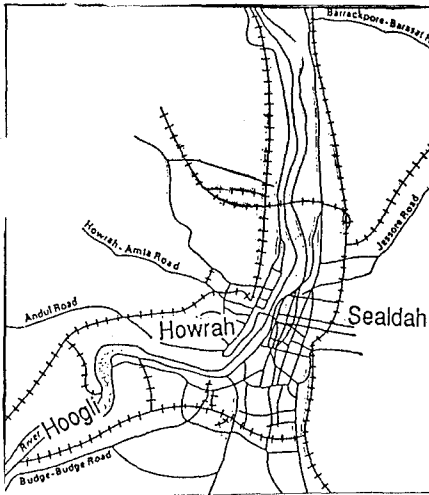


IV-27 THE PRESENT STATE OF PUBLIC TRANSPORT SYSTEMS IN CALCUTTA.

Dhruba BHATTACHARYAY, Student Member, University of Tokyo
Hitoshi IEDA, Regular Member, University of Tokyo
Kazushi SANO, Regular Member, University of Tokyo

THE CITY :

Calcutta has grown up along the river Hoogli clinging to it from both sides in a linear pattern. The two main railway lines were laid north-south in the nineteenth century on both sides of the river. Later two major roads were built in the north-south direction in the similar pattern. Presently, the city spreads 40 km in the North and 15 km in the South of the city center. The city is essentially monocentric. Most people use some form of public transport system for commuting. Although bus remains to be the principal mode of public transit, only 6.4% of the urban land is devoted to roads.



CALCUTTA

Population : 1) 12 million (1990)

2) Annual population growth rate : 2.9 %

Modal share of public transport Buses- 67%,
Para-transit-14%, Rail and Subway-10%,
Taxi-2%, Others-7%.

Motorised vehicles in 1990 (Approximately) :
Commercial-39000, Passenger cars-80000.

GNP per capita (1990) of India : 356 US\$

PUBLIC TRANSPORT :

Buses : The heaviest share of public transport goes to buses. The majority of the buses provide trunk-type service rather than feeder services. Calcutta provides an opportunity to make a direct comparison between privately owned and publicly owned bus systems.

Public buses are operated by the Calcutta State Transport Corporation (CSTC). The fleet of 1174 buses comprises 700 single deck buses and rests are double-deck buses. CSTC has annual passenger journey of 900 million in 62 routes over 482kms. Since CSTC has a staff of 11,000 the staffing ratio per operational bus is 16. CSTC has also been plagued with fare evasion. The systems require annual subsidy of 10million US\$. Fares yield 70% of the operating cost ; rest is through subsidy.

Private buses and minibuses in Calcutta number about 2200. The buses are mainly run by small companies or individuals. The owners unite into a number of route associations. Most of the private buses, except the mini-buses, are similar in size to the single deck buses operated by CSTC. Fares of public and private buses are the same. Despite these similarities private operators have been able to survive financially without any subsidy. Their success is attributed to high productivity, which is reflected in low operating ratios and high fleet availability. The drivers and the fare collectors of the private buses receive a percentage of revenue which gives them a strong incentive to counter fare-evasion. Private bus operations are estimated to the cost roughly half those of CSTC and are more than covered by revenues. Owners retain fare but the association governs relationship between members and sets

operating standards. The owners of the buses which do not keep to time have to pay fines. The money is distributed among other members to avoid unfair competition.

Although the quality of both private and public bus services in Calcutta leaves much to be desired, the private operators have been able to provide more reliable and frequent services. The private companies which hold almost two thirds of the market, play a major role in meeting the demand for public transport in Calcutta. This substantially reduces the financial burden on the government.

Suburban Railways :

Despite the fact that only about 10% of the commuters use the suburban railways about 380million passengers annually use the two major stations, Howrah, in the West and Sealdah, in the East. Eastern Railway operates an extensive and long network of suburban lines around Calcutta, totalling 856km in 20 routes serving 260 stations. Work is continuing on several projects to improve capacity, including provisions for a third track on parts of the line between Howrah and Bandel. Extension of Calcutta Circular railway is underway, while the completion of the line and electrification awaits funding.

Underground railway system :

Public service between Esplanade and Bhowanipur started in 1984 and extended to Tollygange in 1986. Another small section started operating in isolation at the northern end from 1985. Remaining 6.4km central section with 6 stations will start operating in 1994. Construction has been the responsibility of the Indian Railways, though the government has indicated plans to establish an independent Calcutta Metro Railway Authority. Approval has been

sought for construction of a tunnel beneath the Hoogli river to link the main railway stations with interchange to the existing metro line at Central station. This would form the initial section of Line no : 2 (28km), which is proposed to run from interior of west to the new township in the East. Presently the system is handling 73000 passengers daily and the number is expected to increase rapidly after the completion of remaining 6.4kilometers.

Calcutta Tramways :

Tramway in Calcutta has a history of 113 years since 1879. Presently, conventional tramcars run over 71kms in 29 routes and carry 170million passengers annually, which in fact has decreased from 235million in 1984. The main problem of tramways is its slow speed in congested streets which outweighs its pollution-free runs.

COMMENTS :

The public transport system in Calcutta is in serious need of capital investment. Elevated light railway could be a good investment. This network can act as a supporting system to the bus network where the road is too congested and at other places it can be the principal mode of transport. This may be financially feasible as the construction cost is lower than a subway system and construction can be much faster while at the same time it can be constructed above the road network. The trains can be kept small in size so that by increasing the frequency of operation during the peak-hour traffic can be managed and by decreasing the frequency at off-peak hours losses can be reduced.

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