

REDESIGN OF RAILWAY STATION IN METROPOLITAN CITY

Viraj Patel¹, Ankita J Parikh², Hardik Sukhadia³

¹M.E. Student, Civil Engineering Department, LDRP Institute of Technology and Research, Kadi Sarva Vishwavidhayala, Gandhiagar,

²Assistant Professor (Head of the department), LDRP Institute of Technology and Research, Kadi Sarva Vishwavidhayala, Gandhinagar,

³Civil Engineering Departments, Sigma Group of Institute.

Abstract- India is a creating nation. Urbanization in India is expanding quickly step by step. Quantities of individuals relocating from town to urban regions are expanding quickly to discover better openings for work and better way of life. As individuals are more pulled in urban zones for employments, transportation prerequisite for remote ranges from neighborhoods expanded. Individuals like to go by railroad as it is the safe, effectively open and less expensive. During peak hours and at local railway time the huge rush in platform to get in train which leads people use the stairs provided for the entry & exit of the passengers thus creating a huge conflict amongst them. Rules and regulation are also not properly obeyed. The finish of the venture will be the design plan of the overhauled of the different part of the railroad station so that the proficient development of group should be possible with it gauge and defense and establishment of check in counter at passageway and exit for security reason.

Index Terms- Urbanization, pedestrian behavior's, expanding

I. INTRODUCTION

Indian Railways (IR) claims and oversees one of the biggest Railway systems of the world with more than 64,000 Route Kilometers (Km) and 7,000 stations. Operations of the Indian Railways (IR) are administered by Ministry of Railways (MOR), Government of India and 16 Zonal Railways headed by General Managers. The Indian railways convey more than 17.5 million travelers consistently and a portion of the real Railway stations handle 100-200 million travelers for every annum. The majorities of the Railway stations have been worked more than 100 years prior, and have a restricted and again framework that handle a perpetually expanding

number of travelers. The Railway stations are likewise situated amidst the urban communities and offer gigantic potential for re-advancement and business development Rail stations are a noteworthy component of the general trip involvement, and are basically the "face" of open transport. Ahmadabad is the largest city in the state of Gujarat. The city served as political as well as economical capital of the region since its establishment. Situated on the banks of river Sabarmati, Ahmadabad is located on the western side of India in the state of Gujarat. Ahmadabad city has witnessed the rule of different dynasties, right from Sultanate and Mughal rule to Maratha and British rule. Thus, the history of Ahmadabad, India is very rich. Ahmadabad was the former capital city of Gujarat. During the freedom struggle of India New traveler terminals are likewise being produced in urban communities where existing terminals can't take care without bounds demand. Not with standing strolling and holding up, travelers likewise much of the time buy and approve their tickets, purchase daily papers or nourishment from concessions, request data at stands, or stop to counsel maps. In this manner, travel station blockage can happen in strolling ranges, for example, stairways, lifts, additionally in holding up zones, for example, stages (particularly amid prepare loading up and landing times). For example, station doors and ways out, ticketing machines, entryways/toll entryways, Waiting lounges and concessions may likewise encounter clog and lining. It can't mirror the assortment of station arrangements that exist in underground rail stations, yet it indicates a surmised grouping of occasions that travelers may understand.

1.2. OBJECTIVES

- To give appropriate fundamental enhancements like holding up room, staircase, stopping and so on for the travelers
- To analysis the movement of vehicles in parking and estimate of parking volume.
- To collect data regarding passengers and photography survey.

1.3 SCOPE OF STUDY

- This review, emphasis on planning lacking like holding up room/Sitting arrangement and Parking.
- Recurrence of traveler in pinnacle hour and give then appropriate fundamental framework.
- A contextual analysis of various railroad station & indentify distinctive issues.
- Planning or Designing outlines in AutoCAD

1.4 PROBLEMS

The separate parking is provided for two-wheeler, taxi and car. Their size is respectively. During weekdays 150 cars normally move in and out. On the other hand, 200 two wheelers are moving.

Although during weekends the motion of the cars and two-wheeler increases and rise to 200 and 240 respectively. The charges for parking of car for 15 minutes are 20 and for the two wheelers it is 15 rupees for 15 minutes. There is no safety for the vehicles being stolen as there is no safety measure. Therefore, CCTV should be installed. There is no proper lane for the parking; hence people face hindrance during parking of the vehicles at the place. It is possible that during festivals the two-wheeler parking get crowded so other ways for expanding the parking should be thought of.[5]

II. LITERATURE REVIEW

Parking issue at Vadodara station. Kinjal Jain, Prof. Krupa Dave (April 2015) Baroda is the third largest city of Gujarat state. It is one of four cities with population over 1 million. Baroda is one of the cities having high literacy rate (78%) of Gujarat. One can

travel to almost all the strategic location of Vadodara is so that it is a connecting link between Surat and Ahmadabad. The parking area available near railway station is very limited and precious. The most Severe and foremost problem of parking provision would be eliminated. Indian standards of Parking would be followed. The state of art Parking facility, would give an everlasting impressions on the travelers residing in the city or visiting station first time.[1]

Node capacity and terminal management on Indian Railways. Narayan Rangaraj B.N.Vishnu. a case study on Indian railway. It is necessary to be able to clearly quantify node capacity as part of the overall capacity, to match this capacity with traffic requirements, to be able to plan investments related to node infrastructure and to be able to manage the operations at nodes in a effective manner. Indian Railways has evolved over the years by planning the rail network to cover large geographical parts of the network, to reflect both the flow of freight and also to play its role in regional development. For convenience, we can describe the management of fixed infrastructure facilities in the following three. 1) Passenger dominant facilities, 2) freight handling facilities and 3) maintenance oriented facilities. Managerially, more awareness regarding terminal performance, definition of some performance measures and integrated analysis of options to do with node capacity will go some way in addressing the issue. [2]

III. METHODOLOGY

3.1 Selection of Study Area

Ahmadabad has emerged as an important economic and industrial hub in India. Residential areas are densely populated and hence the roads of Ahmadabad see a lot of motorized 2-wheelers (M2Ws) and motorized 3-wheelers (M3Ws) plying on them. For the research project “**Kalupur Station Area**” was considered as the study area Coordination is 23°01'30"N 72°36'04"E Ahmadabad Junction railway station is the main railway station of Ahmadabad, Gujarat, India. It is also the biggest and busiest railway station within Gujarat. Railway station elevation is 52.50 meters (172.2 ft).it has connected BRTS and AMTS bus stop, rickshaw & taxicab stand, Car parking & two wheeler parking.



Figure:1 Kalapur Railway station

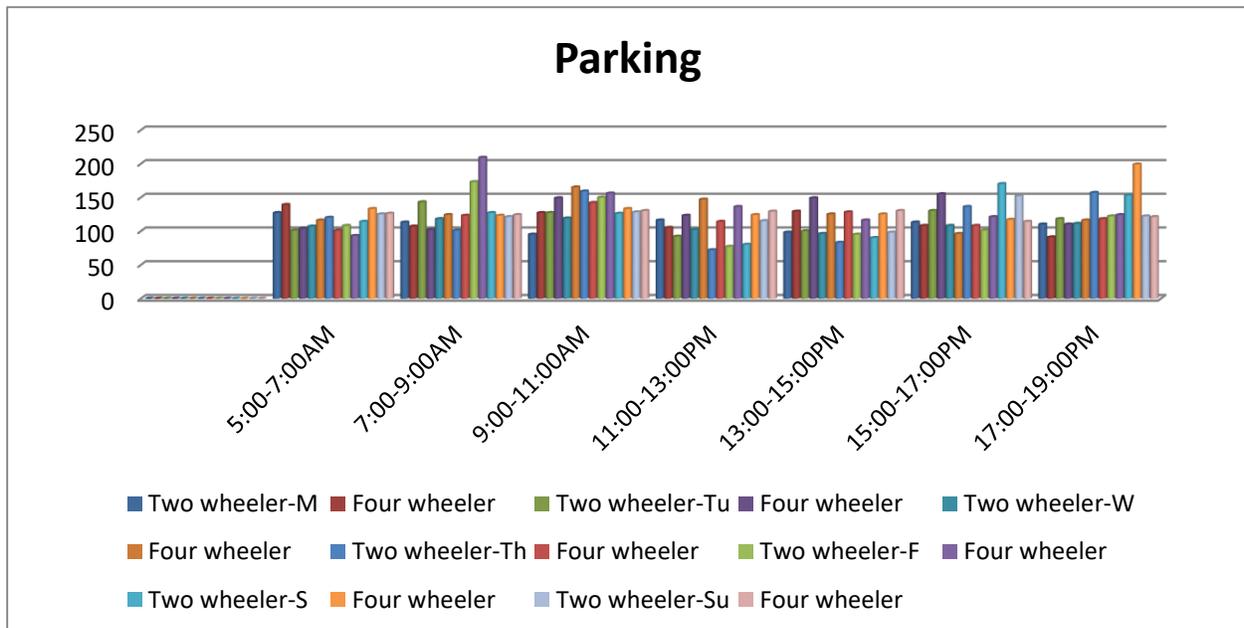
3.2 Problem Identification

To achieve the goals a strategy is circled. For this work consider zone is to be perceived for social event data. Standard reaches out of the audit are recognizing the issues on existing halting extent and holding up zone by the coordinating particular diagrams. After the assurance of study region the objective of work should be picked. For achieving that target the data social event and data examination comes to fruition some therapeutic measure for road

prosperity will be suggested. Last walk is to give complete of this whole work done.

3.3 Data collection & Analysis

Data collected is done in two way direct observation methods and video graphic Observation methods. In observation method, primary data collection and Secondary data collections are two different way to collect the data. In primary data Collection observation and questionnaire survey is carried out at corridor of selected location. Secondary data collected by western railway. Weekly data collected by photography & manually survey at railway station. Two major points' entry & exit through counted two wheelers, four wheelers, Rickshaw & Taxi cab. How many vehicles stay here at railway station easily find capacity of parking? Lots of people labors are very early time reached at station so train time very late then people stays there.[3]



M –Monday Tu- Tuesday W- Wednesday Th- Thursday F-Friday S- Saturday Su- Sunday

IV. CONCLUSION

The most Severe and foremost problem of parking provision would be eliminated. Indian standards of Parking would be followed. The damage to vehicles caused due to Haphazard parking would be avoided.

The time taken to reach the platform for far away parking area would be reduced. The current scenario clearly suggests that redesigning has to be implanted at the earliest using the available resources. The parking area available near railway station is very limited and precious. The land acquisition for this

purpose is very difficult hence they are occupied by private sector ages. Hence the only land owned by municipal corporation and railway authorities can be put up to use. It means to provide automatic & manually multilevel parking, underground basement parking. The extent of penetration in both the directions may increase the parking area to such extent that the Indian standards for parking would be satisfied and fair amount of vehicles would be accommodated. It could be change of holding room location, display information system, toilets and drop off zone.

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