



# INTERNATIONAL JOURNAL OF PURE AND APPLIED RESEARCH IN ENGINEERING AND TECHNOLOGY

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## SPECIAL ISSUE FOR NATIONAL LEVEL CONFERENCE "Recent Trends and Development in Civil Engineering"

### A REVIEW PAPER ON MASS TRANSIT SYSTEM- A CASE STUDY OF GANDHINAGAR TO CHANDKHEDA SH-41 AND NH-147

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Accepted Date: 27/01/2018; Published Date: 01/03/2018

**Abstract:** Transportation occupies a high place at present time. Completely arrangement and management of transport mode becomes a widely helpful for users. Traffic congestion occurs from the various modes of vehicle. Public transport problems include: an overall lack of capacity, lack of quality and choice, severe traffic congestions and insufficient fund to renew and repair vehicles. This study helps with the improvement of Mass Transportation planning between two localities. Proper planning relating to Mass Transportation System is must. Origin and Destination survey carried out for the data collection of project. After analysis of these type of data gives information of the origin and destination of road user, which is helpful in deciding the proper occurrences of mass transport vehicle between specific time intervals. Also develop the facilities of mass transport vehicle.

**Keywords:** Mass transportation, Origin, Destination, Frequency, Analysis

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PAPER-QR CODE

Access Online On:

[www.ijpret.com](http://www.ijpret.com)

How to Cite This Article:

Chirag Mer, IJPRET, 2018; Volume 6 (7): 190-194

## INTRODUCTION

Mass transit (Public transit) is an integrated group of transportation facilities (other than those privately owned for personal use) which enable people or freight to be transferred from one place to another.

Transits are a means of transporting massive either passengers or freight on a separated route especially in urban areas. Modes of public transport are Buses and coach, City buses, Trains, Commuter rails and suburban rails, Metro trains, BRTS, etc.

In India people use road transportation as it enables users to reach destination precisely. If mass transit system is effectively working it may lead to less traffic congestion and less traffic and noise pollution. It may effectively lead to economic development of country by the revenue collected due to mass transit system.



Fig: Mass transit system[7]

## I. PROBLEMSTATEMENT

Mass (Bus) transportation between Gandhinagar to Chandkheda is being continued with some Defects. Identify and study regarding these matter include in this topic. An overall lack of capacity. Lack of quality and choice. Severe traffic congestions and insufficient attraction to renew and repair vehicles. Curtailment of routes at the will of crew to avoid some areas. Overcrowding of buses. Rude behaviour of crew. Dirty buses. Presence of bad elements on the bus. Worst condition of Bus station.

## II. SCOPE AND OBJECTIVES

Scope

- To study about the safe and more economical movement of passenger.
- To study about the behaviour of transportation in Indian traffic condition.
- To study the effective co-ordination between carrier in mass transportation system.

Objectives

- To improve public transport amenities.
- To make transportation low-priced.
- To make trip smooth and less time consuming.

- To reduce accidents.
- To propose occurrences.
- To find out necessity of mass transportation consumers.

### III. STUDY AREA

Study area is of about 16 km in between Gandhinagar to Chandkheda. Study Area containing SH41 and NH147 highway. Main reason for using this transportation by people on large scale is for jobs, Schools, colleges, industries at Ahmedabad.



**Fig: Map of study area[8]**

### IV. METHODOLOGY

Step: 1 Introduction

Step: 2 literature review

Step: 3 study area

Step: 4 problem definition

Step: 5 data collection

Step: 6 analysis

Step: 7 conclusion and recommendation

### V. METHODS OF O-D SURVEY

Origin and destination study:

Origin and destination study determines the pattern of journey that people make. It is the basic study which provides the information for planning of a transportation facility or system particularly the location, design and programming of a new or improved highway public transport and parking facility. Data for Trip Generation, Trip Distribution, Modal Split and Route Assignment Analysis, becomes the Part of This study. It is often called travel survey – a fundamental to all transportation studies and consists basically of determining:

- Where travellers are coming from (origins of trip)
- Where trip markers are going to (destination of trip)
- Why people are making trip (purpose of trip)

- By which model do different types of people travel (mode of travel)
- At what time of the day do they travel (time of trip)
- What is the normal length of trip?
- Other socio-economic data of the trip maker

Road side interview method:

Drivers are stopped and interviewed at roadside and data is recorded on prepared forms. The usual information required is:

- Type of vehicle
- Number of persons in vehicle
- Origin and destination of trip
- Purpose of trip
- Parking location
- Intermediate stops
- Routes travelled

## **VI. RESULT AND CONCLUSION**

As both the routes are busy because of existence of industries, colleges and shops, so people uses private vehicles or transport vehicle as per requirement. If proper scheduling of buses are done, use of personal or private vehicle can be reduced. Hence it can lead to less traffic problem and also helps to economic development of country. It also help to reduce noise and air pollution.

## **ACKNOWLEDGMENT**

This research paper is made possible through the help and support from everyone, including: parents, teachers, family, friends, and in essence, all sentient beings.

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