

# An Overview of Public Transport Facilities for Physically Challenged People: A Case of Surat City

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## ABSTRACT

Public transportation is the essential component for any rapidly growing city. Effective and efficient public transportation leads to a number of advantages such as smooth movement of traffic, control on pollution, lesser number of private vehicles running on the road, reduced number of accidents and so on; but these all advantages of public transportation can be achieved only when the system of public transportation facilitates and serves all the group of a society including urban poor and disable people. It is often seen that the planning of public transportation lacks or neglect the importance of providing disable friendly components in their system. This leads to the discouragement to use such public transport facilities for the Physically Challenged people and they have to either depend upon some other mode of transport or face number of challenges while travelling with public transport. This study is an attempt to focus on the assessment of disable friendly components in public transport system of Surat. Surat is rapidly developing city and on its path of becoming a smart city. Attempts is made to provide disable friendly planning in public transport system of Surat i.e. BRTS, City bus service.

**Keywords - Public transport, Physically Challenged People, Smooth functioning, BRTS**

## 1. Introduction

India, the largest democracy and the second most populous country in the world has, as per the official estimates, 55 million disabled people of different age groups. Unofficial estimates put the number at 100 million. In other words, 10% of the Indian people are disabled. 'The disabled' in the Indian context usually constitute these four categories: Visually Handicapped, Orthopedically Handicapped, Hearing-Impaired or Deaf and Dumb and the Mentally Retarded. People with disabilities of different types are dispersed throughout the country and in all the states. Gujarat one of the developed state in the country in this state Surat has second largest city population about 48 lacks out of this 5% are disabled people 2.4 lacks approx . In this study planning for this category people according their ability to face barrier to identify this difficulty and create barrier free environment. In this study for planning for disabled and elderly people consider area Surat city. In Surat city consider public places like terminal, intersection, public building. First do field survey photographic survey and interview some aim groups of disabled people and identify their problems and according their problem do planning proposal. Unfortunately, adults with disabilities are twice as likely as those without disabilities to have inadequate transportation. Of the nearly 2 million people with disabilities who never leave their homes, 560,000 never leave home because of transportation difficulties. Leaving people out has real costs to the nation. Keeping people with disabilities at home keeps them out of jobs, away from shopping, and out of community life, and it prevents them from making valuable contributions to our society as individuals, as workers, as consumers, and as taxpayers.

Disability is a complex phenomenon, reflecting an interaction between features of a person's body and features of the society in which he or she lives. People with disabilities (PWDs) report fewer healthy days than the

general population. They have lower rates of health promoting behaviors. Inaccessibility of the natural and built environments often limits opportunities to participate in various types of recreation, sport, and leisure physical activity in both indoor and outdoor settings. A freely accessible society without any physical obstacles is a first and foremost requirement to mainstream people with disabilities. Living with a disability poses unique challenges and can influence participation in many activities. Travelling is one activity that many people with disabilities feel must be sacrificed as it requires an orchestrated cooperation of physical, mental, and social capabilities, which are often adversely affected or compromised by a disability.

People with diverse disabilities (sensory or physical) and reduced mobility (people with health problems for example respiratory, cardio-vascular, joint problems or temporary ailments); senior citizens; pregnant women; families with young children and people with heavy luggage, etc., constitute sizeable number of the population. Since majority of this segment belong to lower and middle-income group, it is beyond their economic capacity to use private taxis/three-wheeled auto rickshaws or purchase their own vehicle and are, therefore, dependent on public transport. Existing transportation system, i.e., vehicles, terminals, and operations are either full of obstacles or impossible to use. It induces fatigue, restricts educational and employment opportunities, causing frustration. It hinders right to freedom of movement, equal participation and access to health. These days there is lot of emphasis on making our society disabled friendly. However, efforts of city planners often fall short of expectations.

## **2. Disability**

The United Kingdom in the 1970s, which challenged how the medical concept of disability dominated perception and discourse about disabilities. Debates about proper terminology and their implied politics continue in disability communities and the academic field of disability studies. In some countries, the law requires that disabilities are documented by a healthcare provider in order to assess qualifications for disability benefits of disabled people. Physiological functional capacity (PFC) is a related term that describes an individual's performance level. It gauges one's ability to perform the physical tasks of daily life and the ease with which these tasks are performed. PFC declines with advancing age to result in frailty, cognitive disorders or physical disorders, all of which may lead to labeling individuals as disabled. Contemporary understandings of disability derive from concepts that arose during the West's scientific **Enlightenment**; prior to the Enlightenment, physical differences were viewed through a different lens.

### **2.1 Types of Disability**

According to World Health Organization, Disabilities is an umbrella term, covering impairments, activity limitations, and participation restrictions. An impairment is a problem in body function or structure; an activity limitation is a difficulty encountered by an individual in executing a task or action; while a participation restriction is a problem experienced by an individual in involvement in life situations.

Disability is thus not just a health problem. It is a complex phenomenon, reflecting the interaction between features of a person's body and features of the society in which he or she lives. Overcoming the difficulties faced by people with disabilities requires interventions to remove environmental and social barriers.

People with disabilities have the same health needs as non-disabled people – for immunization, cancer screening etc. They also may experience a narrower margin of health, both because of poverty and social exclusion, and also because they may be vulnerable to secondary conditions, such as pressure sores or urinary tract infections. Evidence suggests that people with disabilities face barriers in accessing the health and rehabilitation services they need in many settings.

- **Autism**

A developmental disability significantly affecting verbal and nonverbal communication and social interaction, generally evident before age three, that adversely affects a child's educational performance. Other characteristics often associated with autism are engaging in repetitive activities and stereotyped movements, resistance to environmental change or change in daily routines, and unusual responses to sensory experiences. The term autism does not apply if the child's educational performance is adversely affected primarily because the child has an emotional disturbance.

- **Deaf-Blindness**

Concomitant [simultaneous] hearing and visual impairments, the combination of which causes such severe communication and other developmental and educational needs that they cannot be accommodated in special education programs solely for children with deafness or children with blindness.

- **Deafness**

A hearing impairment so severe that a child is impaired in processing linguistic information through hearing, with or without amplification, which adversely affects a child's educational performance.

- **Developmental Delay**

Children from birth to age three (under IDEA Part C) and children from ages three through nine (under IDEA Part B), the term developmental delay, as defined by each State, means a delay in one or more of the following areas: physical development; cognitive development; communication; social or emotional development; or adaptive [behavioral] development.

- **Emotional Disturbance**

A condition exhibiting one or more of the following characteristics over a long period of time and to a marked degree that adversely affects a child's educational performance:

- (a) An inability to learn that cannot be explained by intellectual, sensory, or health factors.
- (b) An inability to build or maintain satisfactory interpersonal relationships with peers and teachers.
- (c) Inappropriate types of behavior or feelings under normal circumstances.
- (d) A general pervasive mood of unhappiness or depression.
- (e) A tendency to develop physical symptoms or fears associated with personal or school problems.

The term includes schizophrenia. The term does not apply to children who are socially maladjusted, unless it is determined that they have an emotional disturbance.

- **Hearing Impairment**

An impairment in hearing, whether permanent or fluctuating, that adversely affects a child's educational performance but is not included under the definition of "deafness."

- **Intellectual Disability (formerly known as Mental Retardation)**

Significantly sub average general intellectual functioning, existing concurrently [at the same time] with deficits in adaptive behavior and manifested during the developmental period, that adversely affects a child's educational performance.

- **Multiple Disabilities**

Concomitant [simultaneous] impairments (such as mental retardation-blindness, mental retardation orthopedic impairment, etc.), the combination of which causes such severe educational needs that they cannot be

accommodated in a special education program solely for one of the impairments. The term does not include deaf-blindness.

- **Orthopedic Impairment**

A severe orthopedic impairment that adversely affects a child's educational performance. The term includes impairments caused by a congenital anomaly, impairments caused by disease. (e.g. poliomyelitis, bone tuberculosis), and impairments from other causes (e.g. cerebral palsy, amputations, and fractures or burns that cause contractures).

### 3. Problems

As per Census 2011, in India, out of the 121 crore population, about 2.68 Crore persons are disabled which is 2.21% of the total population. From the total number of disable people in India, approximately 70% people are physically challenged (i.e. having disabilities like blindness, deafness, movement, speech and so on.) (Source: Disable person in India: a statistical profile 2016). The city of Surat has developed rapidly in the last decades and is on the path of becoming smart city. Effective public transportation is a key tool for any smart city and therefore, it should be such that each and every person should be able to use it easily and effectively including those having physical or mental disabilities. But in this case as surat city is more depended on private vehicle, there is no scope of disable people to use public transportation as no special provisions are given for them. Every special provisions should be specially given for disable people.



Figure 1



Figure 2



Figure 3



Figure 4

#### 4. Conclusion

Many studies have focused on the disabilities study. Though, less research has been done to the specific area such as Public transport facilities. In the study we found that disable friendliness of public transport facilities remains a unrealized goal for the most part in Surat city. Transport facility was far from being acceptable than to be called disable friendly. There is lack of symbols and signages at the station nor were any warning signs for visually impaired. There was no pathway for pedestrians to enter the station and external environment had lot of obstructions not easily detectable by Physically Challenged People and vision impaired making it difficult for them to travel safely. In transport Priority seating is often taken up by other passengers and the disabled/elderly priority seating policy was not always obligatory by the driver.

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