

**STUDY ON CONTRIBUTION AND ROLE OF AUTO-  
RICKSHAW IN URBAN TRANSPORTATION SYSTEM: A  
CASE STUDY OF VADODARA CITY**

**M Tech Dissertation**

Submitted in  
partial fulfillment of the requirements  
for the degree of

**MASTERS OF TECHNOLOGY**

in

Civil-Transportation Engineering

by

**Bhayji Javid I.**

**160303211003**

Under the supervision of

**Prof. Jayesh Juremalani**



May 2018

**DEPARTMENT OF CIVIL ENGINEERING  
PARUL INSTITUTE OF ENGINEERING & TECHNOLOGY  
FACULTY OF ENGINEERING & TECHNOLOGY  
PARUL UNIVERSITY  
P.O. Limda – 391 760, GUJARAT, INDIA**

## **ABSTRACT**

Auto rickshaws, which qualify as a para-transit mode of transport, are one of the most popular mode of public transport in India. They stand incomparable in their segment of providing door-to door transportation and last-mile connectivity at an affordable cost to a major chunk of the Indian population. It is widely agreed upon that auto rickshaws are a dynamic mode of transport in Indian cities, providing low-cost mobility and connecting travelers to mass transit or directly to their destinations. The auto-rickshaw sector provides an existence for some of India's poorest citizens. Para-transit vehicles are a for-hire flexible passenger transportation that does not necessarily follow fixed routes and schedules. They provide two types of services: one involving trips along a more or less defined route with stops to pick up or discharge passengers on request. The other is a demand-responsive transport which can offer a door-to-door service from any origin to any destination in a service area.

Vadodara is one of the metropolitan city of Gujarat, which is running with multi formal and informal transport mode. In formal transportation there is vinayak city bus service and as informal public transport there is auto-rickshaw, Tata-magic, maruti-van, atul-rickshaw, and few taxi. Approx. 75000 number of auto-rickshaws are running on the major and minor routes of Vadodara city. Vadodara city known as smart city of Gujarat is suffering from the problems of auto rickshaw sector, in solution of this serious problems, data collected by the questionnaire forms, and data collected from the auto rickshaw drivers and the passengers as well as from the police stations and authorized departments (**VMC**). A detailed study has been carried out to understand the role and contribution of auto-rickshaw sector in transportation system as well as to understand the present situation of the sector.