

CHAPTER IV
QUALITY OF SERVICE

This chapter deals with quality of service of the NBSTC. Provision of public utility services such as electricity, water sanitation, medical facilities, transport etc. are increasingly being considered as the functions of a welfare state. There are no two opinions about the need to provide these services on a regular and guaranteed basis. The main characteristics of public utility are (i) it supplies services rather than goods; (ii) it needs large investment in fixed plant; (iii) its services are non-transferable from the point of view of the buyer; (iv) it is to be supplied as and when demanded and (v) it can be supplied efficiently under the conditions of monopoly. In other words, it can be said that public utility supplies services of a type in which regularity, certainty, reliability and constancy of quality are important requisites.

The commuters are entitled to a good quality service and the Public Corporation, because of its nature, is bound to provide it. In the context of passenger road transport Corporation good quality of service is assumed to mean, in an ideal situation, breakdown-free, accident-free, punctual service with no cancellations whatsoever and this can be evaluated by various aspects i.e. passenger amenities, regularity of trips operated, breakdowns, accidents and vehicles in repair and finally the age composition of vehicles. The lower the accidents, breakdowns, cancellation of trips and the improved the punctuality the better will be the image of the corporation and will enhance the confidence of the passenger which will yield more revenues in turn.

In this Chapter, an attempt is made to study as to whether the quality of service has been improving or deteriorating during the study period.

4.1 Accidents :

Sri P.G.Pantankar defines accident as follows :- "An accident is an occurrence in the use of a vehicle on revenue earning trip resulting in injury to or death of a person and/or damage to property"¹. Depending upon its nature, the accidents are classified into the following heads :

- "a) Fatal - A fatal accident is one involving loss of human life.
- b) Major : A major accident is one involving generous hurt to human beings or loss or damage to property exceeding Rs. 1000/-.
- c) Minor : A minor accident is one involving simple bodily injuries to human beings or loss and/or damage to property exceeding Rs. 100/- but not exceeding Rs. 1000/-.
- d) Insignificant : All other accidents not included in fatal, major, and minor accidents shall be classified as insignificant"².

The accident rate in state transport undertakings is worked out per one lakh kilometers, as used by Sri Pantankar

$$\text{Rate per lakh of effective gross Kms.} = \frac{\text{Total no. of accident} \times 1,00,000}{\text{Total effective/Gross Kms}}$$

The relationship of accidents with efficiency is inverse. Therefore, higher number of total accidents or accidents per lakh kms of operation mean lower efficiency. It reduces scheduled services and consequently, loss to the undertaking.

The following table shows the performance of NBSTC over the period of 20 years from 1967-68 to 1987-88 in terms

of accidents per lakh of Gross kilometers, as defined by Sri Pantankar.

Table 4.1

Performance of accidents per lakh of operationa kms in NBSTC

Year	Accidents per lakh of gross kms.
1967-68	0.25
1968-69	0.22
1969-70	0.23
1970-71	0.21
1971-72	0.22
1972-73	0.20
1973-74	0.21
1974-75	0.30
1975-76	0.31
1976-77	0.29
1977-78	0.29
1978-79	0.26
1979-80	0.20
1980-81	0.23
1981-82	0.24
1982-83	0.20
1983-84	0.20
1984-85	0.21

contd ...

Table 4.1 contd ...

1985-86	0.21
1986-87	0.19
1987-88	0.27

Source : Compiled from Office Records, Administrative Reports and Performance on nationalised State Transport Undertakings, Pune.

The above table shows the performance of the NBSTC over the period of more than 20 years i.e. 1967-68 to 1987-88 in terms of accidents per lakh of gross kms. The table clearly shows that there is not much variation in the number of accidents per lakh kms. and it has almost been constant around 0.23 accidents per lakh of kms. Thus NBSTC has been able to maintain this type of efficiency consistently overtime.

4.2 Comparative Performance Accidents per Lakh of Operational kms. in various State Road Transport Corporations from 1974-75 to 1986-87 :

Table 4.2

Accidents per lakh of operational kilometers in various State Road Transport Corporations

Year	PRTC	APSRTC	Gujrat SRTC	Rajasthan SRTC	Kerala SRTC	NBSTC
1974-75	0.33	0.31	0.31	0.24	2.30	0.30

contd ...

Table 4.2 contd ...

1975-76	0.36	0.29	0.35	0.23	2.56	0.31
1976-77	0.34	0.29	0.35	0.31	2.14	0.29
1977-78	0.39	0.24	0.34	0.30	2.39	0.30
1978-79	0.43	0.22	0.36	0.28	2.70	0.26
1979-80	0.39	0.22	0.36	0.28	2.50	0.20
1980-81	0.37	0.20	0.38	0.22	2.40	0.23
1981-82	0.33	0.19	0.38	0.27	2.30	0.24
1982-83	0.43	0.22	0.36	0.28	2.70	0.20
1983-84	0.32	0.23	0.33	0.28	2.00	0.20
1984-85	0.24	0.22	0.33	0.23	1.92	0.21
1985-86	0.34	0.20	0.29	0.25	2.20	0.21
1986-87	NA	0.20	0.28	0.25	1.97	0.19

/from

Source : Compiled Report on the Performance of Nationalised Road Transport Undertaking Pune and NBSTC Office Records.

The above table reveals that the rate of accidents in the NBSTC is lower than any other Corporations except the APSRTC. This means NBSTC provides less discomfort to the passenger, at least in terms of incidence of accidents and lower loss to the revenue in this connection. It has been able to maintain "stability" in terms of accidents consistently overtime.

4.3 Causes of Accidents :

The following are the causes of Road Accidents :

1. Aggression and Road Accidents :

One of the main causes of road accidents is aggression. The hypothesis that road death and injury rates are recognisable indices of the total sum of aggression in a given society.

2. Criminality and Violation of Traffic Laws :

A study from West Germany indicated that persons convicted for ordinary criminal offences had broken the traffic laws far more frequently than others.

3. Alcoholism and Road Accidents :

Persons in the less privileged socio-economic classes had higher blood alcohol concentration. If the blood alcohol concentration exceeds 0.1 per cent, the simple driving skills become impaired. The average blood alcohol concentration in drunken drivers is 0.2 per cent. The alcoholic driver carries his problems with him on to the road and they influence his behaviour and safety.

4. Fatigue and Road Accidents :

Fatigue is responsible for the alertness of the driver.

Drugs taken to reduce fatigue contribute to accidents"⁴.

5. Condition of Roads :

In respect of the road, the operating environment is many a time hazardous. The quality of roads is far from satisfactory and one of the causes of accidents. It is the policy of the various State Transport undertakings that wherever there is a road, there must be bus. But unfortunately, it is observed that many cases a bus precedes a road or operates on a rough track called "a road". The policy shall be wherever there is a good road, there must be a good bus⁵.

6. Selection of Drivers :

The most important factor in accident control is the driver. In a study it was observed that in 70% accidents a driver was involved. The licensing system needs a thorough overhaul. The system itself does not ensure recruitment of safe drivers⁶.

7. Length of Service of the Drivers :

The percentage of drivers involved in accident diminishes with the increase in the length of service. It is also to be noted that after 20 years of service an increasing trend is observed in the percentage of drivers involved in accident. This is due to failing physical

standards as a result of age⁷.

8. Visibility : As traffic intensity is on high side in the day time the probability of accidents is also on high side and about 69% of the accidents took place between sunrise and sun set. The percentage of accidents during 00.00 hours to 06.00 is 6.8%. It is because of fatigue of drivers, exhaustion and bad visibility⁸.

One important reason for the lesser incidents of accidents may be due to efficiency of the bus drivers. In the NBSTC, the selection of drivers has been a rigorous process and qualified drivers with ITI training had been appointed. This has compensated to certain extent the bad road condition. Moreover, the NBSTC employs the driver and utilises them upto a particular age, so that the drivers are comparatively young but experienced. This human factor has to a certain extent decrease the rate of accidents in the NBSTC.

4.4 Breakdown :

The second important measure of quality of service of a passenger transport undertaking is the number of breakdowns of its fleet during a given period. Definition of a breakdown is not the same in all state Road Transport

undertakings. The definition given by Pune Research and Training Institute is as follows :-

"A breakdown is defined as stoppage of vehicle on road due to mechanical defects or other failures rendering the vehicle immobile or unfit for continuation of the revenue earning trip without attention to it, irrespective of time involved"⁹. A breakdown not only leads to passenger discomfort and annoyance, but also causes loss of revenue to the organisation.

The causes of breakdowns are many. Important among them is the poor quality of roads. Bad driving also contributes to higher incidence of breakdowns. The other major reasons are lack of preventive maintenance, lack of supervision, and low levels of skills, too little time for maintenance, inadequate staff, poor morale and frustration among the maintenance staff, inadequate tools and equipment, use of substandard spare parts etc.

There is an inverse relationship between the number of breakdowns and the efficiency of the undertaking. The higher the number of breakdowns, lower is considered the efficiency of an undertaking.

The following table shows the performance of NBSTC over the period of twenty years from 1957-58 to 1987-88 in terms of breakdowns per 10,000 Gross kilometers as per the definition of the Pune Research and Training Institute.

Table 4.3

Breakdowns in NBSTC per 10,000 gross kms.

Year	Breakdowns, per 10,000 kms. (Gross)
1967-68	1.56
1968-69	1.54
1969-70	1.55
1970-71	1.51
1971-72	1.53
1972-73	1.50
1973-74	1.52
1974-75	1.20
1975-76	1.30
1976-77	1.60
1977-78	1.70
1978-79	1.30
1979-80	1.40
1980-81	1.41
1981-82	1.40
1982-83	1.50
1983-84	1.50
1984-85	1.60
1985-86	1.50
1986-87	1.50
1987-88	1.50

Source : Compiled from Annual Administrative Reports of
NBSTC and Office Records

The above table speaks that the rate of breakdowns per 10,000 kms. is exceptionally high in the years 1976-77, 1977-78 and 1984-85. With respect to other years there is not much variation in the number of breakdowns per 10,000 kms. and it has almost been constant around 1.48 breakdowns per 10,000 kms.

4.5 Comparative Performance of State Road Transport Corporations in Breakdowns Per 10,000 kms :

The following table will reveal the comparative performance of State Road Transport Corporations in breakdowns per 10,000 kms :

Table 4.4

Comparative performance of State Road Transport Corporations in breakdowns per 10,000 kms.

Year	PRTC	APSRTC	Gujrat SRTC	Rajasthan SRTC	Kerala SRTC	NBSTC
1974-75	0.70	0.90	0.95	0.50	2.30	1.20
1975-76	1.25	0.86	0.93	0.57	1.30	2.40
1976-77	1.75	0.81	0.86	0.65	1.74	1.67
1977-78	2.28	0.73	0.86	0.65	1.82	1.70
1978-79	2.18	0.86	0.61	0.64	2.70	1.30
1979-80	1.58	0.91	0.49	0.68	3.00	1.40

contd ...

Table 4.4 contd ...

1980-81	1.15	0.79	0.54	0.65	2.80	1.41
1981-82	0.98	0.75	0.61	0.70	2.60	1.40
1982-83	1.20	1.10	0.40	0.70	2.30	1.50
1983-84	1.02	1.17	0.36	0.66	1.90	1.50
1984-85	1.05	1.04	0.42	0.43	1.80	1.60
1985-86	1.08	1.03	0.33	0.34	1.60	1.50
1986-87	NA	0.47	0.39	0.27	1.10	1.50

Source : Compiled from Office Records of NBSTC and Report on Performance of Nationalised State Road Transport undertakings.

The above table shows that out of six Corporations taken for comparison, the rate of breakdowns of NBSTC is higher than the PRTC, APSRTC, Gujrat and Rajasthan SRTC and lower than only Kerala State Road Transport Corporation whose performance is the worst. So the performance of NBSTC is not praiseworthy and fall below the standards set by other undertakings.

In the light of the above analysis of the data on breakdown of buses some problems can be understood in the NBSTC.

The vehicles shall be reconditioned after covering the mileage as required under the rules. Generally, it is seen that the buses do not receive docking facilities in the NBSTC at the kilometerage covered as specified in the rules.

Docking is carried out occasionally over 8000 to 9000 kilometerage in place of 6000 kilometerage as provided by the rules.

The buses should be properly cleaned before every out-shedding. It is found in the NBSTC that most of the buses which are out shedded daily are full of dust and dirt. This affects operational efficiency of individual vehicles and puts the commuters to unnecessary inconvenience.

One should have been deputed to certify the road worthiness of a vehicle before it is outshedded. If the vehicle reports breakdown, it must be properly investigated and responsibility of repairing the breakdown shall be put on a person in the management. But this is hardly ever done in the NBSTC and if done there is a long time lag between breakdown and repair.

Proper incentives should have been awarded to the staff for reducing the number of breakdowns and this incentive system is conspicuous by its absence.

The buses which report more than 10 breakdowns in a month without any chance of improvement shall be withdrawn from operation but due to shortage of buses these are frequently used.

Sometimes it is found that maintenance and repair works are done by untrained apprentices. This affects the

maintenance of vehicles and results in the wastage of inputs. Untrained apprentices shall not be put in workshop to wipe out the gap between actual and sanctioned staff. The sanctioned quota of the maintenance and repair staff shall be provided to workshops.

4.6 Percentage of Vehicles Off the Road :

Another measurement of quality of service is the percent of vehicles off the road. The lower the vehicles off the road, the higher the efficiency and vice-versa.

The following table will show the percentage of vehicles off the road in the NBSTC.

Table 4.5

Percentage of vehicles off the Road in NBSTC

Year	Percentage of vehicles off the road
1967-68	21.9%
1968-69	19.5%
1969-70	17.0%
1970-71	17.0%
1971-72	18.0%
1972-73	N.A.
1973-74	39.0%

contd ...

Table 4.5 contd ...

1974-75	40.0%
1975-76	33.4%
1976-77	38.7%
1977-78	32.5%
1978-79	23.8%
1979-80	28.0%
1980-81	32.0%
1981-82	36.0%
1982-83	43.0%
1983-84	41.0%
1984-85	45.0%
1985-86	15.0%
1986-87 (upto June)	14.0%

Source : Compiled from Annual Administrative Reports and Office Records of N.B.S.T.C.

The above table shows that except 1985-86 and 1986-87, the percentage of vehicles off the road is high and has almost been constant around 28% of the total on average. It means that about $\frac{1}{4}$ th or more than $\frac{1}{4}$ th of the vehicles remain off the road. However, some improvements have been noticed during the current period of 1985-86 and 1986-87. But it is difficult to say whether the improvement is transitory, random or permanent feature of the NBSTC management.

4.7 Vehicles in Repairs :

Another factor in quality of service is vehicles in repairs.

The following table will show the number of vehicles in repairs yearwise starting from 1967-68 in North Bengal State Transport Corporation.

Table 4.6

Number of vehicles in Repairs

Year	No. of vehicles in repair	No. of Mechanical staff (maintenance)	Mechanical staff/Vehicles in repair
1967-68	51	302	5.92
1968-69	45	394	8.75
1969-70	42	409	9.73
1970-71	46	435	9.45
1971-72	51	447	8.75
1972-73	62	1040	16.77
1973-74	150	1370	9.13
1974-75	221	1368	6.19
1975-76	209	1365	6.53
1976-77	153	1361	8.89
1977-78	228	1364	5.98
1978-79	93	1356	14.58
1979-80	119	1352	11.36

contd ...

Table 4.6 contd ...

1980-81	138	1347	9.76
1981-82	181	1349	7.45
1982-83	223	1193	5.34
1983-84	185	1176	6.35
1984-85	209	1166	5.57
1985-86	57	1150	20.17
1986-87	63	1140	18.03
1987-88	103	1220	11.84

Source : Compiled from Administrative Reports and Office Records of NBSTC.

The above table shows that in the year 1967-68 the number of buses in repair was 51 and the vehicle in repair and maintenance staff ratio was 5.92. In the year 1987-88 the number of buses in repair was 103, and the vehicle in repair mechanical staff ratio was 11.84. The highest number of buses was in repair (i.e. 228) in the year 1977-78 when the vehicle in repair - Mechanical staff ratio was 5.98 and the lowest number of buses was in repair (i.e. 45) in the year 1967-68 when the vehicle in repair/maintenance staff ratio was 8.75. The increasing number of vehicles in repair affects the scheduled services thereby causing inconvenience to the public. The vehicles in repairs have been increasing over the period and accounted for 103 vehicles in repair during 1987-88. This poor performance and deteriorating condition of the vehicles may be viewed seriously and necessary maintenance policy for the vehicles may be

introduced, especially in the rural depots. This idea has also been substantiated in table number 4.5 where the percentage of vehicles off the road has almost been constant around 28% (average). One paradox that has to be noted is that with the increase in the number of mechanical staff the number of buses in repair is increased and number of buses off the road has multiplied. This shows that the maintenance policy of the N.B.S.T.C is defective if in existence. One of the reason that can be gathered from the repair shops is the lack of discipline, work ethics and poor supervision in the management. The management has virtually no control over the mechanical staff. Very often this mechanical staff are recruited not on merits but on extra-economic or extra-administrative condition.

4.8 Comparative Statement of Percentage of Vehicles Off the Road :

The following table will present a picture of the comparative statement of percentage of vehicles off the road of six Corporations including NBSTC.

Table 4.7

Comparative statement of percentage of vehicles off the road of Six Corporations from 1974-75

Year	PRTC	APSRTC	Gujrat SRTC	Raja- sthan SRTC	Kerala SRTC	NBSTC
1974-75	16.3%	13.02%	22.58%	24%	21.3%	40%
1975-76	9%	12.49%	23.5%	24%	16.2%	33.4%
1976-77	13.73%	6.71%	22.5%	23%	13.7%	38.7%
1977-78	7%	6.70%	20.5%	21%	16.0%	32.6%
1978-79	8%	12.1%	20.08%	22%	16.1%	23.8%
1979-80	5%	12.5%	20.06%	23%	18.5%	28.00%
1980-81	5%	13.0%	13.7%	24%	23.4%	32.00%
1981-82	7%	12.0%	13.7%	27%	10.8%	36.00%
1982-83	10%	8.7%	22.2%	20%	32.4%	43.00%
1983-84	13%	9%	21.2%	15.81%	26.3%	41.00%
1984-85	10.41%	9.2%	20.5%	13.32%	23.99%	45.00%

Source : Compiled from NBSTC Office Records and Report on the performance of STC, Pune.

It appears from the above table that the position of NBSTC as regards percentage of vehicle off the road is the worst. The condition of Kerala SRTC is however in a very poor state but the NBSTC is still the lowest in the league Table of efficiency as defined.

4.9 Percentage of Total Number of Trips Cancelled to Scheduled Trips :

The following table shows that total number of trips cancelled to scheduled number of trips in NBSTC. The percentage of operated trips to scheduled trips will give the regularity of service.

Table 4.8

Percentage of total number of trips cancelled to scheduled trips in NBSTC

Year	Percentage of Cancellation
1979-80	24%
1980-81	24%
1981-82	24%
1982-83	22%
1983-84	23%
1984-85	25%
1985-86	20%

Source : Compiled from office records of NBSTC.

The above table speaks that the percentage of cancellation of trips is 23.14 over a seven year periods on an average. The above percentage of scheduled trips were cancelled due to variety of reasons which requires serious attention of the management. It is needless to say that due to frequent cancellation (varying from $\frac{1}{4}$ to $\frac{1}{5}$ th of the scheduled trips) the public at large are put into great

inconvenience. In terms of productivity of the country as a whole it may be presumed that the NBSTC has contributed much less than it should have been.

4.10 Age of Vehicles :

It is also a factor which determines the quality of service.

The following table will show the age group of buses held by NBSTC.

Table 4.9
Age of vehicles

Age Group	1979 -80	1980 -81	1981 -82	1982 -83	1983 -84	1984 -85	1985 -86	1986 -87 Jan
Upto 4 Yrs.	99	127	104	114	102	105	94	133
More than 4 yrs. but upto 8 yrs.	106	115	145	150	143	146	107	121
More than 8 yrs.	149	131	166	182	163	167	152	138
Total	354	373	415	455	408	418	353	392

Source : Office Records of NBSTC.

The table represents that most of the buses in each year belongs to "More than 8 years group". Regarding the overheads, the corporation sends more vehicles for 1st overhaul at the early stage due to deteriorated condition of the vehicle for its heavy operation in rural roads. But the corporation was negligent in sending the vehicles for second overhaul on completing the required kms. as per the norm. Thus, the timely overhauling which is most important has been neglected resulting in more buses in repairs and increasing the rate of breakdowns over the period of study. According to the management the retention of vehicles even after the scrapped stage was due to lack of new vehicles caused with shortage of chasis. It does not matter if the vehicle is not replaced but it requires regular overhauls as per the specified norms to reduce the rate of increase in the repairs if not the total repairs, because the old vehicle continue to contribute more recurring repairs.

4.11 Other Amenities :

In spite of the above criteria of measuring the quality of service, there are certain other amenities which upgrades the image of the Corporation and enhances the confidence of the passengers.

a) Amenities Towards Customers :

The Corporation has constructed bus shelters, bus stations for the comfort of the travelling public. In almost all the bus stations, drinking facilities, seating arrangements, latrines and urinal facilities are available. But conditions are extremely poor and unhygienic. The North Bengal State Transport Corporation had 16 bus stations (depots) in the year 1967-68 and at present (i.e. 1987-88) the number of bus stations are eighteen. There are no pick up sheds, cloakrooms, tea stalls, book stalls, refreshment rooms etc. under the management of the Corporation. It is true that with the meagre resources, the Corporation finds it difficult to spend sizeable amounts for the provision of passenger amenities. But it may be stated here that in all the bus stations (depots) facility of tea stalls, book stalls etc. are available owned by small vendore.

B. Amenities Towards Students, Teachers, Blind People, Journalist and Office goers :-

The Corporation in spite of facing so many difficulties is offering monthly facilities to the students, on 8 days fare (up and down) for 1 (one) months journey. Similar facilities are also provided to others on 15 days fare (up and down) for 1 (one) months journey. In addition to this,

free travel facilities are allowed to bonafide journalists and social workers. Single fare double journey facility is provided to competitors participating in games and theatrical teams. Free travel facility is also given to blind people. Average loss of the Corporation is Rs. 15 lakhs per year for the issue of monthly tickets, free pass to handicapped persons, journalists etc.

4.12 Leakage in Revenue :

It has been clearly revealed after nationalisation that transport service is a business which can bring in a 10 per cent return on capital if it is a well-run. In the days of spiralling prices the profitability will depend not only a control exercised on costs but also on revenue and every possible step to be taken to increase it. Revenue can be increased by restructuring the fare table and ensuring that traffic revenues are collected from all concerned and what is collected is actually accounted. It is also needed for optimum utilisation of capital resources. Fare structure of transport services unfortunately, is not revised as a matter of course in sympathy with the rise in costs. The Government will not ordinarily agree to it. What is important then is that the leakage of revenue at all stages be effectively arrested if the earnings are to improve.

The leakage of revenue from passenger fares reflects on the effectiveness of the supervision of the operating staff. This affects the figure of operational performance as well as the finances of the Corporation. It is difficult to collect authoritative evidence as to the extent of leakage of revenues and consequential effects on the financial performances. The general opinion is that the leakage can be anything between 8 per cent and 15 per cent¹⁰. If this is so, in the case on hand, it could be anything between Rs. 81.50 lakhs and 153 lakhs in 1987-88. But as per Dr. D.K. Halder¹¹ the number of unbooked passengers everyday constitutes 22.04 per cent of the total passenger carried in Calcutta i.e. the actual collection is less than 80 per cent of what the actual collection should have been in absence of evasion. Survey reveals that in case of NBSTC the number of unbooked passenger everyday constitutes more than 23% of the total passenger carried.

The problem of leakage of revenue is primarily seemed to be a human problem. Leakage can arise out of ticketless travel, by not paying for luggage carried, for overtravelling beyond stage permitted by ticket or route earmarked in passes, by not picking up traffic at stops, by issuing spurious tickets. The crew can cheat the passengers and the passenger also can cheat the crew. Both may be indifferent. The result is that the organisation suffers.

A survey conducted for the purpose of the present study on different routes of the Corporations reveals that leakage of revenue mainly arises out of :

1. Ignorance or Carelessness :- A lower denomination ticket is asked for or issued.
2. Indifferent :- The conductor does not exert or care to issue tickets to all who are travelling. The passengers also do not verify their tickets or demand tickets. This happens particularly during peak hour.
3. Deliberate Cheating :- The conductor takes the advantage of the illiteracy of the passenger or his infirmity and do not issue ticket or issue a lower denomination ticket.

The inspectors of NBSTC are very rarely found in the route duties now a days. During the study period no special schemes were in operation except for routine inspection and checking system in the NBSTC. Under the circumstances, it may be apprehended that by now the evasion of fare in the NBSTC has increased rather than gone down.

The drain on the Corporation's revenue through the unholy settlement of a section of passengers with the operating staff of the NBSTC is a well known fact. The management is perfectly aware of this fact but, unfortunately they could neither do any thing to rectify it nor could they

estimate the magnitude of loss on account of this. The leakage of this type is gradually assuming alarming proportion and the management should immediately try to take some preventive measure to stop it. In addition to all these it is reported that allegations against the conductors for manipulation of cash are frequent. If the above loopholes of the NBSTC could be plugged it would likely to cause considerable improvement in revenues.

SUMMARY

This chapter deals with quality of service for study and analysis as it reflects in the goodwill of the organisation. The commuters are entitled to a good quality service and the Corporation, because of its public sector, public utility character, is bound to provide it. In the context of road transport Corporation good quality of service is assumed to mean, in an ideal situation, breakdown free, accident free, punctual service with no cancellation and this can be evaluated by various aspects i.e. passenger amenities, regularity of trips operated, breakdowns, accidents and vehicles in repairs and finally the age composition of vehicles. The lower the punctuality the better will be the image of the Corporation and will enhance the confidence of the passenger which will yield more revenues in turn.

Accident :

The accidents are classified into four heads (a) Fatal (b) Major (c) Minor (d) Insignificant. The accident rate in Transport undertakings is worked out per one lakh kilometers. The relationship of accidents with efficiency is inverse. Therefore, higher number of total accident or accidents per lakhs kms. of operation mean lower efficiencies. It reduces scheduled services and consequently, loss to the undertaking. The accident rate of NBSTC per lakh kms. does not show much variation in the number of accidents per lakh kms. and it has almost been constant around 0.23 accidents per lakh kms. Thus NBSTC has been able to maintain its efficiency consistently overtime. The rate of accidents per lakh kms of NBSTC is lower than any other Corporation except APSRTC where the rate is more or less equal.

The causes of accidents are (a) aggression and Road accident (b) Criminality and violation of traffic laws (c) Alcoholism and road accident (d) Fatigue and road accident (e) Condition of roads (f) Selection of drivers (g) Length of service of the drivers and (h) Visibility.

Breakdown :-

The second important measure of quality of service of a passenger transport undertaking is the number of breakdowns.

The causes of breakdowns are many. Important among them is the poor quality of roads. Bad driving also contribute to higher incidence of breakdowns. Other reasons are lack to preventive maintenance, lack of supervision and low levels of skills, too little time for maintenance, inadequate staff, poor morale and frustration among the maintenance staff, inadequate tools and equipments, use of substandard spare parts etc.

There is an inverse relationship between the number of breakdowns and the efficiency of the undertaking. The higher the number of breakdowns lower is considered the efficiency of an undertaking.

The number of breakdowns per 10,000 kms. of NBSTC does not show much variation and it has almost been constant around 1.48 on average. The comparative performance table speaks that the rate of breakdowns of NBSTC is higher than PRTC, APSRTC, Gujrat and Rajasthan SRTC and lower than only Kerala State Road Transport Corporation whose performance is worse. So the performance of NBSTC is not praiseworthy and falls below the standards set by other undertaking.

In the light of the above analysis of the data on breakdown of buses following suggestions can be offered to reduce the high incidents of breakdowns :

a) The vehicles shall be reconditioned after covering the mileage as required under the rules.

b) The buses shall be properly cleaned before every outshedding.

c) One shall be deputed to certify the road worthiness of a vehicle before it is outshedded.

d) Proper incentives be awarded to the staff for reducing the number of breakdowns.

e) The buses which report more than 10 breakdowns in a month without any chance of improvement shall be withdrawn from operation.

f) Untrained apprentices shall not be put in workshop to wipe out the gap between the actual and sanctioned staff.

Percentage of Vehicles Off the Road :-

It is also an instrument of measuring the quality of service. The lower the vehicles off the road, the higher the efficiency and vice-versa. The table speaks here that the percentage of vehicles off the road was high and has almost been constant around 28%. But it will be unjustified if we do not mention the recent progress from 1985-86.

Vehicles in repairs :-

The table shows here that in the year 1967-68 the number of vehicles in repair was 57 and the number of buses outshaded daily was 182 out of 233 and the vehicle maintenance staff ratio was 1.29. The vehicles in repair have been increasing and accounted for 103 vehicles in repair during 1987-88. The highest number of buses was in repair in the year 1977-78 (i.e. 228) while the vehicle maintenance staff ratio was 5.98. and the lowest number of buses was in repair in the year 1967-68 (i.e. 45) when the vehicle maintenance staff ratio was 8.75. The increasing number of vehicles in repair affects the scheduled services thereby causing inconvenience to the public. The poor performance and deteriorating condition of the vehicles may be viewed seriously and necessary maintenance policy for the vehicles may be introduced. The comparative table of vehicles in repair speaks that the position of NBSTC as regards percentage of vehicles off the road is worse as compared to other state transport corporations except Kerala SRTC where performance is more worse. The same is the position for the vehicles in repairs also. One paradox that has to be noted is that with the increase in the number of mechanical staff the number of buses in repair is increased and number of buses off the road has multiplied. This shows that the maintenance policy of the NBSTC is defective if in existence existence. One of the reasons that could be gathered from

the repair shops is the lack of discipline, work ethics and poor supervision in the management. The management has virtually no control over the mechanical staff. Very often these mechanical staff are recruited not on merits but on extra-economic or extra-administrative conditions.

Percentage of the Number of Trips Cancelled to Scheduled Trips :

The table prepared here shows that the percentage of cancellation of trips is 23.14 over a period of seven years on an average. The above percentage of scheduled trips were cancelled due to variety of reasons which requires serious attention of the management because the public would criticise the organisation though the cancellation was justifiable in such situations.

Age of Vehicles :

The table represents here that most of the buses in each year belongs to "More than 8 years group". Generally the timely overhauling which is most important has been neglected resulting in more buses in repairs and increasing the rate of breakdowns over the period of study. According to the management the retention of vehicles even after the scrapped stage was due to lack of new vehicles. It does

not matter if the vehicle is not replaced but it requires regular overhauls as per specified norms to reduce the rate of increase in the repairs if not the total repairs, because the old vehicles continue to contribute more recurring repairs.

Other Amenities :

In spite of the above criterias of measuring the quality of service, there are certain other amenities which upgrades the image of the Corporation and enhances the confidence of the passengers.

a) Amenities towards Customers — The Corporation has constructed bus shelters for the comfort of the travelling public. The NBSTC had 16 bus stations in the year 1967-68 and at present the number is 18(87-88). There are no pick-up shades, cloak room, tea stalls, book stalls etc. under the management of the Corporation. It is true that with the meagre resources the Corporation finds it difficult to spend sizeable amounts for the provision of passenger amenities.

b) Amenities towards students, teachers, blind people, journalist and office goers :-

The Corporation in spite of facing so many difficulties is offering monthly facilities to the students on 8

days fare for one months journey, 15 days fare for one month journey to others. Free travel facilities are also allowed to social workers and journalists. Average loss of the Corporation is Rs. 15 lakhs per year for the issue of monthly tickets, free pass to handicapped persons, journalists etc.

Leakage in Revenue

The leakage of revenue affects the figure of operational performance as well as financial performance of the Corporation. It is difficult to collect authoritative evidence as to the extent of leakage of revenue and consequential effects on the financial performances. The general opinion is that the leakage can be anything between 8 per cent and 15 per cent. But survey reveals that in case of WBSTC, the number of unbooked passenger carried everyday constitutes more than 23 per cent of the total passenger carried.

NOTES AND REFERENCES

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