

Tracing the Trajectory of Road Transportation in Colonial Mumbai

Minal A. Mapuskar

Assistant Professor, Department of Political Science, DES' Kirti M. Doongursee College, Dadar(W), Mumbai, Maharashtra, India

Abstract

Transportation is the lifeline of the cities. Transport infrastructure and the ease of commuting make cities different than the rural areas. Transportation not only provides access to jobs but also performs a much wider and meaningful role in urban life. The access of city people to healthcare, education, cultural centers, and recreational activities including shopping and entertainment largely depends on the quality of urban transportation. Development of a city over the years largely depends on its transportation networks. In this context, the paper seeks to trace and examine the trajectory of the road transportation in the city of Mumbai during colonial phase. The paper argues that the development during the colonial phase has provided the foundation that later help Mumbai to become financial capital of India and leading global city. The study has employed qualitative techniques and primarily based on secondary sources of information.

KEYWORDS- Road Transportation, Public Transportation, Mumbai

Introduction

The city of Mumbai (then called Bombay: 'Bom' 'Bay' in Portuguese meant 'Good Bay') originally consisted of seven islands namely Colaba, Mazagaon, Old Woman's Island, Wadala, Mahim, Parel, and Matunga-Sion. This group of islands eventually was joined together by a series of reclamations to form today's Mumbai city. Portuguese got these seven islands from Sultan Bahadur Shah of the Gujarat Sultanate because of signing the Treaty of Bassein between the two in 1534. In 1661, these islands were given to British by Portuguese as a gift in the Royal wedding of Portuguese princess Catherine Braganza and British King Charles II. In 1669, the British Crown gave these islands to East India Company on an annual rent of 10 pounds of gold (Burnell, 2007). Major development of Mumbai took place during British Rule.

Today, tiny island city of Mumbai, has earned thereputation as India's commercial and financial capital. The city is spread over a geographic area of 467.81 sq. km that houses about 12.4 million people. (MMRDA, 2016). It is a coastal city that serves as the capital of the State of Maharashtra. Due to its spread that has occurred owing to a number of factors, the city has developed into a contiguous metropolitan area termed as Mumbai Metropolitan Region.

The Mumbai Metropolitan Region is one of the world's largest urban areas with a population of 18.39 million that makes it India's most populated metropolitan areas, according to the Census Report of 2011 (Census, 2011). It is spread over 4,355 sq. Km. and has 20 urban local bodies. It has emerged as a significant region in terms of its contribution to the economy of India. The MMR alone accounts for six percent of India's economy, ten percent of factory employment, twenty percent of income tax collections, sixty percent of customs duty

collections, twenty percent of central excise tax collections, and about forty percent of foreign trade (World Bank , 2016, p. 1). Several Indian financial institutions, such as the Bombay Stock Exchange, the Mint, and numerous Indian companies, such as the Tata Group, Essel Group, and Reliance Industries have headquarters located in Mumbai. But at the same time, more than half of Mumbai's population lives in slums. This is the result of unchecked migration into the city by people in search of jobs, antiquated housing laws and accelerating real estate prices.

Transportation has played a crucial role in making Mumbai the leading city of India. The elaborately developed network of the suburban railway and bus routes earned it a repute of one of the most public transport friendly city of India. The paper, therefore, intends to examine the evolution of road transport in colonial Mumbai.

Late Eighteenth Century: Initial Transport and Road Construction

During the eighteenth century, transportation in the city was completely dependent either on foot or on the animal powered vehicles. The usual means of conveyance in the city were called the shigram (horse-drawn vehicles), the rekla (bullock-drawn vehicles) and the palkhi (palanquin). Later, the 'gharry'- a horse-drawn vehicle came into the picture. A modified version of it called the 'Victoria' began to operate on the roads in 1882. There were some 30 stands for vehicles in the city. Bullock carts carried all the heavier goods (Dave, 2014).

The latter half of the eighteenth century witnessed a boom in the road construction activity under the governorship of Jonathan Duncan from the year 1795 to the year 1811. He proposed a plan for widening and expansion of roads in Mumbai. He took enormous efforts to connect all islands of Mumbai to boost the trade. He very skilfully utilised the labour force that was available due to widespread famine in many parts of the country. The famine-ridden people had migrated to Mumbai in search of work. This labour power was used by the Governor to reclaim Thane Creek for constructing a bridge connecting Sion in Mumbai to Kurla in Thane district. It was called the Sion Causeway or Duncan Causeway. (Thana District Gazetteer XIII, 1984 [1882]). The work continued from 1798 to 1805. Thus, a win-win situation was created as labour were guaranteed enough rations in return for their work. The construction cost was very high. Hence toll was imposed to recover the cost after the construction of the bridge. It thus became the first toll bridge not just in Mumbai but in India. The bridge proved very beneficial, especially to the trading community.

Nineteenth Century: Increased Traffic and Expansion of Roads

In 1818, when Mumbai became Bombay Presidency's capital, the population further increased due to more in-migration. Several government offices were established that attracted more people for jobs. The increasing prosperity brought improvements in the existing transport modes. For instance, baggies (horse-drawn comfort carriages) became popular among the wealthy class of the city. Khatara carts were used for carrying goods.

Several regulations were brought in with respect to traffic and transportation in the growing city on the background of the rapidly increasing number of vehicles in the city. Most of these vehicles were animal-drawn like bullock carts (called reklas, shigrams), horse carts (gharries) or human drawn palanquins

(Palkhis/Menas). Their growing numbers was causing a lot of trouble to the pedestrians often leading to fights and accidents. Hence, regulations were brought in the year 1812. The rules with respect to the maximum speed limit, direction of traffic, compulsory registration, and parking were introduced. Non-obedience to these rules was made a punishable offense (Dusar, 2013, p. 44). In 1817, taxes were imposed on wheels and horseshoe. This amount raised through taxes was used for creating and repairing roads. Thus, many roads and footpaths were built during this period.

The increased number of people and vehicles required modifications in existing traffic rules. Better transport infrastructure was needed. Thus, about 25 to 30 official parking lots were provided at places such as Colaba, Girgaon, Appolo Bandar, Lalbagh, and Portuguese Church. Rates were fixed for rental vehicles. For instance, a horse cart and a Rekla was charged four annas and three annas respectively for one mile (Dusar, 2013, p. 45). Several restrictions were imposed on digging roads. Fines and penalties were laid down for not filling the ditches after completion of repair works, wrong side driving, and causing hindrance to traffic.

- *Creation of New Roads*

New roads were built to connect the expanding city to the main island city. In 1838, Colaba Causeway connecting Colaba to Mazgaon was built. In 1837, twenty ships full of people (labour) going to work from Bandra to Salset islands sank in the swampy Mahim Creek. Despite this incident, the Company government refused to build the road. On this background, Mahim Causeway joining Mahim to Mazgaon was completed from the generous donation of Rs 1.5 lakh given by Indian Parsi philanthropist, Sir Jamshedji Jeejeebhoy and Lady Avabai Jamshedji Jeejeebhoy. The work began in 1841 and was completed in 1845 (History of Mumbai, 2017). This road is still known as the Lady Jamshedji Road.

- *The Beginning of The Railways*

Till the mid of 19th century, Mumbai city had an animal-based non-motorised private transport. In 1853, a new era began in the transportation history of not just Mumbai city but India as well. On 16th April 1853, the first railway train ran between Mumbai and Thane. Within a decade, it reached Pune by crossing Khandala Ghat and Ahmedabad by crossing the Vasai creek.

The expansion of Railways increased the number of people and amount of goods entering Mumbai city. Hence there was an inevitable need to widen and expand the existing road system for the smooth circulation of passengers and goods within the city. Also, there was a need to control increased criminal activities. Hence Police Act 13 was enacted in 1856 that created posts of Police Magistrate and Justice of Peace. Special powers were granted to Police to handle traffic in the city (Dusar, 2013, p. 51).

- *Increased Prosperity: Increase In Traffic*

An international event that proved to be a boon for Mumbai's material development occurred in the second half of the nineteenth century. This event was the American Civil War (1860-65). Due to the civil war, the supply of raw materials for British industries came to a standstill. It increased the importance

of Mumbai Port for supplying raw materials to England brought in from different parts of India through railways and roads. The opening of the Suez Canal was another very important international event that changed the fate of the city. Due to this, the distance between Europe and India was greatly reduced.

The increase in trade through Mumbai further increased the prosperity of the city's trading class. The increased affluence led to an increase in the number of vehicles in the city. The existing roads were insufficient to handle the increased load of vehicles. The reckless driving, on road parking etc., became reasons for the increased number of road accidents. The worsening situation and the anger of common people of the city led to the passage of the Conveyance Act no.2 in 1863. This was the first independent act controlling vehicles in the city (Dusar, 2013, p. 52). Today's traffic police department owes its origin to this Act. The Act made vehicle registration compulsory. It made provision for armed policemen for patrolling the traffic in the city.

- *Expansion of Road Infrastructure*

The period from 1860 to 1870 saw the beginning of modern roads in the city. A road was built connecting Rani Bag to Mahalaxmi Temple. Appolo Street was widened. Reclamations took place in areas of Mazgaon, Dongri, Girgaon, Byculla, and Mahalaxmi. However, these reclamations attracted more people in the city. Hence, the construction of new roads in these areas became necessary. Road widening of roads in Kamathipura, Girgaon began. Worli-Parel road (Fergusson Road) was completed. Construction of seven roads around Jacob Circle began. The roads constructed were of small stones. Steamrollers were used to press the stones to form a flat surface.

- *Trams: Asia's First Road Public Transport*

The idea to introduce trams in Mumbai was first mooted in 1864 by a US company. But it could not materialize. In November 1871, the Bombay Omnibus Company published an advertisement in Times of India announcing a launch of a horse-drawn tram service between Malabar Hill and Fort only for the European population at a monthly charge of Rs 30. However, this service was very short-lived and was closed within a few days in absence of sufficient response.

Though public transport dawned in the city in 1853 with the first rail between Mumbai and Thane, there was no public transport as far as roads were concerned. This space was filled up when trams became operational on 9th May 1874. In March 1873, a twenty-one-year agreement was signed between the Municipality (that had come into existence in 1865) and M/s. Stearns and Kittridge. According to the agreement, the Municipality had an option to buy back the whole company with its assets at the end of the agreement period (BEST, 2006).

The Government passed the Mumbai Tramway Act in 1874 to empower the company to run trams on the streets of Mumbai. For laying the iron tracks another company named M/s. Glover and Company supervised by Whiteman Spenicewas appointed. The first tramways were laid in Mumbai's business area that is from Boribunder to Pydhonie via Kalbadevi (David, 2011). These trams were horse-driven. Eight horses typically drove one tram. The tram fare was

three annas between Colaba to Pydhonie and mere one anna between Boribandar (or present-day Chhatrapati Shivaji Maharaj Terminal) to Pydhonie. In 1899, the fare was brought down to one anna for any distance. No printed tickets were issued for first five months. The first day saw a ridership of 451 passengers and total fare collection was Rs. 80 and one annas. Forty -four horses had drawn six cars over a distance of 3.77 miles (David, 2011).

Trams were not only India's but Asia's first road public transportation system (Dusar, 2013, p. 55). The tramcars initially were imported from the USA but later they were built in Mumbai itself. The Tramways connected Sassoon Docks, Byculla Bridge, Girgaum, Pydhonie, Grant Road and Boribandar. The Company had set up two stables at Colaba and Byculla with holding a capacity of 500 and 50 horses, respectively. The horses were imported from countries like Persia, Australia and internally from Punjab. Special attendants were employed to take care of these horses. The Company Headquarters was in Colaba and its efficient Managing Director was Mr. G.A. Kittridge (BEST, 2006).

Electricity reached Mumbai towards the end of the nineteenth century. In 1907, electric trams were introduced that slowly replaced the horse driven trams. A semi-governmental organization named as the Bombay Electric Supply and Tramways Company (precursor of today's Brihanmumbai Electric Supply and Transportation) was established. It took over the tramways company by paying a heavy compensation of Rs 98.5 lakhs. The tramways were extended up to King's Circle. At Dadar, the main terminus was established. This place is still known as Dadar T.T (Trams Terminal). In 1920, double-decker trams were introduced.

- *Arrival of car*

Mumbai's transport growth in the pre-independence period was a replica of that in England. The railways and trams were introduced in Mumbai just a few years after their launch in London. In 1873, the first motorcar made its appearance on the streets of Europe. In 1893, the first car was booked by a European residing in Mumbai. In 1897, the first car arrived in Mumbai. Mr. Foster, the owner of Crompton and Greeves Company, owned it. Just 2 years later, the first motorcycle arrived in Mumbai. Sir Jamshedji Tata became the first Indian to buy and own a car in 1901 and Mrs. Suzan Tata became the first woman driver in India (Mumbai Police, 2015).

In 1897, there were 6426 public vehicles and 4720 private vehicles in the form of victorias, khatara, reklas, and shigrams. Pedestrians were losing importance amidst non-motorised and motorised vehicles. The arrival of the car was thought to be a potential danger for pedestrians. It was mandatory for a bellman to ring the bell to give intimation of car arrival. The average motor speed was 5 to 6 kilometers per hour (Dusar, 2013).

In 1911, the first taxi ran on Mumbai's streets. Taxi ride soon became a status symbol of the wealthy in the city. By 1953, the number of taxis rose to 158. By 1914, many American car models started running on Mumbai's roads. From mere 38 motorised vehicles in 1906 (that included 12 lorries, 8 buses, and 18 cars), the number increased to 565 (Ibid).

- *Motor Vehicles Act*

With the increasing number of vehicles in the city, a new act was felt to be necessary. In 1903, Calcutta (now Kolkata), which was the capital of the British Empire in India, had brought in an act with provisions to effectively handle the exodus of vehicles in that city. A similar act was passed in 1904 for Mumbai entitled Bombay Motor Vehicles Act. This Act made vehicle registration mandatory. License Test was made mandatory and stringent. Mumbai was made the center to register cars not only in the Mumbai City but also in the whole Bombay Presidency.

More vehicles on the roads led to more traffic jams and accidents. The public cry against this forced the Municipality to intervene. The Police Commissioner was asked to make a report on the worsening transport scenario in the city. The report mentioned that 80 percent of the accidents were due to the pedestrians, lacking a sense of traffic as well as due to the non-motorized vehicles and trams. In 1914, a uniform law for the entire country entitled Indian Motor Vehicles Act 1914 was brought in that was subsequently replaced by another act in 1939 (MoRTH, 2015).

A number of reform measures kept coming in to reduce the accidents and improve the traffic condition in the city. For instance, zebra crossings were marked for the first time, in 1919 in the overcrowded areas of the city. In 1920, fare meters were made compulsory for all taxis. In 1920, the Traffic Control Committee with the participation of all stakeholders was formed to aid Police. The Committee was restructured as Traffic Advisory Committee in 1929. The Committee still exists in the city. In 1925, an independent traffic branch of the city police was launched (Dusar, 2013).

- *The Arrival of Public Buses*

With the spread of the city in the suburbs, trams were not able to cope up with the demand for speedy transport. Hence a new vehicle system was needed in the public domain. BEST, therefore, brought the first passenger bus on road on 15th July 1926. There were the following 3 routes initially.

- Afghan Church to Crawford Market
- Dadar T.T. -Parsi Colony to King's Circle
- Opera House-Lamington Road- Jacob Circle to Lalbaugh

Ticket rates were two to six annas. In the very first year, BEST ran twenty-four buses and total annual ridership was six lacs while in the next year thirty-nine buses carried thirty-eight lakh passengers. The introduction of buses too met with resistance from taxi and Victoria owners who feared losing their livelihood. In 1934, the Colaba-Mahim route was started. Ticket rates were halved for children. In 1937, double-decker buses were introduced and the Limited bus service was introduced in 1940 (BEST, 2006).

In 1940, another significant development took place: the establishment of the Regional Transport Office (R.T.O.). This relieved the pressure of the Police Department as functions of motor registration, issuing, and renewal of licenses, inspection of vehicles, motor taxation was transferred to RTOs. In 1947, the BEST service was municipalized. It was renamed as Bombay Electric Supply and Transportation.

The transportation in Mumbai evolved from the late eighteenth century. It saw one of the largest road construction activity in India due to its role as an important seaport on the western coast during the British Rule. Mumbai was the first city in India to get railways and the first city in Asia to have tramways in the nineteenth century. The city slowly emerged as the one with an extensive and reliable public transport network.

References

- Arnold, C. (2012). The Bombay Improvement Trust, Bombay Mill Owners and the Debate Over Housing Bombay's Mill Workers. *Essays in Economic & Business History*, 105-123.
- BEST. (2006). *BEST archives*. Retrieved from BEST undertaking website: https://web.archive.org/web/20061029143341/http://www.bestundertaking.com/his_chap02.asp
- Burnell, J. (2007). *Bombay in the Days of Queen Anne – Being an Account of the Settlement Also: Being an Account of the Settlement*. Read Books. Retrieved 16, 2019, from <https://books.google.com/?id=1a-Apmn-K-gC&printsec=frontcover>
- Census. (2011). *Census Report 2011*. Office of the Registrar General & Census Commissioner, India. Retrieved from <https://www.census2011.co.in/census/metropolitan/305-mumbai.html>
- Chandrashekar, T. (2003, May 26). MUIP will boost MUTP. (N. Bharuchal, Interviewer) Mumbai, India: Times of India.
- Chopra, P. (2011). *A joint enterprise* (1st ed.). Minneapolis, USA: University of Minnesota Press.
- Dave, P. (2014). *How best is Mumbai's BEST :The Public Transport Tale of India's richest city*. Retrieved from Sustainable Cities Collective website: <https://www.smartcitiesdive.com/ex/sustainablecitiescollective/how-best-mumbais-best-public-transport-journey-indias-richest-lady/217976/>
- David, M. (2011). *Mumbai: The City of Dreams* (3rd edition ed.). Mumbai: Himalaya Publishing House.
- Dusar, R. (2013). *Kahani Mumbapureeteel Vahatukichee*. Mumbai: Sanvedana Prakashan.
- Dwiwedi, S. a. (1995). *Bombay: The Cities Within*. Mumbai: India Book House Pvt Ltd.
- Hindusthan Times. (2017, March 30). Mumbai.
- Hindusthan Times. (2017, March 7).
- History of Mumbai*. (2017). Retrieved 16, 2019, from Department of Theoretical Physics (Tata Institute of Fundamental Research): <http://theory.tifr.res.in/bombay/history/>
- JICA. (2017). *The Preparatory Survey on the Project for Construction of Mumbai Trans Harbour Link in Republic of India*. MMRDA. Retrieved from http://open_jicareport.jica.go.jp/pdf/12270351_01.pdf
- Joint Technical Committee. (2011). *Coastal Road Mumbai*. Mumbai: Government of Maharashtra.
- Ministry of Urban Development. (2006). *National Urban Transport Policy*. New Delhi: MoUD, GoI.
- MMRDA. (1996). *Regional Plan 1996*. Mumbai: MMRDA. Retrieved from file:///C:/Users/MINAL/AppData/Local/Temp/Temp1_Part-1%20(1).zip/Part-1/RP_Part-1_Chapter-1.pdf

- MMRDA. (2016). *Basic Transport and Communication Statistics for Mumbai Metropolitan Region*. Transport and Communication Division. Mumbai: MMRDA.
- MMRDA. (2017). *MMRDA - About MMR*. Retrieved 1 21, 2019, from <https://mmrda.maharashtra.gov.in/about-mmr>
- MMRDA. (2017, May 12). *mmrda.maharashtra.gov.in*. Retrieved May 16, 2017, from MMRDA website: <https://mmrda.maharashtra.gov.in/comprehensive-transport-study>
- MMRDA. (2017, May). *www.mmrda.maharashtra.gov.in*. Retrieved May 16, 2017, from MMRDA: <https://mmrda.maharashtra.gov.in/regional-plan>
- MoRTH. (2015). Retrieved June 23, 2016, from Ministry of Road Transport and Highways Website: <http://www.morth.nic.in/writereaddata/mainlinkFile/File672.pdf>
- Mumbai Police. (2015). Retrieved June 13, 2017, from Mumbai Police website: <https://mumbai.police.maharashtra.gov.in/aboutus.asp>
- Nallathiga, R. (2010). *Formulating Urban Transport Strategy: Learning from the experience of Mumbai*.
- Shukla, A. (2011, March 22). Man who saw Tomorrow. *Mumbai Mirror*. Mumbai.
- Thana District Gazetteer XIII. (1984 [1882]). *Causeways*. Mumbai: Government of Maharashtra. Retrieved June 6, 2017
- Times of India. (2003, December 18). Recipe for Disaster. Mumbai.
- Tindall, G. (1992). *City of Gold: The Biography of Bombay*. Mumbai: Penguin Books Private Ltd.
- Traffic Management Cell. (1968). *Traffic Study for Mumbai*. Mumbai: Town Planning Department, Government of Maharashtra.
- Urban Design Research Institute. (2017). *Transportation: A strategic Perspective*. Retrieved June 14, 2017, from Urban Design research Institute website: http://www.mumbaidp24seven.in/reference/11_Transportation_a_strategic_perspectives.pdf
- W S Atkin's Study. (1994). *Comprehensive Transport Plan for Bombay Metropolitan Region*. Mumbai: MMRDA.
- Wilbur Smith Study. (1962). *Planning of Road system for Mumbai Metropolitan Region*. Wilbur Smith Associates International .
- World Bank . (2016). *Project Performance Assessment Report, India, Mumbai Metropolitan Urban Transport Project*. Independent Evaluation Group. WorldBank.