

# Impact on Employment via public Transit System

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**Abstract** – A little research has specifically focused on how labor participation is impacted by increases in public transportation availability. Research on the spatial mismatch hypothesis has dealt with the relationship between labor participation and the spatial separation of jobs and houses; however, most analyses concentrate on commuting time or distance as a function of auto accessibility. As jobs move to auto-dependent suburbs, those without access to cars including low-income workers and people with disabilities lose out on employment opportunities. Many workers without access to a car spend hours on multiple buses traveling to remote work places; some are unable to get to these jobs at all. Many large cities are evolving to be multi-nucleated cities, which are believed to reduce car dependency, relieve traffic congestion, lessen suburbanization etc. Ahmedabad has also been developing with many urban policies and implementations. It is still unclear to what extent those actions are appropriate.

**Key Words:** Accessibility, Transportation Availability, Employment Opportunities, Multi-nucleated city, suburbanization

## 1. INTRODUCTION

Rapid population increase, suburbanization, economic growth, motorization, and car dependency are common urban problems experienced by many growing cities. The situations are more severe in the developing countries. Most of their previous developments were undergone disorderly and unsatisfactorily. This resulted in terrible traffic congestion. They are mainly stem from inefficient urban structure and suburbanization, which are caused by rapid population and high economic growth. Public transportation system is the key component of sustainable transport system. The system can relieve congestion and provides efficient way of moving large number of people. Since accessibility is the ultimate goal of most transportation activity (excepting the small amount of travel that has no desired destination), transport planning should be based on accessibility. However, conventional planning tends to evaluate transport system performance based primarily on motor vehicle travel conditions using indicators such as roadway level-of-service, traffic speeds and vehicle operating costs; other accessibility factors are often overlooked or undervalued. Even with a considerable amount of attention being paid to the role of public transportation in addressing inner-city mobility problems, there is very little evidence of the degree to which one

affects the other. In other words, very few urban researchers have specifically focused on how labor participation is affected by increases in public transportation availability.

### 1.1 NEED OF STUDY:

The urban transport problems in India are acute because of rapid motorization. The major challenge for urban transport managed by ULB's in India is how to improve the current urban transport situation or at least prevent it from deteriorating further. The urban transport situation in large cities in India is deteriorating. The deterioration is more prevalent in metropolitan cities where there is an excessive concentration of vehicles. Commuters in these cities are experiencing acute road congestion, rising air pollution and a high level of accident risk. Efficient and reliable urban transport systems and its policy are crucial for India to sustain a high growth rate and alleviate poverty.

### 1.2 OBJECTIVES

- To develop accessibility values for origins & destinations to reach the Bus-stops.
- To develop accessibility values for the Network that includes both walking and travel from origin up to the destination.
- To develop the accessibility values for the bus stops.
- To develop relationship between accessibility of stops and travel demand.

## 2. STUDY AREA

The Ahmedabad city is located in the state of Gujarat, which is located in the western part of India. Ahmedabad city is seventh largest metropolis in India and largest in the state. The city is known as the commercial capital of the state and known as the textile capital of India.

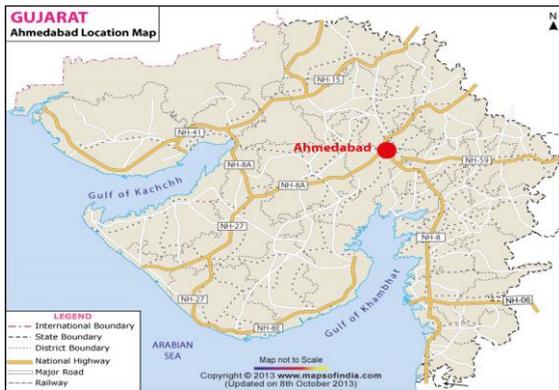


Fig -1: Location of Ahmedabad City



Fig -2: Study area

The study area includes the highlighted portion in the map of Ahmedabad as shown in above fig. This study area includes some of the major transport station which are used by all type of employers in Ahmedabad city to reach their work destinations. The study area having major slums land use characteristics of particular city as shown in below map.

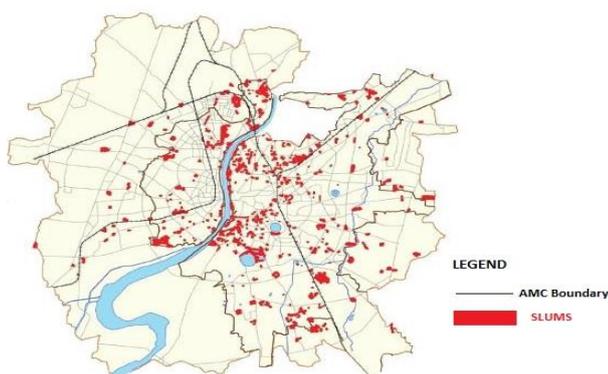


Fig -3: Slums Location in Ahmedabad City

## 2.1 RESEARCH PROBLEM

- At present the public transport services are rather limited and operated within the municipal limits only. At present the public transport services in Ahmedabad. Cities are rather limited and bus is the only mass transport system.

- However the transport system has been unable to cope up with increased demand. With the growth in population, the number of commuters has increased many folds. However the transport system has been unable to cope up with increased demand.
- The bulk of the demand is catered by IPT (auto rickshaws) to sustain the mobility in the city. Rites in the primary survey concluded that para transit share of trips (28%) take away a significant demand due to meager supply of public transport. Bulk of the commuters about 4.7 lakh / per day are using auto rickshaws and total intercity bus passengers are about 2.1 lakh. These together take cater to about 5.6 lakh passenger trips daily.

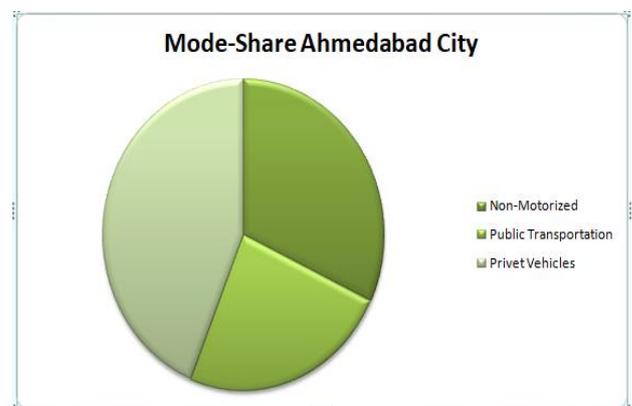


Fig -3: Mode share- Ahmedabad City

- The growth of motorized vehicles in Ahmedabad has increased significantly over the years. The share of two wheelers is highest (about 43%). A significant about 11.3% of vehicles is auto rickshaws and taxis indicating dependence on para-transit modes in the City and needs to be examined critically. It is well understood by the City administration that bulk of the commuter transportation can best be served by public transport and further increase in IPT modes will discourage Public Transport use. The trends in terms of passengers carried out per annum by bus are not increasing. The feet size for City buses is also decreasing.
- It has been that employments in Ahmedabad City are concentrated at some locations or along corridors with high accessibility. The concentration of activity evolves to form a sub-center in longer time. It is, therefore, important to understand the spatial distribution of employment because location of business activities, retail stores, and industrial establishments derives the travel patterns in the city, especially the journey-to-work trips, which largely contributes to the daily travel demand.

### 3. FUTURE OUTCOME

In this review paper the study is to assess the existing condition of public transport; and this will be assessed in terms of accessibility to work places. Also the relation between travel demand in terms of boarding and alighting at the bus stops will be developed through regression analysis and it indicates that the travel demand increases with the increase in the values of accessibility.

### 4. CONCLUSIONS

Based on the results of this analysis, policies advocating increased transit accessibility in addressing urban underemployment are partially supported. The research that has been performed in this area, none has empirically addressed the claim that public transportation represents an effective or efficient strategy to combat unemployment. Despite other findings in the spatial mismatch, it appears possible that transit can overcome the physical separation between the residential locations of nonwhite workers and job locations. The measures of accessibility generated here allow for a long term vision. Having access to more jobs within the labor market increases the number of opportunities available to the disadvantaged population in the long term. On the other hand, the travel time analysis shows the short term impact on individual mobility, since each person is only concerned with how to access her existing job and to what extent the new plan will help her in doing so.

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