CHAPTER-III

EVOLUTION OF PUBLIC BUS TRANSPORT SYSTEM

3.1 Evolution of Public Transport System

The most important part of human life is transport. It makes the people to travel from one place to other place. To make them feel convenient and comfortable with their position, different modes of transportation system are found and it is evolved from the earliest stage to the present stage of transportation system. At present, with the upgraded technology, up to the possible extent the transportation systems in different modes are developed.

Initially, the public transportation system has developed from the level of walking to the air transport system. In ancient days, due to the development of human civilization, there is a drastic change in human life style as well as in the development of transportation system. In general, in earlier days, the human being walked in the bare feet from one place to other place. They walked miles and miles of distance in those days. But later on, because of technological up gradation, human being invented many transportation modes for their survival and for their travel. Such kinds of inventions help them to travel as well as to uplift their standard of life. The transports are used for official and business purpose as well.

In this chapter, the researcher gives the details about the evolution of other Public transportation modes, need for effective public transport system, service providers operated from Chennai district and services offered at bus terminals. The details of other modes of transportation systems are given in the following paragraphs.

3.2 Other Modes of Transport

3.2.1 Walking

In olden days, people have the habit of walking and they often walked and covered long distances on foot. Still the walking habit among the public continues and the same is an essential mode of transport specifically in rural areas.

3.2.2 Palanquin
Palanquin is a other kind of transportation system. Another name of Palanquin is palkis. It was generally used by rich people for their travel. Formally this system of transportation used to carry royalty and holy man. In many temples, one can see the sculpture of palkisand gods being carried on palkis. Later on, this kind of transportation mode was used by European rich people prior to the arrival of railway lines in India. In Tamilit is called ‘Pallaku’.

3.2.3 Bullock Carts and Horse Carriages

Another mode of transport is Bullock cart. It is also used for transportation purpose, especially in rural India. After the arrival of British rule in India, there was improvement in transport system and the horse carriages were also used for transportation purpose. Now it is used in some of the smaller towns and it is called ‘Tonga’ or ‘Buggies‘. Tonga is generally used for tourist purposes. The horse carriages are rarely found in the metropolitan cities of India. cite_note-fadingtonga-12 In recent years, some of the cities have stopped the usage of the bullock carts on the main roads.

3.2.4 Hand-pulled Rickshaws

The people of Kolkata are still using the hand pulled rickshaws where a person pulls the rickshaw manually. In 2005, the Government of West Bengal proposed to prohibit these hand-pulled rickshaws. The proposal submitted in legislature aimed to stop this mode of transport and it was passed in Legislative Assembly of West Bengal in 2006. But still it was not completely implemented. The Government of West Bengal is still working on it and making amendment to the said Proposals.

3.2.5 Cycle Rickshaw

Cycle rickshaw was introduced in India from 1940. It is slightly bigger than a tricycle. In this kind of transportation mode, two people can sit on the rear seats of the vehicle, and a person pedals it from the front side of the vehicle. In the year 2000, usages of cycle rickshaws were stopped in many cities to avoid traffic congestion. Generally, from the public point of view, the cycle rickshaws are the cheapest mode of public transport. In North Chennai of Tamil Nadu, the people are still using it for their day-to-day purpose. In
addition to this, the environmentalists also support this mode of transportation system as they felt, it is a non-polluting and inexpensive mode of public transport.

3.2.6. Pedi cabs

This kind of transportation system operated in poor or crowded places and it comes in different shapes and sizes in the country like Philippines. It is also called “Trisikads” and it is like a regular bike with a sidecar attached.

3.2.7. Bi-Cycle

Bi Cycles is a common mode of public transport in India. India is the second largest manufacturer of bicycles in the world. In India, Pune was the first city having separate lanes for cycles and they were built in the year 2008 mainly for Commonwealth Games. The recent development in Delhi confirms that the bicycle riding is so popular in India. The State Government of Delhi planned to build separate lanes for bi-cycles on all major roads to protect environment, to control pollution and to reduce traffic congestion.

3.2.8. Auto Rickshaws

Auto rickshaws are three wheeler vehicles without doors. They are generally hired. The space of vehicle generally is sub-divided in to two cabins, one cabin allotted for driver at the front and the second cabin is meant for the passengers at the rear side of vehicle. Generally, the auto rickshaws are painted in green, yellow or black color and they have yellow, black or green cover on the top, but designs may vary from place to place. In many metropolitan cities, Auto Rickshaws are installed with regulated meters to charge exact fare. The regulations are imposed to prohibit the auto rickshaw drivers from charging high fare than the regulated and reasonable fare. In India, at the airport and almost in all the bus terminus and the railway stations, they have the facility of prepaid auto system where the passengers should pay a prescribed regulated fare fixed by the local authorities for various destinations.

3.2.9 Taxi

In general, the taxis can be hired from taxi-stands. The public can hire them by phone or hire it from the city streets. As per the regulation of the government, all taxis are
required to install regulated fare-meter. The additional charges may also be imposed or paid for carrying luggage, for late-night services, toll taxes and waiting time. The same is to be borne by the passengers.

### 3.2.10 Two Wheelers

Two wheelers are the popular mode of transport due to their fuel efficiency and level of comfort to use them in congested traffic. Usually, the number of two-wheelers sales is more than that of the sale of cars. In India, Hero Honda (now it is separated into two - Hero and Honda), TVS Motors, Bajaj and Mahindra and Vespa are the major two-wheeler selling companies. Wearing protective headgear is mandatory for both the rider and the pillion-rider in many cities when they ride bikes. Government of Tamil Nadu very often insists on all two wheeler riders to wear helmet to protect them from accidents and to ensure safety when they travel in bikes. Almost in all States, the people show considerable interest in buying bikes as well as in riding a bike.

### 3.2.11. Trams and Light rail

In developing country like India, the trams were introduced by the British people and they have found in many cities including Mumbai, Chennai and Kolkata and it is in use in Kolkata and they facilitated emission-free means of transport. Trams are a kind of vehicles which can be operated in city streets. Generally, they have higher capacity than buses. Light rails are a modern version of trams.

### 3.2.12. Rail Transport

In rail transport, a train runs on two parallel steel rails. A train has many compartments attached to it. Rail can carry both passengers and freight. In India, Delhi Metro rail system operated from 2002. It has attracted other States to build metros to increase rail accessibility. Mumbai Suburban Railway commenced its services from 1867. Mumbai Railway has the highest passenger density. Apart from these two railway segments, the third segment is, Kolkata Suburban Railway which is established in 1854. Its first service of Kolkata Railway operated between Howrah and Hooghly. In Delhi Metro rail system, over a billion travelers travelled within seven years from its inauguration. Kolkata initiated a circular rail line system and Chennai is building its elevated rail
transit called MRTS (Metro Rapid Transit System). Kolkata is the first city in India which possesses a subterranean (operates below the surface of the underground) rapid transport system. The Kolkata Metro commenced its operations from 1984. Rapid transit systems are also in progress in the following States such as Hyderabad, Bangalore, Ahmadabad and Mumbai. Rapid transit systems are shortly to be introduced in Thane, Pune, Kanpur, Lucknow, Amritsar and Kochi.

3.2.13. Water Transport

Water transport includes boat, ship or sail boat over a body of water, such as sea, ocean, lake, canal or river. Water transport is a highly suitable and efficient method of transportation system to transport larger quantities of goods, and public transport by water is less costly and cheaper than the air transport for Continental shipping. Water transport has been the largest carrier of luggage. Recently the importance of water or sea travel for passengers decreased because of air transport.

3.2.14. Air Transport

After rocket, the aircraft is the second fastest method of transport. Aviation is able to transport the people in a quicker manner with the limited cargo over longer distances, but generally, it is highly expensive and too much of energy consumption is there to operate it. In India mostly it is used by upper middle class, rich people and the people who want to go to other countries due to personal reasons, official and business purpose with in a short span of time. (Cooper et al., 1998: 281).

3.3 Need for Effective Public Bus Transport System in India

90% of the Indian population use the services of public bus transportation and it is a convenient mode of transport for all classes of Indian society. Most of the State Transport Corporations are owned and operated by the respective State Governments.

On the other hand, after the economic liberalization, State Transport Corporations and other bus transport service industries have introduced many facilities like low-floor buses for the disabled and air-conditioned buses to attract public. In India, Bangalore was the first state which introduced Volvo Intra-City Buses in January 2006.
The Karnataka State Government has also taken many initiatives such as Bus Rapid Transit Systems (BRTS) and air-conditioned buses to enhance the quality of public bus transport systems. Bus Rapid Transit systems (BRTS) also came into force in many States such as Pune, Delhi, Ahmadabad, Visakhapatnam and Hyderabad. High Capacity buses are also found at cities like Mumbai, Bangalore, Nagpur and Chennai. Bangalore was the first Indian city which installed an air-conditioned bus stop which is situated at Cubbon Park.

The City of Chennai built Asia's largest Bus terminus, the Chennai Mofussil Bus Terminal (CMBT). The public and private bus transport service industries plan to provide low-cost connectivity to the economically backward sections and to the financially poor people of the society.

Apart from these above facts, still the bus transport service industries are not able to cope with the desires, needs, and expectations of the people and are not able to assess or to estimate the pulse of the passengers as well as their satisfaction. There is a need for an effective Public Bus Transport System with quality standards to fulfil the needs of the passengers.

In general, when the experts compared the modes of transportation systems, bus transport and its services are more indispensable, convenient and very easy to access. Mostly bus transport may suit the needs of the passengers and facilitate more in all aspects. It takes the people from one place to another place to enable them to carry out their day to day activities and business. Hence, the effective bus transport with good quality service is important, and it plays a vital role in day-to-day life of general public. Bus transport services and the public bus transportation system are like central nerves system of a human body. Bus transport connects people from different income group and it aids the people to commute for personal reasons and to build their business contacts.

Hence this research is undertaken to appraise and assess different kinds of bus passengers who have different attitudes and psychology, pre-travel expectations and post-travel opinions towards the public sector and private sector bus transport service industries such as SETC, TNSTC, and Private Omni buses operated from Chennai district to various destinations.
3.4 Public Transport System in India

After the Independence of India, transport became an important element for the country’s economic development. Due to liberalization of economy, in the year 1990, the country’s internal infrastructural growth has developed in a quicker pace. The result of infrastructural development is the tremendous growth of different modes of transport by land, water and air. The automobile industries are also highly developed. The public transportation is the primary mode of transportation for the majority of the Indian population. Public transport systems in India are among the most frequently and widely used transport systems in the world.

In spite of these developments in transportation sector, the public and private sector bus transport service industries are still facing many challenges with a lot of hurdles because of outdated infrastructural system, lack of supervision, and population explosion. The demand for public transport, its infrastructural development and services are increasing day-by-day. But the infrastructural facilities are not sufficient to meet the demands of the country’s population.

3.5 Service Providers Operated In Chennai District

3.5.1 State Express Transport Corporation (SETC)

The bus transport corporation was formulated exclusively to operate only long distance express services to connect the entire district headquarters in the State of Tamil Nadu with Chennai district and the same is also implemented by Government of Tamil Nadu from the year 1975. The long distance express services which were operated by previous Tamil Nadu State Transport Department was transferred to the Express wing of Pallavan Transport Corporation with effect from 15.9.1975. The Express wing of Pallavan Transport Corporation was registered on 14.1.1980 and the same was named Thiruvalluvar Transport Corporation. (TTC). Thiruvalluvar Transport Corporation which started with 276 buses at the beginning stage is now renamed as State Express Transport Corporation Ltd.,SETC’s main objective is to achieve operational efficiency in its day-to-day activities and fulfill the needs and expectations of the long distance bus passengers. At present, SETC is one of the most affordable public bus transport service providers which carry up to
2 Lakhs passengers per day. With an objective of providing more comfortable travel to the passengers, SETC operates 310 Ultra Deluxe Buses with 36 numbers of seating capacity with air suspension and pollution free system in Inter & Intra State bus routes. SETC operates long distance buses exceeding 250 Kms and above, in the entire State of Tamil Nadu which connects all important capital cities, historical, religious and commercial places. It also connects the neighboring States such as Andhra Pradesh, Kerala, Karnataka and Union Territory of Pondicherry with Tamil Nadu especially Chennai District.

SETC has also initiated several promotional measures like introduction of online ticket booking facilities, payment of bus tickets through credit cards, 10% discount for the senior citizens, 10% discount for group ticket booking, zero waiting time, reservation of seats for ladies, introduction of one week valid card for Rs.500/- to travel by any bus in SETC. There are 21 Computerized Reservation Centers and 27 Manual Reservation Centers in SETC. It has earned the appreciation and received compliment from the passengers in Southern India because of its efficiency, punctuality, safety and reliability of services.

3.5.2 Services Offered by Transport Corporations at CMBT

3.5.2.1 Introduction to ISO Certification of Chennai Mofusil Bus Terminal (CMBT)

As per the news in “The Hindu” dated 28.12.2005, The Chennai Mofusil Bus Terminal (CMBT) at Koyambedu got ISO certification. CMBT, the biggest bus terminus in Asia got ISO 9001:2000 certification for its quality management and maintenance. According to the official sources, “It is the only bus terminus which achieved this distinction in India”. The certificate was given by Geneva-based International Organization for Standardization to the Chief Minister of Tamil Nadu at the Secretariat, Chennai. The Government of Tamil Nadu officials have also given their official statement that CMBT has all the facilities required for a `special class bus stand'. All kinds of special facilities were already provided and it is still trying to upgrade the existing facilities at CMBT and raise it to international standards. The government officials also point out that the Government of Tamil Nadu has proposed to apply for the Quality Management System Certification of ISO 9001:2000.
After an intensive survey, taking all aspects into consideration especially the traffic density by 2015, the CMDA had constructed the “terminus, which is exceptional in many ways, more particularly the ultra-modern facilities provided for the operation of buses.” It was built at an estimated cost of Rs.103 crores, including the cost of 36.5 acres of land. The efforts were taken by CMDA to get ISO 9001:2000 certification during June 2005, “Initially it was a difficult one because so far no bus terminus was taken up for such kind of international certification.” But it achieved its target. The CMDA also struggled to get the global recognition by setting out objectives such as (a) Achieving users or passengers’ satisfaction at all levels (b) Maintaining zero defect at facilities level (c) Continuous improvement in quality service to the passengers, (d) Innovative services to satisfy the desires, needs of passengers or travelers. The final assessment was made at the highest level from the certifying body, which certified that, the CMBT eligible for ISO 9001: 2000.

ISO certification may help the Chennai Mofussil Bus Terminal (CMBT) to improve its quality of standards such as getting global acceptance, intensive, effective documentation of records, removal, reduction of errors, self-motivated and corrective system to increase passengers’ confidence as well as satisfaction, service efficiency in its performance and operations, motivating its service personnel’s, ensuring competitiveness to enhance the better management system, optimal utilization of its resources and applying cost control measures for cost reduction.

The CMBT terminus has a capacity to handle over 2,000 buses and two lakh passengers per day. The State bus transport services, Express bus services, Private Omni bus services which were operated from Parry’s bus terminus, Chennai was shifted to Koyambedu to reduce the congestion in Parry’s bus terminus, Broadway, Chennai.

3.5.2.2 Highlighted Features of CMBT

CMBT is functioning since 18th of November 2002. The total area of CMBT is 36.5 acres with the total built up area of 17840 square feet, which includes a Main terminal hall, Bus finger, Office space, Shops, Maintenance shed, Crew rest rooms and other incidental structures. The terminus has space for 270 buses, three hotels and three smaller eateries, 18,000 square feet waiting hall facility for passengers, 25,000 square feet parking space for auto rickshaws, cabs and private cars and 16,000 square feet parking space for two-wheelers. Three locker rooms and 10 travel agency offices have also been provided and the
same was acknowledged by the officials of Tamil Nadu State Government in official press release.

3.5.2.3 Underground Parking at CMBT

On 27th December 2010, the former Deputy Chief Minister M.K. Stalin inaugurated a two-level underground parking facility for two-wheelers at the Chennai Mofussil Bus Terminus in Koyambedu. The news came in ‘The Times of India’ on 19th January 2010. The CMBT at Koyambedu has a two-level underground parking facility at a project cost of Rupees twelve crore. The advanced facility built with new technology in the vacant space of CMBT has a capacity to accommodate 3,000 two-wheelers. At present 12,000 two-wheelers are parked in the terminus every day. The existing two-wheeler parking area is allotted for car parking.

3.5.2.4 Child Help Center at CMBT

Chennai City Police started a ‘Child friendly Centre’ at the Chennai Mofussil Bus Terminal (CMBT) at Koyambedu, Chennai to give aid for the lost and wandering children and for the victims of child abuse. This centre works for the prevention and healing or curing of children subjected to physical abuse or other kinds of tortures. Toys and other play materials have been kept at this centre to make the children’s feel comfortable.

3.5.2.5 Customer Relationship Management (CRM) in SETC

The crews of SETC were trained to behave politely with the passengers. Since its budding stage, SETC maintains cordial relations with all its passengers. To ensure comfortable travel to the passengers, the vehicles are halted at proper places for passengers to have refreshment. Halting of buses at motels gives sufficient break during journey and it also helps to relieve the stress and strain of passengers. SETC permits cancer and TB patients to travel with concessional fares from their native place to the nearest Government Hospital to get medical treatment. Public information counters have also been functioning in the main bus stands of this Corporation throughout Tamil Nadu. Public grievance cell is also established exclusively to monitor and implement the suggestions made by the public.
All the public grievances have been computerized effectively to give correct, appropriate solution for their problem.

3.5.2.6 Metro Rail Stations at CMBT

Access to the Chennai Mofussil Bus Terminus (CMBT) in Koyambedu is stress-free for metro rail travelers, because Chennai Metro Rail is built inside the bus terminus. City-based Consolidated Construction Consortium Limited (CCCL) has got contracts to build 10 prominent stations of Chennai Metro Rail including the Metro rail station at the CMBT. These stations are built in Koyambedu-Alandur stretch of Corridor 2 and the Little Mount-Officers’ Training Academy (OTA) stretch of Corridor 1.

3.5.2.7 Future Proposals to form a Satellite Mofussil Bus Terminals in Chennai District

There is a proposal to establish Satellite Mofussil Bus Terminuses in Velachery and Madhavaram to reduce traffic congestion in Chennai city. The proposal of the Chennai Metropolitan Development Authority (CMDA) is to reduce too much of public crowd in CMBT. They will provide all kinds of facilities that are available in CMBT. A terminal hall, large office space, shops, crew rest rooms and other incidental structures are expected to be constructed soon.

3.5.3 Tamil Nadu State Transport Corporation (TNSTC)

Tamil Nadu State Transport Corporation (TNSTC) is a government owned bus transport unit. Cheran Transport Corporation Limited was incorporated as a Company in 1972 and it commenced its services from 1972 with 110 buses. Tamil Nadu State Transport Corporation (Coimbatore Division III) Ltd., has been merged with Tamil Nadu State Transport Corporation (Coimbatore Division I) Ltd., with effect from 2000. At present, the principal area of operation of TNSTC is both Coimbatore and Nilgiris Districts.

3.5.4 Private Omni Bus Transport Services in Chennai District

In Chennai, many private Omni buses are also operated by private individual owners and other transport companies to facilitate passengers who are willing to travel in buses and to fulfill their needs. Even though more numbers of buses are operated from the
government side, Private Omni buses are also plied in more numbers to various destinations or different parts of inner and outer State of Tamil Nadu due to heavy demand for quantity and quality wise needs and expectations from the general public. More over, the passengers also prefer Omni buses even though the fare is too costly than the public sector buses such as SETC and TNSTC because the facilities and luxuries provided and the quicker reach to their destinations. Now the passengers are willing to spend their money to get good quality service from the bus transport services of particular service providers. Routine passengers who become customers for a particular service provider are their backbone and they are needed for the survival of the private Omni bus transport service industries in Chennai and to make them compete with the Public sector bus transport corporations and to grow. Hence, the Private Omni bus transport operators are trying to satisfy their passengers with more services with required quality.