

Case Study On Use Area Parking At New Market City Shopping Center Bogor

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Abstract

New Market City Shopping Bogor is a research object to the availability of parking areas. Perception assessment of park users to park a distance of 42.86% with a distance of > 200 m, the distance is very great influence in determining the parking area. Difficulty entering the parking structure also affects the level of parking services at 39.52%. Level of difficulty occurs because the road to the parking lot filled with public transportation that stops in the place.

Keywords: Perception, distance parking, parking service level.

INTRODUCTION

1.1 Background

New Market Shopping Bogor provides a large parking area. The area of the park in 3.080 m² building, but the parking area is not utilized by park users. New Market Bogor parking space located above the building, along the temple and the frame on the right of way to force the vehicle to the parking lot. Determining the parking area and parking needs must first be assessed capacity and existing parking spaces. The need for parking is very different when compared to the open area and is affected by the designation.

1.2. Problem Formulation

Formulation of the problem is how the user's perception of the research park in New Market Bogor and what factors led to the ineffectiveness of parking spaces.

1.3. Research Objectives

The research objective was to obtain user perceptions of New Market parking Bogor and obtain the factors that cause ineffectiveness of parking spaces.

1.4. Benefits of Research

Benefits of the research was to provide parking effective spaces New Market Bogor and can provide input on the use of parking spaces.

2. LITERATURE REVIEW

2.1. Definition of Parking

The ride was using the vehicle begins and ends in the parking lot, so parking spaces scattered at the origin of the trip, could be in the parking deck, in the parking lot or on the side of the road. Parking is a vehicle stops in the long term and short situation and needs [6].

2.2. Type of vehicle parking

Types of vehicles using the parking facilities [1].

1) Motor vehicles, namely:

- (1) Personal vehicles
- (2) Public transportation

2) Non-motorized vehicles

- (1) Personal vehicles such as bicycles
- (2) Public transportation

2.3. Position park

The position of vehicles in parking spaces that blend or a part of the building or buildings intended, but it pedestrianpun must be considered, as the visitors walked away the place of destination, then the level of service for pedestrians must also be considered such as pavement, bridge crossing, zebrecross, and others [5].

Parking outside the agency applied in places that pull big way so the smooth flow of traffic and environmental sustainability is maintained. Thus design-street parking outside the very need to align with the needs of parking spaces [1].

2.4. Standard Parking Requirements

Standard parking activity area needs differ from each other, depends on several things, among other services, the rates in force, availability of parking spaces, vehicle ownership levels, income levels. Based on the results of a study of the Directorate General of Land Transport [1].

Studies conducted by the Directorate General of Land Transport in 1998 on the activities and standards of parking requirements are as follows [5].

2.5. Parking Facilities

Parking facility is a public service facilities is an important factor in the transport system in urban areas. This argument shows that parking is a common service facilities and is an important part of the transport system, the transport system is a public utility while the quality of public infrastructure is a measure of the success of a society, thus it can be concluded that the successful management of parking in the market town of Bogor is a reflection of society's success Bogor city and vice versa, if the management of the park in the town of Bogor market does not work, then this is a reflection of the failure of the city of Bogor [3]. The existing parking area in the mall Ciputra and electronic shopping center Courts affect the characteristics of the road, and number of vehicles passing certain roads 8,9].

2.6. Various kinds of parking facilities

Various kinds of vehicle parking facilities in urban principles to do on the road and off the road with its specific requirements [1].

- 1) On-street parking facilities are basic concepts related to the function of the parker. What's stopping and parking on the road should not be allowed, the amount of access to arterial roads is restricted to a minimum.
- 2) Parking facilities outside the road providing parking facilities outside the body can be, yard / garden parking lot is off-street parking facilities in the simplest. Generally parking is equipped with a parking meter and operated jointly with parking on the roadside. The appearance of the parking lot facing the street should be considered carefully. Usually done what the court is making pavement walking distance from the parking lot so that it can be limited by other crops
- 3) The parking deck site aspect considerations, related to the ease and convenience of park users to reach the parking facilities and parking facilities leading to Destination otherwise. The ease and

comfort may be associated with a range of potential users walk from parking facilities. Distance range is unbelievably varied.

Parking studied included into the type of parking in the parking structure.

2.7. Parking Regulations

Regulation parking management depends on increasing vehicle ownership and vehicle volume will increase the demand for parking space requirements, to meet the needs of the specific areas to provide public parking facilities. According to the type of facility parking ordinance is as follows [4].

- 1) Parking facilities without control parking
- 2) Parking facility with parking control. Parking facility with parking control (use the entrance/exit).

2.8. Regulation and Control of Parking Policy

Regulation of parking policy is implemented parking restrictions on activity. Parking restrictions in the street or on the street outside the park that is applied primarily on the main streets and town centers. This policy is very effective to improve the road network services, in general, the closer the direction of movement towards the city center, the more obstacles encountered when driving a vehicle. By contrast, the movement toward the direction out of the city center, which is further away from the center to close anyway obstacles encountered [1,10].

Table 1. Policy instruments in the field of parking shown

No	Wisdom	On the side of the road	Off-street
1	Wisdom rate	<ol style="list-style-type: none"> 1. Increased tariffs, 2. Users parking meters, 3. Permission for use. 	<ol style="list-style-type: none"> 1. Tax the provision of parking spaces, 2. Interest rate structure to meet the long for parking.
2	Wisdom	<ol style="list-style-type: none"> 1 Prohibit parking, 2 Prohibit parking with the exception of the occupants, 3 Relocation of the parking lot. 	<ol style="list-style-type: none"> 1. Freeze the construction of a new parking lot, 2. Reduce existing parking spaces, 3. Controlling parking in the future, 4. Variations in load time parking space.

2.9. Parked vehicle control

Controls on vehicles parked on the street in particular usually by location and time, but this requires strict enforcement and prosecution. The main control and commonly performed as follows [2].

- 1) Gauges parking (parking meter)
- 2) Card system and disk
- 3) Ticket system

2.10. Unit Calculation of Parking Spaces (SRP)

Unit Calculation of Parking Spaces (SRP) is to determine the required parking facilities and information about the dimensions of the vehicle from the driver's behavior (maneuver forward or backward) associated with SRP layout that includes angle parking, the width of the space (stall), wide aisle (aisle), and the direction of circulation vehicle. Vehicle dimensions variable influence in the layout of parking spaces can be shown in Figure 1 [1,7].

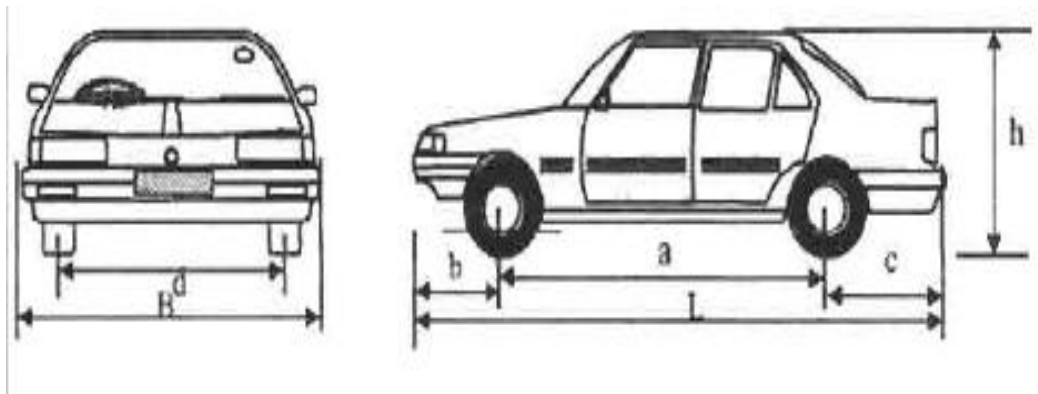


Figure 1. Dimensional structure of passenger vehicles

Caption :

- A = axle spacing,
- b = front overhang,
- c = rear overhang,
- h = height,
- B = total width,
- L = total length.

2.11. Willingness to Pay (WTP)

WTP is the availability of parking user to issue benefits or services received. The approach used in the analysis of WTP are based on the user's preferences and perceptions of the rates of goods or services. Transportation problems, WTP is influenced by several factors [4].

- 1) Quality and quantity
- 2) Utilities for these services
- 3) Income user

2.12. Determination of the location of parking

Determination of locations for public parking facilities by ministers. Determination of the location and construction of facilities for the public, performed by observing [5].

- 1) General plan layout,
- 2) Safety and smooth traffic,
- 3) Environmental sustainability,
- 4) Convenience for service users,

2.13. Pattern Determination Parking

Determination of the pattern refers to the parking lot, there are three kinds of parking patterns, i.e. parallel (0° angle), angle (30°, 45°, 60°, 75°), and perpendicular (right-angle or 90°). Perpendicular parking is the most efficient in terms of land use available, but must be available a wider aisle so that the driver does not run into trouble during parking maneuvers [7].

3. WORKING PROCEDURE

3.1. Time and Place/Location of existing research site

When doing research for 30 days. The research site is at No. 3 Jalan Surya Kencana 4th floor Bogor.

3.2. The use of research equipment

The use of equipment in the research used in the study use the parking spaces including the New Markets Bogor, questionnaire forms, stationery and cameras.

3.3. Flowchart of research methods / user perceptions parking

The method applied in the user's perception of park users park is shown below at Figure 2.

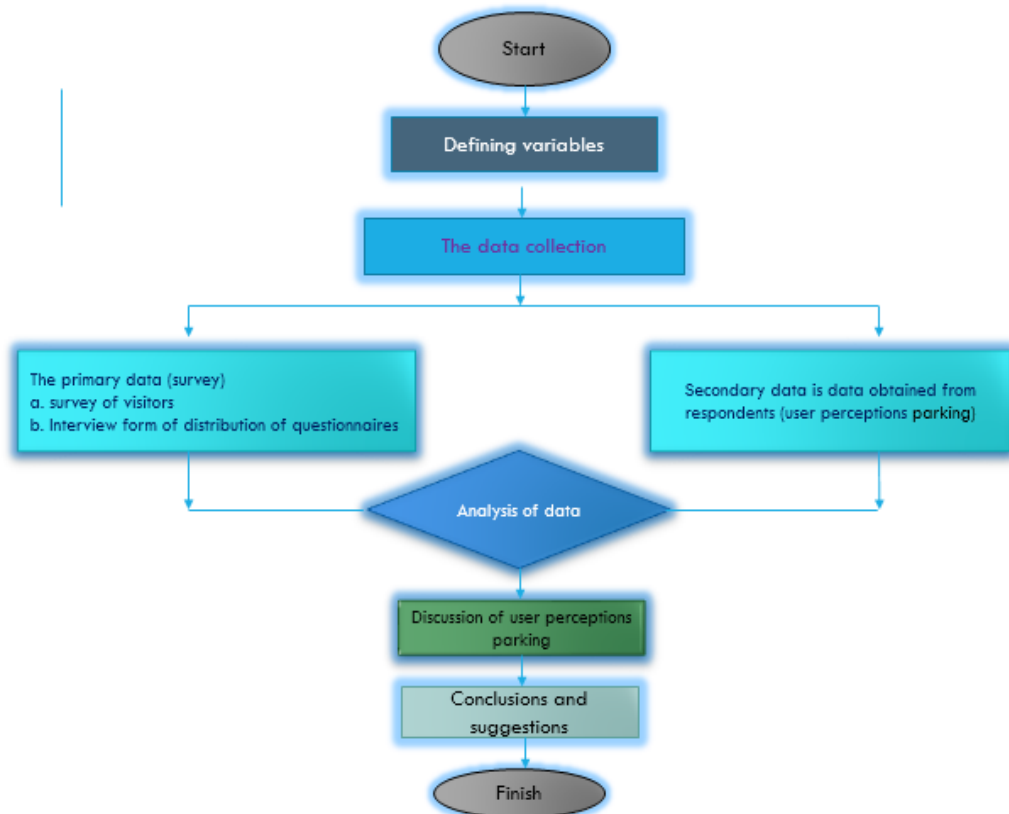


Figure 2. Flowchart of research methods

4. RESULTS AND DISCUSSION

4.1. User Perception of Parking

The results of the user's perception of parking respondent data from the parking area at the New Market building Bogor > 200 m of 42.86%. Respondents chose a parking attendant capabilities for 39.53%, while services provided parking attendant, 35.72% of respondents chose a less than satisfactory service.

4.2. Results Perceptions parking attendant service

The perception by respondents (park users) New Market parking attendant service can be seen in Bogor at Figure 3 is shown in below.

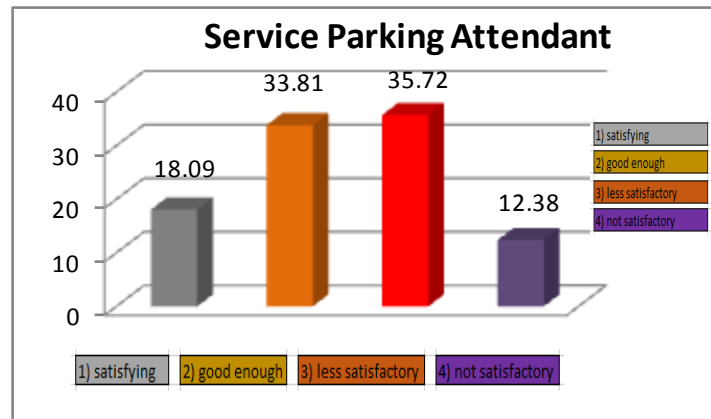


Figure 3. The results of the perception of a parking attendant service to New Market Bogor

In connection with the services provided from the parking attendant results, users who choose the less satisfactory parking 35.72%, 33.81% was satisfactory, satisfying at 18,09%, and 12,38% unsatisfactory. Based on these data a parking attendant service needs to be improved further in order to be better because most people said the service provided unsatisfactory parking attendant.

4.3. Difficulty Entering the Parking Building

Difficulty entering the building parking lot obtained from respondents can be seen below at Figure 4.

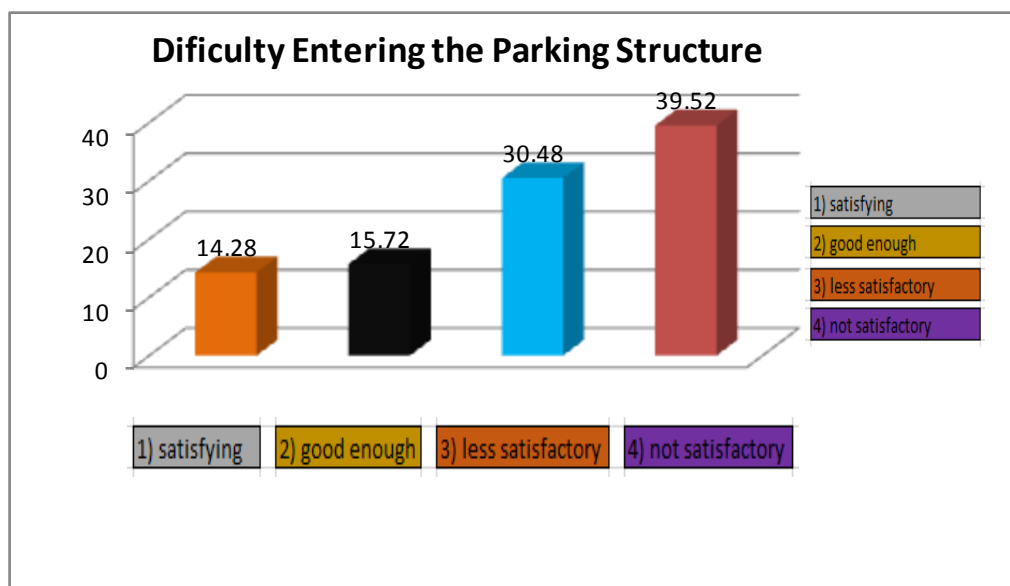


Figure 4. Difficulty entering the parking structure

Based on the results obtained from the respondents (park users) difficulty entering the parking lot of the building, respondents who chose always amounted to 39.52%, and users who choose

to park are at 30.48%, while users stating parking is sometimes amounting to 15.72%, and park users are choose never amounting to 14,28%.

CONCLUSIONS

- 1) Perception assessment of park users to park a distance of 42.86% with a distance of > 200 m, the distance is very great influence in determining the location of parking, if parking location far away from the goal, resulting users do not park their vehicles parking place specified.
- 2) The difficulty of entering the parking structure obtained results based on the difficulty level of 39.52%. Level of difficulty occurs because the road to the parking lot is full by public transport stops place.

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