CHAPTER 2

STATE ROAD TRANSPORT UNDERTAKINGS IN INDIA – A PROFILE
CHAPTER 2

STATE ROAD TRANSPORT UNDERTAKINGS IN INDIA - A PROFILE

This chapter aims at providing a bird's eyeview of the passenger road transport scene in India. It covers the important place which passenger road transport has come to occupy in India, its historical development and growth, its nationalisation and the problems confronting the STUs today. It also provides a basis for appraising the performance of STUs and identifies the key parameters for such an appraisal. In the end a performance review is included which covers operational performance in brief and the financial performance in some detail.

The place and importance of transport in the social and economic development of a country has been briefly referred to in the previous chapter. The Committee on Transport Policy and Co-ordination appointed by the Planning Commission observes: "The significance of the transport sector lies not only in the specific services it renders, but even more in the unifying and integrating influence it exerts upon the economy, enhancing productivity, widening the market, introducing new stimuli to economic activity and bringing village and town and the remoter and the more developed regions closer to one another." 1 However, within the transport sector, it is the bus transport which has become the primary mode for providing mobility to millions of population in the rural as well as the urban societies.

This is all the more the case in a vast country like India which is said to live in its villages.  
These two dimensions, viz. a teeming population in a vast country and a high percentage of its concentration in inaccessible villages/rural areas, readily point to the need for developing the road transport system as the only solution to the problem of public transport in India. Thus "motorised road transport holds the unique position of being the primary, and in some cases the only, mode of transport which can provide effective links to these thousands of villages."

History of the Development of Bus Transport in India

Mechanised road transport has a short history in India beginning in 1896 when the first motor vehicle made its appearance on Indian roads. The history of the development of bus transport in India may be traced in two spells, i.e. the pre-Independence period consisting of the beginning, early growth and problems and the gradual control and regulation by government and the post-Independence period highlighting the nationalisation of the industry, its growth and current problems.

2. According to the 1971 census, out of the total population of 54.82 crores, the percentage of people living in villages was 80% (43.90 crores). The number of villages was 5.76 lakhs, of which 3.14 lakhs, representing 54.51% remained to be connected by any road. (Research & Reference Divn., Ministry of Information & Broadcasting - A Reference Annual, Publications Divn., Govt. of India, Sept 1980.)
Pre-Independence Period

The number of motor vehicles during the early years was few and they were registered under provisional enactments mainly with a view to safeguarding the lives of pedestrians. However, the first All-India enactment for operational control and registration of motor vehicles came in the year 1914 in the shape of the Indian Motor Vehicles Act. In the early 1920's, there was a sudden spurt in the growth of bus transport in India, thanks to the diversion of surplus army vehicles at the end of the First World War to civilian markets. Competition became severe among bus operations, who were plying these vehicles for hire and reward. "In the late 1920s, the problems of unhealthy competition became more acute and the shrinkage of traffic accentuated by the world-wide depression (which involved this country also) had brought to the fore the need for regulation of the industry, both internally and in relation to the railways." 4 This marks the beginning of the emergence of the public utility dimension of bus operations in India since what followed was a series of measures recommended by successive committees appointed by Government for reducing rail-road competition and ensuring better co-ordination of services. The Pope Committee (1932), the Mitchell-Kirkness Committee (1932), the Rail-Road Conference (1933) and the Wedgewood Committee (1936) are

amongst the important ones in this connection.

The culmination of the regulation and control of motor transport operations by the Government came in the shape of a new and comprehensive legislation in 1939, viz. the Motor Vehicles Act of 1939, which, among other things, endorsed the potential of motor transport in carrying people and goods for hire or reward. "This legislation which is in force today (with a number of amendments incorporated from time to time) provided for the creation of Regional and State Transport Authorities, with full powers to grant permits for stage (passenger) carriages, public carriers and private carriers. It also laid down conditions pertaining to routes, timings, specifications of vehicles, standards of maintenance, etc."\(^5\)

In 1945, the Post-War Reconstruction Committee's Sub-Committee on Transport urged the replacement of the small owner by large companies so as to provide adequate services and better travelling comforts. A similar recommendation was made by the Post-War Policy Committee on Transport (1944) and the Transport Advisory Council(1944). In pursuance of this recommendation, several State Governments used compulsion and persuasion to reorganise individual operators into bigger units. Several State Governments

---

also gradually began taking over passenger road transport services and running them as State enterprises. The first road transport undertaking in the public sector in India came into being in 1932 in the old Hyderabad State, followed by another in the princely State of Travancore (now part of Kerala) in 1938. The Kutch State Road Transport Corporation (now merged in Gujarat) was formed in 1942 while the Madras State Transport Department was born on the eve of the Independence in 1947.

"The Pre-Independence scene may be summed up as a period of both the beginning and the blossoming of the bus transport industry in India. The potential of the industry was quickly realised and the government took steps to control and regulate the bus industry to avoid unhealthy competition as well as to protect the railways in which it had substantial interest. It is significant to note that every expert opinion suggested controlled monopoly as the only answer to the evils of unhindered and selfish competition. The Motor Vehicles Act (1939) which was specially designed to tackle operations by numerous private operators by stringent provisions and penal measures could also not fill the bill. " 6

Post-Independence Period

The dawn of Independence and the adoption of the concept of welfare state in India led the highest political

6. Ibid., pp. 21-22.
quarters in the country to plan systematically for rapid economic and social development. In view of its significant role, transport gained due recognition and place in the planning process, though the Industrial Policy Resolution of 1948 did not mention road transport for any priority. In 1950, the Road Transport Corporations Act was enacted by the Parliament although road transport was a 'State' subject under the Constitution. The main objective of this Act was to enable the States to progressively bring under nationalisation, both existing and future passenger road transport operations, in order to provide, secure and promote an efficient, adequate, economical and properly co-ordinated transport services.

"While empowering the State Governments to establish Road Transport Corporations in their respective States, the Road Transport Corporations Act, under Sec.23(1), gave the added incentive of the Central Government's participation, in providing for the capital of the newly established corporations. The Planning Commission also had recommended the formation of Corporations in the States, and the finances of the Corporation are obtained on loan from State and Central Governments on a 2:1 ratio of contribution."  

7. The Industrial Policy Resolution of 1948 laid down that besides arms and ammunition, atomic energy and railways, which would be the monopoly of the Central Government, the State will be exclusively responsible for the establishment of new undertakings in the field of six basic industries viz. coal, iron & steel, aircraft manufacture, ship building, telephone and telegraph and mineral oils. The rest of the industrial field was left to private initiative with the understanding that the State would also progressively participate in this field. As passenger transport belonged to this category and not the basic industries group, the progressive participation of the State Governments was ensured through an enabling Act i.e. the RTCs Act in 1950.

In 1956, suitable amendments were made to the Motor Vehicles Act to enable the corporations, set up under the RTCs Act, to get their schemes for nationalisation approved by the respective State government. Simultaneously, in the Industrial Policy Resolution of 1956, road transport was included, vide Schedule B, in the list of industries to be "progressively state-owned and in which the State will, therefore, generally take the initiative in establishing new undertakings but in which private enterprise will also be expected to supplement the efforts of the State." Thus, by the year 1956, the climate for the nationalisation of this crucial instrument for social and economic change has been well established and several state-owned passenger road transport undertakings came into being.

Not all the undertakings established for providing road passenger transport services were under the RTCs Act. Whilst the majority were established under this Act, other forms of incorporation have also been used viz. as government companies registered under the Companies Act, 1956, or full-fledged departments of the State Government concerned, or as Municipal Undertakings. The last stated form is exclusively used in the case of city transport services. Each form of incorporation gave rise to differences of

degree rather than kind, in the structure of management of the organisation since the major objectives and the methods and technology of operations are always identical. Thus, as on 31-3-1980 there were 49 State Transport Undertakings in India. A list of these STUs appears at the end of this Chapter. (Annexure 1)

The extent of nationalisation of passenger road transport varies in different States. The following Table shows the extent of nationalisation as on 31-3-1980 in some major States.

<table>
<thead>
<tr>
<th></th>
<th>Total No. of Buses in the State</th>
<th>No. of Buses held in the</th>
<th>Extent of Nationalisation as % of Total Buses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andhra Pradesh</td>
<td>10,132</td>
<td>6,994</td>
<td>69</td>
</tr>
<tr>
<td>Bihar</td>
<td>6,770</td>
<td>1,699</td>
<td>25</td>
</tr>
<tr>
<td>Karnataka</td>
<td>11,021</td>
<td>4,908</td>
<td>45</td>
</tr>
<tr>
<td>Kerala</td>
<td>7,923</td>
<td>3,021</td>
<td>38</td>
</tr>
<tr>
<td>Maharashtra</td>
<td>13,990</td>
<td>9,370</td>
<td>67</td>
</tr>
<tr>
<td>Madhya Pradesh</td>
<td>5,620</td>
<td>2,435</td>
<td>43</td>
</tr>
<tr>
<td>Rajasthan</td>
<td>4,820</td>
<td>2,213</td>
<td>46</td>
</tr>
<tr>
<td>Uttar Pradesh</td>
<td>11,180</td>
<td>5,679</td>
<td>51</td>
</tr>
<tr>
<td>Gujarat</td>
<td>8,410</td>
<td>6,404</td>
<td>76</td>
</tr>
<tr>
<td>Jammu &amp; Kashmir</td>
<td>1,903</td>
<td>754</td>
<td>40</td>
</tr>
<tr>
<td>All India</td>
<td>1,22,029</td>
<td>65,428</td>
<td>54</td>
</tr>
</tbody>
</table>

Share of road transport and its growth

Passenger traffic shared between the railways and the road during the last 30 years shows that the growth has been more than two and half times in the case of the road sector during the period 1950 - 1980, as can be seen from the following table.

<table>
<thead>
<tr>
<th>Year</th>
<th>Share of the road (%)</th>
<th>Share of the Railway (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950 - 51</td>
<td>25.8</td>
<td>74.2</td>
</tr>
<tr>
<td>1955 - 56</td>
<td>33.6</td>
<td>66.4</td>
</tr>
<tr>
<td>1960 - 61</td>
<td>42.2</td>
<td>57.8</td>
</tr>
<tr>
<td>1965 - 66</td>
<td>46.1</td>
<td>53.9</td>
</tr>
<tr>
<td>1973 - 74</td>
<td>49.1</td>
<td>50.9</td>
</tr>
<tr>
<td>1976 - 77</td>
<td>61.0</td>
<td>39.0</td>
</tr>
</tbody>
</table>


The main reason for this spectacular growth in the share of the road is due to a set of natural advantages which road transport possesses in comparison with those of the railways making it serve as a cheap mode of transport to reach remote and interior places. Further, the fact that the railways have been gradually increasing their
fares from time to time has also contributed to this shift in passenger traffic from rail to road, where the fares, if at all increased, have been sporadic and minimal. It must also be stated that the railways as a commercial undertaking is more prone to retain and do all it can to improve its share of the freight traffic than passenger traffic since it is the freight traffic which brings in the profit for the railways.

It is estimated that the share of the road sector in the total inland passenger traffic in the country would be of the order of 800 billion passenger kilometers by the year 2000 A.D. 10

Some important statistical details pertaining to STUs are mentioned below.

**STUs - Important Statistical Information as on 31.3.1980**

1. Number of STUs .. 49

2. Fleet Strength
   (a) Passenger Buses .. 65,428
   (b) Goods Trucks .. 1,562
   (c) Others (i.e. Department cars, vans, etc.) 2,490

3. Extent of Nationalisation (Based on fleet strength) 54%

4. Total capital invested (Rs.) 1133.00

5. Total revenue (1979-80) (Rs.) 1186.62

5. Total cost (1979-80) (Rs.)  ..  1297.98
6. Losses sustained (1979-80) (Rs.)  ..  111.36
7. Losses as Return on Capital Invested  ..  ..  ..  (-)9.3%
8. Total effective kilometres operated (1979-80) (in crores)  ..  487.32
9. Average number of passengers carried per day  ..  ..  ..  3.72
10. Total number of employees in STUs  5,80,000


Current features

The ILO/UNDP Study on the performance, problems and prospects of the STUs has brought out the following features concerning the STUs. 11

1. Though India has an extensive rail network and an air transport system, these are not the answers for serving the transportation needs of rural areas meaningfully and adequately. Therefore, motorised road transport occupies a unique position of being the primary, and in some cases, the only mode of transport which can provide effective links to the thousands of villages.

2. Out of 21,000 buses in operation in the country, about 69,500 were operated by the STUs. The extent

11. Ibid. pp 1-3.
of nationalisation, however varied from 12% to 99% in different States.

3. Among the three modes of transport viz. the rail, the road and the air, the share of the road in the total passenger traffic is the largest. In 1977-78, the share of the road was 85.43% in terms of number of passengers carried and 63.51% in terms of passenger kilometres operated.

4. The total number of employees in the STUs was about 5.2 lakhs during the year 1979-80, comprising traffic staff (65%), workshop and maintenance staff (30%) and administrative and other staff (5%).

5. The total capital invested in the STUs, as on 31.3.1980, was ₹1,133 Crores of which 80% represented outlays on buses, 15% on land and buildings, 4% on plant, machinery and equipment and 1% on furniture and other miscellaneous assets.

6. The current problems facing the industry stem from number of factors which can be grouped under three different but inter-related topics:—
   a. continuous financial deficits, which are growing year after year,
   b. high incidence of taxation which is one of the reasons for the mounting deficits, and
   c. limited financial resources.
The Basis for a Performance Appraisal of STUs

Performance appraisal of a public utility, organised in the public sector like the STUs, should be appraised in the context of their objectives. The objectives, as far as road transport undertakings incorporated under the RTCs Act are concerned, are clear and unambiguous. Section 18 of the RTCs Act states "it shall be the general duty of a Corporation to exercise its powers progressively to provide or secure or promote the provision of an efficient, adequate, economical and properly co-ordinated system of road transport services in the State or part of the State for which it is established and in any extended area" while Section 22 enjoins that it shall be "the general principle of a Corporation that in carrying on its undertaking it shall act on business principles." In short, the objectives can be stated as: to provide (secure or promote) (i) efficient (ii) adequate (iii) economical and (iv) properly coordinated transport service and in the process to carry on the activities on (v) business principles. Thus the objectives of STUs are five-fold and qualitative. Other public sector passenger road transport undertakings, whether registered under the Companies Act, 1956, or organised as government departments or municipal undertakings have same aims. in their cases similar objectives are either explicitly stated in the memoranda of articles of association or regulations of government/municipality, as the case may be, or implicitly understood and pursued as such as a matter of general policy and tradition.
Before we examine the implication of business principles in the case of STUs, it would be worthwhile to discuss the relevance of business principles or the profit motive in public sector as a whole. The term 'business principles' has come to be associated with the profit motive. Many a firm set as their objective, in the course of following business principles, the desire to maximise the profit. "Empirically, it has been found that in view of the overall business conditions and short-term requirements of liquidity, most of the business firms formulate their long-term financial objective in the form of the highest attainable profit."¹ In other words, the long-term financial objective of a business firm has to be in terms of a well defined rate of profit, such as a certain percent as return on investment.

The question which arises in the case of public sector undertakings is whether they can also be subjected to such generalisation. There is a view that whatever may be the other rationale in creating public sector enterprises, the most fundamental basis for their creation is that they serve public interest. On the basis of this assumption, public sector enterprises should not aim at profit but at serving public interest. Such a view cannot be accepted as a general policy particularly in those underdeveloped countries where the goal is to evolve an economy along socialistic lines.¹² The issue of public interest

¹². Dr. VKRV Rao, Economic Review (AICC), New Delhi, Seminar Number, July, 1959.
and the profit in such economies is to be deliberately fitted to a given development perspective pertaining to these countries. The best public interest which public enterprises can serve is, therefore, to fulfill all these financial and economic obligations which are determined by the developmental plans and perspectives. As mentioned in the first Five Year Plan, state enterprise in the development process of an underdeveloped country is both an ideological as well as practical necessity. In order to sustain its developmental efforts and promote the growth of a self-reliant economy, the State has to mobilise large savings. Under this view, therefore, profits by public enterprises specially in the underdeveloped countries, are both necessary and desirable. Even in the advanced countries there is emphasis on the earning of profits by nationalised industries. To sum up, it can be said that public enterprises, particularly industrial and commercial undertakings, should formulate their long-term financial objective in terms of attainable rate of profit.


16. Many of the reports dealing with the nationalised industries in England have raised this issue quite emphatically. In a collectivist economy like USSR, non-tax revenue specially profits of nationalised industries and turn-over tax over their products account for nearly 90% of the general revenue. Even in countries like UK and France, public corporations are required to
The implication of business principles in STUs

A scrutiny of the objectives contained in Section 18 and Section 22 of the RTC's Act might create some confusion as to their mutual compatibility. This is mainly because the objective under Section 18 viz. to provide efficient, adequate, economical and well coordinated services, is aimed at increasing the satisfaction of the community which the STUs seek to serve. "The four objectives mentioned in Section 18 of the RTC's Act spell out an obligation on the part of the Road Transport Corporation towards the passenger or the user." These objectives have, therefore, to be interpreted in the larger sense of assumption of social responsibilities by the STUs, such as providing transport services on routes which are not justifiable on economic grounds or having to operate as a public utility under administered fare/tariff systems as opposed to a tariff system related to either cost or the famous principle of 'what the traffic can bear.' On the other hand, the objective vide Section 22 of the RTC's Act is simple and aimed at increasing the surpluses of revenue over cost which is generally considered as anti-consumer interests. Hence the confusion, which is universal and as D.S. David says "characteristic of public passenger transport concerns in many parts of World." 18


State Transport Undertakings are basically public utilities run on business principles. The question of the relevance of business principles in the case of public sector passenger road transport organisations has been discussed by several authors, particularly in the light of the situation obtaining in India. By way of explaining the implication of the term "business principles", A.W.H. Lamond says: "providing transport services is not the business of the government but rather government is in business. This means that the undertakings must follow business principles to achieve their objectives. The fact that they are public undertakings in no way absolves them from the necessity for prudent husbandry of the public funds at work in them." According to K.V.S. Suryanarayana, if business principles mean profit motive then "profit in the commercial sense is difficult to assess in public sector (transport) undertakings because of several social costs incurred by them compared to privately managed undertakings. Unless we are in a position to identify social costs and give credit for these costs to the undertakings, the profit revealed by the accounts of the undertakings cannot be compared. These social costs can be said to include higher wages, over-staffing, provision of more amenities to the workers than in the private industry and other facilities." In a study


undertaken by G.K. Sant, it was noted that profitability in STUs changed from year to year due to several factors such as direct taxes and indirect taxes borne by them, rise in wages, allowances and improvement in service conditions of workers, market conditions relating to shortage of chassis for buses, stores, equipment, etc. leading to large scale sickness of vehicles and changes in the mode of depreciation, interest rates, etc. Under the circumstances, profits as reported in the accounts are not necessarily a true index of efficiency of management of the road transport undertakings. An extended interpretation of business principles is provided by P. Sudarsanam, who observes, "the objective of business principle can, however, be interpreted to mean that the road transport corporations should use their capital and other assets with efficiency that does credit to a business enterprise. In their efforts of cost-reduction and elimination of wastages due to internal organisation inefficiencies, the corporations should act, as private businessmen do, to remain in business." The STUs thus seem to partake some of the characteristics of business enterprises and accordingly their financial performance should also form a criterion in the overall performance appraisal. At the same time, their primary nature


as service organisations reduces the criterion of profit and financial efficiency to a lower importance. According to Kenneth Robinson, "for a private firm profits, loosely defined, are the overriding objective, whereas they clearly provide an inadequate measure of performance for a nationalised industry .... In order that the full potential of public ownership and control is realised, public enterprises require an objective which embraces the wider interests of the community and reduces finance to the status of a constraint rather than a goal in itself."  

Similarly, B.S. Sharma, while forcefully arguing in favour of profit motive to be the governing criterion for public enterprises, however, points out to an exception in the case of certain type of service enterprises, when he says, "Traditionally speaking, public sector enterprises should not aim at profit but at serving public interest. This is perhaps based on the assumption that public interest is served only by not making profit. Public interest thus interpreted can have exceptional justification only in case of certain service type enterprises but is unlikely to be accepted as a general policy." 

Parameters for performance appraisal

As noted earlier, the four fold objective of the STUs viz. to provide efficient, adequate, economical and properly


coordinated transport services should form the basis on which their performance must be appraised. But since they are qualitative objectives, they must be spelt out in some detail in the background of transport operations and in quantitative terms. A suggested scheme is as follows:--

**Efficiency of transport service**

There are many aspects which mark a given transport service as efficient or otherwise. These are the aspects of regularity, reliability, punctuality, safety, comfort, courtesy and cleanliness of operations.

**Regularity** - It denotes the operation of transport services as per the frequency of timings advertised and made known to the public.

**Punctuality** - It means 'neither early nor late'. The services should not only depart and arrive on time but also adhere to the same stipulation for the scheduled halts enroute.

**Reliability** - This refers to the quality of the services being dependable. It also means breakdown-free services.

**Safety** - A safe transport service is one which is accident-free, enabling the passengers to reach their destinations without loss of life or limb.
Comfort - Comfort in transport service would mean in the Indian context at least reasonably adequate accommodation for passengers to be able to sit with ease during the travelling time. In advanced countries passenger comfort extends further to other dimensions like clean toilet facilities, waiting halls, rest-rooms, etc.

Courtesy - This is a quality to be exhibited by the men who provide the transport services and who are in contact with the public e.g. drivers, conductors, bus station supervisors, depot managers, etc. It includes politeness, kindness and showing of good manners to the public.

Cleanliness - This implies that buses, bus stations and other premises are kept clean and that due care and attention are given to the maintenance and the upkeep of these items.

Adequacy of transport service
In the context of transport operations, adequacy denotes provision of service levels in right proportions. This can be achieved by an objective assessment of passengers' travel needs and matching the same with the procurement of resources to meet the transport need.

Economical transport service
This is a dimension which is normally interpreted in relation to both the transport undertaking and the
passenger. For the STU- it means that transport services are not wasteful. It implies that all inputs are provided in appropriate doses and that maximum use is made of them in order to offer services reflecting the genuine costs of operation. In other words, it means the ability to provide maximum of service at minimum of cost by eliminating all wastages internally. From the point of view of the passenger, economical transport means cheap fares.

Properly co-ordinated transport service

Co-ordination in transport is of two types, i.e. internal and external. Internal co-ordination which means co-ordination within a given mode of transport, say bus, may be ensured by so adjusting the schedules of operation that there is no wasteful provision of services. External co-ordination, on the other hand, refers to inter-modal co-ordination say between bus and rail. This calls for an integrated approach to the planning and operation of the various modes so that a network of transport services and systems can result under a deliberate national transport policy. Another dimension of co-ordination is the facility to passengers to change from one mode to another during a journey e.g. from bus to rail. Such inter-changes among the different modes of transport call for coordination in locating transport terminals in such a manner that passengers can easily interchange from one mode to another without having to incur additional cost or suffer inconvenience.
Quantifiable norms: Having spelt out the connotational dimension of the qualitative objectives of STUs, the next step is to develop quantifiable standards for each of them in order to appraise the performance of STUs meaningfully. For this purpose, seven broad areas may be identified for setting the norms. These are, (1) operational coverage, (2) fleet performance, (3) man management, (4) quality of service, (5) cost performance, (6) revenue performance and (7) overall financial performance.

Quantifiable performance norms in these areas will form the points of reference in a performance appraisal of a public passenger road transport undertaking either of itself periodically over time or for comparing inter-organisational performances. These areas are also suitable for control by the STU managements internally.

1. Operational Coverage

Two aspects are involved in operational coverage viz. (a) extent of infrastructural facilities provided by external agencies e.g. the State Public Works Department, the State Transport Department etc. and (b) internal management effectiveness. Criteria such as (i) road length per 100 sq.kms. of area, (ii) road length per one lakh population, (iii) percentage of unsurfaced roads in the area of operation and (iv) the share of the STU in the total number of buses operating in the State, are examples of the
quantifiable indicators as regards infrastructural facilities provided by external or outside agencies.

For internal aspects of operational coverage, the measure of performance can be (i) increase in fleet strength of the STU over periods of time, say five years, (ii) number of kilometres operated by it annually, (iii) number of kilometres operated by it per lakh population and (iv) number of buses per one lakh population.

2. **Fleet performance**

The three main aspects of the fleet performance are:

**Vehicle utilisation** - This is expressed usually in terms of kilometres performed by a bus per day and thus indicative of the production of services.

**Fleet utilisation** - This is the percentage of the number of vehicles pressed into service by a STU out of the total number of vehicles available and held by the STU. It reveals the efficiency with which vehicles are maintained so as to provide uninterrupted operations.

**Occupation ratio** - It is the measure to ascertain the load factor in a vehicle and indicates whether the vehicles are operated with adequate complement of passengers travelling in them.
3. **Man management**

The three main indicators in this area are:

- **Bus-staff ratio** - This indicates the number of persons employed per bus held in the fleet of the STU.

- **Kms. operated per employee (per day or per year)** - This gives a measure of man-power productivity.

- **Cost per kilometre on personnel** - This serves as a point of comparison for controlling man-power cost.

4. **Quality of service**

The quantifiable indicators of performance in these areas are:

- Trips/services/kms. cancelled for reasons other than non-availability of passengers.

- The break-down rate (i.e. number of break-down say per 10,000 kms.).

- The accident-rate (i.e. number of accidents say per one lakh kms.).

- Punctuality percentage.

5. **Cost performance**

The total cost per km. as well as its break-up into major cost-components like personnel, materials, maintenance, diesel and oil, etc. would help in evaluating performance and monitoring the costs and controlling them against the standards.
6. **Revenue performance**

The indicators in this case are mainly the revenue earnings per km. or the revenue earnings per bus per day or any other suitable period. The extent of loss of revenue due to cancellation of trips and leakage in and pilferage of traffic revenue would also come in for appraisal.

7. **Overall financial performance**

This is an extension of the cost performance and revenue performance. The indicators used are the Operating Ratio which is a measure of operational efficiency in terms of cost and revenue$^{25}$ and the rate of return on investment.

**PERFORMANCE OF STUs IN INDIA**

In the light of the foregoing indicating the basis of performance appraisal, the connotational framework of the STU objectives and the quantifiable parameters thereof, a brief review of the performance of the STUs is attempted here as under.

**Operational coverage**

(a) **Road length** - The growth in road length both per 100 sq. kms. of area and per one lakh population is tabulated below.

25. A detailed discussion of the operating ratio appears later in the Chapter.
Table 2.3

Growth in Road Length in India

<table>
<thead>
<tr>
<th>Year</th>
<th>Road length (kms.)</th>
<th>Per 100 sq.km. of area</th>
<th>Per 100,000 population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950-51</td>
<td>*</td>
<td>12.2</td>
<td>111</td>
</tr>
<tr>
<td>1960-61</td>
<td>*</td>
<td>16.0</td>
<td>119</td>
</tr>
<tr>
<td>1970-71</td>
<td>*</td>
<td>31.1</td>
<td>186</td>
</tr>
<tr>
<td>1980-81</td>
<td>*</td>
<td>54.9*</td>
<td>263* (*estimated)</td>
</tr>
</tbody>
</table>


It may be seen that the growth in road length per 100 sq.kms. of area from one decade to another was of the order of 31%, 94% and 76%, respectively. The growth of over 100% in terms of one lakh of population reveals that improvements in road length have occurred not merely in a geographical sense i.e. in terms of area (per 100 sq.kms.) but more importantly in satisfaction of travel needs of more and more people. This is indicative of the recognition of the importance of roads in the social and economical development of the country and the development of infrastructural facilities for STU operations.

(b) Share of the public sector in the total road passenger traffic - The share of the public sector in the total road passenger traffic during the period 1952 - 1981, has more than trebled as can be seen from the following table:
Table 2.4
Share of public and private sectors in road passenger traffic

<table>
<thead>
<tr>
<th>Year</th>
<th>Public Sector (%)</th>
<th>Private Sector (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1952</td>
<td>19.3</td>
<td>80.7</td>
</tr>
<tr>
<td>1961</td>
<td>33.0</td>
<td>67.0</td>
</tr>
<tr>
<td>1967</td>
<td>36.7</td>
<td>63.3</td>
</tr>
<tr>
<td>1974</td>
<td>44.0</td>
<td>56.0</td>
</tr>
<tr>
<td>1979</td>
<td>55.5</td>
<td>44.5</td>
</tr>
<tr>
<td>1981</td>
<td>60.0</td>
<td>40.0</td>
</tr>
</tbody>
</table>

Source: (1) Gupta, J.N. "In Defence of Public Sector Road Transport - State Transport News, Jan. 1970 and (ii) Reports on the Performance of Nationalised State Road Transport Undertakings, CIRT.

c) Internal aspects of operational coverage - In terms of increase in fleet strength, total kms. operated as well as number of buses per 100,000 population, the performance of the STUs can be said to be substantial. Table below refers.

Table 2.5
Internal aspects of operational coverage

<table>
<thead>
<tr>
<th>Item</th>
<th>1970-71</th>
<th>1980-81</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Fleet strength</td>
<td>..</td>
<td>37,048</td>
</tr>
<tr>
<td>2. Kms. operated (in lakhs)</td>
<td>16,642</td>
<td>51,903</td>
</tr>
<tr>
<td>3. Kms. operated per 100,000 population</td>
<td>..</td>
<td>3.04</td>
</tr>
<tr>
<td>4. No. of buses per 100,000 population</td>
<td>..</td>
<td>17.30</td>
</tr>
</tbody>
</table>

It is significant that against an increase of only 88 percent in the fleet strength of the STUs between 1970-71 and 1980-81, the increase in the total kms. operated by them was as high as 312 percent. This indicates good performance.

**Fleet performance**

The two main indicators of fleet performance viz. fleet utilisation and vehicle utilisation, are tabulated below based on averages for STUs during the period 1975-76 to 1980-81.

**Table 2.6**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fleet utilisation (%)</td>
<td>77</td>
<td>79</td>
<td>80</td>
<td>79</td>
<td>78</td>
<td>84</td>
</tr>
<tr>
<td>Vehicle utilisation (kms. per vehicle per annum)</td>
<td>87,000</td>
<td>87,500</td>
<td>89,000</td>
<td>91,145</td>
<td>93,000</td>
<td>94,000</td>
</tr>
</tbody>
</table>

*Source: Report on Performance of Nationalised State Road Transport Undertakings, CIRT.*

Both indicators show a continuous rising trend implying that capacity utilisation is continuously increasing.

**Man Management**

State Transport Undertakings are labour-intensive enterprises so much so that any growth in terms of operations, capacity etc. in their case will be correspondingly accompanied by a growth in the number of persons employed in
them. Thus, the normal yearly growth in operations on account of introduction of new routes and services and in augmentation of existing services would result in an increase in manpower in STUs. Moreover, since transport is an important infrastructure for the development of other sectors of economy, there would be the need for a planned growth in the transport sector to inspire growth in the other sectors. At the same time, the social and economic development in the region and the growth in other sectors themselves would give rise to a growth in transport. Thus, the growth in the number of persons employed in STUs is a natural phenomenon.

Growth in manpower 'per-se' does not reflect efficiency, which alone should be the main focus in performance appraisal. A measure of manpower productivity in the case of STUs is the number of kilometres per employee per day. On this basis, the efficiency of manpower in STUs has been consistent as reflected by the following table.

**Table 2.7**

**Manpower in S.T.Undertakings**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. No. of persons employed</td>
<td>410,000</td>
<td>421,000</td>
<td>462,000</td>
<td>520,000</td>
<td>570,000</td>
</tr>
<tr>
<td>2. No. of buses</td>
<td>56,040</td>
<td>58,128</td>
<td>61,661</td>
<td>65,428</td>
<td>69,550</td>
</tr>
<tr>
<td>3. Bus-Staff Ratio</td>
<td>7.3</td>
<td>7.2</td>
<td>7.4</td>
<td>7.9</td>
<td>8.2</td>
</tr>
<tr>
<td>4. Effective km./Employee/day</td>
<td>25</td>
<td>26</td>
<td>26</td>
<td>26</td>
<td>27</td>
</tr>
<tr>
<td>5. Manpower Cost/km (paise)</td>
<td>62.4</td>
<td>67.8</td>
<td>73.9</td>
<td>80.8</td>
<td>86.2</td>
</tr>
</tbody>
</table>

*Source:* Report on Performance of Nationalised Road Transport Undertakings, CIRT.
Quality of Service

The two important parameters in this regard are rate of breakdowns and rate of accidents. The rate of breakdowns at 1 per 10,000 kms. in 1975-76 dropped to 0.94 per 10,000 kms. in 1979-80. This indicates reduction in the number of breakdowns due to improved system of maintenance and upkeep of vehicles. As regards the rate of accidents, it is seen that a low rate of 0.5 number of accidents per 100,000 kms. of operation has continued throughout the five year period from 1975-76 to 1979-80.

Overall Financial Performance

In spite of satisfactory performance as regards operational coverage, fleet performance, manpower performance and quality of service, the overall financial performance of STUs leaves much to be desired especially during the later half of the decade 1971-80. This appears to be due to high inflationary conditions during the period which confronted the country in general and the STUs in particular. The petroleum crisis affects STUs both directly and indirectly - directly because STUs have to bear the increased cost of petroleum products which are direct inputs in transport operations and indirectly, because increase in petroleum prices trigger inflationary forces in the economy thereby increasing prices of other inputs especially wages as additional
dearness allowances is to be paid to the employees incidental to the rising cost of living index.

In the financial appraisal that follows, 32 major STUs operating inter-city and mofussil services have been covered and the analysis has been made on the basis of averages. A list of these STUs is given as Annexure 2 to this Chapter.

Operating Ratio

A useful indicator of financial performance of passenger road transport operations is the 'operating ratio', which expresses the relationship between operating cost and operating revenue expressed as a percent i.e. Operating ratio = \( \frac{\text{Operating Cost}}{\text{Operating Revenue}} \times 100 \). The significance of this ratio lies in the fact that it translates the operating efficiency in terms of cost and revenue. "An operating ratio of less than 100 is indicative of better performance than one which is greater than 100. Similarly a progressive decrease in the operating ratio over a period of time is indicative of a trend of improved performance and vice-versa." 26

For computing the operating ratio, operating cost and operating revenue have to be carefully scrutinized

so that only items related to operations are included. The total cost in transport operations can be classified into two major categories viz. 'operating' and 'non-operating.' The former includes costs such as running costs, staff costs, depreciation, insurance, overheads and other miscellaneous costs, i.e. all items excepting interest and taxes. Interest is a financing cost as it reflects the cost of alternative methods of financing a business. Taxes are costs emerging from policies of public finance and levied differently in different States. These two costs are, therefore, 'non-operating costs.' Operating revenue in the case of passenger road transport operations would thus comprise receipts by way of fares collected from passengers and other incidental receipts such as luggage charges, carriage of mail, etc. In other words, all receipts arising out of movement of people or things comprise the operating revenue. Other miscellaneous items of receipts such as advertisement receipts, rent of stalls hired out at bus stations, etc. constitute 'non-operating' revenue. In the case of STUs, 95% of the total revenue is 'operating' revenue and the remaining 5% only is 'non-operating.' The following table provides the average operating ratio.
Table 2.8

Average Operating Ratio

<table>
<thead>
<tr>
<th>Year</th>
<th>Average Operating Revenue (Pass/km.)</th>
<th>Average Operating Cost (Pass/km.)</th>
<th>Average Operating Ratio (Per cent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1973-74</td>
<td>146.38</td>
<td>125.11</td>
<td>85</td>
</tr>
<tr>
<td>1974-75</td>
<td>165.97</td>
<td>146.75</td>
<td>89</td>
</tr>
<tr>
<td>1975-76</td>
<td>183.75</td>
<td>157.09</td>
<td>85</td>
</tr>
<tr>
<td>1976-77</td>
<td>192.12</td>
<td>158.16</td>
<td>82</td>
</tr>
<tr>
<td>1977-78</td>
<td>198.27</td>
<td>168.44</td>
<td>84</td>
</tr>
<tr>
<td>1978-79</td>
<td>210.90</td>
<td>181.03</td>
<td>85</td>
</tr>
<tr>
<td>1979-80</td>
<td>226.15</td>
<td>197.44</td>
<td>87</td>
</tr>
</tbody>
</table>

Source: Compiled from Report on Performance of the Nationalised Road Transport Undertakings, CIRT.

The average operating ratio was around 85 percent which indicates that the operational performance of STUs was quite satisfactory in the financial terms of cost and revenue. In other words, the revenue from operations covered the cost incurred on operations and also produced an operating margin or surplus.

Of the two non-operating costs, interest on an average, accounted for about 4 percent of the total revenue and thus could be covered within the operating margin. Upto this point, the financial performance of STUs appears good in that the STUs have been able to cover the operating costs plus the financing cost (interest) within operating revenue. For a public utility, this appears as
no mean performance since all costs of operations and financing have been covered from out of the operating revenue. The significance of such performance becomes greater when seen in the context of increased prices of almost every input in transport operations which occurred during the latter half of the decade 1970-80 and the fact that governments did not allow any appreciable fare increases to meet increased cost of operations. The following table provides data illustrating the severe price-hike.

Table 2.9
Price-hike affecting the STUs

<table>
<thead>
<tr>
<th>Item</th>
<th>Base Year 1971 = 100</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1971</td>
</tr>
<tr>
<td>1. Diesel (per 1,000 ltrs.)</td>
<td>Rs. 772</td>
</tr>
<tr>
<td></td>
<td>(100)</td>
</tr>
<tr>
<td>2. Tyres</td>
<td>Rs. 939</td>
</tr>
<tr>
<td></td>
<td>(100)</td>
</tr>
<tr>
<td>3. Lubricants per litre</td>
<td>Rs. 2.68</td>
</tr>
<tr>
<td></td>
<td>(100)</td>
</tr>
<tr>
<td>4. Chassis (Tata)</td>
<td>Rs. 66,826</td>
</tr>
<tr>
<td></td>
<td>(100)</td>
</tr>
</tbody>
</table>

Source: Compiled from Report on Performance of the Nationalised Road Transport Undertakings, CIRT.

It is seen that between 1971 and 1980 the price hike was of the order of 289 percent in case of diesel, 246 percent in case of tyres, 384 percent in case of lubricants and 225 percent in case of chassis.
The residue in the operating margin after meeting the operating cost and financing cost was 10 percent which was all that was available for covering the other non-operating cost viz. taxes and to generate profit. It is this point that marks the beginning of the real problems faced by STUs because taxes at 1979-80 level, accounted for nearly 18 percent of the total operating revenue, far exceeding the 10 percent available in the operating margin to meet taxes.

Taxes, therefore, appear to be the main reason for the financial deficits in the case of STUs. "The total burden of taxes paid by bus transport in India today is the highest in the world." 27 The variety of taxes involved in road transport has been mentioned in a study conducted by Hindustan Motors in 1968. "The power to tax road transport is shared by the Centre and the States. The central levies are the import and excise duties on motor vehicles, components, tyres and tubes, batteries, motor spirit, HSD oil and lubricants. Levies on the State list include the taxes on motor vehicles, taxes on carriage of goods and passengers, and sales-tax on motor vehicles, bodies, parts, motor, fuel, tyres and tubes and lubricants. Then, there are the 'tolls, 'octroi' and 'wheel tax'; although State subjects, in most cases, these are levied by local bodies operating within the States." 28

multiplicity in the number of taxes they also show huge variations in nature as well as quantum. They are governed by various legislations and are not uniform except in the case of corporate income-tax which is payable to the Central Government. For example, the rate of motor vehicle tax is not uniform. Passenger tax in some States is levied on the gross earnings of the STUs while in some other States it is in the nature of a collection from passengers and remittance to the exchequer. Such a situation led the National Transport Policy Committee to observe "In our view it would be desirable for State Governments to rationalise tax structure so that incidence of taxation at least among neighbouring States is made broadly comparable. This could be done by ensuring that the basic rates are uniform as between States." 29

The overall financial deficits are presented year-wise in the following Table indicating earnings per km. (EPKM), cost per kilometre (CPKM) and the resultant profit/loss per km. for the period 1973-74 to 1979-80.

Table 2.10

Profit/Loss per unit of Service

<table>
<thead>
<tr>
<th>Year</th>
<th>EPKM (Paise)</th>
<th>CPKM (Paise)</th>
<th>Profit/Loss per Km. (Paise)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1973-74</td>
<td>154.08</td>
<td>158.29</td>
<td>(-) 4.21</td>
</tr>
<tr>
<td>1974-75</td>
<td>174.71</td>
<td>183.38</td>
<td>(-) 8.67</td>
</tr>
<tr>
<td>1975-76</td>
<td>193.42</td>
<td>196.56</td>
<td>(-) 3.14</td>
</tr>
<tr>
<td>1976-77</td>
<td>202.23</td>
<td>200.64</td>
<td>(+) 1.59</td>
</tr>
<tr>
<td>1977-78</td>
<td>208.71</td>
<td>211.53</td>
<td>(-) 2.82</td>
</tr>
<tr>
<td>1978-79</td>
<td>222.00</td>
<td>227.45</td>
<td>(-) 5.45</td>
</tr>
<tr>
<td>1979-80</td>
<td>238.05</td>
<td>250.54</td>
<td>(-) 12.49</td>
</tr>
</tbody>
</table>

Source: Compiled from Report on the Performance of Nationalised Road Transport Undertakings, CIRT.

According to G.C. Baveja, "One of the main causes contributing to the financial difficulties of nationalised (transport) undertakings is inflexibility of their fare structure. The fare standards of various undertakings has not been fixed on a scientific basis. Even as the operational costs go on increasing because of increase in incidence of taxation, rise in prices of vehicles and spare parts and increase in cost of staff, it is not possible for the undertaking to raise the fares in time and to the extent needed because of public pressure." 30

In transport operations, profit, in the ultimate analysis, is a function of fares. But in India, fares are

not within the control of the STUs. Fare policies and structures in the case of passenger road transport in India are regulated by State Governments. The procedure for the formulation and the enforcement of fares are quite vexing. Under the Motor Vehicles Act, State governments issue directives to the State Transport Authorities regarding the fixing of fares. However, as pointed by the National Transport Policy Committee, "These are not determined on any objective basis of cost and profitability studies of transport establishments .... No appropriate methodology for determining cost of inputs has been laid down in most States .... There is no in-built system to provide for an increase in fares commensurate with an increase in cost of inputs individually or cumulatively." 31 Moreover, even the marginal fare increases are granted by governments so late that they are always overtaken by further increases in costs. To quote the National Transport Policy Committee again "Many State Transport Undertakings are presently operating at a loss mainly on account of uneconomic fares which have been kept low as a deliberate policy of the government. Such low fares are not in conformity with the principle of covering short-term marginal costs .... Fare structure of State transport undertakings should be revised and brought in line with cost structure .... Each public sector undertaking should

have the freedom and flexibility to revise and adjust its fare structure." 32

The other indicator of the financial performance of a business venture is the return on investment (ROI). The ROI measures the final reward to the owners of the business for investing their capital. In the case of the STUs, the concept of ROI is seen relevant because they are enjoined to act on business principles and one of the tenets in business is that the capital invested should result in appropriate returns. The following Table furnishes the return on investment for the period 1973-74 to 1979-80.

Table 2.11

Return on Investment in STUs

<table>
<thead>
<tr>
<th>Year</th>
<th>Profit (Rs.)</th>
<th>Government funds invested (Rs.)</th>
<th>Return on Investment (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1973-74</td>
<td>(-) 94.31</td>
<td>2479.19</td>
<td>(-) 3.80</td>
</tr>
<tr>
<td>1974-75</td>
<td>(-) 225.66</td>
<td>3163.26</td>
<td>(-) 7.13</td>
</tr>
<tr>
<td>1975-76</td>
<td>(-) 89.82</td>
<td>3922.50</td>
<td>(-) 2.29</td>
</tr>
<tr>
<td>1976-77</td>
<td>(+) 52.73</td>
<td>4974.88</td>
<td>(+) 1.06</td>
</tr>
<tr>
<td>1977-78</td>
<td>(-) 101.41</td>
<td>5816.34</td>
<td>(-) 1.74</td>
</tr>
<tr>
<td>1978-79</td>
<td>(-) 210.19</td>
<td>6911.77</td>
<td>(-) 3.04</td>
</tr>
<tr>
<td>1979-80</td>
<td>(-) 541.40</td>
<td>7396.55</td>
<td>(-) 7.18</td>
</tr>
</tbody>
</table>

Source: Compiled from Report on the Performance of Nationalised Road Transport Undertakings, CIRT

32. Ibid., p 104.
However, the concept of ROI in the case of STUs needs to be explained in the context of some special features of the STUs which make it different from the conventional context in which the ROI concept is applied in financial analysis. Though the ROI concept is relevant, it is somewhat difficult to apply this concept in its virgin form and without qualification in the case of STUs because of two reasons. First, the net profit does not represent the first and the only reward to the owners viz. governments. It is not that the governments are rewarded only through the ultimate net profit. Other forms of reward take place in the shape of interest on State/Central Government contributions and the various taxes levied on the STUs. The second reason is that the owners’ capital in the case of STUs cannot be defined in the conventional sense because "a unique feature of these corporations, which is wholly inconsistent with business principles, is that they have no equity capital of their own. The owners of these undertakings, namely, the Central and State Governments make only capital contribution, interest on which constitutes a charge on the earnings, unlike a dividend on the share capital of a business firm which is payable only out of surplus." 33 Moreover, in the conventional sense owners’ capital is entirely risk-capital, whereas in the case of STUs, government contributions cannot be viewed as risk-capital since these contributions are interest bearing statutorily.

Therefore, for a proper appraisal of the return on investment, an overall assessment based on the total pay-out to the government should be taken in the case of STUs. The total pay-out to the governments includes interest and taxes paid and it is seen that such total pay-outs worked out to more than 20%, as is evident from the following Table.

**Table 2.12**

*Total reward to Governments by STUs*

(figures as % of govt. funds invested)

<table>
<thead>
<tr>
<th>Year</th>
<th>Interest</th>
<th>Taxes</th>
<th>Profit/Loss</th>
<th>Total pay-outs to owners</th>
</tr>
</thead>
<tbody>
<tr>
<td>1973-74</td>
<td>3.80</td>
<td>22.01</td>
<td>(-) 3.80</td>
<td>22.01</td>
</tr>
<tr>
<td>1974-75</td>
<td>4.04</td>
<td>25.17</td>
<td>(-) 7.13</td>
<td>22.08</td>
</tr>
<tr>
<td>1975-76</td>
<td>2.87</td>
<td>22.80</td>
<td>(-) 2.29</td>
<td>23.38</td>
</tr>
<tr>
<td>1976-77</td>
<td>3.14</td>
<td>22.33</td>
<td>(+) 1.06</td>
<td>26.79</td>
</tr>
<tr>
<td>1977-78</td>
<td>3.14</td>
<td>21.39</td>
<td>(-) 1.74</td>
<td>22.79</td>
</tr>
<tr>
<td>1978-79</td>
<td>2.95</td>
<td>20.68</td>
<td>(-) 3.04</td>
<td>20.59</td>
</tr>
<tr>
<td>1979-80</td>
<td>3.06</td>
<td>24.81</td>
<td>(-) 7.18</td>
<td>20.69</td>
</tr>
</tbody>
</table>

*Source:* Compiled from Report on the Performance of Nationalised Road Transport Undertakings, CIRT.

An analysis of financial performance of the STUs cannot be complete unless some features of the capital structure in their case and the inadequacy of their finances are highlighted. The capital structure in STUs comprises mainly State/Central government contributions.
and internal funds. Internal funds however, do not add up to much since as B.N. Adarkar observes: "the price control system aims at minimising the burden on the user of road transport services and, therefore, prevents these corporations from building up reserves. They are left with no owned funds apart from depreciation and meagre surplus to finance their essential capital expenditure." In few cases, additional capital through borrowings has no doubt been employed by the STUs. The usual source of debt capital is term-lending public sector finance institutions and nationalised commercial banks. Other sources like public deposits, debentures, etc. are nearly non-existent. Of late, the Life Insurance Corporation of India has earmarked some funds to be lent to State transport undertakings, while the World Bank lends capital mostly to STUs engaged in metropolitan city bus operations.

The capital structure of the STUs reveals that owners' capital, i.e. government funds and internally generated sources, account for about 80% while debt capital is only 20%. This may be seen from the following table providing the Capital Structure in STUs.

34. Ibid.
Table 2.13
Capital Structure in STUs
(Per cent)

<table>
<thead>
<tr>
<th>Year</th>
<th>Owners' Capital</th>
<th>Debt Capital</th>
<th>Total</th>
<th>Debt/Equity Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Govt. funds</td>
<td>Internal sources</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td>1973-74</td>
<td>48.6</td>
<td>42.3</td>
<td>90.9</td>
<td>9.1</td>
</tr>
<tr>
<td>1974-75</td>
<td>53.3</td>
<td>37.0</td>
<td>90.3</td>
<td>9.7</td>
</tr>
<tr>
<td>1975-76</td>
<td>47.2</td>
<td>32.3</td>
<td>79.5</td>
<td>20.5</td>
</tr>
<tr>
<td>1976-77</td>
<td>46.7</td>
<td>35.2</td>
<td>81.9</td>
<td>18.1</td>
</tr>
<tr>
<td>1977-78</td>
<td>49.4</td>
<td>34.8</td>
<td>84.2</td>
<td>15.8</td>
</tr>
<tr>
<td>1978-79</td>
<td>49.8</td>
<td>33.0</td>
<td>32.8</td>
<td>17.2</td>
</tr>
<tr>
<td>1979-80</td>
<td>46.0</td>
<td>35.5</td>
<td>81.5</td>
<td>18.5</td>
</tr>
</tbody>
</table>

Source: Compiled Data from Report on the Performance of Nationalised Road Transport Undertakings, CIRT.

Although predominantly funded by capital contributions from government, STUs face the problem of inadequacy of funds. This can be explained by a comparison of the total funds which should have been invested during the period 1973-74 to 1979-80 and the funds actually invested during the same period. The funds invested as at the close of 1973-74 was Rs. 262 crores in respect of vehicles. The Planning Commission Working Group on road transport for the 1978-83 Plan has adopted 12.5% outlay for replacement (of worn-out fleet) and 8% for expansion (new routes and augmentation of existing services). On this basis, the total funds which should have been invested on revenue earning assets viz. vehicles, worked out to Rs.779 crores at the end of 1979-80 at the average prices of vehicles ruling during the

period. In other words, a sum of Rs.517 crores should have been invested during this period on vehicles alone. The only source for these investments was government funds since debt financing was more an exception than the rule in STUs. However, the increase in the owners' capital (government funds plus internal sources) was of the order of Rs.492 crores during the said period. This has resulted in a short-fall of Rs.25 crores in investments in vehicles, thus providing a measure of the inadequacy of funds. To this must be added the investment in other infrastructural assets like buildings, plant and machinery which can be financed by only government funds as they cannot be met by borrowings from other sources in view of their non-revenue earning nature. The STUs thus suffer for severe dearth of funds.

Apart from the inadequacy, there is also uncertainty as regards the timely availability of the capital contributions from governments. The need for timely contributions from government has been stressed by B.N. Adarkar, who says, "Having for good reasons nationalised a public utility service to the point of excluding all private enterprises, a government incurs a special obligation to see that the fleet is adequate to meet the needs of the public. This means that the government contribution to the capital of a wholly nationalised enterprise should be
forthcoming regularly." 36 But in spite of such huge need for regular capital contributions, there was actually a backlog of Rs.33.82 crores as on 31.3.1979 as arrears of Central government capital contributions to the STUs and in the budget for 1978-79, the Central government made a provision of only Rs.26 crores. 37 Thus on the one hand the STUs have limited succour from more or less a single source and on the other hand even the promised succour is in arrears. To make matters worse, even the paper promise of the limited provision in the budgets are not actually disbursed to the STUs to the extent of full budget provisions. 38

To sum up, "the need to expand and augment the services is enjoined on the STUs by the society and the government alike and, if nothing else, the sheaf of momentum of planned economic development in a region would demand commensurate growth in the transport services. The legitimate aspirations of the STUs to consolidate and grow have been seriously hampered mainly on account of inadequate government funds." 39

37 Unpublished Data - CIRT, Pune.
Summary

This Chapter presents a profile of the nationalised road transport undertakings in India. From humble beginnings, the STUs have today come to occupy an important place, as a public utility, to provide transport facilities especially to the poor and weaker sections of the society in rural areas. The record of the growth of the STUs as regards their operations and efficiency during the decade from 1970-1980, is seen to be quite fair. They increased their fleet and services and judged by the criteria of efficiency, adequacy and economy, as enjoined on them in their objectives, their performance does not come under cloud. But their overall financial performance is seen to be dismal with continuous and mounting losses. The analysis of their financial performance clearly indicates that the causes of the malady viz. high incidence of taxation, un-economic fare structure and lack of adequate financial resources seem to lie outside the scope of the STUs to control. However, the losses need to be minimised, if not completely eradicated. It is in this setting that study of the working capital management in some selected STUs becomes relevant since working capital management and financial efficiency are closely inter-related.
Annexure I to Chapter 2

State Transport Undertakings in India
as on 31 - 3 - 1980

A. Incorporated under the Road Transport Corporations Act, 1950

1. Maharashtra State Road Transport Corporation
2. Gujarat State Road Transport Corporation
3. Uttar Pradesh State Road Transport Corporation
4. Andhra Pradesh State Road Transport Corporation
5. Karnataka State Road Transport Corporation
6. Kerala State Road Transport Corporation
7. Madhya Pradesh State Road Transport Corporation
8. Delhi Transport Corporation
9. Bihar State Road Transport Corporation
10. Calcutta State Transport Corporation
11. Rajasthan State Road Transport Corporation
12. Himachal Pradesh Road Transport Corporation
13. Assam State Transport Corporation
14. Pepsu Road Transport Corporation
15. Orissa State Road Transport Corporation
16. North Bengal State Transport Corporation
17. Durgapur State Transport Corporation
18. Tripura Road Transport Corporation
19. Meghalaya Transport Corporation
20. Jammu & Kashmir Road Transport Corporation
B. Registered under the Indian Companies Act, 1956

1. Pallavan Transport Corporation Limited
   a. Metropolitan Services, Madras
   b. District Services
2. Pandiyan Roadways Corporation Limited
3. Kattabomman Transport Corporation Limited
4. Cheran Transport Corporation Limited
5. Cholan Roadways Corporation Limited
6. Orissa Road Transport Company Limited
7. Anna Transport Corporation Limited
8. Bombay Metro. Transport Corporation Limited
9. India Tourism Development Corporation
10. Thanthai Periyar Transport Corporation Limited
11. Orissa State Commercial Transport Corporation Limited
12. Tamilnadu Goods Transport Corporation
13. Thiruvalluvar Transport Corporation Limited

C. As Department of the State Government

1. Haryana State Transport
2. State Transport Punjab
3. Nagaland State Transport
4. Sikkim Nationalised Transport
5. Chandigarh Transport Undertaking
6. Government of Mizoram
D. Municipal Undertaking

1. Bombay Electric Supply & Transport Undertaking
2. Pune Municipal Transport
3. Ahmedabad Municipal Transport Service
4. Kolhapur Municipal Transport
5. Solapur Municipal Transport
6. Pimpri-Chinchwad Municipal Transport
7. Jamnagar Municipal Transport
8. Amritsar Nigam Transport

Annexure 2 to Chapter 2

List of passenger road transport organisation covered in the financial analysis made in the thesis

1. Maharashtra State Road Transport Corporation
2. Gujarat State Road Transport Corporation
3. Uttar Pradesh State Road Transport Corporation
4. Andhra Pradesh State Road Transport Corporation
5. Karnataka State Road Transport Corporation
6. Kerala State Road Transport Corporation
7. Madhya Pradesh State Road Transport Corporation
8. Bihar State Road Transport Corporation
9. Rajasthan State Road Transport Corporation
10. Himachal Pradesh Road Transport Corporation
11. Assam State Transport Corporation
12. Pepsu Road Transport Corporation
13. Orissa State Road Transport Corporation
14. North Bengal State Transport Corporation
15. Tripura Road Transport Corporation
16. Meghalaya Road Transport Corporation
17. Jammu & Kashmir Road Transport Corporation
18. Manipur State Road Transport Corporation
19. Pallavan Transport Corporation Limited (District)
20. Pandiyyan Roadways Corporation Limited
21. Kattabomman Transport Corporation Limited
22. Cheran Transport Corporation Limited
23. Cholan Roadways Corporation Limited
24. Anna Transport Corporation Limited
25. Thanthai Periyar Transport Corporation Limited
26. Thiruvelluvar Transport Corporation Limited
27. Orissa Road Transport Company Limited
28. Haryana State Transport
29. State Transport, Punjab
30. Nagaland State Transport
31. Sikkim Nationalised Transport
32. Transport Department of Government of Mizoram