure 3. *Diagram Cartesian Importance Performance Analysis (IPA)*

Attributes in quadrant A are attributes that must be prioritized to be fixed. These attributes are very important for pedestrians however has not been able to meet the needs. The attributes are level ease of walking on sidewalks, obstacles on the sidewalks, availability means support as crossing Street, the place garbage, traffic markings and signs as well as guide lane facilities for pedestrian the legs special needs. Attributes in quadrant B are attributes that need to be maintained or improved because the level of performance that has been carried out is generally in accordance with the level of interest of pedestrians. Attributes that are in quadrant B are the availability of green lanes as protection or shade and the level of cleanliness of the sidewalks. In quadrant C, attributes have a low level of importance and satisfaction. Pedestrian users do not feel important on these attributes. The attributes in quadrant C are the availability and function of the bus stop, speed control, ball, function of the waiting booth and the level of ease of reaching the sidewalk. In quadrant D is an attribute that has a very high level of performance but is felt very unimportant by visitors. Attributes that are in quadrant D are the availability and function of lighting, availability of waiting stalls, benches/seats, drainage, walking comfort on the sidewalk and thermal comfort/temperature.

IV. Conclusion

Based on the results of the discussion of this research, the following conclusions can be drawn:

1. Circulation of Movement of Road Users in the corridor of Jalan Andi Pangeran Pettarani
   In the morning, the flow of vehicles is more crowded on the exit route compared to the residential entrance route. Pedestrians use the sidewalk as a place to wait for public transportation. During the day, the circulation of vehicles in the entry and exit lanes is relatively the same. In the afternoon the circulation of the entrance route is more crowded than the exit route.
2. Purpose and Intensity of Pavement Use
   In general, pedestrians most often use the sidewalk for the purpose of shopping at street vendors and also as a place to park vehicles. The use of sidewalks is most often in the afternoon until the evening.

3. Availability of Pavement Supporting Facilities
   a. Continuity
      The sidewalks along the Jalan Andi Pangeran Pettarani corridor have a width of 0.40 - 2 meters which generally have the same elevation as the traffic lane. The covering material for the pavement is concrete pavement. At some points there is material in the form of paving blocks but in an open and untidy condition. The type of obstacle in the form of a vehicle that is parked is quite high due to pedestrian conditions having the same elevation as the sidewalk. Supporting suggestions in the form of road crossings are not yet available while there are 4 units available for bus stops.
   b. Security and Safety
      Bolars and speed controllers are available but are currently damaged or not working, while waiting stalls are also available but in minimal quantities. Conditions at night are quite bright because the street lamps located in the median of the road along the Andi Pangeran Pettarani street corridor are available and functioning properly. The lighting is assisted by lighting coming from buildings along the axis road of Andi Pangeran Pettarani.
   c. Comfort
      For the green lanes located in the median of the road, there are already available, but the green lanes that are next to the pedestrian path are only available in some segments of the research location. Benches/ seats and trash cans that are part of the hardscape that can support the safety, security and comfort of pedestrians are not yet available. Drainage is available along the pedestrian path in the form of open drainage and closed drainage with a width of 0.56 – 2 meters and functioning well.
   d. Accessibility
      Along the sidewalk on the Andi Pangeran Pettarani axis road, there are no facilities for pedestrians with special needs in the form of guide lanes, both guiding blocks and warning blocks. - Traffic markings and signs function well but are only available at a few points of the research location segment.
4. Pedestrian satisfaction with pedestrian paths
   The level of satisfaction can be stated that pedestrians are dissatisfied with the condition of the sidewalks along the road corridor andi Pangeran Pettarani which is based on a value of 0.50 based on the results of the calculation of the IPA analysis.

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