# CHAPTER IV

THE PASSENGER MARKET

Competition

The NETS operates as a bus monopoly in the whole of the State of Kelantan. It runs its buses on twenty-seven different routes which range in length from seven miles to one hundred and fifteen miles. The population of the state in the 1957 Census year was 500,000 and estimates for 1961 was 603,000. Of this 65% are in the 10 - 60 age group which means that it can draw its passengers from a population of approximately 400,000 assuming that those below ten and above 60 are not likely to travel very much. However, this monopoly only goes as far as the travelling public allows. There are at present about 250 licensed taxis in the state. Assuming that each taxi makes on the average 10 trips per day (on the shorter routes the number of trips is higher) to and fro that is, and if operates on 280 days per year we can estimate the number of passengers carried per year thus: (No. of taxis x No. of Passengers per taxi x No. of trips per day x No. of days operated.)
= 250 x 4 x 10 x 280 = 2,800,000 passengers.

This is about ⅓ of that carried by the buses. However, the NETS management believes that it has its own market and the taxis have theirs.

In addition to the licensed taxis there are about 50 'private' taxis in operation. For shorter trips of up to 4 or 5 miles the NETS have to compete with the numerous rickshaws which are available the moment one stands by the roadside. There are at least 500 in Kota Bharu town alone. Graph 6 attempts to show the relationship that exists between the number of passengers carried per year by NETS and the number of taxis (licensed) in operation on 1st January each year. The graph of passengers carried per year shows a decline in the rate of increase between 1961 and 1962. This may be due to the increase in the number of taxis past the 180 level to 196 by the end of 1962. Then as the number of taxis declined again to 186 by the end of 1963 the number of passengers carried increased in rate again. However, the number of taxis may be only one of a number of contributing factors. But it is neverthe-less a factor and a very important one in my opinion.
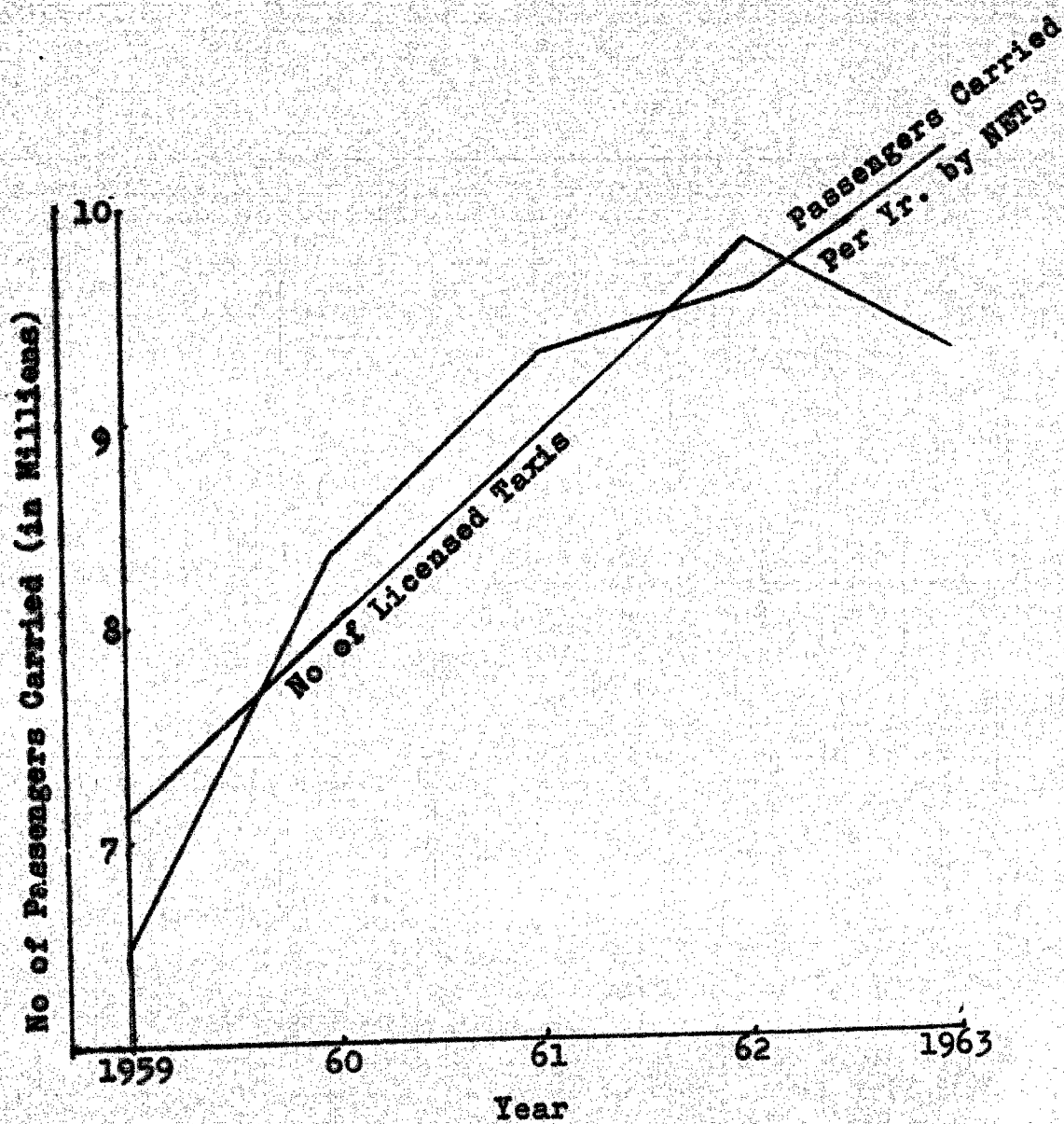
GRAPH 6

The Need for Market Intelligence and Statistical Forecast

In order to survive the tough competition offered by other transport operators the NBTS must offer reliable, frequent, comfortable and fast service at a competitive price. In order to use the present resources in the optimum manner there is an urgent need for market intelligence and statistical forecasts. To provide for the convenience of the passenger the NBTS must have a bus when and where the passenger wants it. It is a waste to run many trips at a time or on a day when people travel less. On the other hand more trips should be made during the part of the day when people travel most. To determine these the travelling habits of the people must be studied in detail. Much of the data required for the study of the travelling habits of the passengers is available from the waybills. Table 4 attempts to show some of these. However it is far from adequate as it is based only on a typical day on a particular route. Similar tabulation can be made for all the routes and over a suitable period of time. According to the table 14.3% of the total passengers carried on that day travelled only over ½ of the route and only 21.4% travelled the full or nearly full length of the route. This affects the cents per mile of revenue. It also shows that 32% of the total number passengers travelled before 10.00 a.m. and another 32% travelled between noon and 4.00 p.m. Less people travelled during the mid-day hours and in the late afternoon and the evening. These facts on the travelling habits should be borne in mind when scheduling the routes and in allocating the size of the buses to be used. Only then can resources be used to the optimum and costs reduced.

The management of NBTS at present uses the cents per mile (C.P.M.) figure as an indicator of the profitability of any route. But this figure reveals just that. It does not show the cause behind it. The cause for a high or low C.P.M. can be found in the ratio of seat-miles to passenger miles:

$$\text{(Seating capacity} \times \text{No. of buses} \times \text{Total Bus Miles)}/\text{(No. of passengers} \times \text{Miles travelled by passenger)}$$

The maximum is reached when total passenger miles equal total seat-miles. This can never happen. But the aim should be to close the gap between the two. Then the result will be an increased C.P.M. figure.

The frequency with which the various routes are operated should be determined by the use of quantitative

TABLE 4 -An Analysis of Waybills

Departure	Arrival	Departure	Arrival	¼ 5 & 10	½ 15 & 20	¾ 25 & 30	1/1 35 & 40	Total
6.00	8.30	7.00	7.30	10	35	4	5	54
6.40	7.20	7.30	8.15	20	15	17	10	62
7.20	8.00	8.10	8.50	60	12	19	7	98
7.45	8.30	8.30	9.05	7	15	13	12	47
7.00	7.40	7.50	8.25	60	9	19	16	104
8.00	8.25	8.30	9.25	9	15	7	41	72
8.30	9.00	9.10	9.55	17	10	20	19	66
8.50	9.40	9.30	10.15	8	15	21	20	64
9.00	9.35	9.30	10.20	5	7	12	22	46
9.25	10.00	10.20	10.50	5	18	14	6	43
Total For Up To 10.00 a.m.				201	151	146	158	656
				30.6%	23%	22.2%	24%	100%
10.00	10.30	11.00	11.30	9	22	18	22	71
10.20	11.00	11.10	12.00	28	19	29	16	92
11.10	11.40	11.50	12.35	41	21	14	16	92
11.30	12.10	12.30	1.00	63	16	19	20	118
Total For up to 12.00 noon				141	78	80	74	373
				37.8%	20%	21.4%	19.9%	100%
12.00	12.40	12.50	1.20	74	18	14	10	116
12.20	1.00	1.10	1.55	38	17	17	13	82
12.40	1.20	1.30	2.20	38	18	17	19	92
1.20	2.00	2.10	2.45	8	20	4	11	43
2.00	2.40	2.50	3.35	4	13	12	17	46
2.30	3.00	3.10	3.50	30	18	16	21	85
2.25	3.10	3.15	3.50	28	20	15	22	85
2.45	3.20	3.30	4.00	7	18	12	18	55
3.00	3.35	3.50	4.30	4	17	18	15	54
Total For up to 4.00 p.m.				228	159	125	146	658
				34.6%	24.16%	19%	22.2%	
4.00	4.40	4.50	5.25	6	17	7	11	41
4.20	5.00	5.10	5.45	34	8	15	16	73
4.50	5.35	5.40	6.10	49	16	9	5	79
5.15	5.50	6.00	6.30	14	12	9	8	43
5.40				6	22	14	12	54
6.00			7.40	14	22	6	0	42
6.20	7.00	7.20	7.50	2	3	1	2	8
Total For after 4.00 p.m.				125	100	61	54	340
				36.7%	30%	17.8%	15.7%	
GRAND TOTAL				695	488	412	432	2027
						20.3%	21.4%	100%

statistical methods. Variations in the frequency for the different periods of the day can also be determined this way.

Service to Passengers

The essence of service must be imbued in all the NBTS personnel especially those who are in constant contact with the public, the drivers and the conductors. It is true of many bus companies that this point is not understood. The conductors are often arrogant and rude. This can cost the company in loss of passengers to the taxis.

More space if needed should be provided for the things carried by passengers e.g., shopping baskets and luggage. This can only be done if the company knows how much space is needed. To know this observation must be carried out.

Regularity is very difficult to be achieved by a bus company if the passengers are to be allowed to stop where and when they like. Nevertheless this must be achieved. Regularity and reliability are of the utmost importance in building up confidence among the travelling public in the bus service. If a traveller on a few occasions has waited in vain for a scheduled bus to arrive he will soon lose confidence in the bus service and take taxis instead.

Publicity and Advertising

The widest possible publicity should be given to the bus schedules so that the public will know when to expect the buses and if there should be an unavoidable delay all effort should be made to publicise it so that passengers will not wait in vain. It is most frustrating to wait for a bus that does not appear.

Since the competition is keen advertising and mass persuasion is called for, new passengers should be the target. Advertising in this direction should try to give more prestige to travelling by bus. It is a fact that some people avoid travelling by buses for prestige reasons.