CHAPTER I
ROAD TRANSPORT INDUSTRY-AN OVERVIEW

1.1 Transportation in India
1.2 Road Transport Sector
1.3 Public Road Transport
1.3.1 Bus Transport
1.4 Road Transport Corporation Act
1.4.1 Power & Duties of Corporation
1.4.2 Finance & Audit
1.4.3 Problems of Nationalization of passenger transport in India
1.5 State Road Transport Undertakings
1.5.1 Institutional Category-wise fleet strength of SRTUs
1.6 Financing of state Road Transport
1.7 Historical Perspective of GSRTC
1.7.1 GSRTC at a glance
1.7.2 Fixed Assets of GSRTC
1.7.3 Objectives
1.7.4 Mission & Vision
1.7.5 Social Obligation
1.8 SWOT analysis
1.8.1 SWOT Analysis of GSRTC
1.9 General views of declining performance of GSRTC
1.10 Privatization of State Road Transport
1.11 Funding of State Transport Undertakings
1.12 Recent & Planned Improvement
1.13 The challenges of privatizing state Road Transport Undertaking
CHAPTER II

WORKING AND ORGANISATION OF GUJARAT STATE ROAD TRANSPORT CORPORATION

2.1 Introduction of GSRTC
2.2 Operation Management
2.3 Organization Profile
2.4 Corporate Information
2.5 Organization Structure
2.6 Services Provided
2.7 Computerization
2.8 Fare Structures
2.9 Internal Structures
2.10 Government Grants
2.11 Composition of Fleet Held
2.12 Diesel KMPL Incentive Schemes
2.13 Staff Employee Ratio
2.14 Recruitment & Selection
2.15 Strategic Move of GSRTC
2.16 Labour Settlement
2.17 Welfare Activities
2.18 Rationalization of Routes
2.19 Supply Chain Management
2.20 Mechanical Engineering Department
CHAPTER III
FINANCIAL ANALYSIS: CONCEPTUAL FRAMEWORK OF A STUDY

3.1 Introduction
3.2 Ratio Analysis
3.2.1 Types of Ratios
3.2.2 Standard of Comparison
3.2.3 Classification of Ratios
  Debt Equity Ratio
  Current Ratio
  Fixed Asset Turnover Ratio
  Return on Capital Employed
  Return on Equity
  Return of Assets
  Profitability Ratios
  Operating Profit Ratio
  Net Profit Ratio

3.3 Utility of Ratio Analysis
3.4 Diagnostic Role of Ratio
3.5 Tests of Hypothesis
3.6 Non-Parametric Analysis
3.7 Parametric Analysis
3.8 Coefficient of Correlation
3.9 Bus Transport Cost Assessment
3.9.1 Cost Concept
3.9.2 Cost Function
3.9.3 Controllable and Non-controllable cost
3.10 Bus Transport Revenue Assessment
3.10.1 Bus Fare
3.10.2 Fleet Productivity
3.11 Trend in Traffic and Revenue Level
3.12 Z-Score Analysis Tool

3.12.1 Formula of Z-Score

3.12.2 Users of the Z-Score Analysis
CHAPTER IV
REVIEW OF LITERATURE

4.1 Introduction
4.2 Meaning
4.3 Indian Studies
4.4 Summary of the Indian Study
4.5 Foreign Studies
4.6 Summary of the Foreign Study
CHAPTER V
RESEARCH METHODOLOGY

5.1 Identification of Problem
5.2 Parameters
5.3 Objectives of the Study
5.4 Hypotheses of the Study
5.5 Time Period of the Study
5.6 Research Design
5.6.1 Research Tools
5.6.2 Universe of the Study
5.6.3 Sources of Data Collection
5.6.4 Classification and Analysis of Data
5.6.5 Plan of the Thesis
5.6.6 Implications of the Study
5.6.7 Limitations of the Study
CHAPTER VI
PERFORMANCE ANALYSIS OF GSRTC

6.1 Ratio Analysis
   I Solvency Ratio
      (a) Debt Equity Ratio
   II Current Ratio
   III Fixed Assets Turnover Ratio
   IV Profitability Ratio
      (a) Return on Capital employed
      (b) Return on Equity
      (c) Return on Assets
      (d) Operating Profit Ratio
      (e) Net Profit Ratio

6.2 Revenue Assessment of GSRTC

6.3 Total Cost Assessment of GSRTC

6.4 Utilization Rate

6.5 Division-Wise Analysis of Expenses

6.6 Z-Score Analysis

6.7 Coefficient Correlation

6.8 Analysis of Variance
CHAPTER VII
FINDINGS AND SUGGESTIONS

7.1 Findings
7.2 Suggestions
7.3 Conclusion
CHAPTER 1
ROAD TRANSPORT INDUSTRY-
AN OVERVIEW
CHAPTER II
WORKING AND ORGANISATION OF
GUJARAT STATE ROAD TRANSPORT CORPORATION
CHAPTER III
FINANCIAL ANALYSIS:
CONCEPTUAL FRAMEWORK OF A STUDY
CHAPTER IV
REVIEW OF LITERATURE
CHAPTER V
RESEARCH METHODOLOGY

Requirement Analysis
Research Design
Data Collection
Data Analysis
Presentation & Inference
CHAPTER VI
PERFORMANCE ANALYSIS OF GSRTC
CHAPTER VII

FINDINGS AND SUGGESTIONS

SEARCH

RESEARCH FINDINGS

SUGGESTION
CHAPTER I
ROAD TRANSPORT INDUSTRY-AN OVERVIEW

1.1 TRANSPORTATION IN INDIA

Transport in the Republic of India is an important part of the nation's economy. With a land area of 3,287,240 kms (1,269,210 sq. mi), and an estimated population of 1,028,737,436, transport in India is both a necessity as well as a convenience. Since the economic liberalization of the 1990s, development of infrastructure within the country has progressed at a rapid pace, and today there is a wide variety of modes of transport by land, water and air. The findings of International Organization of Motor Vehicle Manufacturers revealed that in India the car production had grown to 30% in 2004. Brazil came a distant second with the increase of 17%. The table below attempts to capture in figures the rapid growth of production of automobile sector in India.¹

Table 1.1: Showing number of vehicles in India (Year Wise)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Types of Vehicle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Passenger Vehicles</td>
<td>557400</td>
<td>782550</td>
<td>960480</td>
<td>1045880</td>
<td>1545223</td>
<td>1762131</td>
</tr>
<tr>
<td>Utility Vehicles</td>
<td>114470</td>
<td>146330</td>
<td>182020</td>
<td>196380</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Multipurpose Vehicles</td>
<td>51450</td>
<td>60670</td>
<td>67370</td>
<td>66665</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Total</td>
<td>723320</td>
<td>989550</td>
<td>129870</td>
<td>1308925</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>


The total sale of 2-wheelers in India has touched a fig. of 7.86 million units by March 2007 and it is expected to reach 17.85 million units by 2011-12. The domestic sale of car in India as on 2005-06 was 4, 22,791 units and the number of car owner in that year increased by adding number of imported car in India.

But Public transport still remains the primary mode of transport for most of the population, and India's public Transport systems are among the most heavily utilized in the world.

¹. www.automobileindia.com/cars/statistics/vehicle-production.html
Despite improvements, several aspects of transport are still riddled with problems due to outdated infrastructure and a burgeoning population, and demand for transport infrastructure and a service has been rising by around 10% a year. Taxes and bribes are common between state borders, and Transparency International estimates that truckers pay annually $5 billion in bribes. Although India has only 1% of the world's vehicles, it accounts for 8% of the world's vehicle fatalities. India's cities are extremely congested — an average bus speed is 6–10 km/h in many large cities. India's rail network is the longest and fourth most heavily used system in the world. India's growing international trade is putting strain on the ports in India. The country's overburdened airports have just begun to get a makeover, with modernization work and greater investment in the aviation sector. In general, public transport suffers from outdated technology, incompetent management, corruption, over staffing, and low worker productivity.

1.2 ROAD TRANSPORT SECTOR

Road transport is vital to the economic development and social integration of the country. Road transport fulfils a major role in the Indian economy involving a wide range of industries and services from vehicle manufacturers and suppliers to infrastructure builders, services, energy providers, public authorities, insurance and many others. Road transport, together with the other modes of transport, provides indispensable mobility for all citizens and goods and contributes to the economic prosperity of a nation. It is a key factor to social, regional and economic cohesion, including the development of rural areas. However, the impact of road transport on the environment and health remains a major challenge in many aspects. Easy accessibility, flexibility of operations, door-to-door service and reliability have earned road transport an increasingly higher share of both passenger and freight traffic vis-à-vis other transport modes. In addition to these factors, transit time, availability of capacity on alternative modes, quality and reliability of the service, associated costs like warehousing and demurrage etc. All influence the choice of the mode of transport. The alternative modes of transport viz. Roadways, railways, waterways, airways, mass transit etc., each contribute to the transportation requirements of the economy. Transport sector accounts for a share of 6.4 per cent in India’s Gross
Domestic Product (GDP). The composition of various sub-sectors of the transport sector in terms of GDP is given in Table 1.2

Table 1.2: Share of Different Modes of Transport in GDP

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>of which</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Railways</td>
<td>5.8</td>
<td>6.0</td>
<td>5.9</td>
<td>6.2</td>
<td>6.3</td>
<td>6.6</td>
<td>6.5</td>
<td>6.4</td>
</tr>
<tr>
<td>Road Transport</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
</tr>
<tr>
<td>Water Transport</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
</tr>
<tr>
<td>Services</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
</tr>
</tbody>
</table>

* Services incidental to transport.

The share in GDP of Railways is exclusive of Financial Intermediation Services indirectly Measured (F.I.S.M.); for other modes it includes F.I.S.M.

Source: Road Transport Year Book-2006-07.

However, road transport has emerged as the dominant segment in India’s transportation sector with a share of 4.5 per cent in India’s GDP in comparison to railways that has a mere 1.2 per cent share of GDP in 2006-07 as per the revised data on National Accounts released by the Central Statistical Organization (CSO). It may be noted that the entire increase in percentage share of transport in GDP since 1999-2000 has come from road transport sector only, with share of other modes remaining nearly constant. Second, over the last seven years (1999-2000 to 2006-07) for which detailed revised data is available from the CSO, an average annual growth in road transport sector at around 9.4 per cent was much higher than the overall annual average GDP growth of 6.9 per cent. The growth rates across various modes have varied with road transport growing at a much higher rate compared to other competing modes (Table 1.3) despite significant barriers to inter-State road freight and passenger movement compared to inland water, railways and air transport which do not face rigorous en-route checks/barriers.
Table No. 1.3: India Composition of Vehicle Population

<table>
<thead>
<tr>
<th>Year ended on March</th>
<th>2-Wheelers</th>
<th>Car/Jeeps</th>
<th>Buses</th>
<th>Goods Vehicles</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(As % age of total vehicle population)</td>
<td>In Million</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2001</td>
<td>70.1</td>
<td>12.8</td>
<td>1.2</td>
<td>5.4</td>
<td>10.5</td>
<td>54.92</td>
</tr>
<tr>
<td>2002</td>
<td>70.6</td>
<td>12.9</td>
<td>1.1</td>
<td>5.0</td>
<td>10.4</td>
<td>58.92</td>
</tr>
<tr>
<td>2003</td>
<td>70.9</td>
<td>12.8</td>
<td>1.1</td>
<td>5.2</td>
<td>10.0</td>
<td>67.01</td>
</tr>
<tr>
<td>2004</td>
<td>71.4</td>
<td>13.0</td>
<td>1.1</td>
<td>5.2</td>
<td>9.4</td>
<td>72.72</td>
</tr>
<tr>
<td>2005</td>
<td>72.1</td>
<td>12.7</td>
<td>1.1</td>
<td>4.9</td>
<td>9.1</td>
<td>81.5</td>
</tr>
<tr>
<td>2006</td>
<td>72.2</td>
<td>12.9</td>
<td>1.1</td>
<td>4.9</td>
<td>8.8</td>
<td>89.61</td>
</tr>
</tbody>
</table>

Note: Others include Tractors, Trailers, 3 Wheelers & etc. (P): Provisional

Source: Road Transport Year Book-2006-07.

The proliferation in the personalized mode of transport has serious implications for traffic congestion, energy efficiency and pollution. The growth in number of registered vehicles amongst different categories of vehicles during the period 1991 to 2006 which coincides with era of significant economic reforms shows compound annual growth rate (CAGR) of about 10% in total vehicle registrations with variation across vehicle categories. Personalized category of motor vehicles, viz., two wheelers and cars grew at a CAGR 10.6% and 9.5% respectively which was higher compared to growth in buses (7.6% per annum) and goods vehicles (8.2% per annum). The higher growth in personalized motor vehicles reflects rising disposable income; easing of supply side restraints (lifting of licensing, Quantitative Restrictions etc.); and availability of more convenient financing options. In contrast, slower growth in goods vehicle category to some extent shows changes in structure of economy and shift from commodity producing sector like agriculture and industry towards services which are far less material intensive together with higher input costs and a plethora of regulations.

Growth in terms of CAGR of registered vehicles amongst the States and Union Territories for the quinquennium ending 2006 shows that total vehicle population in terms of registration grew at 10.3%. Several States exceeded the all-India growth rate and clocked CAGR of over 11%. These States include Andhra Pradesh, Assam, Chhattisgarh, Karnataka, Kerala, Orissa, Sikkim, Tamil Nadu, Tripura and Uttarakhand. Over the quinquennium ending 2006, 23 metros posted a CAGR of
8.3% in the number of total vehicle registrations. These 23 metros accounted for a share of about 28% of the total number of vehicle registrations in the country in 2006. Significantly, it was the second tier cities like Coimbatore (12.9%), Madurai (10.9%), Nagpur (14.6%) and Vishakhapatnam (17.2%) which have posted growth rates of about 11% or more. In contrast, Delhi and Mumbai showed far lower CAGRs of 4.3% and 6.2% respectively while Chennai posted a much higher growth of 13.2%. Ahmedabad City’s vehicle population had grown at a higher CAGR of 16% during this period of 2001 to 2006.

The growth of vehicular traffic on roads has been far greater than the growth in road network; as a result the main arteries face capacity saturation. Between 1951 and 2004 the motor vehicle population grew at a CAGR of close to 11 per cent (10.9%) compared to CAGR of 3.6 per cent in the total road length with National Highway segment increasing by 2.3 per cent only. A noteworthy aspect has been the step-up in the growth of National Highway network in recent years which has grown at CAGR of about 4.5 per cent with total vehicle population growing at 10 per cent CAGR during 1991-2006.

1.3 PUBLIC ROAD TRANSPORT

The changing composition of vehicle population over time reflects an increasing importance of personalized mode (cars & two-wheelers) of transport vis-a-vis PBT transport mode. The marginalization of the bus mode of transport is reflected in the fact that while the vehicle population grew at a compound annual growth rate (CAGR) of close to 10% number of buses grew by less than 7 per cent during 1991 to 2004 with a meager growth of less than 1 per cent in the number of buses owned by the public sector entities. The slower growth in the number of buses has resulted in sharp erosion in the share of buses in total vehicle population from more than 11% in 1951 to a mere 1.1% in 2004. This marginalization of Public Bus Transport (PBT) also reflects major sociological and economic changes related to increase in disposable income of households, changes in lifestyles, urbanization etc. This has been accompanied by increasing motorization through rising number of cars and 2-wheelers resulting in congestion and therefore, slowing down the movement of public bus transport. With rising income and greater need for mobility, the personalized mode of transport is likely to grow in importance in the coming years.
The proliferation in the personalized mode of transport imposes negative externalities on the society in the form of traffic congestion, carbon emissions/pollution, inefficient use of fuel, scarce road space, etc.

1.3.1 BUS TRANSPORT

Buses take up over 90% of public transport in Indian cities, and serve as a cheap and convenient mode of transport for all classes of society. Services are mostly run by government owned state transport corporations. All passenger buses use the standard truck engine and chassis and are not economical for city use — there are virtually no buses in India specifically designed for urban conditions. As a result, available urban mass transport services are over-crowded, unreliable, and involve long waiting periods. However, after the economic liberalization, many state transport corporations have introduced various kinds of special buses like low-floor buses for the disabled and air-conditioned buses to attract private car owners to help decongest roads.

New initiatives like Bus Rapid Transit (BRT) systems and air-conditioned buses have been taken by the various state governments to improve the bus public transport systems in cities. Bus Rapid Transit systems already exist in many cities like Pune, Delhi, Ahmedabad, and Indore with new ones coming up in Visakhapatnam and Hyderabad. High Capacity buses can be found in cities like Mumbai, Bengaluru, Nagpur and Chennai. The city of Bengaluru is the first Indian city to have an air-conditioned bus stop, located near Cubbon Park. It was built by Airtel. The city of Chennai houses Asia's largest bus terminus, the Chennai Mofussil Bus Terminus.

Public Land Passenger Transport services in India can be classified into two groups - viz., the Rail passenger transport and the Road passenger transport. Out of total land passenger requirements of the country, 80% are met by road transport while the remaining 20% are carried by railways at present. The Road passenger transport in India is operated partly by public sector and largely by private sector comprising about 28.7% and 71.3% respectively. The percentage of nationalization in different States varies considerably, being highest (68.78%) in Maharashtra State. Public sector passenger road transport in India is operated 71 passenger road transport undertakings owning 113370 buses having fleet strength varying between 5 buses to 17000 buses among organizations under single management and control. The number of public
bus transport undertakings having more than 1000 bus fleet as on 31-3-1997 was 20, the largest among them are the Maharashtra State Road Transport Corporation and the A.P. State Road Transport Corporation with a fleet of about 17000 passenger buses each. The organizational form for public sector bus transportation varies from State to State, the most common form being that of a Corporation form constituted under the provisions of the Road Transport Corporation Act., 1950. There are 21 such corporations, while 31 undertakings are formed under Indian Companies Act, 1956, Urban Transport is operated by 10 Local Municipal Councils. The remaining 9 Undertakings function as part of Government Departments.

Total number of buses, including private and public sector, in India was 0.45 million during the year 1996. Total number of buses in public sector held by the State Transport Corporation was 0.11 million during 1996. Thus public sector buses constitute only 25% of the total buses in the country. Total capital invested in State Transport Undertakings in India during the year works out to Rs. 81.87 billion. The total capital contribution made by State Govts. and that of the Central Govt. was Rs. 31.13 billion. The total loan capital from financial institutions like, Industrial Development Bank of India, the Life Insurance Corporation of India and other banks is Rs. 9.34 billion. The public passenger road transport is funded through its internal resources, market borrowings and equity capital provided by the Central and State governments. The quantum of internal financing for all undertakings together works out to 51% of the total capital while the market borrowings and the equity capital of the Governments stands at 11% and 38% respectively.

In respect of bus transport operations in private sector, they are conducted mainly by private individuals or smaller companies who are very scarcely distributed and perform independently. The private sector passenger road transport is thus in the most disorganized state resulting into fierce and unhealthy competition with the public sector undertakings in the country. Public passenger road transport operations are mainly common in larger cities where daily commuting is done by the residents for the purpose of work, education, marketing and recreation.

1.4 ROAD TRANSPORT CORPORATION ACT

It is one of the earliest legislations giving effect to the post-independence accent on nationalization of core sectors in business and industry. The concept of “Government
in Business” drawn from the socialist philosophy is meant for the state to carry on such activity does not encroach upon right to carry on, so long as such activity does not encroach upon the rights of other or is not contrary to law. If in the interest of general public, the state decides to provide transport amenities, it will only be discharged out of its primary duties.

The Motor Vehicles Act of 1939 was intended for regulation and co-ordination of road transport and to vest the control of the use of transport vehicles in the hand of the transport authorities. An amendment was made and separate government department were established for running transport services to the exclusion of private operators in defined areas and routes. The private operator approach High Court against the decision of the Regional Transport Authorities in giving preference to State Government.

The government of India felt the necessity of having statutory bodies to operate transport services. It was therefore, decided that road transport operations should be publicly managed by establishing corporation. The Constituent Assembly passed Road Transport Corporation Act in the year 1948.

In exercised of the provisions of this Act, the Government of Bombay established the first Road Transport Corporation on 17th November, 1949. The road transport services which were being operated by the Road Transport Department were entrusted to the new Corporation. This act was challenge by the private oprators. The Bombay High Court accepted the contention of the private operators and declares the Road Transport Corporation Act 1948 as ultra virus and consequently the Corporation established in pursuance of the provisions of the said Act was declared as having no legal existence. The Parliament immediately took up the matter and passed the Road Transport Corporations Act 1950 on 4th December, 1950 rectifying certain defects in the earliest legislation. The 1950 Act repealed the 1948 Act and validated retrospectively the incorporation of the Bombay State Road Transport Corporation, which was established under the provision of the 1948 Act. 2

---

2 Central Institute of Road Transport, POONA, Correspondence Course in Transport Management
1.4.1 POWER AND DUTIES OF CORPORATION

- To operate road transport services in the state.
- To provide any subsidiary service for providing any amenity of facility to persons making use of any road transport services of a corporation.
- To provide for its employees suitable conditions of service including fair wages, establishment of provident fund, living accommodation, places for rest and recreation and other amenities.
- To manufacture, purchase, maintain and repair rolling stock, vehicles, appliances, plant, equipment or any other thing required for any of the activities of the Corporation.
- To acquire and hold such property both movable and immovable as the Corporation may deem necessary for the purpose of any of the said activities and to lease, sell or otherwise transfer any property held by it.
- To purchase by agreement or to take on lease or under any form of tenancy any land or building.
- To authorize the disposal of scrap vehicles, old tyres, used oils, or any other spare parts.
- To purchase vehicles of any kind as required.
- To do anything to develop the skill of persons employed by the corporation.
- With the prior permission of the State Government, to do all other things to facilitate the proper carrying on of the business of the Corporation.

1.4.2 FINANCE AND AUDIT

As per the Act, the Corporation will act as the Corporation should be able to stand on its own fleet in order to fulfill the objectives and justify its existence act laid down. Under the act, the Capital requirement of a Corporation may be provided by the Central and State Government in agreed proportion of 2:1 between State and Central government. Where such capital contribution is not available from the government, Corporation may approach to Open Market.

Under Section a Corporation is liable to pay interest on capital borrowed from the Central and State Government. After setting off the payment of interest and Dividend and contribution to the depreciation and other payment of interest and dividend, rest
of the money left will be utilized for creating amenities of the passenger, welfare of its employees, its own expansion programme and road development.

1.4.3 PROBLEMS OF NATIONALISED PASSENGER TRANSPORT IN INDIA

As development of road transport is mainly assigned under the State Government, the Nationalization of this sector also comes under the preview of state Governments. This explains the absence of uniformity in nature of nationalization of passenger transport in the different states. The nationalization is also gradual and sometime partial, in the given state. The heterogeneous characteristics of the different state transport undertaking in different states are responsible for different problems:

• LEGAL CONSTRAINTS

It is common experience that the efficient operations of different State Undertakings are different owing to many legal constraints. For instance, the Motor Vehicle Act imposes many administrative procedures to get permit for route of the bus services. The demand pattern for passenger travel is also uneven and sometime more random in nature than generally observed in the case of other productive enterprises. Rising cost of many inputs required for bus operations is uncontrollable cost component as the operations have no influence to control the prices of fuels, tyre and spares. The economic rationale demands the immediate upward change in the fare structures based on cost of the operations, but owing to legal and administrative procedure, the various steps needed appear to be highly time consuming, more over resistance from the public and political authorities is also creating problems even for justified increase in fare. The lag in increase in fare and high cost of operations owing to non-controllable cost component creates the long term problem of financial viability of the organization.

• HEAVY BURDEN OF TAXATION

The taxation on road transport industry in India is highly burden-some. The fixed component of taxation which is independent of vehicle utilization per day creates fixed liabilities on the organization. When the prices of inputs affecting variable cost component are rising the fare is not flexible as needed, the burden of taxation is to be reduced so that the financial viability would be possible.
• ISSUE OF INDUSTRIAL RELATIONS

For healthy and competent operations of nationalizes bus transport undertakings, the congenital employer-employee relationship is a pre-requisite. It appears that the managerial efforts to boost up the labour productivity do not get adequate response from labour. This type of situation may not be justified. So the real challenge lies in how to provide incentive by providing good atmosphere so that the additional expenditure is compensated by increase in the productivity of bus services. In this particular context the attitude of Trade Union in favour of increase in productivity is to be encouraged.

• NATURE OF THE NATIONALISATION OF ROAD TRANSPORT INDUSTRY

How the nationalization is being implemented in a particular State is also very much vital for economic operation of the S.T.Undertaking. If there is a partial nationalization compelling STU to compete with private operators, many problems would crop up as private operators are having special advantages which may create the problems for highly legalized and accountable organization like STU. It appears that as far as possible the partial nationalization should be avoided.

1.5 STATE ROAD TRANSPORT UNDERTAKINGS (SRTUS)

The institutional structure of SRTUs varies from corporations (constituted under the Road Transport Corporations Act) to companies (constituted under the Companies Act) and to those operated departmentally or by the municipal authorities. As on end March 2008, there were 23 Corporations, 8 Companies, 8 Government Departmental Undertakings and 8 Municipal Undertakings. For the year ending March, 2008, physical and financial performance were reported by 33 SRTUs respectively. Corporations account for about 75% of the bus fleet strength followed by Companies (17%); the share of Municipal Undertakings (4.5%) and Government Departmental Undertakings (3.5%) were lower.

1.5.1 INSTITUTIONAL CATEGORY-WISE FLEET STRENGTH OF SRTUS

• Fleet Strength
During the year 2007-08, the number of buses held by the 33 reporting SRTUs was 1,11,153 as compared with 1,07,821 held in the previous year, which represents a marginal increase of 3.1% in fleet strength.

- **Age Profile of the Fleet**

  The productivity of the SRTUs is influenced by the age profile of their bus fleet and the policy adopted for scrapping the buses. The age profile in the different institutional categories reflects wide variations. On an average, Corporation and Companies maintained a younger fleet as compared to Government Departmental Undertakings and Municipal Undertakings.

- **Staff Strength**

  The total number of staff deployed by the 33 reporting SRTUs for the year ending March, 2008 was 6.59 lakh which is higher by 3.1 % as compared to total staff strength of 6.39 lakh during the previous year. The highest number of staff per bus was reported by Mizoram ST (12.59) and the lowest was in Orissa SRTC (4.36).

- **Operational Productivity Parameters**

  The common indicator of physical productivity include: (i) Fleet Utilization (ii) Vehicle Productivity (iii) Fuel Efficiency (iv) Staff Productivity (v) Occupancy Ratio.

- **Fleet Utilization**

  Fleet Utilization is the ratio of the buses on road to an average fleet held by an Undertaking. An average fleet utilization for all the reporting SRTUs was 92.38 % in 2007-08. The Andhra Pradesh SRTC recorded the highest utilization of 99.47 % whereas the lowest was observed in Mizoram ST (51.85 %).

- **Vehicle Productivity**

  Vehicle productivity is an average number of revenue earning km. performed by a bus per day, and is an important parameter. An average vehicle productivity recorded by all the reporting SRTU was 270.3 km/bus/day in the year 2007-08. The highest level of vehicle productivity (km/bus/day) was recorded by State Express TC Tamil Nadu Ltd. (585.95 kms) and the lowest was Thane MT (35.43 kms).
• Fuel Efficiency

Average kilometer per liter of fuel reflects the fuel efficiency in operation. Out of the 33 reporting SRTUs, for which comparable data was available, as many as 12 SRTUs posted improvement; while 20 SRTUs showed a decrease during the year ending March, 2008 vis-à-vis the previous year. One SRTU (Maharashtra SRTC) maintained a status quo in fuel efficiency. The highest fuel efficiency recorded was by North Eastern Karnataka SRTC (5.41 km/liter) and the lowest by Mizoram ST (2.92 km/liter).

• Staff Productivity

It is measured by an average revenue earnings km performed per staff per day. The average staff productivity for all reporting SRTUs was 46.83 km/staff/day in 2007-08. The highest staff productivity was observed in Rajasthan SRTC (78.41 km/staff/day) and the lowest in Thane MT (4.33 km/staff/day).

• Occupancy

Occupancy ratio reflects the passenger kilometers performed to passenger kilometers offered. The average occupancy ratio of all reporting SRTUs taken together was about 69 % in the year 2007-08. The range in the occupancy ratios of the four categories of Undertakings viz. Corporations, Companies, Government Departmental undertaking and Corporations Companies Govt. Dept. Undertakings Municipal Undertakings for the year ending March, 2008.

• Passengers Carried

The total number of passengers carried by the 30 reporting SRTUs for the year ending March, 2008 stood at 2231.70 crores passengers, which was higher than 2161.40 crores passengers carried during the year ending March, 2007 (an increase of 3.25% in this period).

• Road Safety

As per the information, total number of recorded road accidents increased by 4.1% from 21,866 during the year ending March, 2007 to 22,765 in the year 2008. Consequently, the total number of fatal accidents increased marginally by 0.6 % from 4,471 to 4,497 during the same period. However, the percentage of fatal accidents to total accidents declined from 20.4% to 19.8% between the two years.
At the disaggregated level, Maharashtra SRTC recorded the highest number of road accidents (3450 accidents) whereas both Mizoram State Transport and Nagaland State Transport reported nil accidents.

1.6 FINANCING OF STATE ROAD TRANSPORT

For most of the State Road Transport Undertakings (SRTUs), financing of the operation cannot be fully covered by the revenues from fares/user charges. Also SRTUs are confronted with a situation where staff costs and fuel costs account for more than three fifth of their expenditure with staff costs more or less in the nature of fixed costs due to the limited ability to adjust labour force in response to the changing market conditions. The fact that government financial support is required to fill the gap between revenue and costs of operation does not mean that SRTUs are unviable but also reflects that fares are not adjusted in line with rising fuel and other costs. Besides bus fares are also set with socio economic objectives in mind. Presently acquisition cost of a bus is compounded by the existence of multiple commodity taxation, viz, central excise and State VAT/Sales Tax. In view of the advantages of public bus transport system it would be desirable to lessen the burden of commodity taxation. In addition, public buses (Contract/Stage carriage) are subject to Motor Vehicle Tax (MVT) and Passenger tax etc, which also need to be rationalized. There is heavy and varying incidence of MVT on public buses, in general, and SRTUs, in particular. SRTUs in Maharastra and Gujarat contribute 17% of their respective turnover towards MVT; in Rajasthan MVT is assessed at 2.1% of the current cost of bus chassis on a monthly basis; in Uttar Pradesh the average incidence tax on UPSRTC bus was Rs. 2.35 lakhs which is almost four times what a private bus operator paid (Rs. 0.85 lakhs) in 2004-05; in Punjab, for 2005-06, the average tax liability per SRTU Bus was 3.93 lakhs compared to Rs.2.80 lakhs paid by a private bus operator. The main underlying principles of costing should emphasize on: (a) Where costs are incurred for policy reasons, such as higher service levels or lower fares than would be justified on exclusively commercial grounds, those responsible for them must assume responsibility for their payment and; (b) Subsidies implicit/explicit should be considered and calculated as payments for services rendered.
1.7 HISTORICAL PRESPECTIVE OF GSRTC

Gujarat State Road Transport Corporation (GSRTC) was formed in 1960 as an offshoot of Bombay State Road Transport Corporation, with a purpose of providing an efficient transport facility to the traveling public of Gujarat state. Over a period of 45 years of its existence, GSRTC has recorded phenomenal growth on every physical parameter and has emerged as one of the largest state transport undertakings in India.

Figure No.1.1: GSRTC BUS

As of 2008, GSRTC employed over 45,000, covered 2.5 million kms, and operated 38,000 trips, 15,000 routes, and 7,300 schedules everyday. GSRTC covered and provided connectivity to approximately 98 per cent of the villages in Gujarat and also connected some important travel destinations in the neighboring states. GSRTC is organized as a three-tier administrative set up consisting of depots (129), divisions (16), and a central office.

Since its inception, GSRTC has certainly achieved the basic purpose of providing road connectivity to the far-flung areas in the state. It has enabled accelerated economic growth of Gujarat state. It has played a pioneering role in bringing about a balanced regional development in the backward regions of the state.

Over a period of time, the financial and operational performance of GSRTC was showing a slow and steady decline. While GSRTC played a significant role in the economic development of Gujarat, its operational performance had declined substantially compared to similar state-run organizations in Andhra Pradesh, Maharashtra, and Karnataka.
1.7.1 GSRTC AT A GLANCE

Gujarat State was born on May 1, 1960 and with the same GSRTC also came forward to serve the common public of the State. GSRTC came out with seven (7) Divisions, 76 Depots. With the passage of time more number of services and facilities were added as Corporate progressed.

Capital Revenue

**Equity Capital:** During the year 2001-02, State Government had release Rs.45052.57 lacs of equity capital, the capital contribution of Central Government remains at Rs.10627.82 lacs as on 31st March, 2002.

- During the year 2003-04, State Government released Rs. 2011 lacs of equity capital, so as on 31st March, 2004, the equity share capital of State Government had increase to Rs. 48468.31 lacs. The capital contribution of Central Government remains at Rs. 10627.82 lacs as on 31st March, 2004.

- During the year 2004-05, State Government released Rs. 1769 lacs of equity capital, so as on 31st March, 2005, the equity share capital of State Government had increase to Rs. 50237.31 lacs. The capital contribution of Central Government remains at Rs. 10627.82 lacs as on 31st March, 2005.

- During the year 2005-06, State Government released Rs. 1769 lacs of equity capital, so as on 31st March, 2006, the equity share capital of State Government had increase to Rs. 52006.31 lacs. The capital contribution of Central Government remains at Rs. 10627.82 lacs as on 31st March, 2006.

- During the year 2006-07, State Government released Rs 33 Crores of equity capital, so as on 31st March, 2007, the equity share capital of State Government had increase to Rs. 553.06 Crores. The capital contribution of Central Government remains at Rs. 10627.82 lacs as on 31st March, 2007.

- As on 31st March, 2007, Corporation had total contribution of Rs. 553.06 crores of State Government and Rs. 106.28 crores of Central Government.

- As on 31st March, 2009, Corporation had total contribution of Rs. 583.06 crores of State Government and Rs. 106.28 crores of Central Government.
Regulation Governing GSRTC

- Road Transport Corporations Act, 1950 * Factories Act, 1960
- Minimum Wages Act * Industrial Dispute Act, 1947
- Carriers Act, 1865 * Carriage By Road Act, 2005 (Revised)

Revenue Receipts and Revenue Expenditures

I] Corporation earns revenue from the following heads:

1) Passenger Fare
2) Reimbursement of Student Concession
3) Luggage & Parcel Receipts
4) Carriage of Postal Mail
5) Casual Contract
6) Advertisement Receipts
7) Profit from sale of depreciated Vehicles & Scrap Materials
8) Subsidy of Handicapped Persons etc
9) Commercial stall at bus stations

II] Corporation incurred expenditure under following heads:

1) Salaries and Allowances including LTC
2) Welfare & Super Annuation
3) Stores (other than Oil & Tyres)
4) Tyres & Tubes
5) Lubricant Oil
6) Fuel
7) Lease
8) Passenger Tax
9) Passenger Tax
10) Motor Vehicle Tax
11) Toll Tax
12) Insurance & other Claim like Accident Claims
1.7.2 FIXED ASSETS OF GSRTC

The total land holding of corporation includes both lease hold as well as owned property. Being a government run organization; corporation has easy access to land property when ever required by them. The nominal amount of lease is paid by it for possessing the property. The term of the contract is also pretty long. The total liability of Lease Rent as on 31-3-2007 was Rs 4854.02 lacs. Corporation hold lease land at 60 different places all over Gujarat. The Corporation owned land admeasuring 509.16 hectares (as on 31-3-2003).

One of the strength of GSRTC is it owned vast land property at the center of the city. From commercial point of view it added to the value. In future corporation can take benefit of such centrally located property for generating revenue by commercializing it.

1.7.3 OBJECTIVES OF GSRTC

1 GSRTC is expected to meet the social expectation of providing connectivity to most of the far-flung remote villages in Gujarat.

2 Being a state run organization the pricing of its services cannot be decided solely based on commercial considerations. It must also consider the affordability (of the price) from the consumer perspective.

3 As a commercial entity it must ensure operational efficiency and resource productivity to minimize the dependence on government subsidy.

4 Being a part of a state, it must meet all its legal obligations related to safety and taxation and social expectations related to employees.

5 As a corporate entity, it must ensure its long-term financial and operational viability.

6 From customers’ perspective, GSRTC should provide modern, world class efficient service at an affordable price.

1.7.4 MISSION & VISION

GSRTC’s vision is to provide efficient, safe, comfortable and affordable public transport in Gujarat and its mission is to make GSRTC as the key contributor to the economic and social growth of state. To do so, emphasis is being laid on improving
delivery system and by raising quality of service. The focus is to have passenger friendly initiatives and as well strengthen the existing mechanism by capacity building and inducting modern gadgets in the organization.

Table No. 1.4: Vehicles Position and Its Performance of GSRTC

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Avg. no of Vehicles held</td>
<td>9428</td>
<td>9042</td>
<td>8473</td>
<td>8118</td>
<td>7987</td>
<td>8069</td>
<td>6697</td>
</tr>
<tr>
<td>2</td>
<td>Avg. no of Vehicles on road</td>
<td>7793</td>
<td>7729</td>
<td>7113</td>
<td>6767</td>
<td>6852</td>
<td>6932</td>
<td>6697</td>
</tr>
<tr>
<td>3</td>
<td>Vehicle Utilization ( % )</td>
<td>85.67</td>
<td>85.5</td>
<td>83</td>
<td>83.4</td>
<td>85.8</td>
<td>85.91</td>
<td>87.79</td>
</tr>
<tr>
<td>4</td>
<td>KMPL/DIESEL</td>
<td>5.30</td>
<td>5.24</td>
<td>5.19</td>
<td>5.20</td>
<td>5.25</td>
<td>5.37</td>
<td>5.53</td>
</tr>
<tr>
<td>5</td>
<td>KMOL/OIL</td>
<td>2391</td>
<td>1420</td>
<td>1047</td>
<td>1100</td>
<td>1558</td>
<td>2264</td>
<td>3244</td>
</tr>
</tbody>
</table>

Source: Annual Reports.

Table No. 1.5: Showing the Number of New Buses Purchased

<table>
<thead>
<tr>
<th>Years</th>
<th>Diesel</th>
<th>CNG</th>
<th>Total</th>
<th>Total Expenditures (in Crores.) (Govt.Subsidy)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005-06</td>
<td>1000</td>
<td>200</td>
<td>1200</td>
<td>157.32</td>
</tr>
<tr>
<td>2006-07</td>
<td>700</td>
<td>300</td>
<td>1000</td>
<td>140.13</td>
</tr>
<tr>
<td>2007-08</td>
<td>1000</td>
<td>500</td>
<td>1500</td>
<td>212</td>
</tr>
<tr>
<td>2008-09</td>
<td>700</td>
<td>400</td>
<td>1100</td>
<td>NA</td>
</tr>
<tr>
<td>Total</td>
<td>2700</td>
<td>1000</td>
<td>3700</td>
<td>509.45</td>
</tr>
</tbody>
</table>

Source: Annual Reports.

The fleet size of GSRTC had been reducing steadily in the past decade (1995-2008), whereas the other state units had increased their fleet size by more than 56 per cent. In fact, the other state units have been constantly adding to their fleet (net of replacement), GSRTC had not been able to add to its fleet (even for replacement) since 2000.

- During the year 2002-03 management decided not to purchase any new bus, but at the same time 113 Leyland and 246 Tata in all 359 over-aged vehicles were scrapped.
- During the year 2004-05 -738, over-aged vehicles were scrapped (310 Leyland and 428 TATA). Considering the pollution control strategy of Central
Government, Corporation has decided to purchase 100 new CNG buses. As per the plan 10 CNG buses were purchased during the year.

- As a move towards extension of route, in the year 2005-06, Corporation has purchased 1200 buses (200 CNG-100 Luxury-200 Semi-Luxury and 700 Super Luxury)
- In year 2006-07, Corporation has scraped Vehicles as on 31-3-2006 numbering 1580. Total 1000 new buses were purchased, out of which 700 –Diesel and 300 CNG.
- But the overall Vehicle size over a period of time has decline. Such a decline in the fleet size severely restricts the ability of GSRTC to introduce new routes or increase the frequency in a route even when there is adequate traffic potential.
- A perpetual shortage of vehicles has led to poor or delayed operational maintenance resulting in more off-line vehicles or increased breakdowns, leading to consumer inconvenience, and eroding credibility of GSRTC.
- Sooner or later, consumers are bound to explore other options of ground transportation (like private operators). This revenue depletion to GSRTC is further reinforced by attractive and dynamic prices offered by private operators, convenient trip schedules, new and luxuriously designed buses, etc
- Thus, GSRTC is constantly `facing’ the risk of losing its customers to private operators.

GSRTC was the first Corporation running CNG buses in rural and Inter-State Route. GSRTC has not availed any kind of financial help from any other corporation. In year 2004-05, 65 CNG bus were taken on lease basis (amounting to Rs 9.75 crores) the supplier of CNG between Ahmedabad –Gandhinagar, like Gujarat Meri-Time Board, Gujarat State Petroleum Ltd., Gujarat Kanij Development Corporation, Gujarat Valley Fertilizer Company and Gujarat Industrial Development Board has agreed the lease with the Corporation.

If we compare the size of fleet and its utilization in other State Corporation, then during the period, GSRTC’s fleet utilization was 85.97 per cent as against 99 per cent in Andhra Pradesh, 94 per cent in Maharashtra and 93.7 per cent in Karnataka. Accidents per bus and break down / km had also risen to unacceptable levels. Demands of social service coupled with an ageing fleet of vehicles, unionized labour, and lack of continuity at the top level have complicated the managerial challenges for
GSRTC and contributed to its declining performance. As of 2007, GSRTC has not been able to maintain the basic criteria of an efficient organization. Improving and reviving the operational performance of GSRTC is indeed a challenging task. The operating performance of GSRTC is so constrained that it is neither able to increased its revenue opportunity nor improve it by overall resource utilization. Further, the fierce and some what unfair competition by private transport operators is damaging the fragile financial position of the Corporation.

The operational performance of GSRTC in the year 2007 is so weakened that it registered an overall fleet utilization of 85.97 per cent. Only 8 per cent of the services operated by GSRTC were profitable. The remaining 92 per cent of the services were not good enough to cover the fixed expenses (high overheads and low utilization factors). Among these, roughly 50 per cent of the routes did not cover operating expenses and about 25 per cent incurred cash losses.

As a consequence of these factors combined with other environmental factors, GSRTC, as of 2007, accumulated a loss of Rs. 66 crores, rendering its long-term functionality or existence at great risk.

### 1.7.6 SOCIAL OBLIGATIONS

The Corporation grants concession in bus fares to students, Participants of competition of sports, tournaments sponsored by the government, physically handicapped, blind persons, deaf & dumb, cancer patients, freedom fighters, widow of the freedom fighter who were getting pension from the government, State Government awarded teachers. The Corporation grants concession to students in casual contracts also. The details of concessions from corporation are given below:

**Table No. 1.6: Details of Various Concessions**

<table>
<thead>
<tr>
<th>Sr.No.</th>
<th>Particular</th>
<th>% of concessions</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Students</td>
<td>82.50 %</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Sports / tournaments sponsored by govt.</td>
<td>50.00 %</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Blind person</td>
<td>100.00 %</td>
<td>With 1 attendant</td>
</tr>
<tr>
<td>4</td>
<td>Cancer patients</td>
<td>50.00 %</td>
<td>With 1 attendant</td>
</tr>
<tr>
<td>5</td>
<td>Eye containers</td>
<td>100.00 %</td>
<td></td>
</tr>
<tr>
<td>No.</td>
<td>Category</td>
<td>Eligibility Details</td>
<td>Distance Limitation</td>
</tr>
<tr>
<td>-----</td>
<td>----------------------------------------------</td>
<td>---------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>6</td>
<td>Physically handicapped</td>
<td>100.00 %</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Press reporter, representative A.I.R journalist etc.</td>
<td>100.00 %</td>
<td>Unlimited kms. Only in Gujarat</td>
</tr>
<tr>
<td>8</td>
<td>Freedom fighter</td>
<td>100.00 %</td>
<td>With 1 attendant</td>
</tr>
<tr>
<td>9</td>
<td>Widow of freedom fighter</td>
<td>100.00 %</td>
<td>With 1 attendant</td>
</tr>
<tr>
<td>10</td>
<td>State awarded teachers</td>
<td>Up to 2500 kms.</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Unemployed persons</td>
<td>To attend an interview</td>
<td>Only with call letter from the employ. Exch.</td>
</tr>
<tr>
<td>12</td>
<td>Daily travelers on the same route</td>
<td>50 %</td>
<td>Traveling 30 days in the fare of 15 days</td>
</tr>
<tr>
<td>13</td>
<td>Group booking for 4 or more persons</td>
<td>5 %</td>
<td>On advance booking only</td>
</tr>
<tr>
<td>14</td>
<td>Return journey</td>
<td>10 %</td>
<td>On advance booking only</td>
</tr>
</tbody>
</table>

Source: Annual Report 2007-08.

- During the year 2008-09, the state government had reimbursed Rs. 36162 lacs for student’s concessions. Corporation had incurred a loss of Rs. 13299.28 lacs. On account of free travel allowed to handicapped persons, state government had reimbursed Rs. 1171.72 lacs.

- During the year 2007-08, the state government had reimbursed Rs. 36162 lacs for student’s concessions. Corporation had incurred a loss of Rs. 12072.03 lacs. On account of free travel allowed to handicapped persons, state government had reimbursed Rs. 7353.67 lacs.

- During the year 2006-07, the Corporation had given free concession to students in form of pass amounting to Rs. 48585.1 lacs against the total amount the state government had reimbursed Rs. 35600 lacs for student’s concessions. Corporation has incurred a loss of Rs. 12985.1 lacs. On account of free travel allowed to handicapped persons, state government had reimbursed Rs. 1738.18 lacs.

- During the year 2005-06, the Corporation had given free concession to students in form of pass amounting to Rs. 48577.48 lacs. Against the total amount the state government had reimbursed Rs. 35600 lacs for student’s concessions. Corporation has incurred a loss of Rs. 12977.48 lacs.

- During the year 2004-05, the Corporation had given free concession to students in form of pass amounting to Rs. 45277.5 lacs. Against the total amount the state
government had reimbursed Rs. 34211 lacs for student’s concessions. Corporation had incurred a loss of Rs. 12063.61 lacs.

- During the year 2003-04, the Corporation had given free concession to students in form of pass amounting to Rs. 46274.61 lacs. Against the total amount the state government had reimbursed Rs. 33198 lacs for student’s concessions. Corporation had incurred a loss of Rs. 12084.5 lacs.
- During the year 2002-03, the Corporation had given free concession to students in form of pass amounting to Rs. 28787 lacs. Against the total amount the state government had reimbursed Rs. 14300 lacs for student’s concessions. Corporation had incurred a loss of Rs. 14487.5 lacs

1.8 SWOT ANALYSIS

SWOT analysis is used to evaluate the overall position of any organization.

S is strength reveals the internal strong point of the organization. It only reflects the internal management and its policy aspects.

W is the weakness of the organization. Here we try to find out the draw backs or negative point of the organization. Weakness can be converted into strength.

O is the opportunity from the external environment. Looking at the strength of the organization, opportunity can be grabbed.

T is the threat from the external environment. If the weakness is not improved or the opportunity is not grabbed then the threat can take over the organization.

1.8.1 SWOT ANALYSIS OF GSRTC

A) STRENGTH

- Well established name in the mind of the people.
- It is considered as the safest mode of transportation in the mind of general public.
- The debt equity ratio is low.
- The attrition rate of the corporation is very negligible. As most of the people are old to the organization, the training and development cost to the corporation is very minimal.
• Most of the employees at lower levels are from local/nearby areas so the expertise skill can be used for many years together.
• Huge property in terms of land and building situated in the heart of the city.
• Top level people are highly qualified and experience.
• Large man power and resources.
• Being State Owned Enterprise, GSRTC is able to charge low fare.
• It has a widest reach in the interior of Gujarat.
• Own diesel pump. High diesel KMPL achieved every year. GSRTC has been getting PCRA Trophy for the highest diesel KMPL since last 21 consecutive years from 1981-82.

B) WEAKNESS
• Very strong Union force.
• Obligatory service like concession to students and other free services as per government decision.
• Charging higher fare cannot be decided solely by GSRTC, it requires government approval.
• All basic regulations of then government like providing minimum wages, appropriate employee benefits, and adherence to government demand on taxation, etc. has to be fully complied with.
• Lack of professional personnel at various levels.
• Decision making is very slow. For taking a small decision it has to go through long hierarchy.
• Mind set of being government employees leads to non-performance among the employees.
• Fixed amount of salary as per the government norms are offered to the newly appointed employees, so they lack the motivation to perform better.
• The position of higher level people is prone to transfer, so the expertise or specialized knowledge is not fully utilizes or implemented.
• No visible control of the higher authority at Divisions and Depot levels.
• Performers (employees) are not motivated. Performer and non-performer is treated in similar line in terms of monetary benefits.
• Looking at the financial position of corporation, they are not able to settle the past dues.
• They have to strictly follow the pay structure of government even if they are incurring huge loss.
• Fleets are not properly maintained and replace at the right time.
• Regularity of bus services is very poor.
• Hygiene conscious people keep them self away from State transport as the vehicles are not kept clean and in luxury services, DVD player and fans are not kept working in most of the services.
• Weak management at lower level.
• Many CNG buses are added in the fleet but corporation is not having sufficient number of filling station which leads to harassment to passengers.
• Information Technology is not mastered to take benefits.
• Depended on private CNG filling station for the requirements.
• Dead Routes are more as the seating capacity is uniform for all the routes.
• Strict adherence to government rules and regulations

C) OPPORTUNITY
• Fleet with modern facilities and look can be added targeting to the premium segment of the population.
• Inter-state transportation can be extended to more states.
• Seasonal /occasional tour/packages with attractive offers can be implemented.
• Some routes can be customized. Pick up facility can be offered to daily commuter. For e.g. city to GIDC during morning and evening hours
• Being State owned enterprise; corporation has full government support in terms of finance.
• The idle vehicles can be given on a contractual basis so that the vehicle utilization rate can be improved which will again add to revenue earning capacity.
• More revenue fetching sources can be added like ATM/Shopping Mall etc.
• With the help of Information Technology online services can be extensively used, which will help in better reach.
• Different Size seating capacity bus can be purchased.
D) THREAT

- Private transporter with modern facilities, offering customized services.
- Larger numbers of sharing vehicles are easily available at very reasonable fare. Door services are offered by the private operators.
- Corporation is still using old fleets. Depreciated value of most of the fleet has already reached zero.
- Number of self–owned vehicles has also increased and is increasing day by day. The people of interior region are also moving toward owing their own vehicles.
- The customer relationship management of private players is very strong.
- Corporation has to strictly follow the rules and regulation of government, which is not helping them in improving the financial position.
- Increase price of diesel and fuel.
- The financial position is getting worse day by day. The new pay structure (Implementation of 6th Pay) of government has added more burden on the loss making corporation.
- Tax levied on Corporation is higher than that of Private Operators.
- Seating Capacity of the Private operators is of different size.

1.9 GENERAL VIEWS FOR DECLINING PERFORMANCE OF GSRTC

- Lack of resources

The prime resource of GSRTC is its buses. A proper upkeep of the vehicles, effective deployment and efficiency in operations, increase in revenue, reduced cost of operations (manpower, spare parts, fuel, etc.) are key attributes based on which the profitability and hence the long-term viability of GSRTC can be sustained. Unfortunately, in the context of GSRTC, none of the factors are effectively managed. As of 2009 the number of vehicles on road has decrease to 6697 from 6932 figure of year 2007-08. Where as the fleet utilization has also decrease by almost 2%. Only in year 2008-09 it has increase by 1.88%. As of 2005, more than 85 per cent of the fleet owned by GSRTC have completed the stipulated number of kilometer and are due for replacement. Due to lack of funds and no grant from Central as well as State
government, other loans and funds was Rs. 73.36 crores in year 2004-05, Rs. 56.82 crores in year 2005-06 and Rs. 43.21 in year 2006-07. The combination of these factors has contributed to its financial vulnerability.

Aged fleet needs more resources (man and material) to operate. Also, they slow down operations due to frequent break-downs and hence only less number of trips than planned can be operated. Alternatively, in order to maintain same service level, more resources need to keep in the reserve. The rate of break downs has increase year after year i.e. in year 2005-06 it was (0.03), 2006-07 (0.42), 2007-08 (0.38), 2008-09 (0.14). Frequent break-downs and reduced services of GSRTC result in consumers searching for alternatives. Consequently, employee and vehicle utilization goes down and revenue potential is also not realized. In the absence of addition of new buses, the corporation struggles to constantly readjust the mix of routes in favour of short distance routes at the expense of economically attractive interstate and long-distance routes.

- Poor Management

During 1992-2001, GSRTC obtained lease finance from several finance companies for purchase of vehicles with high interest ranging from 24 percent to 36 per cent. Due to operational inefficiencies these loans could not be serviced, inflicting a huge debt burden on GSRTC. The total burden of loan interest on Corporation is huge. In year 2005 it was Rs. 111.66 lacs. In year 2004-05, 65 CNG bus were taken on lease basis (amounting to Rs 9.75 crores). The supplier of CNG between Ahmedabad – Gandhinagar, like Gujarat Meri-Time Board, Gujarat State Petroleum Ltd, Gujarat Kanij Development Corporation, Gujarat Valley Fertilizer Company and Gujarat Industrial Development Board has agreed the lease with the Corporation.

The borrowings in year 2006-07 stood at Rs. 709.43 crores. There is a huge burden of settlement of various arrears and provident funds to its ex-employees. The state government new pay structure has again added burden of paying the dues. Year after year the dues /arrear are going on increasing. Huge property is taken on lease bases (around 60 as of year 2006-07).
• **Adding to the Facilities**

In order to respond to the political compulsions, GSRTC has, over a period of time, has established a string of tyre re-treading plants across the state without any regard to scale economics and associated benefits. Total 595 staff (year 2005-2006) is employed for tyre-retrading and body building. Apart from generating employment, such scattered creation of facilities has not served any useful purpose. Satellite Bus station is build up to give the feel of modernization. Plans are also there for making international bus terminal. Of course it will generate revenue in the longer run but at present it is adding the financial instability. More CNG buses are purchased on lease bases but that is adding to more problems of passenger harassment due to lack of sufficient resources. Corporation has to depend on the private gas filling station where again they are wasting the precious man power. Drivers have to wait in a long queue, sometime 3 hours. Of course all this is being done to compete with the private players, but Corporation is not looking at the problems at the grass root level. The organizational culture has to change. Just by adding to the facilities the revenue will not be generated but they have to evaluate the expectation of the passenger in both terms i.e. tangible as well as in-tangible. Many other facilities like use of computer is implemented (even government has given grant for the same) but one need to look at, the improvement in the service after it is implemented.

• **Lack of Goal Congruence**

Lack of long-term vision and orientation is an internal reason for the continued poor performance of GSRTC. Usually, the top management of GSRTC is on deputation from the government for duration of up to three years. The personal styles of these individuals who may not be keen to lead an organization like GSRTC and lack of systems and procedures (which have not evolved over a period of time) have resulted in GSRTC being directionless. Thus, the management practices at GSRTC have a short-term outlook at the cost of permanent focus. Even the position at various divisional levels is prone to frequent transfer. Sometime people hardly spend one year and they are transfer. Due to frequent transfer at far off place the efficiency level goes down. Sometime the personnel sitting at the top level is bias toward one place/route (due to personal feelings) in a scenario where diverse stakeholders are pushing the organization in different directions, viz. political representatives influencing the route
mix with a bias towards servicing their constituencies, unions and staff demanding frequent wage revisions, strict working hours (due to government set up), etc., achieving goal congruence of various stakeholders is difficult.

- **Inequality**

The Government of Gujarat levies a passenger tax of 17.5 per cent on passenger income since GSRTC is a stage carrier. However, the private operators (who are supposed to operate as contract operators) pay a one-time yearly payment of Rs. 90,000 per bus. In year 2005-06 Corporation has paid Passenger Tax of Rs. 16,830 lacs. In practice they operate as a stage carrier resulting in an uneven competitive environment and unfair tax obligations to GSRTC. Infect Corporation is adding the treasury of the Government. GSRTC is a government-run organization. Hence, all basic regulations of the government like providing minimum wages, appropriate employee benefits, and adherence to government demand on taxation, etc. are fully complied with. Implementation of Sixth Pay has added to the burden. In year 2007-08 1161 number of accidents has taken place. Out of which 241 were fatal and 311 numbers of people died. Looking the rate of accident, Corporation has to settle the claims which again add to the financial instability. Also, it is constrained not to increase the prices based on market conditions. Several of these constraints, limitations, and compulsions are not applicable to private operators.

- **Social Obligations**

GSRTC believes that its social responsibility is demonstrated by providing transportation connectivity to wider geographical area. Often, this translates to plying buses on routes which are economically not viable. The competitors, more specifically, the private operators have no such compulsions. Long list of concessions like concession to students (free for students of rural areas) free traveling for handicapped person, daily commuter concession, free luggage up to 25 kg per person etc.

- **Political Compulsion**

Inability (due to political compulsions) to link the price of the service to the increase in the input cost due to fuel, spares, depreciation, and wages. The price of diesel has increased year after year but the fare structure has not increased with the similar
pattern. Not only the cost of diesel and fuel has gone up but the cost of salary and wages has also gone up. So naturally there is an imbalance between the cost incurred and the revenue generated.

- **Standard Route and Capacity**

Irrespective of the traffic in each route, uniform capacity bus is available. Even the buses for long distance route and short distance are same. Due to over age bus given for long route, passenger are put in odd condition when the bus break down in between. Same capacity bus is given even if the number of passenger traveling on the route is less. Some time due to biasness on the part of the top controlling people route are operated in sear loss. The financial and operational turnaround of GSRTC is a complex managerial challenge since diverse needs of several stakeholders are to be effectively addressed. The proposed plan is presented in three segments.

**Table No. 1.7: Profile of GSRTC and Private Operators**

<table>
<thead>
<tr>
<th>Attributes</th>
<th>GSRTC</th>
<th>Private Operators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expansion of fleet size</td>
<td>Non-existent</td>
<td>Need-based</td>
</tr>
<tr>
<td>Mix of vehicles</td>
<td>Standard, Uniform</td>
<td>Based on market demand</td>
</tr>
<tr>
<td>Route rationalization</td>
<td>Stagnant/Static</td>
<td>Dynamic</td>
</tr>
<tr>
<td></td>
<td>Driven by social consideration</td>
<td>Driven by market dynamics</td>
</tr>
<tr>
<td>Pricing</td>
<td>Static pricing</td>
<td>Dynamic pricing</td>
</tr>
<tr>
<td></td>
<td>Government-driven</td>
<td>Owner-driven</td>
</tr>
<tr>
<td></td>
<td>Independent of cost of service</td>
<td>Related to input cost</td>
</tr>
<tr>
<td>Control and management of input costs like spares, fuel, employee wages</td>
<td>No control Usually higher cost of operation</td>
<td>Strong emphasis on cost, often cost reduction is resorted to</td>
</tr>
<tr>
<td>Connectivity to rural areas</td>
<td>Mandated by the government</td>
<td>Decided by economic consideration</td>
</tr>
<tr>
<td>Fair business practices</td>
<td>Complete adherence to the regulations</td>
<td>Context dependent, opportunity-based</td>
</tr>
<tr>
<td>Tax incidence</td>
<td>As per law, 100% adherence</td>
<td>As per convenience</td>
</tr>
<tr>
<td>----------------------------</td>
<td>-----------------------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>Safety orientation, regularity, and punctuality</td>
<td>High, accountable to public authorities</td>
<td>Low, accountable to none</td>
</tr>
<tr>
<td>Employee compensation</td>
<td>As per law</td>
<td>As per economic considerations</td>
</tr>
<tr>
<td>Purpose of existence</td>
<td>Confusion between social and economic objectives</td>
<td>Opportunity based, only economic consideration</td>
</tr>
<tr>
<td>Concessional services and subsidized prices</td>
<td>Widely prevalent decided by political consideration</td>
<td>Non-existent</td>
</tr>
</tbody>
</table>


1.10 PRIVATIZATION OF STATE ROAD TRANSPORT

One possible solution for many of these problems might be the selective privatization of India’s public transport sector. That could be done either through opening up the market to private firms (who would own, manage, operate and finance their own systems) or by having public agencies contract with private firms to operate services on a system wide basis, for selective routes, or for selected functions (like maintenance). Privatization seems an option for bus services, which account for more than 90 percent of India’s public transport. World Bank strongly recommends privatization of public bus service. According to the report of World Bank, Public Bus accused publicly owned and operated systems of being inefficient and highly unprofitable, providing insufficient and low-quality services, and failing to respond to market demands. Although there were some minor attempts at privatization in the 1980s, the first large-scale privatization of buses occurred in Delhi in 1992, when numerous small, private bus firms entered the market. Unfortunately, the new private operators were not adequately regulated and coordinated, leading to complete chaos. Moreover, the private buses were often poorly maintained, unsafe, noisy, and highly polluting, adding to the already severe congestion, safety, and air pollution problems in Delhi. In the years since 1992, regulations have been strengthened and better enforced. Moreover, many private bus operators are now much better coordinated.
than at the outset. Service quality problems still remain, but privatization appears to have brought some substantial economic benefits. In a comparison of public and private bus operators in Delhi, the World Bank found that private bus firms carried twice as many passengers per bus per day (1,584 vs. 751), earned twice as much revenue per bus per day (2,700 vs. 1,321 Rupees), required less than half the staffing per bus (4.6 vs. 9.6 employees), cost less than half as much per bus km (7.7 vs. 17.2 Rupees), and actually made a profit (3.2 Rupees per bus km) while the public bus firms ran a loss (11.0 Rupees loss per bus km) (Marwah, Sibal, and Sawant 2001).

These financial comparisons between public and private buses are somewhat exaggerated, since private firms can usually select profitable routes, while public firms are often required to provide unprofitable services on lightly used routes to achieve social objectives and ensure comprehensive coverage to the entire city. Moreover, private bus companies offer their employees much lower wages, less job security, and less generous fringe benefits such as pensions and health insurance. Thus, to some extent, the private bus firms have lower costs due to lower salaries for their workers.

Kolkata currently has a large number of privately operated buses as well (about 1,800 private vs. 1,200 public), and as in Delhi, they have fewer employees per bus, lower costs, and much higher cost coverage through fare revenues than the publicly operated buses. Privatization of certain routes to private operators has been done in Bangalore and Hyderabad, but still with the overall coordination of a public agency. It appears that privatization does indeed have much potential to improve efficiency, but that it must be accompanied by strict regulations, performance standards, and overall coordination to ensure an integrated network of services. In light of the transport funding crisis in Indian cities, they may have little choice but to seek the cost savings possible with privatization and increased competition.

### 1.11 FUNDING OF STATE TRANSPORT UNDERTAKINGS

Most bus services are still publicly owned and operated by STUs (State Transport Undertakings), who’s operating and capital investment costs are covered by a combination of state and local government subsidies, grants, and loans that varies from state to state. Significantly, no government level has any dedicated taxes whose

---

3 Road Transport Year Book-2006-07.
proceeds would be automatically earmarked for public transport. With critical shortages of revenues at every government level, public transport must compete each year with many other urgent needs for public funds. The willingness of the Central and state governments to fund public transport can vary substantially over time, making long-term planning very difficult.

1.12 RECENT AND PLANNED IMPROVEMENTS

The main bus operator in Mumbai (BEST) has already introduced smart cards for fare collection on some premium bus services and also plans to introduce low-floor buses to facilitate travel by passengers with disabilities (Brihanmumbai Electric Supply and Transport 2003). Delhi has also been at the forefront of innovations in bus services, both by requiring a complete switchover to non-polluting CNG buses and by introducing privatization and increased competition among bus firms to reduce costs. As noted earlier, both of those policy changes caused enormous disruptions in service for several transitional years, but the overall result has been positive. Chennai has plans to introduce privatized, competitive bus services on roughly half its bus routes, following the example of Delhi and the recommendations of the World Bank. Bangalore had planned a new light rail system, but it has been indefinitely postponed due to a shortage of funds. Instead, a less expensive system of grade-separated bus ways and high-capacity articulated buses are being considered (Gaur 2002).

1.13 THE CHALLENGE OF PRIVATIZING STATE ROAD TRANSPORT UNDERTAKINGS (SRTUs)

The real challenge to privatize the vast operations of the SRTUs would be regulatory oversight at not too high a cost, which also ensures that operating companies adhere strictly to their timetables and do not omit services. Independence of observing and certifying agencies, while necessary is not adequate since collusion is possible and a public entity could be slack. The only solution is to raise the punitive measures against service omission and to bring in competitors’ monitoring of each other. The monitoring by independent agencies could usefully have representation on their boards of users and other organizations like large employers who stand to gain through better and efficient performance of SRTUs especially in the cities. Peak pricing creates perverse incentives unless the peak is of small duration, ensuring
competition from other modes wherever feasible rail and taxis can have some positive effect. But the social benefit in the privatization of bus companies can be maximized if they can be sold off as operating units. This could be financially unsound since the entire burden of workers would then be on the government account, and socially the costs of unemployment among the ex-public sector employees (or of continued over manning and high salaries) would be on the government and consumers (especially if there is a concession approach that is used). Hence, other less conventional measures that are able to bring the economies (and natural high motivation) of owner supervision (small bus companies) or self-supervision of the smaller cost of operators who have access to the unorganized (competitive) labour markets, would be worthwhile. Thus, sets of three or fewer buses could be sold at values close to a values assessment as also garages to cooperatives of ex-SRTU employees. As both employee and owner they would be value added maximizes rather than pure profit maximizes allowing them to compete with a private company that has access to low cost labour. The key to such co-operatives would be a framework that is acceptable to workers and workers would have to be helped to have the financial means to come together in groups to buy buses and depots. Credit assistance for such operators with appropriate safeguards may also be required.

Whatever the industry structure, but especially, if these are many small operators, the crucial determinant of success would be a regulatory mechanism that ensures route discipline and service frequencies. SRTUs vary in their efficiency and in some—Maharashtra, Karnataka—it may be possible to sell off SRTUs to a few employee owned largish enterprises. (In Tamil Nadu the SRTUs compete and are oriented commercially, so that they are best left much as they are with sell off to the incumbent managers and employees through stock options, without disturbing their structure.) In others where the share of SRTUs in total passenger carriage is small, it may be worthwhile to close operations; sell assets to finance liabilities, to retire workers, and shift the focus on regulating a private sector service quality in contrast to fares have been ignored in the regulatory approaches thus far. This is most unfortunate since privatization then has come to mean bus mafias, poor and overcrowded services, where safety aspects are ignored. Delhi’s private operations illustrate how best not to privatize. The potential of private bus transport to cheaply provide quality service is very large.
Few studies on performance of PSUs are correct with regard to their methodology. But the few that bring out the fact that the performance of PSUs—a few exceptions apart—has been woefully below that of the private sector. Many studies though have attempted to justify such performance on the ground that these enterprises have ‘multiple’ objectives, ‘non-commercial’ objectives, or social objectives, that they were set up to ‘lead’ or to develop sectors rather than make profits and so on.

1.14 NEW TRANSPORT POLICY ENDORSED

A cabinet meeting chaired by Chief Minister Shivraj Singh Chouhan endorsed state's new Transport Policy. Under the policy, District Transport Authorities will be established on the lines of State Transport Authority and Regional Transport Authority. The committee headed by the district collector will issue permits and determine routes in the district. The District Transport Authority will issue permits as per local requirements after scrutinizing the applications for bus permit. The permits for inter-district and inter-division routes will be issued by the State Transport Authority. The arrangements at State and Regional Transport Authorities will be fully computerized. The age limit of passenger buses will be incorporated in the permit terms and conditions. This age limit will be ten years for inter-state routes and 15 years for intra-state routes. Bus fares will be determined annually on regular basis which will help not only in protection of passengers' rights but also in smooth conduct of transport services on professional basis. The transport sources on various routes will be identified and large buses will be promoted for long routes. Under the new Transport Policy, public transport sources will be promoted and arrangement of buses will be made for all the regions especially. Effective control will be exercised on goods transport also. Constant development and construction of national and state highways and district routes will undertake which will ensure transport in every region. Top priority will be given to measures to increased safety of life and property of passengers and preventing accidents. Under the policy, the Open Permit System will continue for running buses inside the state with necessary controls. A healthy competition will be promoted among the bus operators and quality of transport sources being used by private operators will be ensured. With a view to preventing monopoly of any person, institution and company, more than 50 percent permits will not issued to a single party or his relatives. Provisions have been incorporated in the
new Transport Policy to make rural transport smooth and easy. Surveys of demand for passenger buses will be undertaken by the District Transport Authority with a view to appropriating bus fares and ensuring services in the areas which do not have transport facilities. Bus stands will be improved and all the basic amenities will be provided there. The works of improving and modernizing inter-state bus stands will be entrusted to public participation companies. An appropriate unit will also be constituted for development of basic transport facility in the state. Besides, the new policy incorporates the provisions of complete winding up of Road Transport Corporation. The process of terminating services of the rest of the employees of the corporation will be ensured while considering the interests of all those concerned. Proper alternative arrangements will also be made before abolishing inter-state bus routes. The assets will be the corporation will soon be disposed of by the government. The policy envisages strengthening the national permit system with a view to promoting inter-state goods transport. Undue checking of goods vehicles will not be undertaken by the Transport and Police departments. The checking at the bordering check-posts will be fully computerized and integrated and electronic checking units will be installed there. In the urban areas, every possible effort will be undertaken to implement BRT System in big cities. CNG and LPG-based transport will be determined in the metro cities with a view to lessening pollution. The policy incorporates provisions of lessening road accidents also. The process of issuing driving licenses will be tightened up and License Board will be abolished. Fitness checking system will be streamlined and made effective. Trauma canters will be set up on state routes. Services for taking accident victims to the trauma centers will be ensured with the cooperation of 108 ambulance network. Provisions have also been made in the new Transport Policy for development of transport infrastructure, strengthening revenue collection and taxation system, introducing modern techniques and providing alternative transport arrangements.
REFERENCES:

9. Road User Cost Study, Central Road Research Institute, New Delhi, 1982.
23. Operational Result of GSRTC from 2001-02 to 2008-09.
29. Tanmay Desai, Sanjay Parmer, (Student) GIDC Rajju Shroff Rofel Institute of Management Studies, Vapi (2009), Summer Internship Project, “Study of GSRTC”.