

**DEVELOPING THEMATIC GIS DATABASE BY
INTEGRATING ROAD NETWORK FOR EVALUATING
ACCESSIBILITY AND MOBILITY: 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

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May 2018

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Abstract

The development of and improvement of urban road network and its management has essential element for the development of a city. Vadodara city is fast developing city in the Gujarat state therefore the urban transportation system management have important factors for the continuous development of the cities and manage the transport system in systematic. For the performing the task the use of digital systems is required which is like GIS software have crucial application on urban transportation planning which is helps by preparing GIS database of for analysis and interpretation of the data by using different analysis tools and techniques by using ARC GIS 10.2 software. The developing of thematic GIS database is uses for easy understanding of the data user as well as easy to manage and manipulate the quarry of the required information. On this study developed thematic GIS database by integrating road network to evaluate the accessibility index and mobility of 19 wards and to prepare thematic based analysis of the result. Which is helps to evaluate the mobility and accessibilities of the 19 wards with each other and to evaluate the existing of road networks accessibility towards different service area as well as it used as the initial study of further urban transportation planning.