

ON-STREET AND OFF-STREET PARKING ACCUMULATION SURVEY REVIEW

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Abstract

The pace of growth is closely tied to greater rates of urban economic development, a rise in people's incomes, and a general improvement in the quality of people's living circumstances in general. There has been a rise in the number of individuals living in urban regions who drive their own automobiles as a direct consequence of the fast development of the economy. This may be seen as a direct correlation between the two factors. Engineers and traffic planners have challenges in their efforts to provide sufficient parking space whenever the number of cars on the road rises. Conducting a traffic analysis is a necessary need if one is interested in designing parking facilities or developing pricing structures for such facilities. The purpose of the Parking Study is to collect data on the availability of parking spaces as well as evaluate the demand for parking based on the existing conditions of parking, the level of its utilisation, parking patterns, the amount of revenue generated from on-street and off-street parking, and parking base fees. In order to reach a conclusion and have an understanding of the outcome, it is important to do the calculations required by a variety of parking variables. These parking factors include parking accumulation, parking volume, parking load, average parking time, and parking index.

Keywords: Parking, Parking Accumulation Survey, License plate method, Parking parameters.

1. INTRODUCTION

Parking surveys are carried out with the purpose of gathering parking data such as the total amount of parking, the parking volume, the parking load, the average parking length, the parking turnover, and so on. The in-and-out survey, the set period sample technique, and the licence plate method of survey are the three most popular ways of conducting a parking survey. The following provides a more in-depth explanation of these survey methodology and terminologies. This is the most basic kind of parking survey, in which the only cars that are tallied are those that are entering and leaving the parking lot at predetermined intervals of time. In addition to this, the number of cars parked both before the beginning of the survey and after it has been completed is also counted in order to arrive at the overall parking volume. The time period that must be met is determined by the aim, which might specify whether hourly estimates or data collected every 15 minutes are necessary.

Advantages- Labour required is extremely minimal, Suitable for use in parking areas that are not monitored.

Disadvantages- The length of time spent parked cannot be determined for any individual car or group of vehicles, while it is possible to get an estimate of parking accumulation, neither parking time nor turnover can be achieved. Because the length of the trip is unknown, it is impossible to determine base prices based on this poll, Survey with a Fixed Time Frame.

A sample method with a set duration may also be carried out if the survey has to be completed quickly. In this kind, the number of automobiles that are parked in a lot is counted and noted at predetermined intervals of time. As a result, the entire accumulation that occurred throughout the course of the survey may be approximated. Relevance. The respondents considered the following as very satisfactory: the preparation of modules was considered important for the learners and the teachers; the modules were suited to all levels of basic education; the use of modules allowed teachers to provide minimal assistance to their learners; through the modules, learners could easily understand patterns and logical reasoning; and the questions that integrate broader concepts enhance the knowledge of the learners. The results conform with the evaluation of the learning module that states on the relevance. School heads' practices of strategic address the dilemmas of the schools in the unprecedented time. School heads are very aware of their responsibilities in carrying out the school even in its most uncomfortable situation by investing in any strategies possible just to overcome the said dilemma. Although school heads are hesitant and very apprehensive in dealing with school clientele, teachers and stakeholders yet there is a need to move and implement programs and projects in order to continue the delivery of education. Hence, school heads are positively learning from the experiences they have in the crisis.

Advantages

This kind of survey is appropriate for on-street parking as well as parking places that aren't monitored by an attendant.

Disadvantages

1. It is not possible to predict any essential parking metrics that are not related to accumulation.
2. The total accumulation number may also be inaccurate since in this study, cars that were parked for a shorter length (than the stipulated period) are not taken into account.

License Plate Method of Survey

In this survey, license plate of each vehicle entering the parking bay and exiting the parking bay is noted along with the time of entry/exit. This gives information of parking duration of each vehicle. This method can further be enhanced in organized parking lots where parking bay can also be noted down along with the license plate and time. Thorndike's (1898) Law of Effect is the concept that a gratifying aftereffect intensifies the activity that caused it. The outcome of modular education must be assessed to see whether it has a substantial impact on student performance, particularly in mathematics. A created and verified learning module in Algebra is the first step in improving students' learning. Bruner (1966) introduced Discovery Learning as a technique of inquiry-based education; discovery learning thinks that it is better for learners to uncover truths and relationships on their own. Every learner, in their own unique way, may discover new concepts. A student who works hard and is motivated to complete the exercises in the module assigned to him might learn certain approaches for tackling issues in a specific subject. It will motivate him to excel in his academics, particularly in mathematics. People have basic psychological demands such as competence, relatedness, and autonomy. The hypothesis contends that if these demands are addressed, people will operate and grow optimally. Teachers must be dedicated and motivated in order to provide products that will benefit their pupils.

Advantages

1. Results are most accurate and realistic data can be obtained.
2. All parking characteristics can be computed with this survey.
3. Decision on base fare can be optimized.

Disadvantages

1. Requires a lot of labour and analysis may be time consuming.
2. This method cannot be used for uncontrolled parking lots

2. LITERATURE REVIEW

The analysis of parking spots enables one to have a better understanding of the effectiveness of the parking provided at a certain area. Mohammad Nazim et al. June 2020. The licence plate approach was used throughout the process of data collecting for the research. On the basis of the data collected, it was determined that the parking facility that was made available was enough to meet the requirements.

Er. Gurpreet Singh et al 2016. This article includes research on the parking features of Area 17 in Chandigarh with the goal of establishing the appropriateness of the existing parking space and the future demand for more parking. The findings of this study are presented in this paper. The difficulties are analysed in depth, and workable solutions are proposed in order to reduce the number of parking issues in the region under review. In order to facilitate study, the neighbourhood of Chandigarh known as Area 17 has been subdivided into many parking lots. They are enough to satisfy the demand for parking spaces. The Amul dairy road is one of the most notable districts in the city of Anand. The route is quite congested with a large number of cars driving both quickly and slowly. The study was conducted using the method of number plate registration, and the results indicated that there is a problem with parking on the Amul dairy road during the peak hours. The development of a given location causes a rise in the number of cars in that region, which causes parking problems. This research by Ninad Gore and colleagues investigates the effect that on-street parking has on the flow of pedestrians and the implications that these findings have. The data on foot traffic was gathered in the central business districts of the three metropolitan cities of Gujrat. According to the findings of this investigation, the average walking speed of pedestrians in areas with comparable population densities was slower when on-street parking was present. The total growth of a city may be directly attributed to improvements made in that city's infrastructure. Janak Parmar and colleagues conducted research on the peculiarities of parking in the city of Delhi. Surveys pertaining to parking were carried out in nine distinct regions, mostly in the business districts. It was found that certain locations offer ample parking facilities; nonetheless, there was congestion because parking management was poorly managed and there were not enough signs.

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