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LOCAL PASSENGER TRANSPORT
IN BOMBAY

S. G. PATWARDHAN, M. A.

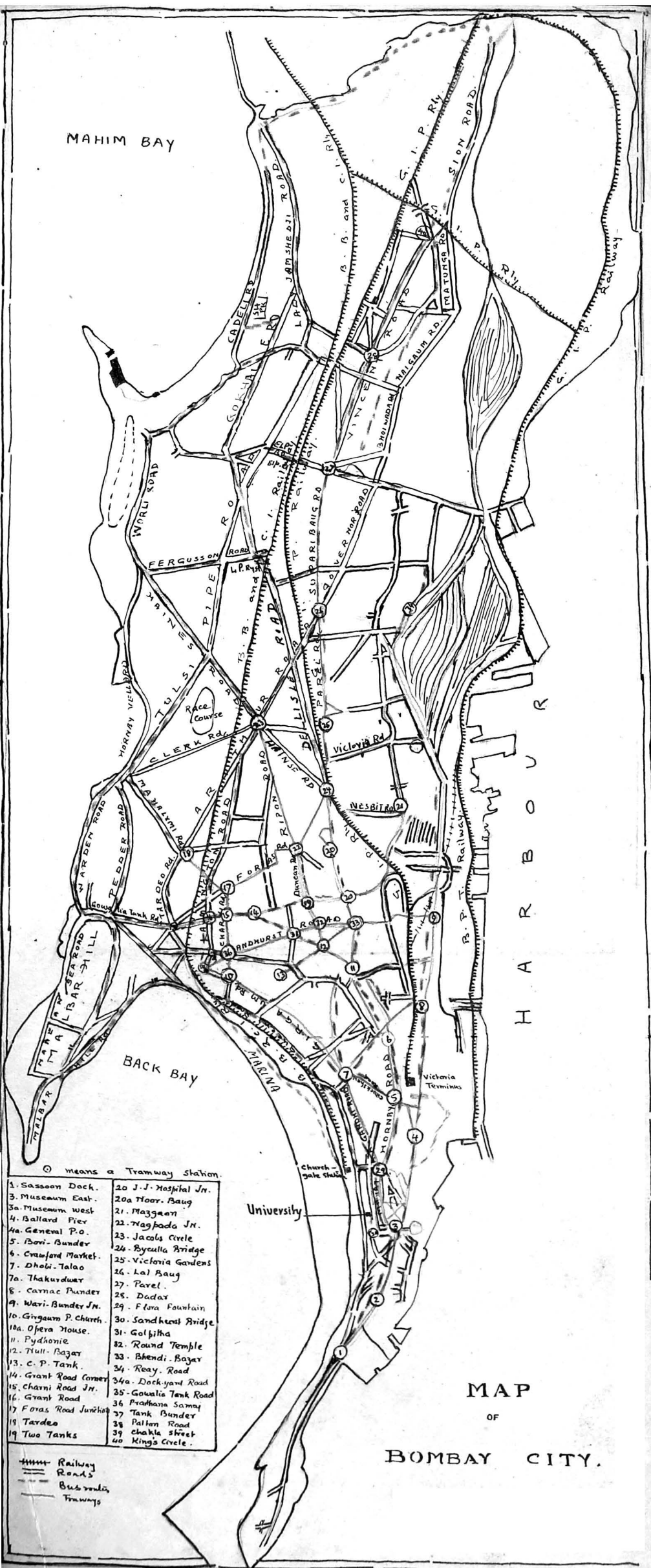
LOCAL PASSENGER TRANSPORT IN BOMBAY

Thesis submitted for the degree
of
Ph.D. of the Faculty of Arts (Economics)
of
the University of Bombay.

S. G. Patwardhan, M.A.

SCHOOL OF ECONOMICS & SOCIOLOGY.
1941

MAHIM BAY



○ means a Tramway Station.

- | | |
|-------------------------|-----------------------|
| 1. Sassoon Dock. | 20 J. J. Hospital Jn. |
| 3. Museum East. | 20a Moor. Baug |
| 3a. Museum West | 21. Magaan |
| 4. Ballard Pier | 22. Nagpada Jn. |
| 4a. General P.O. | 23. Jacobs Circle |
| 5. Boni-Bunder | 24. Ryculla Bridge |
| 6. Crawford Market. | 25. Victoria Gardens |
| 7. Dhobi-Talao | 26. Lal Baug |
| 7a. Thakurdwar | 27. Parel. |
| 8. Carnac Bunder | 28. Dadar |
| 9. Wari-Bunder Jn. | 29. Flora Fountain |
| 10. Gingaum P. Church. | 30. Sandhead Bridge |
| 10a. Opera House. | 31. Galpitha |
| 11. Pydhonie | 32. Round Temple |
| 12. Null-Bazar | 33. Bhendi. Bazar |
| 13. C. P. Tank. | 34. Reay. Road |
| 14. Grant Road Corner | 34a. Dockyard Road |
| 15. Charni Road Jn. | 35. Govalia Tank Road |
| 16. Grant Road | 36. Prabhara Samaj |
| 17. Forts Road Junction | 37. Tank Bunder |
| 19. Tardeo | 38. Patton Road |
| 19 Two Tanks | 39. Chakla Street |
| | 40. Kings Circle. |

Railway
 Roads
 Buses only
 Tramways

MAP OF

BOMBAY CITY.

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INTRODUCTION

It is hardly necessary to explain at length the need for a systematic study of the problem of local passenger -- transport in Bombay. If we have to sum up in one word the -- results of the great change we call the Industrial Revolution, we should say that its keynote is mobility - the mobility of goods, the mobility of capital and the mobility of the human factor. This threefold mobility has given us the modern city with all its problems. The growth of large cities has gone hand in hand with the development of the modern means of -- transport and communication. Transport plays an important part in our economic life as it enters into the production as well as the distribution of commodities. Not only does it link up the different parts of the country, it links together the -- different countries of the world. The broader problem of transport in relation to economics and industry has been -- studied by a number of economists in this country. But there has not yet been undertaken a systematic study either of the public utilities in general or of the problem of local -- passenger transport in our cities in particular. A modern - city is a manufacturing as well as a distributing centre and could only exist with the help of efficient transport -- facilities. On the one hand, it must be adequately linked up with the rest of the country on which it depends for its

food supply and raw materials and for its market for finished goods. On the other hand, there must be suitable facilities for transport as between its different parts so as to minimise distances, to economise time and to enable the population to live a many-sided busy life. The following tables give an idea of the increasingly urban character of modern life.

Table No.1

(Showing the percentage of urban population to total population

Country	1800	1850	1890	1930
England and Wales	21	39	62	80
France	10	14	26	50
United States of America	4	12	27	47
Australia	-	-	41	45

Table No.2

(Showing the number of cities (100,000 and over) in 1800 and 1930 by countries).

Country	No. of cities 1800	Population 1800	No. of cities 1930	Population 1930
Great Britain	1	865,000	58	22,900,000
United States of America	0	-	96	55,000,000
Germany	1	200,000	53	19,950,000
France	3	-	17	8,625,000
Russia	3	500,000	31	11,000,000

1. Queens and Thomas - The City - P.34.

The following table shows the number of passengers per year travelling by organised forms of transport in some large cities.

Table No.3¹

(Showing the number of total passenger journeys in 1938-39)

City	No. of passenger journeys
Greater London	4,368,651,629
Glasgow	617,329,867
Birmingham	427,040,480

It is obvious that the complex life of the enormous populations of such cities would not have been possible without mechanical transport making possible the carrying of large -- numbers of passengers rapidly and over long distances.

The Indian population as is well known is predominantly rural, the proportion of urban population to rural being 10.2 in 1921 and 11 in 1931. There has, however, been an increase in the total urban population as well as in the number of towns during the last fifty years. This will be clear from the -- following tables

¹ Compiled from the Annual Reports of the London Passenger Transport Board. etc.

Table No.4

(Showing urban population of India by decades).

	1881		1891		1901		1911		1921		1931	
	Population	% of ur- ban popu- lation	Population	% of ur- ban popu- lation	Population	% of ur- ban popu- lation	Population	% of ur- ban popu- lation	Population	% of ur- ban popu- lation	Population	% of ur- ban popu- lation
Total Urban	23,773,376	9.3	27,251,176	9.5	29,244,221	9.9	29,748,228	9.5	32,475,276	10.2	38,985,427	11
Towns												
Class I (100,000 & over)	5,304,172		6,173,123		6,605,837		7,075,782		8,211,704		9,674,023	
" II (50000 to 100000)	2,880,899		3,255,175		3,414,188		3,010,281		3,517,749		4,572,113	
" III (20000 to 30000)	3,907,329		4,492,113		4,940,251		5,545,820		5,968,794		8,091,288	
" IV (10000 to 20000)	4,764,257		5,487,983		6,457,339		6,163,954		6,220,889		7,449,402	
" V (5000 to 10000)	5,334,663		6,164,900		5,945,905		5,944,503		6,223,011		6,992,832	
" VI (under 5,000)	1,580,056		1,677,882		1,880,101		2,007,888		2,333,129		2,205,760	

Table No.5

(Showing the number of towns and the percentage of population in each of them).

Class	Number of towns					Percentage of total Indian population in each.				
	1891	1901	1911	1921	1931	1891	1901	1911	1921	1931
I (100,000 and over)	30	31	30	35	39	2.2	2.2	2.2	2.6	2.7
" II (50,000 to 100,000)	48	52	45	54	65	1.1	1.2	1.0	1.1	1.3
" III (20,000 to 50,000)	148	166	180	200	268	1.6	1.7	1.8	1.8	2.3
" IV (10,000 to 20,000)	407	471	442	451	543	1.9	2.2	2.0	2.0	2.1
" V (5,000 to 10,000)	896	856	847	885	987	2.1	2.7	1.9	2.0	2.0
" VI (under 5,000)	505	569	660	691	674	0.6	0.5	0.6	0.7	0.6

Table No.6

(Showing the population of some cities in India by decades).

City	1872	1881	1901	1911	1921	1931
Calcutta (Suburbs & Howrah)	829,197	932,440	1,145,933	1,272,279	1,327,547	1,485,582
Bombay	773,196	821,764	776,445	979,445	1,175,914	1,161,383
Madras	405,848	452,518	509,346	518,660	526,911	645,586
Karachi	68,332	98,195	108,644	140,511	201,691	247,791

It will be seen from these tables that our urban -- population has been increasing for the number of towns of all sizes has been increasing and the population of some of the - existing big cities has also increased. According to press reports, the latest census registers a further increase in urban population. This means that the problem of local passenger - transport must assume increasing importance for us in view of the needs not only of the old cities but also of the newly - developing ones.

It seems, however, that not much thought has yet been given to the problems which arise in this connection. Transport systems in our big cities have grown along different lines, and there is no uniformity of practice as to the extent of municipal or State control over them. In Bombay, Karachi and Delhi trams and buses are owned and operated by the same concern, while in Madras and Calcutta, they are operated by different concerns. Moreover, in Bombay, Karachi and Delhi, the principle of monopoly in each transport service has been accepted and competition - between different owners and operators of the identical forms of transport is ruled out, while in Calcutta and Madras buses are run by competing organisations, so that there is not only the competition between trams and buses, but ^{also} there is competition ₁ also between the various bus services themselves. While in - some cases, therefore, the public suffers from the evil of -

1. Needless to say, we have profited from the experience of the West and have not allowed competing local railway systems or tramway systems.

unregulated or inadequately controlled monopoly, in others it suffers because of unregulated competition.

Some special features of city transport arise from the peculiar nature of the services to be rendered. In the first place, transport is an essential service, the dislocation of which would cause serious inconvenience and loss to the public. It is, therefore, a highly profitable and at the same time a highly responsible kind of business undertaking. It cannot be left to unrestricted competition, for the initial capital and the scale of business required for the successful operation of these services make competition highly unstable. There are possibilities here of cut-throat competition, undue discrimination, and in the long run, the exploitation of the consumers. Nor could these services be safely left in the hands of a private monopolist, intent only on maximising his profits.

Secondly, the problem has a social aspect in as much as it affects the health and efficiency of the citizens -- concerned. Under the factory system, thousands of workers are required to congregate under the same roof. It is no longer possible for the worker to work at his place of residence. It is natural that he prefers ordinarily to reside near the place of work, but this has serious disadvantages from the point of view of public health and economic efficiency. If, then, it is desired that these people should live in healthy localities away from their place of work, they must be provided, with cheap, frequent and dependable transport services. Local -- passenger transport has thus a social, besides an economic,

end.

Even from the economic point of view, the problem is not simple. The different kinds of transport services have to be adapted to the diverse needs of the city's population. This raises several theoretical issues; should the cost of service principle be adopted in the pricing of these services, or should it be the value of service principle? Then again, there is the fact that transport undertakings in common with several other public utilities, have to solve the problem of the peak and -- corresponding under-utilisation of the plant at off-peak -- periods. Some kind of discrimination in respect of fares seems, therefore, essential. But we have also to consider the broader economic and social consequences of such discrimination.

With the growth of cities in area as well as -- population, the necessity for additional transport facilities increases in a greater ratio, since the population tends to spread out away from the central parts, which become more and more non-residential in character. If this kind of re-distribution does not take place serious evils of slums and overcrowding may result. The Royal Commission on London Transport came to the conclusion that the problem of ^{housing} having and -- re-housing with better light, ventilation and low rents was difficult to solve due to the fact that large sums would have to be spent on re-housing with high land values. Congestion must be prevented and the most effective means to this end is the provision of cheap and efficient transport. The Commission

declared that "the evils resulting from slow and imperfect means of locomotion appear to be ~~not~~ quite as serious from a social as well as from an economic point of view." ¹ It further observes "In order to relieve overcrowding means must be provided for taking population into and out of London, not in one or two directions, but in many directions at a rapid speed, frequent intervals and cheap rates." ² Who will assert that this dictum of the Royal Commission does not equally apply to all big -- cities, including Bombay?

Thus, on account of the importance of transport -- facilities to the city population, local transport has to be considered as a public utility, like gas, water, electricity etc. Public utility industries, ³ in the simplest terms, mean those industries which supply essential services for which the demand is fairly inelastic and without which communal life would be paralysed. Such concerns operate under special privileges and franchises, and are subject to some, though varying, control by the local authorities or the Government. While the ~~need~~ - nature of regulation thus varies from place to place, the need for such regulation cannot be denied.

1. Report of the Royal Commission on the Means of Locomotion and Transport in London, Vol. I-P.9.

2. Report of the Royal Commission - op.cit- p.16

3. Public Utilities may be divided into two classes:-

(1) Those which store and handle the product under this category are the water and gas companies.

(2) Those which perform a service; under this are included electricity supply concerns, telegraph and telephone companies, steam and electric transportation.

In the case of most enterprises, competition generally results in fair prices and efficient service, but the results are quite different in the case of transport. A monopolistic concern, if it is realised, would be better able to serve the city, and the regulation of the monopoly is attempted through -- franchises. Even this is not always a sufficient guarantee of their operation in the public interest, because there is the further problem of determining the respective ~~and~~ spheres of the different forms of transport. The tramways may be organised as a monopoly, and so may the railways and buses, but this -- problem has to be visualised as one whole, if these monopolies are not to enter into destructive competition, or into overt or covert combination so as to exploit the public. Special machinery has to be set up to regulate and coordinate the activities of the concerns in the interests of the public. Regulation may refer to the rate of return on investment, as well as to minor details, such as seating space etc. The justification of such regulation lies not only in the fact that these are given -- special rights and concessions, but also ^{that the} interests of the -- public ~~who~~ are vitally affected by their policies. If the layout of the city is to be planned afresh, or at any rate improved, adequate transport must be given a place of -- prominence in the programme. This in turn raises the question of municipal ownership and control.

It is clear, then, that the problem of local passenger transport has to be investigated on scientific lines, so as to

enable us to visualise it in terms of the common good. We have, in this work, attempted this task, firstly, by examining the organised and unorganised forms of transport in Bombay in their proper historical perspective, and secondly, by formulating and applying certain workable criteria of efficiency and adequacy to these forms. An attempt has been made, wherever possible, to compare the conditions in Bombay with those in other cities, especially in India. In the first chapter is presented the background of the problem in terms of the growth of the City. The next three chapters deal with organised forms of transport, viz. trams, buses and suburban electric railways and give a picture of the working of the same. In chapters V and VI is discussed the problem of the determination and regulation of fares in terms of a reasonable rate of return. The unorganised forms of transport, viz. taxicabs, ¹victorias are discussed in all their aspects in chapter VII. Chapter VIII deals with labour problems in organised transport undertakings; while chapter IX discusses the efficiency and sufficiency of transport facilities in Bombay. The last ~~xxx~~ chapter is devoted to the examination of the questions of municipalisation and operation and management by a specially constituted public board.

See this 1. The information relating to Karachi, Madras and Calcutta which we have utilised in this work was obtained by us from the managements of the respective concerns interviewed personally.