

# A Local Area Planning Proposal in Context of Mobility: A Case Study of South Zone, Surat City

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**Abstract** - Surat is one of the fastest-growing cities with a growth rate of 55.29% in 2011 with a rise of the population from 24.33 lakh in 2001 to 44.66 lakh in 2011. So, the most important challenges facing Surat public is transport, but there are many others as well: inefficiency, roadway congestion, traffic accidents, lack of planning, overcrowding, noise, and total lack of coordination of any kind. During the last decade Mobility Plans have been developed in many times at local scale. These studies evaluate the configuration of the current mobility status and develop some interventions in order to solve particular problems at South Zone level. These kinds of studies are specially oriented to provide transportation alternatives that are accessible to individuals of all ages and to provide and maintain a network of continuous routes. Improvement of public transport for sustainable and cost-effective investments in transport sector. The importance of developing these kind of integrated analysis, not only for implementation and project development, but also an easy acceptance of local citizens.

Key Words: Mobility Plans, Parking, Traffic, Pedestrians,

Land Use

# **1. INTRODUCTION**

Local area planning is a process of planning that is concerned with resolving local level problems and issues. Its priorities include overall welfare of the people and development of the local area. Maintenance of social services and amenities, promotion in the quality and quantity of local products and services and keeping surroundings and local environment clean and green are some of its continuous concerns.

The term local area is used variously in ecology, economy, and society. It is a site-specific issue, commodity, or community. In terms of attributes, local area is both a physical as well as cultural attribute like landscape of an area, surroundings of a locality, local products, folk dances, handicrafts etc. Planning is carried out at various levels. Beginning from a small local area to as large area as the world, planning is an integral part of human progress and area development. People have been planning their affairs, activities, habitats, etc. from early times. It is, thus a continuous process across time and areas and is aimed

at the welfare of people and the environment. At the global level, planning for the whole world is taken up by the United Nations and countries provide cooperation in the implementation of the planning schemes.

Mobility can be defined as, Mobility is the ability to freely move or be moved. mobility ("capable of movement") describes the ability of a person to move or be moved.

## 1.1 Need of Study

A Mobility Plan on a local scale intends to analyze and solve problems of a neighborhood that many times are not visible at a city scale. Limited road widths together with increase in number of private vehicles have led to traffic congestion and delays becoming common phenomenon. The situation becomes more acute during peak hours. The impact of uncontrolled urbanization is widespread. Although a number of measures have been adopted by the city authority to improve basic infrastructure services, congested roads and increasing traffic numbers remain the major issue. Mobility Plan for Surat aims at developing an integrated land use transport vision document for creating an organized transport system to achieve sustainable mobility goal for Surat.

#### **1.2 Problem Definition**



 $\triangleright$ To overcomes the problem of urban sprawl, to improve basic infrastructure services, congested roads and increasing traffic numbers remain the major issue. Limited road widths together with increase in  $\geq$ number of private vehicles have led to traffic congestion and delays becoming common phenomenon. The situation becomes more acute during peak hours.

➢ Growth and development of commercial activities along both sides of the road and on-street parking of private vehicles by resident users, has further aggravated the situation. On the other hand, the pedestrians have become more vulnerable due to lack of dedicated pedestrian lanes.

## 2. AIM

To prepare planning proposal for structuring better mobility in south zone of Surat City.

## 2.1 Objectives

• To configuration of the current mobility status and develop long-term strategy in order to solve particular problems at south zone level.

• Improvement of pedestrian lane and also improve bicycle lane.

• To prepare planning proposal for integrated Transportation and Land Use Planning.

#### 2.2 Comprehensive Mobility Plan Surat – 2046 (vision "SARAL Mobility 2046")



Figure : 1 Visions for Comprehensive Mobility Plan

#### 2.3 Study Area Profile



Figure: 2 Location of Surat City

## 2.4 Urbanization Scenario of Surat

> During 2001-11, the city experienced an exceptionally high decadal population growth rate of 85.36 percent.

Rapid inflow of population is continuing. The sex ratio has dropped down to 756 in 2011 from 774 in 2001.

A positive feature is that the literacy rate has gone up from 83 percent in 2001 to 85 percent in 2011.

## 2.5 Demographic Profile

- Zone : South
- Area (in Sq.Km.) : 61.764
- Population As per 2011 census : 695028
- Density per Sq. Km : 11253
- Total no. of households : 167629

# **3. SURVEY ANALYSIS**





7. Which mode of transportation do you use ? 115 responses 2 Wheeler 3 Wheele 4 Wheele BRTS Bicycle Walking Other 8. What is the purpose of your trip? 113 responses School College Commercial Labour Industrial Labour Self employment / Busines Government Employee Other 14. Improve Walkability ? 114 responses High Priority Medium Priority Low Priority Don't Know 15. Manage Parking 114 responses High Priority Medium Priority Low Priority Don't Know 78.9%

#### 4. CONCLUSIONS

Planning Proposal for Transportation and Land Use Planning is necessary, Like

1. Parking Management

2. Active Transport Conditions (Street Design to ensure safety of pedestrians and bikers)

3. Site Design (Pedestrians, Bikers, Movement of Goods)

4. Mobility Management (Improved transport Options, Demand Management

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