

Parking Space Demand Analysis in Majene City Park

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ABSTRACT

This research was conducted in Majene City Park which is located in Banggae District, Majene Regency, West Sulawesi Province is a city park that is often used by many people because of its advantageous location. This research aims to 1. Analyze the need for parking space in Majene City Park, 2. Know the parking space pattern in Majene City Park. The method used in this research is a field survey based on existing conditions and recording vehicles entering and exiting the parking lot. To ensure the physical state of the site, field research methodology was used to collect data for this study. To provide a sense of security to visitors, data analysis was carried out by providing an overview of the area by identifying the variables required for parking spaces and parking space patterns. The data was analyzed by calculating the amount of parking space requirements in Majene City Park. This takes into account the volume and accumulation of parking. Based on the findings of the investigation, a parking lot was found. It is expected that the government makes strategic planning in the regulation and management of parking levies in Majene City Park because parking lots are needed there. The results showed that the characteristics of Majene City Park include parking volume and accumulation. 1) The busiest time for parking is between 20:00 and 21:00, 2). Visitors accumulate the most peak parking on Sundays from 21:00 to 21:15, 3). From 20:00 to 21:00, the maximum parking capacity is available. The concept of parking space requirements is divided into 2, namely: 1. Parking spaces must be close to the road to make it easier for visitors, 2. Parking spaces are divided into 2 based on the type of vehicle.

Keywords: *Parking; Space; City Park; Facilities*

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INTRODUCTION

Along with the increasing population growth and the high level of economy in an urban area, it will result in an increasing need for facilities needed by urban communities such as business centers, education, offices and trade. The increasing number of vehicles each year, especially private vehicles, is clearly the main cause of the increasing need for parking spaces. Parking is a form of Non-Green Open Space as a court with the main function of placing motorized vehicles such as cars or motorcycles and other vehicles. Parking lots are known as a form of non-green open space that has an economic function. Thus, there is a need for adequate parking facilities to accommodate all vehicles that come and will park. In other words, the available parking area must be able to meet the parking needs of the place.

Majene city park has several facilities such as gazebos, places to eat, statues of sandeq or boat characteristics, but Majene city park does not have parking lots. Majene City Park does not

have a parking lot, resulting in less interest from visitors due to lack of comfort and safety while in the city park area. Parking lots are needed in the City Park area because every afternoon until night has visitors, Majene City Park does not have parking lots therefore most visitors park on the side of the road.

Based on the existing conditions of the Majene City Park, it is not intended as its function, the City Park is currently used as a trading place / sale every night and part of the City Park area is used as a busy fish market on holidays. Actually, parking is a phenomenon that is often found in transportation systems. The parking phenomenon occurs in almost all regions in Indonesia. On this occasion we conducted research at Majene City Park where this place is one of the places that has limited parking space. Due to limited parking space, visitors to Majene City Park leave their vehicles on the roadside. This can result in reduced road capacity due to a reduction in the area of the traffic lane and can provide the potential for accidents. By conducting this research, it is hoped that it can provide a solution to the limited parking space in Majene city park. Based on this, the author raised the title "Analysis of Parking Space Needs in Majene City Park".

METHOD

The method used in this research is a field survey based on existing conditions and recording when cars enter and exit the parking lot. Field research method is a method used to obtain data for this research, namely to find out the physical conditions that exist at the location. Parking management in Majene City Park needs to be analyzed based on aspects of planning, implementation, and supervision because it is an activity process consisting of various aspects that influence each other in the hope that what is to be achieved can be carried out properly. Parking space planning in Majene City Park which is directly related to the fulfillment of basic community needs is the subject of this research. Stages of Research Implementation The research stages consist of: preparation of research tools, information collection through documentation, interviews, and literature studies, To provide a sense of security to visitors, data analysis is carried out by describing the site through variable identification of parking space requirements and parking space patterns. Data is analyzed by calculating the amount of parking space requirements in Majene City Park which includes parking volume and parking accumulation.

RESULTS AND DISCUSSION

Research with the title analysis of parking space requirements in Majene city park was carried out initial research in the first week, namely a survey on parking characteristics. It should be noted that Majene City Park does not have a parking area, so the land for parking vehicles uses the road shoulder. This is one of the problems in Majene City Park which has become a public spotlight so that it is very possible to be used as research material. By using parking characteristics, several things were studied, namely parking volume, parking accumulation, parking duration, and parking index. The data is evaluated and analyzed to determine how much parking demand must be met in Majene City Park. Below are the things that are included in the parking characteristics studied.

1. Parking Volume

Table 1. Percentage of Parking Volume

No	Day	Time	Light Vehicle (LV)	Motor cycle (MC)	Number of Vehicle
1	Monday	20.00-21.00	4	16	20
		21.00-22.00	2	17	19
		22.00-23.00	1	20	21
2	Tuesday	20.00-21.00	2	19	21
		21.00-22.00	1	15	16
		22.00-23.00	1	9	10
3	Wednesday	20.00-21.00	5	19	24
		21.00-22.00	3	12	16
		22.00-23.00	1	9	10
4	Thursday	20.00-21.00	1	8	9
		21.00-22.00	1	27	28
		22.00-23.00	0	11	11
5	Friday	20.00-21.00	3	18	21
		21.00-22.00	1	10	11
		22.00-23.00	1	6	7
6	Saturday	20.00-21.00	8	57	65
		21.00-22.00	6	22	28
		22.00-23.00	3	15	18
7	Sunday	20.00-21.00	2	20	22
		21.00-22.00	1	13	14
		22.00-23.00	1	10	11

2. Parking Accumulation

Table 2. Percentage of Parking Accumulation

No	Time	Log in	Exit	Accumulation
1	20.00-20.15	5	2	3
2	20.15-20.30	7	1	9
3	20.30-20.45	17	5	21
4	20.45-21.00	25	7	39
5	21.00-21.15	37	9	67
6	21.15-21.30	13	19	61
7	21.30-21.45	8	12	57
8	21.45-22.00	14	21	50
9	22.00-22.15	9	17	42
10	22.15-22.30	4	14	34
11	22.30-22.45	1	24	11
12	22.45-23.00	1	7	5

From the table above, it can be seen that a graph of peak accumulation of entry and exit of parking vehicles on Saturdays during observations at the Majene City Park location can be made.

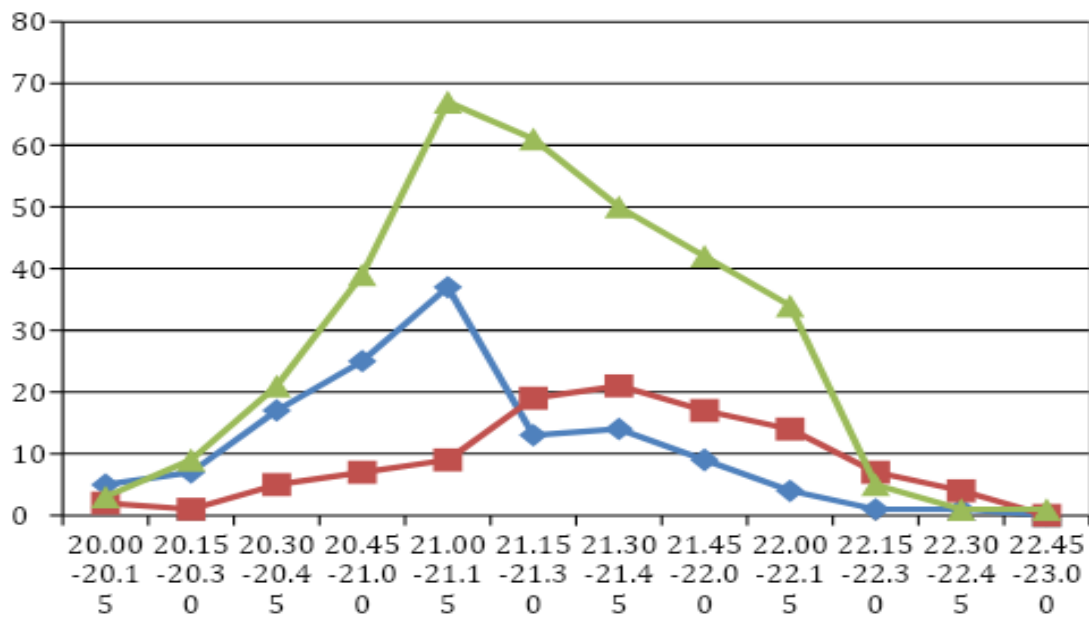


Figure 1. City Park Vehicle Flow Peak Accumulation Chart

From the graph above explains the accumulation of parking in and out of Taman Kota motorcycle parking, which in this case the accumulation is used per 15 minutes. The maximum accumulation of vehicles on the Taman Kota roadside during the study occurred on Saturday at 21:00 - 21:15 as many as 67 vehicles.

CONCLUSION

Parking characteristics of Majene Regency City Park, namely, the highest peak parking volume of vehicles in the city park occurred on Saturday with 111 vehicles at 20.00-21.00. About 67 cars were parked at the highest height on Saturday between 21.00 and 21.15. The highest peak parking capacity at City Park was 120 vehicles. By looking at the user standards and needs, as well as conditions on the shoulder of the road based on the analysis of the shape of the parking lot, the shape chosen for parking activities in the City Park is a 45° parking form so as not to interfere with vehicle users when making parking changes. While for motorcycle parking the shape of the parking space chosen is, the shape of the parking space parallel to the angle of 90°. likewise for the concept of parking patterns and arrangements can be distinguished above: Parking for visitors must be easily accessible and close to the road as the main access. Car parking is separated from motorcycle parking.

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