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NEED FOR INTEGRATION OF PUBLIC TRANSPORT AUTHORITIES FOR GREATER MUMBAI

Kajal Narkhede¹, Prof. Abhay Shelar²

M. Tech Scholar, Department of Technology, Civil & Environment Engineering, Savitribai Phule Pune University, Pune, India¹ Prof. Civil Engineering Department, G H Raisoni College of Engineering, Pune, India² kajal.9592@gmail.com

Abstract: Public transport has assured a one of unique position in the life of Mumbai individuals since numerous years. With a colossal development in the human and vehicle populace in this incredible city and its suburb areas over the most recent 30 years, the issue of transportation has additionally developed many folds. The misfortunes endured by the city on an account of the enormous delay and uncomfortable traveling due to super dense loading on public transport system due to heavy rush. Due to long waiting time and change in mode of transport, work ability of individuals is obviously affected. The need for a integration of public transport agency is to give recognition to the importance of urban transport in the economic well being, social cohesion, physical integration, cultural development and political stability of the city. Such an arrangement is necessary to enable rational policies, pooling of resources, integrated development and co-ordination of operation and effective and efficient management of the city's public transport system.

I INTRODUCTION

Transport is the medium to provide linkage with the distance places for demand and supply of persons or goods. Its need mainly arises due to social and economic necessity and regional disparity, which requires movement of men and materials from one place to another.

Public transportation is a derived demand; hence it is directly proportional to the magnitude of activities. Concentration of population as well as economic and social activities in a smaller are, in the form of cities has resulted in concentrated demand of transportation in these areas. Functionally transportation network is like arteries, veins and blood of the city, which feeds the various organs of the city to keep the city healthy and functional. Collapse of the transportation system would result in the collapse of the city life. A healthy and vibrant city must have perfect harmony among the various components of the transportation system, so as maximize the output for the given input. Commensurate with the needs, normally the public transportation systems in a Metropolitan city have the following sub systems:

- a) Road transportation sub system
- b) Railway transportation sub system
- c) Waterway transportation sub system
- d) Air transportation sub system
- e) Out of the Road and Rail transportation sub systems are the most dominate in most of the metropolitan cities and these consist of
- 1. Network of roads
- 2. Network of rail (Suburban Rail)
- 3. Parking lots
- 4. Bus transport (Public & Private)
- 5. Private modes of transport: car. Motorcycle, scooter,
- 6. Public modes of transport (Intermediate Public Transport (I.P.T.): Taxi, Autorikshaw, etc.

From the above, it is seen that the Urban Transportation System consists of several Sub-Systems and each of the Sub-System has several components. All these sub systems along with its individual components have to function together in a harmonious and co-ordinate manner, and then only it would possible to maximize the output. The co-ordination and balanced development can be achieved only if there is a proper organization, viz. a brain for the body.

In our country about 30% of population lives in urban areas. The increased urbanization and concentration of population in large cities has already put heavy pressure on the already over-saturated urban transport network, thus adversely affecting the productivity in urban areas.

Greater Mumbai accommodates about 6% of the country's urban population. Mumbai being one of the major ports in India, the seat of Government of Maharashtra and the Centre for Industrial and Commercial activities, has strong influence on the surrounding areas. Therefore traffic and transportation problems in the metropolitan city are becoming acute every day. It is important to appreciate the urban travel demand and identify practical and effective policies for its co-ordination and management.

II NECESSITY OF THE STUDY

In Greater Mumbai, 13 organizations play important roles towards transport planning and management. The multiplicity of agencies in public transport sector results in considerable overlapping, leading to contradictory actions and schemes with individual organizational priorities. Due to deteriorating traffic condition, each Authority in Mumbai Metropolitan city is trying their best to solve the traffic problems but lacking in an integrated, scientific and systematic approach. The integration can be achieved only through "One Co-coordinating Agency". Integration alone can ensure high efficiency and level of services at the least cost, a rational fare structure, convenient ticketing system and evolution of overall transport plans and policies which are not in-consistent within operating organizations, but are also properly integrated with other aspects of metropolitan planning.

In the absence of proper co-ordination or clear-cut division of responsibilities, multiple governmental agencies

and institutions in the transport sector have been operating without direction, leading to ineffectiveness.

In practice, many agencies pursued totally independent paths, each developing fresh projects and taking different policy Initiatives, as needs were perceived and new agencies were formed. Moreover, Mumbai's administration continuous to face great difficulties in effecting change, because of in sufficient co-ordination problems. These factors have a direct bearing on large sized projects.

Thus, there is the need of Urban Metropolitan Transport Authority (UMTA) not only for Greater Mumbai Metropolitan Area, but also for other metropolitan cities as has been stressed in various studies, by various Committees.

In spite of the strong recommendations by various authorities for the formation of Urban Metropolitan Transport Authority (UMTA), no steps have yet been taken by the government, and today there is an urgent need of formation of Urban Metropolitan Transport Authority (UMTA) for Greater Mumbai to find a long-term solution to the traffic problems / hazards.

PRESENT STATUS OF MUMBAI

Greater Mumbai is the industrial and business capital of the nation, State capital of Maharashtra and a quickly extending Mega city. The number of inhabitants in Greater Mumbai is around 12 million as indicated by the 2011 enumeration and it covers a territory of 467.18 Sq. Km. The City is encountering preceded with development and change. Monetarily the city is transforming from a national city to a 'worldwide city'.

POPULATION AND DENSITY:

With the expansion in commercial and industrial activities in the metro focus, individuals were pulled in towards Mumbai. These transients wanted to remain in the region of the work focuses bringing about the high populace territory toward the North of the Central Business District (C.B.D)

Year	Island City	Suburbs	Total Pop. Of Gr. Mumbai	Decade variation	% of decade variation	
1901	7.76	1.53	9.29			
1911	9.79	1.69	11.48	2.19	23.60	
1921	11.76	2.04	13.80	2.32	20.22	
1931	11.61	2.36	13.97	0.17	1.23	
1941	14.90	3.11	18.01	4.04	38.40	
1951	23.29	6.65	29.24	11.93	66.40	
1961	27.72	13.8	41.52	11.58	38.60	
1971	30.70	29.01	59.71	18.19	43.81	
1981	32.85	49.85	82.43	22.72	38.05	
1991	31.94	67.51	99.26	16.83	20.02	
2001	33.27	85.87	119.14	19.88	20.02	
2011	30.85	93.57	124.42	5.28	4.43	

Table 1 Population of greater Mumbai since 1901 to 2011 in Lakh.

From the population chart it is observed that in the period 1901 to 1961 population of Suburbs was less than the population of Island City. But from 1961 onwards population in suburbs has increased at high rate while the Island population remained nearly constant. It shows that most of the Island City area is under extensive use for administrative / commercial / port / industrial activities and there is no space to accumulate the migrant population. People prefer to stay at Suburbs and commute their work place at Island City and due to this situation public transportation system of Mumbai becomes overloaded / overcrowded.

TRAVEL PATTERN:

Traffic is a function of land-use and hence the road net-work develops as per the activities in the area. The island being narrow in width and central business district situated in a southern part of the island, people residing in the northern part of the island and the suburbs beyond the island are required to travel towards south on the morning and towards north, to their homes in the evening. Thus all major routes, road and rail, are in north-south direction. The suburban area has also developed along two major roads viz. Mumbai-Agra Road and Mumbai-Ahmadabad Road and along two railways namely Central and Western Railways.

ROAD NETWORK:

There is an extensive bus service, run by the Brihamumbai Electric Supply and Transport Corporation (BEST).Taxicabs and other private vehicles make up whatever is left of urban transport framework. The street arrange in Mumbai is created in North-South course. Activity from North through NH-8 (Ahmadabad-Mumbai), North-East through NH-4 and Mumbai-Pune Expressway and NH-17 (Mumbai-Goa) enter/exit at the edges of the city and get associated with city street arrange. There are three fundamental Express Highway, viz. Western Express Highway (WEH), Eastern Express Highway (EEH) and Sion Panvel Express Highway, other than Linking street, Swami Vivekananad (SV) Road, Lal Bahadur Shastri (LBS) Marg running in North-South course.

RAIL NETWORK:

The most vigorously utilized open transport system in Mumbai is the suburban railway system. Mumbai Suburban Railway Network takes into account 7 million suburbanites consistently. It has the most astounding traveler thickness on the planet. The most intensely utilized public transport system in Mumbai is the suburban railway system. This is directed by the Indian Railway, a Central government undertaking. Two divisions of IR are included western railway, connecting the western suburbs to Church gate, and the central railways, associating the eastern suburban areas to the Chhatrapati Shivaji Terminal (CST) End.

Vehicular Population Study

MMR has so far been a region with one of the highest public transport shares in the world; however this status is expected to change in future. Following table provides a summary of some changes in Vehicles Registered in Greater Mumbai over the period 2011-2013.

Sr. No.	Region	2011			2012			2013		
		Transpor t	Non Transport	Total	Transpor t	Non Transport	Total	Transpor t	Non Transport	Total
1	Mumbai Central	56611	544565	601176	58357	579411	637768	59623	616891	676514
2	Mumbai West	110819	759739	870558	112806	837588	950394	115019	911802	1026821
3	Mumbai East	65336	333241	398577	67567	372771	440338	70452	413611	48063
	Total	232766	1637545	1870311	238730	1789770	2028500	245094	1942304	2187398

Table 2 Vehicles in Greater Mumbai as On 31ST March 2011 to 31st March 2013

Island City area is under extensive use for administrative / commercial / industrial activities and there is no space to accommodation the migrant people. People prefer to stay at Suburbs and go to their work place in the Island City. Due to this situation, public transportation systems of Greater Mumbai become overloaded.

Mumbai Suburban Railway system, in spite of heavy demands on it, has provided an efficient and reliable service. However, the pressure continues and today it has reached alarming proportions. Given the geographical spread of the population and location of business areas, the rail network will continue to be the principal mode of mass transport in Greater Mumbai. Due to the limited scope for augmenting road capacity, the city suffers from chronic road congestion for most of the day. Thus overall situation is alarming the transport authorities and it has become urgent & important to implement a long term transportation plan in a co-ordinate manner.

PROBLEMS FACED BY COMMUTERS:

Majority of earners and students living in Greater

Mumbai, have to travel to their workplaces and school or colleges respectively. Every person desires that his travel should be comfortable, speedy and safe.

But what is the experience?

- A pedestrian is not in a position to walk on footpaths meant for him, due to the encroachment of the hawkers. He is completed to walk on carriage-way where his life is always in danger.
- A person travelling by bus finds that he has to wait in the queue for a long time. The bus travels slowly because of congestion of roads.
- A person travelling by suburban train finds that the trains are over-crowded and he cannot easily enter the train. Sometimes he is required to stand in the doorways and cannot get down at his designation station, if the platform is on the other side.
- A person travelling by car finds that he has to stop at each traffic signal and practically at most of the intersection. He cannot move fast on straight roads due to congestion and pedestrian interference. When he reaches the destination, he finds no suitable parking place. He manages to park his car by kerb side, where his car obstructs the free flow of traffic for 8-9 hours of the day.

Difficulties due to Ticket Fare System:

Ticket fare systems, Concession pass systems are not same for every authority. The ticket fare for suburban railway for second class journey for 26 to 40 Kms distance is Rs. 8/- and ticket fare of BEST for ordinary class for 40 Kms distance is Rs. 13/-. If the mode of the transport changed for further route, then it becomes uneconomical for the commuter. On the other hand, if commuter has to travel by a signal mode of transport, the ticket fare becomes economical to him.

Wastage of Time in Waiting:

- The intercity traveler many a times realize upon the bus service and expects to get the bus within 10-15 minutes; but due to inadequate Mass Transport Service, he is required to wait for 30-40 minutes.
- People have to wait for the mode of transport, which is convenient to them. The waiting period is more if only one mode of transport is available between origin and destination point, e.g. If a person has to travel from Thane to Goregaon, he has to choice of only BEST bus service, which comes after every 25 minutes. Either he has to wait or look for another alternative like taxi, which increases the fare structure.

Imbalance of Transport modes:

The transport modes are available tremendously on some rout and they are lagging or even absent on some route.

Health Problem due to increasing Pollution:

Due to heavy traffic, pollution level at some of the junctions and on some roads in Greater Mumbai is increasing causing the nuisance to the people living there or people travelling from that area.

No flexibility in the mode of transport:

The various authorities in Greater Mumbai have their own ticket fare system. It is not possible to use the ticket of one authority for the other authority. Hence, it is not possible to use a ticket of railway for bus transport system for the same origin and destination points.

Inconvenience:

- Mumbai Suburban Railway system, in spite of heavy demands on it, has provided an efficient and reliable service. However, the pressure continues and today it has reached alarming proportions. Overcrowding has grown to such an extent that 5,300 passengers are travelling per 12 car train during peak hours, as against the rated carrying capacity of 3500. It becomes inconvenience to the commuters.
- The congestion on the road has increased so much that a pedestrian cannot walk safely on the road and the motor vehicles cannot move with a speed more than 15 Km per hour.

In short nobody finds his journey speedy, comfortable and safe. All this is the result of inadequate management. There is no co-ordination between various agencies.

PROBLEMS FACED BY VAIOUS AUTHORITIES: *Land Acquisition:*

While planning and executing the schemes, land acquisition is a difficult problem to solve. In the urban area the land costs are very high and every land owner tries to make maximum profits from the property he owns.

Under the circumstances when the land is required for any public purpose, it takes considerable time for acquiring the land. Many times, the authorities are required to give occupants an alternative accommodation for the property acquired.

Inadequacy of Funds:

Non-availability of funds is the other major problem. The Government collects 30 to 40 per cent of the revenue from the Greater Mumbai area but they spend less than 3 per cent of the collection from road transport on road development in the Bombay.

Lapsable Funds:

For each work, some specific amount is allocated in the budget. Considerable time passes before the commencement of work. The funds lapse, if the work is not executed within that financial year. If the funds are made non-lapsable then the work can progress smoothly.

CONCLUSIONS

Mumbai's transport sector shows that there is an absence of coordination and over lapping capacities in the current authoritative set up. So to tackle Mumbai's Traffic and Transportation issues Integration of public transport authorities is essential, which will attack the issue in a thorough and co-ordinate way, now it is a need of this City. Such as Authority will benefit to the City on the following count:

- Under the supervision of UMTA, projects of common interests of different organization can be executed by sharing the cost.
- Initial subsidize necessities for new advancements can be bolstered by UMTA.
- Much reduction in delay costs due to removal of multiplicity of authorities.
- Relieving some congestion on the road system in a coordinated way and reducing some pollution.
- Centralized data available with the UMTA can be shared by all agencies involved in Mumbai's transportation sector for future planning of facilities and development of individual organization, this helps in better decisions making.

RECOMMENDATIONS

To have a 'clear focus' on all traffic related problems, it is absolutely necessary to have a Central Authority having all powers relating to up-gradation for all traffic related facilities, with requisite funds and / or power / authority to raise funds and to ensure that this Metropolis remain efficiently functioning, the speed of all traffic carrying nerves remains fast, so as to keep pace with the activities expected from this Metropolis.

The proposed UMTA would be the right step, without which I do not see any relief to the commuters of this Metropolis, who have to remain their efficiency and utilise their maximum time in productive work and not waste their invaluable time facing traffic jams, delays and overcrowded trains and the like.

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