# **Chapter III**

# **3.** Performance review relating to Statutory corporation

## **Rajasthan State Road Transport Corporation**

## Planning, Fabrication and Operation of buses

# Highlights

As on 31 March 2006, the Corporation held 4,553 buses against 6,904 buses required to operate all the notified schedules.

(Paragraph 3.7.1)

The Corporation replaced only 12.94 *per cent* of overage buses during 2000-05 resulting in excess operating cost of Rs.130.39 crore on operation of these buses.

(Paragraph 3.7.3)

One time increase of passenger fare instead of a phased increase as suggested by the Central Institute of Road Transport, Pune resulted in foregoing operating revenue of Rs.89.82 crore.

(Paragraph 3.9.2)

Non-rationalisation of operating schedules for all the available buses resulted in non-recovery of fixed cost of Rs.30.08 crore.

(Paragraph 3.7.4)

Operation of 438 schedules without recovery of variable cost resulted in loss of Rs.12.26 crore during 2004-05.

(Paragraph 3.9.1)

The Corporation did not have a dependable quality assurance system. It failed to ensure quality of bus fabrication or take action with regard to substandard material used in these bodies.

(Paragraph 3.8.4)

Deficient system of evaluation of technical bids of bus body fabricators resulted in high percentage of sample failure.

(Paragraph 3.8.1)

Utilisation of man-hours in fabrication of City Transport Service bus body and ordinary bus body in its Central workshop at Ajmer was substantially high resulting in extra expenditure of Rs.1.37 crore.

(Paragraph 3.8.5)

Delay in fabrication of buses by the fabricators coupled with defective penal provision led to loss of Rs.87.65 lakh to the Corporation.

(Paragraph 3.8.2)

## Introduction

**3.1** The Rajasthan State Road Transport Corporation (Corporation) was constituted on 1 October 1964 under the Road Transport Corporations Act, 1950 (RTC Act) with a view to provide efficient, adequate, economical, safe and well co-ordinated passenger transport services in the State.

Chassis and bus bodies are the major constituents of capital expenditure in the Corporation. Chassis are purchased from chassis manufacturers. Bus bodies on new chassis are fabricated through bus body fabricators. City Transport Service (CTS) and district type bus bodies on old chassis are fabricated through bus body fabricators as well as in its own Central Workshop (CWS) at Ajmer.

As on 31 March 2005, the Corporation had a fleet of 4,320 buses consisting of 2,558 buses of Leyland make (59.21 *per cent*), 1,752 buses (40.56 *per cent*) of Tata make and 10 mini buses. Besides, 219 buses were taken on hire. A flow chart of the process of planning, fabrication and operation of buses is given below:

Assessment of tentative requirement of new buses and planning of schedules.
↓
Calling of offers from chassis manufacturers and techno-commercial discussions with them.
$\downarrow$
Approval of the Board regarding number of chassis to be purchased from the manufacturers.
$\downarrow$
Finalisation of terms and conditions of chassis purchase by Body Building Committee and purchase on those terms.
$\downarrow$
Invitation of tenders and placement of orders for fabrication of bus bodies and purchase of seats.
$\downarrow$
Pre-inspection of bus bodies and seats and collection of samples for testing at CIRT.
Receipt of buses from fabricators and operation thereof as per planned schedules.

The Corporation is managed by a Board of Directors consisting of a Chairman and 11 Directors. As on 31 March 2005, it consisted of a Chairman and a Managing Director and four Directors. The Managing Director is the chief executive who is assisted by a Financial Advisor and Executive Directors (Traffic and Engineering) in matters related to planning, fabrication and operation of buses. The CWS, Ajmer is headed by a Divisional Mechanical Engineer.

A review on purchase of chassis and fabrication of bus bodies by the Corporation was included in the Report of the Comptroller and Auditor General of India (Commercial) for the year ended 31 March 1991 which was treated as discussed by the Committee on Public Undertakings (December 1996).

## Scope of Audit

**3.2** The present performance review conducted during August 2005 to March 2006 covers planning, fabrication and operation of buses during the period of five years ended 31 March 2005. The audit findings are based on test check of records of the head office and the Central Workshop at Ajmer and  $10^*$  depots selected, out of 48 depots, on the basis of number of buses and composition of fleet.

# Audit objectives

**3.3** The performance audit of planning, fabrication and operation of buses was carried out in order to assess whether:

- proper planning for assessment of requirement of buses was done and adequate number of buses were purchased based on the areas notified by the State Government and schedules planned by the Corporation;
- adequate financial planning was done to purchase the required number of buses;
- an efficient and appropriate purchase/tendering process as per purchase/ bus body building policy was adopted to ensure economical purchases of chassis and seats and fabrication of bus bodies, thereby ensuring economical transport service to the passengers;
- a dependable quality assurance system was devised, put in place and was made operative; and
- schedules were planned and buses were operated ensuring their economic viability.

Udaipur, Jodhpur, Beawer, Kota, Alwar, Sikar, Hanumangarh, Sanganer, Jhalana Dungri and Sri Ganganagar.

# Audit criteria

**3.4** The performance of the Corporation in respect of planning, fabrication and operation of buses was assessed against:

- the provisions of the Motor Vehicles Act (MV Act);
- laid down policy of the Corporation;
- norms developed for providing efficient and economical transport services;
- prescribed procedure and instructions for assessment of requirement of new buses; and
- quality standards/specifications of bus bodies as also the operation of buses.

# Audit methodology

- **3.5** The following mix of methodologies was adopted:
  - review of agenda and minutes of meetings of the Board of Directors and budget estimates to assess financial planning for purchase of new buses;
  - analysis of data relating to population and nationalised routes vis-à-vis number of buses;
  - review of details relating to fleet age, replacement of overage buses and cost of operation of buses;
  - review of records relating to approved material sources and test reports of the material to assess use of good quality material; and
  - review of financial results of operation of buses and revision of passenger fares from time to time.

# Audit findings

**3.6** The audit findings were reported to the Government/Management in May 2006 and discussed at the meeting of the Audit Review Committee for Public Sector Enterprises (ARCPSE) held on 5 July 2006, where the Commissioner and Secretary to Government of Rajasthan, Transport Department and the Managing Director represented the Government/ Corporation. The review was finalised after taking into account the views of the Government/Management.

Audit findings are discussed in the succeeding paragraphs.

# 3.7 Planning

#### Deficient planning for assessment of requirement

**3.7.1** To provide efficient, adequate, economical and safe passenger transport services, it is essential to keep sufficient fleet of buses for which it is necessary to purchase and fabricate sufficient number of buses. Despite 41 years of its existence, the Corporation did not prepare any long term policy document towards assessment of requirement of buses.

Whenever any nationalised route was notified by the State Government, the number of trips and buses to be operated on the route was indicated in the notification. Transport Department, Government of Rajasthan issued (May 2005) a revised notification after conducting survey for requirement of buses through Regional/District Transport Officers and after considering objections raised by the Corporation. As per the revised notification, 5,553 buses (22,437 trips) were required against 2,168 buses (5,635 trips) mentioned in earlier notifications issued up to August 1991. Further, 19 buses (84 trips) were required for routes notified after August 1991. In addition to the nationalised routes, the Corporation operated 1,073 buses on inter State routes and 259 buses on non-nationalised routes. Thus, overall 6,904 buses were required against which the Corporation held only 4,553 buses as on 31 March 2006 *i.e.* a shortage of 2,351 buses. The Corporation did not surrender the unutilised permits to the transport authority which aggravated the shortage of buses.

The main reason attributed by the Corporation for non-operation of adequate number of buses was non achievement of required passenger load due to ingress of unauthorised buses on these routes run by private operators. It was observed during audit that the fare being charged by these private operators was less than that charged by the Corporation. The operation of unauthorised private vehicles ranged from 5.92 to 11.78 *per cent* of the vehicles checked by the State Transport Department during 2000-05. The unauthorised vehicles included large number of jeeps/cars, which not only caused loss of revenue to the Corporation as also to the State exchequer by way of escaping State taxes, but also risked the lives of the passengers due to overloading and rash driving resulting in road accidents. It was also noticed that despite the fact that there was growth in the population of the State by 19.89 *per cent* during the above period, the Corporation instead of providing adequate number of buses, reduced its fleet from 5,014 buses in March 1998 to 4,553 buses in March 2006.

Thus, due to absence of any long term planning and system for assessment of requirement of buses, the Corporation not only failed to cater to the growing demands of the passengers but also did not surrender permits to let authorised private players to operate buses.

Against requirement of 6,904 buses, the Corporation deployed 4,553 buses only. The management stated (July 2006) that it was not proper to assess the requirement of buses based on the notification of the Transport Department as the Corporation operates buses by clubbing the routes mentioned in the notified Schemes. It was also stated that despite shortage of vehicles, the operated kilometer (km) had increased. The reply is not tenable as the Corporation is required to operate buses as per the notification and clubbing of routes deprives the passengers of adequate transport facility due to low frequency of buses. Further, increase in operated km also includes km for inter-state and non-nationalised routes which are not included in routes notified by the State Government. The management, however, accepted at the ARCPSE meeting (July 2006) the fact that there was shortage of buses.

#### Injudicious purchase of mini buses

**3.7.2** In order to induct mini buses in the fleet, the Corporation held a meeting (December 2001) with the representative of one manufacturer *viz;* Swaraj Mazda Limited. The Executive Director ED (Traffic) was required to submit the requirement for 32 seater buses on certain routes/schedules keeping in view their financial viability. The ED (Traffic) recorded (18 January 2002) that the proposal of induction of mini buses was not financially profitable. The management ignoring the report of the ED (Traffic) and suppressing/misrepresenting the facts about its non-viability, obtained approval of the Board for purchase of 10 mini buses for Rs.73.13 lakh (April 2002). The actual difference in the operating cost was Re.0.54 per km and not Rs.1.45 per km as mentioned by General Manager (Bus Body) based on which approval of the Board was obtained.

**Unviable operation of mini buses caused loss of Rs.75.13 lakh.** The operation of mini buses proved uneconomical due to substantially higher operating cost than operating revenue. The unviable operation of mini buses caused loss of Rs.75.13 lakh upto March 2005 and continues to incur loss.

The Government, while accepting the loss in operation of mini buses stated (May 2004) that profit was not the sole objective of the Corporation as it had to provide cheap and comfortable services. Not denying the fact that the Corporation has to provide cheap and comfortable service, the Corporation should not have purchased the mini-buses in view of the categorical note of the ED (Traffic) referred to *ibid*.

The management stated (July 2006) that the operation of mini buses was on trial basis in order to compete with private jeeps and mini bus operations on sub urban routes. The reply is not tenable as the operation of mini buses by the Corporation was unviable even at 100 *per cent* load factor as was adjudged prior to their purchase, and also the management had obtained approval of the Board by suppressing the ED (Traffic)'s report.

## Non-phasing out of 'Overage buses'

**3.7.3** The Corporation prescribed (September 1995) the life of a bus as 7 years or 6 lakh km, whichever is earlier. After completion of the prescribed life, such buses are required to be condemned and replaced with new buses as the variable cost of operation of overage buses is higher by Rs.1.50 per km (Rs.6.96 – Rs.5.46 per km) as worked out (January 2003) by the management.

The Corporation purchases chassis mainly for replacement of overage buses and shortage of its own buses are met by hiring buses from private owners. It was pointed out in the Report of the Comptroller and Auditor General of India for the year ended 31 March 2000 (Commercial) that the Corporation was operating overage buses resulting in uneconomical operations. The Corporation, however, did not plan to phase out the overage buses within the prescribed time. The position of number of such buses and the number of chassis purchased during the last five years ended 31 March 2005 is as detailed below:

Year	No. of Overage buses	No. of chassis	Percentage of purchase of
		purchased	chassis to Overage buses
2000-01	2,204	395	17.92
2001-02	2,567	489	19.05
2002-03	2,738	549	20.05
2003-04	2,301	688	29.90
2004-05	2,110	273	12.94

It would be observed from the table above that the Corporation did not replace the overage buses within the prescribed time. It replaced such buses to the extent of 12.94 to 29.90 *per cent* only during 2000-05. As a result, the Corporation had been plying overage buses incurring higher operating cost. It was noticed in audit that the Corporation had been successfully and profitably running hired buses under the 'kilometer scheme'. It could, therefore, have replaced its overage buses by procuring more buses on hire from private owners without any additional investment. Had the Corporation taken more buses on hire instead of running its overage buses, it could have saved excess operating cost of Rs.130.39 crore during 2000-05, calculated on the basis of Kilometers run by overage buses and their excess operating cost. Higher operating cost ultimately resulted in operation of uneconomical schedules. Besides, the operation of overage buses was prone to more breakdowns, adversely impacting the quality of passenger service.

The management stated (July 2006) that despite operation of overage buses, breakdown rates and losses had been reduced and diesel average had improved during 2000-05. The reply is not tenable as the improvement reported by the Corporation is not specific as comparison of data relating to overage buses and other buses was not made. Further, the management itself had apprised (January 2003) the Board that operation of overage buses caused financial loss to the Corporation. The management, further, stated (July 2006) that the norms of overage buses had been fixed for charging depreciation in financial accounts and there were no norms for physical condemnation. The reply contradicts the management's own practice of taking decisions for purchases of chassis based on the life of the buses as the norm.

## Non utilisation of available buses

**3.7.4** The Corporation ascertains the total number of buses required based on schedules to be operated plus a provision for spare buses of four to six *per cent* of the planned schedules. It was, however, noticed in audit that the Corporation did not adhere to the planning norms of schedules and planned less schedules as compared to the number of available buses during all the five years from 2000-01 to 2004-05 as indicated below:

Operation of overage buses led to excess operations cost of Rs.130.39 crore. Audit Report (Commercial) for the year ended 31 March 2006

Year	Availability of buses (No.)		No. of schedules planned and operated	Requirement of buses including spare buses	Buses in excess of requirement (No.)	
	Own	Hired	Total		(No.)	
2000-01	4,358	249	4,607	4,281	4,538	69
2001-02	4,413	220	4,633	4,282	4,534	99
2002-03	4,348	278	4,626	4,326	4,587	39
2003-04	4,538	271	4,809	4,408	4,612	197
2004-05	4,320	219	4,539	4,291	4,491	48

Non-rationalisation of operating schedules compared to available buses led to non-recovery of fixed cost of Rs.30.08 crore. It would be observed from the above table that during the period 2000-05 due to operation of less number of schedules as compared to the number of buses available, the Corporation's buses ranging from 39 to 197 remained idle, every year and fixed cost on these buses was incurred without earning any revenue. Thus, while on the one hand, the Corporation did not operate the required number of schedules due to shortage of buses, on the other, less number of schedules was planned as compared to availability of buses leading to idling of buses. Had the Corporation rationally planned the number of schedules *i.e.*, according to the availability of buses, it could have recovered fixed cost to the extent of Rs.30.08 crore during 2000-05 by operating these idle buses, which contributed to the loss of the Corporation.

The management stated (July 2006) that due to procedural delays in condemnation of buses, the off road buses are included in the fleet which exhibit buses in excess of requirement. The management, however, could not make available any records of buses under 'condemnation process'.

## **3.8** Fabrication of buses

## Deficient system of tender evaluation

3.8.1 The Board of Directors of the Corporation approved (December 1995) a Bus Body Building Policy, which, inter alia, provides that tenders for fabrication of bus bodies should be invited in two parts *i.e.*, technical bids and financial bids. The financial bids of only those bidders should be opened whose technical bids are approved. It further provides that the technical bids of new entrants should be evaluated based on the prescribed matrix based on organisational capabilities, technical capability, execution performance, workmanship and pending arbitration/legal cases of the bidders. Technical evaluation of approved fabricators already on the panel should be based on their pre-qualification ratings of previous years, delivery performance and penalty imposed on account of delay etc. The policy also provides that where the material used is found to be sub-standard, pro rata material cost should be recovered from the fabricator. In case of material not conforming to the specifications or if the workmanship is substantially defective, the fabricator should be black listed.

Audit analysis revealed that out of 2,459 bus bodies fabricated during 2000-05, 1,930 bodies were fabricated by four major fabricators. The year wise performance of these four fabricators indicating sample failure rate and delay in fabrication is given in **Annexure**-20.

It would be seen from the Annexure that during 2001-02, the percentage of sample failure of all the four fabricators was substantially high ranging between 38 and 58. Further in case of one fabricator (Bharat Metals) there were abnormal delays of 374 days, 414 days and 641 days in fabrication of bus bodies during 2000-01, 2001-02 and 2003-04, respectively. As per the policy, these fabricators should not have been considered for award of work in the subsequent years and should have been black listed. The Corporation, however, awarded fabrication work to these fabricators during subsequent years ignoring their deficient past performance.

Audit analysis further revealed that the evaluation of technical bids of approved fabricators was done based on the matrix designed for evaluation of new entrants, instead of on their past performance. Besides, the matrix applied assigned negligible weightage (only four out of 100) to past performance thereby enabling the defaulters to continue on the approved list of fabricators. As a result, the percentage of sample failure of these firms during 2003-04 increased to 100. Further, three out of four of such firms delayed the fabrication work during the year (2003-04) by 6 to 641 days. Despite increase in sample failure and delay in fabrication, the Corporation continued awarding fabrication work to these firms.

The management stated (July 2006) that due to delay in fabrication by Bharat Metals during 2000-01, the firm was down graded in the subsequent year. It was noticed in audit that even after down grading, orders for substantial quantity were issued to the firm in all the subsequent years which indicates that considerable delays by the firm had no adverse impact in evaluation of their performance. The firm again delayed the fabrication in 2001-02 and 2003-04.

Thus, the deficient system of evaluation of technical bids not only resulted in substantial delays in fabrication of bus bodies, but also contributed towards poor quality of the bus bodies due to non-elimination of the firms using substandard material. The Corporation thus failed to ensure the quality of bus bodies and also paid excess money to those fabricators to the extent of substandard material used.

## Defective agreement conditions

**3.8.2** As per the agreements executed with the fabricators during the period 2000-05, a penalty of Rs.600 per day (revised to Rs.700 in 2004-05) for first seven days and Rs.1,000 per day for the remaining days was recoverable from the fabricators for delay in delivery of a bus body beyond the prescribed period from the date of release of chassis. The Corporation levied penalty of Rs.74.97 lakh on fabricators for delays ranging between 1 and 60 days (total 9,017 vehicle days of 511 buses) that occurred in delivery of bus bodies on the chassis allotted during 2000-05.

Despite sample failure and delay in fabrication, fabrication work was awarded to defaulting firms.

Deficient system of evaluation of technical bids resulted in delay in fabrication and use of sub-standard material. Wrong construction of penalty clause, without relating it to loss of revenue, led to loss of Rs.87.65 lakh. It was, however, noticed in audit that the quantum of penalty in the agreements was fixed without any relation to the actual loss of revenue. The delay in fabrication of 511 buses resulted in loss of revenue of Rs.1.63 crore against the penalty of Rs.74.97 lakh recovered by the Corporation. A similar para was included in the Report of the Comptroller and Auditor General of India (Commercial) for the year 1990-91 but no corrective action had been taken by the Corporation. Thus, due to fixing of penalty without any correlation to loss of contribution towards fixed cost, the Corporation suffered a loss of Rs.87.65 lakh, which not only enhanced the operating cost of the buses but also caused discomfort to the passengers.

The management stated (July 2006) that penalty for delay is aimed to have a check on the fabricators for timely fabrication and it cannot be related with loss of revenue. The reply is not tenable as the penalty is against liquidated damages which have to be based on the actual losses sustained and not on any arbitrary yardstick.

#### Purchase of seats

**3.8.3** The Corporation provides readymade passenger bus seats to bus body fabricators for fixing. The Corporation purchases bus seats for its buses by inviting two tier open tenders. After opening of the technical bids the financial bids of technically approved firms are opened. Audit scrutiny revealed that instead of issue of purchase orders on the lowest firms (up to their supply capacity), the Corporation issued purchase orders in three cases to the next higher bidders as detailed below:

Sl. No.	Date of decision	No. of seats sets purchased from II lowest	Name of firm	Rate difference per set from first lowest firm (Amount in Rupees)	Extra expenditure (Amount in Rupees)	Reasons given for purchase from II lowest
1	5.3.2001	72	Oto Indus- tries	2,700	1,94,400	Ratio 80:20 decided by Body Building Committee
2.	4.3.03	175	Vijay Jyot Seats	1553.50	2,71,863	Ist lowest was not tried and was new entrant
3.	1.11.03/ 22.11.03	171	-do-	6,750	11,54,250	Seats set were required within two months
Total					16,20,513	

In the case of purchase of 72 seat sets (5 March 2001), no justification for purchase of 20 *per cent* seats from the second lowest firm was found on record despite the first lowest firm having sufficient capacity to supply the full quantity of seats. In the case of purchase of 175 seat sets (4 March 2003), despite being technically qualified the lowest firm was given only a trial order. In the case of purchase of 171 seat sets (November 2003), the supply order was placed on the second lowest firm on the plea that the seats were urgently required. The contention is not acceptable as the seats could have been purchased from the lowest firm by synchronisation of procurement of seats with those of chassis. Thus, non-awarding of orders to the lowest firms to their full supply capacity had resulted in extra expenditure of Rs.16.21 lakh.

The management stated (July 2006) that in case of second purchase (4 March 2003), the first lowest firm had demanded extra transportation charges and in view of uncertainty of transportation charges, order was placed on the second lowest firm. The reply is not based on facts as the recorded reason was that first lowest firm was an untried/new entrant. Further, even after allowing transportation charges, the Corporation could have saved Rs.2.72 lakh.

In case of purchases decided in November 2003, the Management stated that the purchase orders to the respective chassis manufacturers were issued during November and December 2003 and synchronisation of purchase of seats with those of chassis in phased manner was not possible. The reply is not tenable as the Corporation could have rescheduled its supply of seats as and when the intimation from chassis manufacturers for pre-inspection was received.

## Quality assurance of bus bodies and seats

**3.8.4** For super express buses, quality is ensured through approval of sources of material, prescribing specifications of material to be utilised and testing of material at Central Institute of Road Transport (CIRT), Pune. Details of bus bodies fabricated, samples sent for testing and their approval/rejection during 2000-01 to 2004-05 are as under:

Year	No. of bus bodies fabricated	Samples tested	Percentage of samples sent	Samples approved	Samples failed	Percentage of failed samples
2000-01	416	Nil	-	-	-	-
2001-02	584	76	13.01	38	38	50.00
2002-03	390	29	7.44	12	17	58.62
2003-04	647	38	5.87	10	28	73.68
2004-05	194	17	8.76	10	7	41.18
Total	2231	160	7.17	70	90	56.25

It would be seen from the above table that the Corporation did not collect any sample for testing in 2000-01 and the number of samples tested in the subsequent years was not significant as their percentage ranged between 5.87 and 13.01 only. Further, a substantial part (upto 73.68 *per cent* in 2003-04) of samples tested failed the quality tests. Despite this, the Corporation did not initiate any action to ensure that the material of prescribed specifications was used. This resulted in fabrication of bus bodies utilising sub-standard material. Thus, out of 2,231 super express bus bodies fabricated during 2000-05, 1,076 bus bodies costing Rs.26.61 crore (calculated based on year wise sample failure rate) were sub-standard.

It was also noticed that no samples of material used in Hi-tech, Star-line, sleeper coach and mini buses were sent for testing as the Corporation had got these bus bodies fabricated as per the specific designs and specifications of the respective fabricators. Thus, 228 buses valuing Rs.15.22 crore were fabricated without ensuring quality.

In respect of purchase of seats, the Corporation, despite 50 and 40 *per cent* failure rate of samples in 2002-03 and 2003-04 respectively, discontinued testing of seats in 2004-05. In the absence of testing, the quality of seats purchased in 2004-05 (value Rs.1.46 crore) could not be verified.

Non-initiation of action to ensure use of material of prescribed specification, buses of Rs.26.61 crore fabricated with substandard material.

Buses valuing Rs.15.22 crore were fabricated without ensuring quality. The above findings indicate the casual approach of the management towards quality assurance. Moreover, the possibility of discomfort to the passengers, because of sub-standard material cannot be ruled out.

The management stated (July 2006) that the quality is ascertained through feed back from the field units as well as on stage inspection and in case there is no adverse feed back report, there is no need to get the samples tested repeatedly. The reply is not tenable, as is amply proved by the high failure rate of the samples tested. Further, during 2000-05, the Corporation had to fabricate 438 low cost bus bodies on old chassis, the original bodies of which had to be condemned.

## Excessive man-hour utilisation

**3.8.5** District type and City Transport Service (CTS) bus bodies which are fabricated on old chassis are called low cost bus bodies. Low cost bus bodies are fabricated through private fabricators as well as in-house at the Central Workshop (CWS), Ajmer.

It was noticed in audit that the Corporation has not prescribed any norms for utilisation of man-hours in fabrication of bus bodies in CWS. Kirlosker Consultant's report on Time and Motion study of Maharasthra State Road Transport Corporation (MSRTC) in January 1992 mentioned that 819 man-hours are required for fabrication of a Leyland city bus body in the Central Workshop. As against this, the Corporation utilised an average of 1,228, 1,603, 1,479 man-hours per CTS bus body during 2002-03, 2003-04 and 2004-05 respectively, which were in excess by 49.94, 95.73 and 80.59 *per cent* respectively.

Similarly, as per the report 800 man-hours are required for fabrication of Leyland ordinary bus body against which the Corporation utilised 1,464, 1,293, 1,328 and 1,305 man-hours during 2001-02, 2002-03, 2003-04 and 2004-05 respectively. The excess utilisation of man-hours resulted in extra expenditure of Rs.1.37 crore.

As a result of utilisation of excess man-hours, the cost of bus bodies fabricated in CWS was always higher by 17 to 31 *per cent* than the cost of bus bodies fabricated by outside agencies as detailed below:

Year	Type of body	Cost at CWS (Rs.)	Cost of outside firm (Rs.)	Percentage of excess cost
2001-02	District type	2, 20,622	1, 71,600	28.57
2002-03	-do-	2, 01,565	1, 71,600	17.46
2002-03	CTS type	2, 11,416	1, 61,200	31.15

The Corporation neither prescribed any norms nor initiated any such study to analyse the man-hour cost; as a result the labour cost of the Corporation went up and resulted in enhanced operational cost by way of additional depreciation on increased cost of bus bodies. The Corporation has not taken any steps to reduce the labour cost in fabrication of bus bodies at CWS.

Excess utilisation of man-hours resulted in extra expenditure of Rs.1.37 crore. The management stated (July 2006) that low cost bus bodies were fabricated by the Corporation on old chassis which get some distortion due to prolonged usage over time requiring additional man-hours, whereas in MSRTC, the bus bodies are fabricated regularly on new chassis, hence both are not comparable. The reply is not tenable as there were large variations of up to 95 *per cent* in utilisation of man-hours by MSRTC and the Corporation. This also gets corroborated by the fact that the cost of fabrication in CWS was always higher than that charged by outside firms.

# **3.9 Operation of buses**

#### **Operation of uneconomical schedules**

**3.9.1** The stated objectives of the Corporation of providing efficient, adequate and economical passenger transport service in the State can be achieved and sustained on a long term time horizon only if it generates certain amount of surplus to be ploughed back for maintenance and growth both in terms of quality of service as well as larger coverage. The Corporation has, however, been running in loss since 1997-98 and its accumulated loss at the end of 2004-05, was Rs. 345.49 crore. Inspite of this, the Corporation was not monitoring 'schedule wise profitability' at the macro level up to March 2004. The Corporation, belatedly, started monitoring of schedule wise profitability from April 2004. A comparative position of operation of uneconomical schedules in April 2004 and March 2005 in respect of 42 depots for which information was made available is given below:

S.No.	Particulars	April 2004	March 2005
1.	Total number of schedules	3,822	3,847
2.	No. of uneconomical schedules	2,926	3,179
3.	Percentage of uneconomical schedules	76.56	82.64
4.	Total operating cost per Km (Rs.)	13.84	14.92
5.	No. of schedules running into loss of more than Rs.3 per Km (more than 20 <i>per cent</i> )	1,277	1,978
6.	Percentage of schedules given at S.No.5 to total schedules	33.41	51.42

Operation of 438 schedules without recovery of variable cost resulted in avoidable loss of Rs.12.26 crore.

It would be observed from the table above that the percentage of uneconomical schedules was as high as 76.56 in April 2004, which further increased to 82.64 in March 2005 within one year. Further analysis of uneconomical schedules revealed that the number of schedules running into losses of more than 20 *per cent* substantially increased from 1,277 (33.41 *per cent*) to 1,978 (51.42 *per cent*) during the same period. This indicates that the Corporation has not taken effective steps to make these uneconomical schedules viable by rationalising time, frequency and route. It was further noticed that during 2004-05, 438 schedules were operated without recovery of even variable cost which resulted in avoidable loss of Rs.12.26 crore.

Audit analysis of losses and uneconomical schedules revealed that the main reasons for losses were delay in revision in fares (paragraph 3.9.2), higher establishment cost (paragraph 3.9.3), non-phasing out of overage buses (paragraph 3.7.3), non-planning of schedules according to availability of buses (paragraph 3.7.4) and short deployment of buses against the Government notification (paragraph 3.7.1).

The management stated (July 2006) that to maintain continuity of bus operations, it has to operate buses on uneconomical routes in public interest. The management, however, accepted (July 2006) the viewpoint of Audit and requested the State Transport Department to accept surrender of permits of 26 uneconomical routes.

The fact remains that despite persistent operating losses, the Corporation did not initiate any strategic approach to turnaround the operations to make it sustainable.

## Non-revision of passenger fares

**3.9.2** As per the MV Act, the State Government may issue, by notification in the Gazette, direction to the State Transport Authority for fixation of passenger fares of Stage Carriage buses. The Government revises the fare only on the request of the Corporation. The State Government issued notifications in May 2000, October 2002 and in July 2005 for revision of fare.

The major element of operating cost is diesel and whenever the rate of diesel increases, the Corporation proposes to the State Government for increase of fare. In a meeting with the Chief Minister in June 2002, it was decided that whenever, there is an increase in diesel price, fare can be revised immediately by the Corporation with prior sanction of Transport and Finance Ministers. It was, however, noticed in audit that at the time of increase of fare in October 2002, the price of diesel was Rs.20.28 per litre, which progressively increased to Rs.23.34 in March 2003, Rs.24.01 in June 2004 and Rs.28.29 per litre in November 2004, but the Corporation did not propose revision of fare inspite of substantial increase in operating cost of diesel per km from Rs.3.65 in 2002-03 to Rs.3.83 in 2003-04 and Rs.4.86 to Rs.5.22 per km during this period.

The fare was belatedly revised in July 2005 from 40 paise to 45 paise per Km (express buses) after increase of diesel price to Rs.30.94 per liter in June 2005. It was noticed in audit that in the seminar on 'Strategic planning decision' organised (1999-2000) by CIRT, Pune and All State Road Transport Undertakings (ASRTU), it was concluded that steady increase in fares instead of a major increase at one go is beneficial to the Corporation to avoid reduction in passenger load. The financial implication of an increase in diesel price on fare by two paise in March 2003, another two paise in November 2004 and one paisa in July 2005 instead of the one time increase of five paise per km in July 2005 in terms of revenue foregone amounted to Rs.89.82 crore.

One time increase in fare instead of phased increase caused revenue loss of Rs.89.82 crore. The management stated (July 2006) that it is not empowered to revise the passenger fare on its own. The fact, however, remains that the Corporation did not approach the State Government for steady increase in fares as and when the diesel price escalated. The Government stated (July 2006) that the orders of the State Government are underway whereby the Corporation would get powers to increase fare of one paisa per km per passenger on every increase of one rupee in the diesel price.

#### Excessive establishment cost

**3.9.3** Establishment cost largely affects the economic viability of operation of buses. The Corporation, therefore, needs to reduce the establishment cost to the minimum possible. It has, however, not prescribed any norms/targets to be achieved in this regard. It was noticed in audit that the number of employees per vehicle was 4.87 in 2003-04, which, inspite of decline in total number of employees, increased to 4.96 in 2004-05. This is indicative of the failure of the Corporation in proper utilisation of the staff, which resulted in increased establishment cost per km from Rs.4.87 in 2003-04 to Rs.5.22 in 2004-05. In spite of excessive establishment cost, the Corporation had not taken effective steps to reduce it to a reasonable level, which adversely impacted the economic viablity of bus operations.

The management stated (July 2006) that the Corporation provides regular employment to drivers and conductors, which causes excessive establishment cost. The reply is not tenable as the Corporation has not made any efforts towards reduction of its cost.

## Conclusion

The performance of the Corporation, which was established with the main objectives of providing efficient, adequate and economical passenger transport services in the State, was found to be unsatisfactory. It failed in attainment of its objectives as it neither operated the requisite number of buses on the notified routes nor did it surrender the permits to the Government to enable private operators to operate on such routes. Operation of overage buses (which constitutes more than 46 *per cent* of its fleet) by incurring higher operating cost adversely affected the fare economics.

Planning of less number of schedules as compared to the available buses also contributed to the loss. The Corporation failed to ensure quality in fabrication of bus bodies. Despite failure of substantial part of the samples sent for testing, the Corporation did not take steps to ensure use of quality material. It continued to award fabrication work to the same fabricators disregarding their unsatisfactory past performance. Non-revision of passenger fares at the appropriate times and nonreduction in excessive establishment cost coupled with all the above factors rendered over 80 *per cent* schedules uneconomical.

#### Recommendations

The Corporation may:

- map out a long term corporate/business plan with a turnaround strategy so that it can compete with the private operators more efficiently and provide effective and adequate passenger transport services;
- plan operating adequate number of buses in order to reduce fixed cost per km and consider replacing the overage buses as per norms to reduce the operating cost as also take effective steps to minimise establishment cost;
- introduce a system for effective monitoring of uneconomical schedules so as to take timely action to make them economical;
- strengthen the system of technical evaluation of bidders by giving due weightage to their past performance and improve the tendering system so as to get fabrication work done at minimum cost;
- devise a dependable system of quality assurance; and
- evolve a mechanism in association/consultation with the State Government to enable it to have autonomy to fix the fares.