

REVIEW OF THE PERFORMANCE OF STATE ROAD TRANSPORT UNDERTAKINGS

FOR APRIL, 2016 - MARCH, 2017



भारत सरकार / GOVERNMENT OF INDIA
सड़क परिवहन एवं राजमार्ग मंत्रालय / MINISTRY OF ROAD TRANSPORT AND HIGHWAYS
परिवहन अनुसंधान प्रभाग / TRANSPORT RESEARCH WING
नई दिल्ली / NEW DELHI

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MINISTRY OF ROAD TRANSPORT AND HIGHWAYS
TRANSPORT RESEARCH WING
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FOREWORD

The State Road Transport Undertakings (SRTUs) are an important player in providing bus-based public transport to urban and rural population of the country. They account for about 8% of the total bus fleet being used for road transport in the country with the remaining 92% being held by private operators. They collectively, performed 155 crore passenger-kilometres per day and carried over 7.1 crore passengers per day during 2016-17.

This document titled 'Review of Performance of State Road Transport Undertakings 2016-17' provides comprehensive information on physical and financial performance of 56 reporting SRTUs during 2016-17 in comparison with 2015-16.

The 56 SRTUs have reported a combined net loss of Rs.13,956.77 crore in 2016-17 which is 23.99 per cent higher than the net loss of Rs.11,256.28 crore for 2015-16. In the year 2016-17, only seven SRTUs made profits with the remaining 49 making losses.

The profits/losses made by SRTUs are determined by the revenue and cost structure as also the physical and operational efficiency parameters underlying each SRTU. While physical parameters underlying the performance of SRTUs includes size of fleet, its vintage, proportion of overaged fleet, staff strength etc and are summarised in Section 3, key operational performance parameters include revenue earning kilometres covered, passengers carried and key operational ratios like staff productivity, vehicle productivity, occupancy ratio, fuel efficiency etc covered in Section 4 of the Report. Any remedial action would necessarily be dependent on an interplay of these parameters and would be SRTU specific.

An examination of the loss making SRTUs shows that costs are much higher than the revenue earned in loss making SRTUs mostly because fare revisions have not kept pace with cost increase. Other challenges include competition from private bus operators and the social obligation to ply on uneconomic routes as well. There is a continuous need for route rationalization to enable SRTUs to cross subsidize their operations. In order to improve the performance of the fleet, there is a need to improve the technology of vehicles, change fleet composition through purchase/hiring of buses. There is also a need to deploy IT services and Intelligent Transport Systems such as Electronic ticketing system; GPS vehicles tracking system; online bus reservation system etc to make the bus services more responsive to the needs of the customer so as to improve bus occupancy ratios and make bus based transportation a preferred mode of travel to private transport.

Electric Vehicle technology has brought revolutionary changes in automobile Industry which needs to be quickly adopted by STUs. This will make bus transport cheaper, safer and environmentally sustainable.

Shared mobility through app based companies such as Ola and Uber have changed the face of public transportation forever. To remain competitive compared to these cab aggregators, STUs need to raise their productivity to a much higher level.

गिरिधर अरमने, आई.ए.एस.

सचिव

GIRIDHAR ARAMANE, I.A.S.

Secretary



सड़क परिवहन और राजमार्ग मंत्रालय

Ministry of Road Transport & Highways

भारत सरकार / Government of India

The Ministry of Road Transport and Highways have engaged the World Bank in collaboration with Transport for London (TfL), under the Reimbursable Advisory Services (RAS) agreement, for making policy recommendations for improving Public Transport undertakings. The SRTUs in the State of Maharashtra and Andhra Pradesh have been taken as a pilot for this study. The Report is under process and is expected to be finalized shortly.

I would like to thank the SRTUs for the cooperation extended to TRW in supplying them with the required information. I also acknowledge the commitment and hard work put in by the officers and staff of TRW in bringing out this publication.

It is hoped the document is found useful by administrators, policy-makers and academia dealing with public transport system in the country.

New Delhi

Date: 23rd July 2020

A handwritten signature in blue ink, appearing to read "Giridhar Aramane".

(GiridharAramane)



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PREFACE

Review of Performance of State Road Transport Undertakings (SRTUs) is one of the four annual publications brought out by the Transport Research Wing of the Ministry of Road Transport & Highways.

The present issue reviews the physical and financial performance of 56 reporting SRTUs in India during the financial year 2016-17 in comparison with that in 2015-16. The document for 2016-17 has been delayed somewhat as it aimed to cover a larger portion of the SRTUs this time of about 56 SRTUs compared to the previous year's 47 SRTUs for the benefit of the users.

In this edition, we have changed the narrative considerably and have attempted to make the document as analytical as possible. Three new sections have been added in the document this time including the organisational form of 56 SRTUs (Section 2), the capital structure of SRTUs (Section 6) as well as the initiatives taken by MORTH for improving public transport (Section 11). The physical and operational efficiency parameters have been realigned to make them intuitively more acceptable and are given in Sections 3 and 4 of the report. The dynamics of revenue, cost and profit and loss at the aggregate as well as the SRTU level has been captured in Section 5. Section 6 brings out the Capital structure of these SRTUs and Section 7 brings out the State wise spread of these SRTUs. The performance of SRTUs in Metropolitan cities like that of DTC in Delhi, BEST in Mumbai, etc are given in Section 8, SRTUs and Road accidents is given in Section 9 and Cross-country comparisons of Bus transport are given in Section 10 of the report.

I would like to thank all the 56 reporting SRTUs as well as the Association for Road Transport Undertakings for providing us with the necessary information to help us in bringing out this publication. We have also benefitted from the consultations held by the Ministry with the World Bank on the policy prescriptions for SRTUs as a part of the Research Advisory Services agreement and the various publications brought out by them on the subject.

I would be failing in my duty if I do not place on record the hard work put in by the officers and staff of Transport Research Wing in bringing out this publication.

It is hoped that the researchers and practitioners on the subject find the document useful. Suggestions from SRTUs and other users of this publication are welcome to help us improve the quality and coverage of future issues of this publication.

New Delhi
Date: July 2020

Babni Lal
(Babni Lal)

LIST OF CONTENTS

Description	Page No.
Executive Summary	i-iv
1. Introduction <ul style="list-style-type: none"> 1.1 Overview 1.2 Approach & Methodology 1.3 Growth of SRTUs 1.4 Overview of Physical & Financial Performance of SRTUs <ul style="list-style-type: none"> 1.4.1 Combined physical performance of SRTUs 1.4.2 Combined financial Performance of SRTUs 	1-4
2. Profiling SRTUs by Organizational form in 2016-17	5-8
3. SRTU wise Performance: Key Physical Parameters of SRTUs and Ratios <ul style="list-style-type: none"> 3.1 Fleet Strength 3.2 Age Profile of the Fleet 3.3 Proportion of over aged fleet 3.4 Staff Strength 3.5 Fleet Utilization 3.6 Staff Bus Ratio 3.7 Summary of indicators for Top five leading SRTUs by fleet Size 	9-16
4. SRTU wise Performance: Key Operational Parameters of SRTUs and Ratios <ul style="list-style-type: none"> 4.1 Passengers carried 4.2 Effective Kilometers/revenue earning kilometers covered by SRTUs 4.3 Fuel Efficiency 4.4 Staff Productivity 4.5 Occupancy Ratio 	17-20
5. Financial Performance <ul style="list-style-type: none"> 5.1 Total Revenue 5.2 Total Cost 5.3 Profit & Loss 5.4 Profit/Loss before Tax 5.5 Key financial Ratios 	21-30
6. Capital Structure of SRTUs	31-33
7. State/union Territory –wise spread of SRTUs	34-35
8. Performance of SRTUs in Metropolitan cities <ul style="list-style-type: none"> 8.1 Financial Performance 8.2 Physical Performance 	36-38
9. Road Accidents involving SRTU Buses	39 - 40
10. Cross Country Comparison	41 - 42
11. Initiatives by MORTH for improving public transport	43 - 44

LIST OF TABLES

Sl. No.	Tables	Page No.
1.	1.1: Growth of SRTUs	2
2.	1.2: Combined physical performance of 56 SRTUs-2015-16 & 2016-17	3
3.	1.3 : Combined financial performance of 56 SRTUs-2015-16 & 2016-17	3
4.	2.1: Profiling SRTUs by organizational form and physical performance in 2016-17.	5
5.	2.2: Category wise financial performance of SRTU's in 2016-17	6
6.	3.1: Key indicators of physical performance of SRTUs and corresponding top five SRTUs.	9
7.	3.2: Top five SRTUs in terms of fleet size and their share	10
8.	3.3 : Physical performance of top five SRTUs during 2016-17	15
9.	3.4 : Operational performance of top five SRTUs during 2016- 17	15
10.	4.1: Key Indicators of operational performance of SRTUs and the corresponding top five SRTUs	17
11.	4.2 : Fuel Efficiency (CNG)– Category –wise	19
12.	5.1: Combined total revenue of 56 SRTUs	21
13.	5.2: SRTUs with highest revenue generation during 2015-16 & 2016 - 17	23
14.	5.3: Reasons underlying the decline in Total Revenue of SRTUs	23
15.	5.4: Combined total cost of 56 reporting SRTUs during 2016-17	24
16.	5.5: SRTUs with maximum total cost during 2015-16 & 2016-17	26
17.	5.6: List of top profit making SRTUs during 2015-16 & 2016-17	27
18.	5.7: Leading loss making SRTUs during 2016 - 17 & 2015-16	28
19.	5.8: Analysis of Top Five loss making undertakings	28
20.	5.9: Profit/Loss before paying taxes.	29
21.	5.10: Key financial Ratios – 2015-16 & 2016-17	30
22.	6.1: Total Liabilities of SRTUs 2015 -16 & 2016-17 indicating sources of funding, current liabilities etc.	31
23.	6.2: Total Liabilities indicating sources of funding, current liabilities etc for four profit making SRTUs during 2016-17.	32
24.	6.3: Total Liabilities indicating sources of funding, current liabilities etc for top five loss making SRTUs during 2016-17.	33
25.	7.1: State/Union Territory – wise Spread of SRTUs	34-35
26.	8.1: Select Financial Parameters of SRTU's plying in Metropolitan Cities during 2016-17	37
27.	8.2: Select Physical Parameters of SRTU's plying in Metropolitan Cities during 2016-17	38
28.	9.1: Top 5 SRTUs in terms of accident compensation paid to victims	40
29.	10.1: Cross-Country Comparison of vehicular penetration	41-42

LIST OF FIGURES

Figure No.	Description	Page No.
3.1	Total fleet held and fleet operated by all 56 SRTUs during 2015 -16 & 2016-17	10
3.2	Top five SRTUs in terms of new acquisitions/ addition to fleet size in 2016-17	11
3.3	SRTU wise Average Age of the Fleet held and proportion of over aged Vehicles (%) - 2016-17	12
3.4	Fleet Utilization across categories of SRTUs in 2016-17	14
5.1	Composition of Total Revenue of 56 reporting SRTU's (2015-16 & 2016 -17)	22
5.2	Share of Cost Components of 56 Reporting SRTU's during 2016-17 (in %)	25
9.1	Accidents and Fatal accidents by reporting SRTU's during 2015-16 and 2016 -17	39

LIST OF ANNEXURES

Anne. No	Description	Page No.
I	Physical Performance of SRTUs for the years ending March 2016 and March 2017.	45-48
II	Financial Performance of SRTUs for the years ending March 2016 and March 2017.	49-55
III	Profit/Loss of SRTUs for the years ending March 2016 and March 2017.	56
IV	Key Financial Ratios of SRTUs for the years ending March 2016 and March 2017.	57-61
V	Road accidents and accident rate of SRTUs for the years ending March 2016 and March 2017.	62
VI	Physical Performance of SRTUs At A Glance: 2011-12 to 2016 -17.	63-64
VII	Financial Performance of SRTUs At A Glance: 2011-12 to 2016 -17.	65
VIII	Best and worst performing SRTUs in Terms of Select Parameters: 2016 -17.	66
IX	Capital & Liabilities of SRTUs for the years ending March 2016 and March 2017 .	67-69

LIST OF APPENDIX

Appendix No	Description	Page No.
I	Abbreviations	70 - 71
II	Explanation of terms	72-73

EXECUTIVE SUMMARY

- ❖ The present issue reviews the physical and financial performance of 56 reporting State Road Transport Undertakings (SRTUs) in India during the financial year 2016-17 in comparison with that in 2015-16.
- ❖ 56 of 62 SRTUs have been analysed in this document as against 47 SRTUs analysed in the previous document in 2015-16. Thus, a major part of the SRTU ecosystem has been captured in this report with the uncovered SRTUs accounting for less than 2% of the fleet strength.
- ❖ State Road Transport Undertakings (SRTUs) are important players in the bus-based public transport system in most States and Union Territories in India today and account for about 8% of the total bus fleet being used for bus transport in the country. (Para 1.3.2 of the Report refers)
- ❖ The 56 reporting SRTUs held a total of 1,49,095 buses out of which 1,33,770 buses were operated, implying an average a fleet utilisation of 89.72% during 2016-17. The average age of fleet ranges from 2.96 years for Calcutta STC to 13.85 years for Bihar STRC (Para 1.4.1 of the Report refers).
- ❖ The combined staff strength of the 56 reporting SRTUs was 7,40,831 in 2016-17 which is slightly lower than the staff strength in 2015-16 of 7,57,161. Staff to bus ratio declined from 5.14 in 2015-16 to 4.97 in 2016-17 and staff productivity increased from 59.65 bus km per staff per day to 61.75 km per staff per day in 2016-17. (Para 1.4.1 of the Report refers)
- ❖ The passenger kms performed per day reduced from 156.29 crore in 2015-16 to 155.08 crore in 2016-17. The combined occupancy ratio of the SRTUs decreased from 69.79 in 2015-16 to 69.13.(Para 1.4.1 of the Report refers)
- ❖ The 56 SRTUs comprise of 26 State Road Transport Corporations (SRTCs), 10 Companies, 8 Government Departmental Undertakings and 8 Municipal Undertakings, providing passenger transport services for rural, inter-city and urban areas. (Para 2.1 of the Report refers)
- ❖ The parameters of physical performance of SRTU i.e. average fleet held, average age of the fleet held, percentage of overaged fleet, staff strength etc has been summarised in section 3 of the Report. The largest fleet is operated by Maharashtra SRTC (18710). The average age of fleet is the highest for Bihar SRTC (13.85 yrs). All vehicles of Bihar SRTC are overaged vehicles. The staff strength is the highest for Maharashtra SRTC and the Staff Bus Ratio is the highest for BEST Undertaking.

- ❖ The operational performance of SRTUs i.e. passengers carried, Kilometres covered and passenger kilometres performed and the derived ratios from operational performance parameters including Fuel efficiency, Staff productivity and occupancy ratios are given in Section 4 of the Report.
- ❖ The financial performance of SRTUs is summarised in Section 5 of the Report. Some key observations on the financial performance of SRTUs are as follows:
 - i. The financial performance of SRTUs has varied widely over the years with very few consistent performers like Andhra Pradesh SRTC, UP SRTC and Kanpur City TSL, Odisha STC and PUNBUS which registered profits in both the financial years i.e. 2015-16 as well as 2016-17.
 - ii. In the year 2016-17, only seven SRTUs made profit i.e Andhra Pradesh SRTC (Rs 298.92 crore), UPSRTC (Rs 97.19 crore), Kanpur City TSL(Rs 8.16 crore), Bihar SRTC (Rs 7.80 crore), PUNBUS (Rs 4.25 crore), Sikkim NT(Rs 3.66 crore) and Odisha SRTC (Rs 1.79 crore).(para 5.3.2 of the Report refers)
 - iii. All other 49 SRTUs out of the 56 reporting SRTUs made losses.
 - iv. The top five SRTU's making maximum losses during the year 2016-17 were DTC (Rs 3832.11crore); Kerala SRTC (Rs 1770.62 crore); BEST Undertaking (Rs 990.10 crore); Telangana SRTC (Rs 748.98 crore) and Haryana ST (Rs 597.73 crore). These five SRTUs together accounted for about 69% of the total losses reported by SRTUs.(para 5.3.6 of the Report refers)
 - v. The consolidated net loss reported by 56 was Rs. 13,956.77 crore in 2016-17 which is 23.99 per cent higher than the net loss of Rs. 11,256.28 crore for 2015-16. (para 5.3.1 of the Report refers).
 - vi. An analysis of the loss making SRTUs shows that in the loss making SRTUs, costs are much higher than the revenue earned. This is inter-alia because fare revisions have not kept pace with cost increase. Fair concessions given by State Government lack quantification and transparency and are not reimbursed regularly. A dynamic fare revision policy needs to be in place to compensate for increasing price of fuel, bus spare parts, staff costs of salaries and pension liabilities etc. To offset cost of plying on uneconomic routes as a part of SRTUs social obligation, route rationalization should be a continuous exercise to enable them to cross subsidize their operations.(para 5.3.9 of the Report refers).
 - vii. While on the one hand costs have to be reduced, on the other hand to improve the performance of the fleet, there is a need to improve the technology of vehicles i.e CNG/ Electric buses, change fleet composition through purchase/hiring of buses.

There is also a need to deploy IT services and Intelligent Transport Systems such as Electronic ticketing system; GPS vehicles tracking system; online bus reservation system etc to make the bus services more responsive to the needs of the customer so as to improve bus occupancy ratios and make bus based transportation an attractive substitute to personalized mode of road travel.(para 5.3.10 of the Report refers)

- ❖ For the first time, a section has been included on the capital structure of SRTUs in this report (Section 6 of the report refers)which brings out the following:
 - i. There has been an increase in the total liabilities of SRTUs by Rs 12,845 crores in 2016-17 of about 10% over the previous year.
 - ii. State Government contributions account for about 16% of the total contributions as against almost nil (0.27%) from the Centre. The components which contribute the most in terms of their share in liabilities are “General & Other Reserves (26.68%)” and “Loans from Banks & Financial Institutions (21.87%)”.
 - iii. While profit making SRTUs have relied more on internal sources of finance i.e. “General & Other Reserves”, the loss making SRTUs tend to place greater reliance on “Loans from Bank & Financial Institutions” where possible or State funding.
- ❖ Section 7 of the report captures the State wise spread of SRTUs with some states showing as many as 8 SRTUs as in the case of Maharashtra and Tamilnadu and others like Chhattisgarh, Jharkhand and Madhya Pradesh reporting nil SRTUs. The State of Maharashtra has the largest fleet size with a share of 17.4%, followed by Karnataka with 15.9% and Tamilnadu with a share of 15.04%.
- ❖ Section 8 captures the Financial and physical performance of SRTUs in Metropolitan cities. There are 12 Metropolitan cities based SRTUs. All of these are loss making with the exception of Kanpur City Transport Services Ltd. The highest losses were reported by Delhi Transport Corporation, followed by BEST Undertaking followed by Metro TC Chennai at 3rd position. Staff cost, lubricant cost and Interest cost remain the major cost components for these SRTUs as well.
- ❖ Section 9 of the report summarizes the Road accidents in SRTUs. As per provisions of para 146 subsection (3)(c), State Transport under takings are exempt from taking insurance for third party but they are still required to pay the compensation to accident victim(s) on case to case basis and this thus becomes a cost for the SRTU. Though there was a decrease in the number of accidents and fatal accidents reported by the SRTUs by 5% and 7% respectively in 2016-17, the total compensation paid

by SRTUs towards accidents increased from Rs 545.66 crores in 2015-16 to Rs 591.66 crores in 2016-17.

- ❖ Section 10 of the report contains a Cross country comparison of buses both SRTUs and others. The section shows that the bus penetration in India per 1000 persons at 1.33 was much lower when compared with some developed countries like Russia(6.06), Australia(3.99), USA(3.02), UK(2.46), and other developing countries like Thailand(8.42), South Africa(6.38), Malaysia(5.90), Brazil (4.74) and Mexico(2.87). Some other countries like Germany(0.96), Bangladesh(0.97) have bus penetration even lower than India.
- ❖ Section 11 of the report provides the initiatives taken by the Ministry of Road Transport and Highways for improving public transport. The Ministry has inter-alia engaged the World Bank in collaboration with Transport for London (TfL), under Reimbursable Advisory Services (RAS) agreement, for providing policy prescriptions for improving Public Transport undertakings. The State of Maharashtra and Andhra Pradesh have been taken as a pilot for this study.
- ❖ The study would inter-alia, make recommendations on providing sustainable public transport with long term financing; suggestions for improving non fare box revenue; study existing contracting models to suggest improvements; review Intelligent Transport Systems (ITS) to improve customer focus and performance monitoring. The Report is under process and is expected to be finalized shortly.

SECTION-1

Section - 1

INTRODUCTION

1.1 Overview

- 1.1.1 Public Transport is a system of transport which enables group travel by general public. It could be Government or privately owned and has the benefit of conveying many more people in much less space than individual automobiles and helps in reducing traffic congestion as well as air pollution from vehicles. It also relieves riders of the stress that comes from daily driving in congested areas.
- 1.1.2 The importance of public transport can hardly be overemphasized in an economy like India where though the road length has grown @ 3.9% per annum, the use of personalized vehicles has been growing @ 10.1% during the period 2007 to 2017. As a result, the existing stock of roads are becoming increasingly inadequate to cater to the large number of vehicles plying on the roads.
- 1.1.3 In India, an important mode of public transport for intercity and intra city travel is bus transport. It remains a popular and convenient mode compared to all other available modes, especially for the rural poor. State Road Transport Undertakings (SRTU's), set up under the Road Transport Corporation Act 1950 have been providing bus-based passenger transport services for rural, intercity and urban areas in the country.
- 1.1.4 The current document titled Review of the performance of State Road transport Undertakings April 16 to March 17 reviews the financial and physical performance of 56 reporting SRTUs out of the 71 SRTUs existing in the country for the financial years 2016-17.

1.2 Approach & Methodology

- 1.2.1 The process of collecting information from SRTUs in TRW started with a brief questionnaire sent to all of 71 SRTUs in November, 2017. The report however is based on the information received from 56 State Road Transport Undertakings (SRTUs) of the existing 62 SRTUs. This is as against 47 reporting SRTUS in the previous publication.
- 1.2.2 Apart from the information furnished by SRTUs, information was also obtained from Transport Section of MoRTH, International Road Federation and website of Registrar General of India (Population Census) for the compilation of this report.

1.3 Growth of SRTUs

1.3.1 Historical evolution of SRTUs in India:

Prior to Road Transport Corporation Act (RTCA) of 1950, road passengers transport in India was provided by privately owned operators. However, it came to be widely believed over time that services provided by private operators were inadequate and should instead be provided by the Government. Accordingly, with the provision of RTCA of 1950, State Transport Corporations came to exercise monopoly control on key segments of the market, growing several times in the next three decades and accounting for nearly 55% of the total buses in the country. The STUs that came up were increasingly politicized and used more for employment generation and for provision of support to special interest groups spiralling up the costs. The Motor Vehicle Act of 1988 reversed the policy direction and encouraged greater reliance again on the private sector by liberalizing entry. Accordingly, subsequent to the enactment of Motor Vehicle Act 1988, the procedure for issuance of permits was liberalized and reservation of stage permits only for State Transport Corporations was removed in 1994 by way of an amendment. With this the role of the STUs started to recede with most States in eastern India relying on private operations and the share of SRTUs in the bus fleet operating in India dipping to 8% (**Table 1.1** below refers). This was followed by formal bus contracting which emerged in India only in the last decade and is slowly gaining ground.

- 1.3.2 The growth of the public sector in passenger bus transport as evidenced over the years is given in the table below:

Table 1.1 Growth of SRTUs

Indicators	1960-61	1970-71	1980-81	1990-91	2000-01	2010-11	2014-15	2015-16	2016-17
Number of STUs	28	32	54	64	63	52	54	47*	62(56)*
Total Employment (lakhs)	1.4	2.8	5.7	7.5	7.4	7.0	7.0	7.6	7.4
Number of Buses held	18,000	37,000	78,000	1,04,000	1,15,000	1,31,000	1,35,000	1,42,855	1,49,095
% of total buses in the country	32	39	55	33	18	8	7	8	8
Passenger traffic handled (Billion passenger kms BPKm)	26	81	NA	363	434	582	541	570	566
Passenger kilometres per unit of labour	187	288		484	587	831	773		

Source: Profile and performance of STUs, CIRT :various publications

* : Number of SRTUs examined in the Report

1.4 Overview of Physical & Financial Performance of SRTUs

1.4.1 Combined Physical performance of SRTU's

The combined physical performance of the reporting 56 SRTU's during 2015-16 and 2016-17 is summarized in **Table 1.2**.

Table 1.2: Combined physical performance of 56 SRTU's - 2015-16 & 2016-17

Sl No.	Item	2015-16	2016-17	% age increase /decrease
1	Fleet Held (Number)	1,47,348	1,49,095	1.19
2	Fleet Operated (Number)	1,32,753	1,33,770	0.77
3	Fleet Utilisation (%)	90.09	89.72	-0.41
4	Passenger km Offered (in Crore)	81,740	81,886	0.18
5	Passenger km Performed (in Crore)	57,047	56,605	-0.77
6	Occupancy Ratio (%)	69.79	69.13	-0.95
7	Staff Strength (Number)	7,57,161	7,40,831	-2.16
8	Staff/Bus Ratio	5.14	4.97	-3.31
9	Staff Productivity (bus - kms/Staff/Day)	59.65	61.75	3.52
10	Vehicle Productivity (bus - kms/Bus/Day)	306.53	306.84	0.10

The 56 reporting SRTU's showed a total of 1,49,095 buses in 2016-17 registering a marginal increase of about 1.19 percent over 2015-16. Despite the increase in buses, the fleet utilization ratio decreased from 90.09% in 2015-16 to 89.72% in 2016-17 suggesting increased downtime of buses. A decrease in the staff strength of 2.16% has been reported with staff/ bus ratio declining from 5.14 in 2015-16 to 4.97 in 2016-17 .Staff productivity registered an increase of 3.52% over the previous year.

1.4.2 Combined Financial Performance of 56 SRTU's

The combined financial performance of the 56 reporting SRTU's during 2015-16 and 2016-17 is summarized in **Table 1.3**.

Table 1.3 Combined financial performance of 56 SRTU's - 2015-16 & 2016-17

Sl No.	Item	2015-16	2016-17	% age increase /decrease
1	Total Revenue (Rs. in crore)	54,747.69	55,821.95	1.96
	<i>of which total traffic earnings</i>	45,032.60	45,226.91	0.43
	<i>traffic earnings as % age of Total Revenue</i>	82.25	81.02	
2	Total cost(Rs. in crore)	66,003.96	69,778.71	5.72
	<i>of which staff cost</i>	29,312.54	31,109.86	6.13
	<i>Staff cost as % age of Total cost</i>	44.41	44.58	
3	Total Loss (Rs. in crore)	-11,256.28	-13,956.76	23.99

The combined revenue of the 56 reporting SRTU's increased by 1.96 percent from Rs 54,747.69 crore in 2015-16 to Rs 55,821.95 crore in 2016-17. The combined total cost of 56 reporting SRTU's increased by 5.72 % from Rs 66,003.96 crore in 2015-16 to Rs 69,778.71 crores in 2016-17. The combined net loss of the 56 SRTU's in 2016-17 registered an increase of 24 percent at Rs.13956.77 crore in 2016-17 over the previous year.

SECTION-2

Section - 2

Profiling SRTUs by Organisational form in 2016 - 17

- 2.1 The reporting 56 SRTU's can be grouped into six distinct types of organisational forms namely, Corporations (26), Government Department Undertakings (8), Municipal Undertakings (8), Companies (10), Associate Members (2) and Special Purpose Vehicles (2).
- 2.2 The category wise physical and financial performance has been summarized in **Table 1.2 & 1.3** below:

Table 2.1 Profiling SRTUs by organisational form and physical performance in 2016-17

Sl. No	Parameters/ No of reporting SRTU	Corporations (26)	Govt. Dept. Under- take- nings (8)	Municipal Under- take- nings (8)	Companies (10)	Associate Members (2)	Special Purpose Vehicles (2)	Combined SRTU's (56)
1	Average Fleet Held (Number)	1,08,661 (72.88)	6,137 (4.12)	8,079 (5.42)	24,160 (16.20)	1,668 (1.12)	390 (0.26)	1,49,095
2	Average Fleet Operated (Number)	98,503 (73.64)	5,431 (4.06)	6,157 (4.60)	22,060 (16.49)	1,374 (1.03)	245 (0.18)	1,33,770
3	Fleet Utilisation (%)	90.65	88.5	76.21	91.31	82.37	62.82	89.72
4	Passenger Kilometres Offered (in Crore)	56,03,707 (68.43)	2,69,871 (3.30)	2,35,533 (2.880)	20,79,280 (25.39)	NA	160 Neg	81,88,552
5	Passenger KMS Performed (in Crore)	39,34,039 (69.50)	1,86,194 (3.29)	1,35,263 (2.39)	14,04,889 (24.82)	NA	144 Neg	56,60,529
6	Occupancy Ratio (%)	70.2	68.99	57.43	67.57	NA	89.6	69.13
7	Staff Strength (Number)	5,17,485 (69.85)	26,448 (3.57)	54,788 (7.40)	1,41,747 (19.13)	76 (0.01)	287 (0.04)	7,40,831
8	Staff/Bus Ratio	4.76	4.31	6.78	5.87	0.05	0.74	4.97
9	Staff Productivity (bus-Kms/Staff/Day)	63.74	58.38	21.9	68.51	0.00	87.55	61.75
10	Vehicle Productivity (Kms/Bus/Day)	303.54	251.57	148.49	401.97	0.00	64.43	306.84

Note: Figures in parentheses indicates the share in the combined total of 56 SRTU's

Neg:- Negligible

Table 2.2: Category wise financial performance of SRTU's in 2016-17

(Rs in Crore)

Sl. No	Description	Corporations	Govt. Dept. Under- takings	Municipal Under- takings	Companies	Associate Members	Special Purpose Vehicles	Combined SRTUs
	No of reporting SRTUs	26	8	8	10	2	2	56
1	Total Revenue	41,094.88 (73.62)	1,871.27 (3.35)	2,481.61 (4.45)	10,034.24 (17.98)	309.09 (0.55)	30.85 (0.06)	55821.94
2	of which total traffic earnings	33,089.16 (73.16)	1,578.99 (3.49)	2,138.16 (4.73)	8,111.42 (17.94)	278.45 (0.62)	30.73 (0.07)	45,226.91
3	Total cost	49,839.75 (71.43)	2,746.23 (3.94)	4,077.86 (5.85)	13,083.06 (18.75)	7.78 (0.01)	24.04 (0.03)	69,778.71
4	of which staff cost	20,760.51 (66.71)	1,409.21 (4.53)	2,480.98 (7.98)	6,449.46 (20.75)	3.87 (0.01)	5.83 (0.01)	31,109.85
5	Net profit/loss(-)	-8,744.86 (-62.66)	-874.96 (-6.27)	-1,596.25 (-11.44)	-3,048.81 (-21.84)	301.30 (2.16)	6.82 (0.05)	-13,956.76

Note: Figures in parentheses indicate the share in the combined total of 56 SRTU's

- 2.3 It will be noted from **Table 2.1** that **Corporations** constituted under the Road Transport Corporations Act 1950 are the most popular organizational form amongst SRTUs with a total 26 out of 56 SRTUs being corporations. Many of Corporations remain very large and cover the entire State, having grown giant-sized over the years. Under the RTC Act 1950, the Corporation is wholly owned by the State; is a separate entity for legal purposes and can be sued and sue and acquire properties in its own name; Corporations have generally been given more freedom for making contracts and acquiring and disposing of property than government departments. It is usually independently financed. It can obtain its funds from borrowing, either from the treasury or from the public and from revenues derived from the sale of its services. In general, it is exempted from most of the regulatory and prohibitory statutes applicable to the expenditure of public funds.
- 2.4 Corporations constitute about 46% of the reporting SRTU's, held about 73 % of the total fleet strength of the SRTUs, accounted for 70% of the passenger kilometres performed and a staff strength of 70%. In terms of financial performance, they accounted for 74% of the total revenue earned by SRTUs, about 71% the total cost incurred and about 63% of the losses.
- 2.5 The important Corporations are Maharashtra SRTC, Andhra Pradesh SRTC, Uttar Pradesh SRTC, Telangana SRTC, Karnataka SRTC, Gujarat SRTC, Bangalore Metropolitan TC, Kerala SRTC, North Eastern Karnataka RTC, Delhi Transport Corporation etc.
- 2.6 Not all the undertakings established for providing passenger transport services were under the RTCs Act1950. The “**Companies**” form constitutes the second most popular form of organisation under SRTUs with 10 of the 56 SRTUS under study being companies registered under the Indian Companies Act 1956. Out of the 10 Companies, 8 STUs operate in the southern State of Tamil Nadu alone with the others being PUNBUS & Kadamba TC Ltd of Punjab and Goa respectively.

- 2.7 According to the Section 617 of Indian Companies Act, a government company is that in which Central or State Governments holds 51 percent of the shares. The company will have to observe norms prescribed by RBI in regard to debt to equity ratio. The other main features of this form of organization include inter-alia that their employees, excluding those on deputation, are not civil servants, and the personnel policies are subject to the limitations in the articles of associations; and that they are exempted from accounting and audit laws and procedures applicable to government.
- 2.8 Companies constitute about 18% of the reporting SRTU's, held on an average 16 % of the total fleet strength of the SRTUs, accounted for 25% of the passenger kilometres performed and a staff strength of 19%. Companies also had the maximum score in respect of staff productivity measured in terms bus kms/staff/ day as well as Vehicle productivity (kms/bus/day).They accounted for 18% of the total revenue, earned by SRTUs, about 19% the total cost incurred and about 22% of the losses of the reporting SRTUs.
- 2.9 **Municipal undertakings** are the third most important form of organisation with 8 out of the 56 SRTUs having assumed this form in urban/municipal areas where mobility is one of the important determinants of the quality of life of the people. They constitute about 14% of the reporting SRTU's, held about 5 % of the total fleet strength of the SRTUs, accounted for 2% of the passenger kilometres performed, a staff strength of 7%. They accounted for 5% of the total revenue, earned by SRTUs, about 6% the total cost incurred and about 11% of the losses.
- 2.10 Municipal transport undertakings, by their very nature, are urban transport undertakings, catering mainly to those living in the municipal area. These undertakings are managed by a sub-committee, known as transport sub-committee, of the municipal council, headed by one of the councillors or members as chairman. It is expected that the municipality will be able, with the assistance and guidance of the elected members, to respond to the needs of the public and provide for the financing of the services as part of its overall responsibility.
- 2.11 Municipal transport undertakings are prevalent only in the States of Maharashtra and Gujarat. Currently, there are eight municipal transport undertakings in India i.e Ahmedabad MTC; BEST Undertaking; Kolhapur MTU, Navi Mumbai MT, Sholapur MT, Pune Mahamandal; Thane MT, and Kalyan Dombivali MT i.e. seven of them operate in the State of Maharashtra and one in the state of Gujarat. Although municipal undertakings are expected to respond to the transportation needs of the urban dwellers, they are languishing due to lack of resources. The result is that several of them are running with fleets, which have long out-lived their utility, resulting in poor quality of operation. They are unable to augment services on existing routes much less expand and take over more routes. Even in respect of management at the top level, in view of the fact that only municipal councillors could constitute the transport sub-committee, there can be no professional expertise at the policy level. It has been observed that bus productivity of municipal undertakings is, on an average, lower than that of departmental undertakings as well as companies formed under Indian Companies Act1956 and corporations formed under Road Transport Corporation Act 1950.

- 2.12 **Departmental undertakings** are the oldest form of government ownership. The corporate and company forms are later innovations. Even today, departmental undertakings are operating in the states of Punjab, Haryana, Chandigarh, Sikkim, Nagaland, Mizoram etc. Currently, there are 8 STUs operating as departmental undertakings.
- 2.13 The main characteristics of the departmental form of undertakings include inter-alia that the undertaking is financed entirely by appropriation from the treasury and all or a major share of its revenues are paid into the treasury; it is subject to the budget, accounting, and audit control applicable to other government activities; the permanent staff of the undertaking are civil servants, the undertaking is generally organized as a major subdivision of one of the departments of the government and the undertaking possesses the sovereign immunity of the state and cannot be sued without the consent of the government.
- 2.14 The characteristics mentioned above usually do not allow flexibility and dynamism in undertakings' operation and impede their productivity and efficiency. Departmental form of undertakings constitute about 14% of the reporting SRTU's, held about 4 % of the total fleet strength of the SRTUs, accounted for 3% of the passenger kilometres performed, a staff strength of 4%. They accounted for 3% of the total revenue earned by SRTUs, about 4% of the total cost incurred and about 6% of the losses.
- 2.15 Then there are two Associate members and two SPVs which together account for less than 2% of the fleet size, performed negligible passenger kilometre , employed about 363 people and accounted for about 2% of the losses of the reporting SRTUs. The Associate Members are Himachal Pradesh TDCL and DIMTS and the two SPVs are Meerut City TSL and Kanpur City TSL.

SECTION-3

Section - 3

SRTU wise Performance: Key Physical Parameters of SRTUs and Ratios

The detailed SRTU wise indicators of physical performance have been given at **Annexure I** of the Report. In this chapter, we look at the key indicators of physical performance of SRTUs i.e. average fleet held, average age of the fleet held, percentage of over-aged fleet, staff strength and the top five SRTUs corresponding to each such indicator. The broad summary of the same is given in **Table 3.1** below:

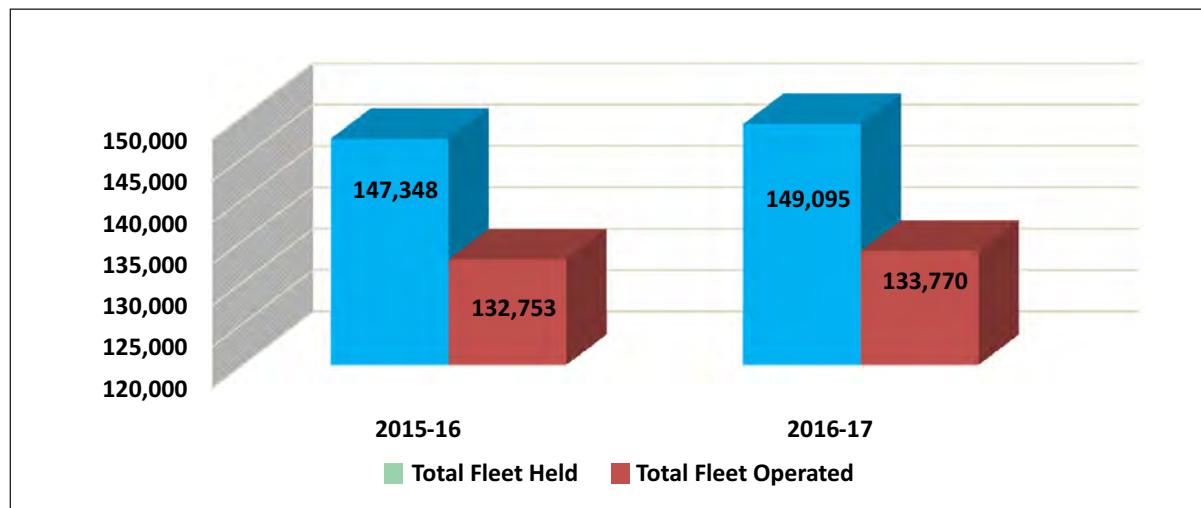
Table 3.1: Key indicators of physical performance of SRTUs and corresponding top five SRTUs

Total 56 Reporting SRTUs				Corresponding Top five SRTUs in 2016-17				
	2016-17	2015-16	% increase/decrease					
Fleet Held (Number)	1,49,095	1,47,348	1.19					
Fleet Operated (Number)	1,33,770	1,32,753	0.77	Maharashtra SRTC	Andhra Pradesh SRTC	UP SRTC	Telengana SRTC	Karnataka SRTC
				18,710	12,072	10,780	10,415	8,212
Avg Age of Fleet (Years)	6.69	6.47	3.47	Bihar SRTC	Nagaland ST	J&K SRTC	BEST Under-taking	Arunachal Pradesh ST
				13.85	12.00	10.00	9.83	9.32
Over aged vehicles (%)	27.25	27.49	-0.87	Bihar SRTC	Nagaland ST	State Express TC, TN	Metro TC Chennai	TN,STC, Madurai
				100%	80%	79%	75%	68%
Staff Strength (Number)	7,40,831	7,57,161	-2.16	Maharashtra SRTC	Andhra Pradesh SRTC	Telangana SRTC	Kerala SRTC	Gujarat SRTC
				103,043	56,592	54,117	43,086	37,688
Staff/Bus Ratio	4.97	5.14	-3.30	BEST Undertaking	Mizoram ST	Kerala SRTC	Kolhapur MTU	Delhi TC
				8.50	7.82	7.34	7.32	6.69
Fleet Utilization (%)	89.72	90.09	-0.41	Pepsu RTC	State Transport Punjab	Telangana SRTC	Andhra Pradesh SRTC	Uttar Pradesh SRTC
				100	100	99.8	99.7	97.6

3.1 Fleet Strength

- 3.1.1 The reporting 56 SRTU's held a total of 1,49,095 buses during the period April-March 2016-17 as against 1,47,348 in 2015-16 which is an increase of 1748 buses in absolute terms and 1.19% in percentage terms (**Table 3.1** above and **Figure 3.1** below refers).

Figure 3.1: Total fleet held and fleet operated by all 56 SRTUs during 2015-16 & 2016-17



- 3.1.2 In terms of fleet size, the top five SRTU's out of the reporting 56 SRTU's in 2016-17 are Maharashtra SRTC (18,710), followed by Andhra Pradesh SRTC (12,072), Uttar Pradesh SRTC (10,780), Telangana SRTC (10,415) and Karnataka SRTC (8,212). These together account for 40% of the total fleet size of SRTUs.

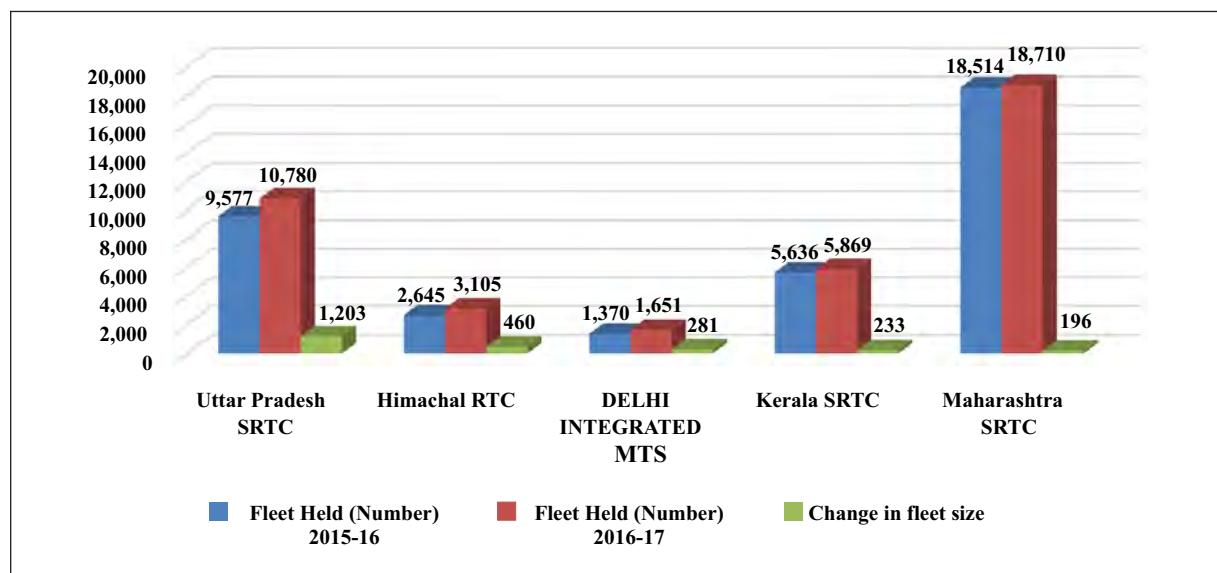
Table 3.2: Top five SRTUs in terms of fleet size and their share

SRTUs	2016 - 17	% share	2015 - 16	% share
Maharashtra SRTC	18,710	13	18,514	13
Andhra Pradesh SRTC	12,072	8	12,012	8
Uttar Pradesh SRTC	10,780	7	9,577	7
Telangana SRTC	10,415	7	10,391	7
Karnataka SRTC	8,212	6	8,172	6
Total Fleet	1,49,095	41	1,47,348	41

However, it may be noted that the 8 SRTUs of Maharashtra taken together have a fleet size of 25,879 buses and account for 17.35% in total fleet strength of 56 reporting STRU's. Similarly, all the 4 SRTUs of Karnataka State have a total fleet size of 23,668 buses and account for about 15.87% and all the 8 SRTUs of Tamil Nadu have a fleet size of 22,421 buses and account for 15.04% in total fleet strength of 56 reporting SRTU's.

- 3.1.3 SRTU's with the smallest fleet strength were Meerut city Transport service (120), Meghalaya STC (52), Mizoram ST (49), Tripura RTC (47) and Himachal Pradesh Tourism Development Corporation (17). The combined share of these five SRTU's was a meagre 0.19% of the total fleet strength of the 56 reporting SRTU's.
- 3.1.4 SRTUs making the highest number of acquisitions of buses during 2016-17 were Uttar Pradesh SRTC (1203 buses) followed by Himachal Pradesh RTC (460 buses), DIMTS(281 buses), Kerala SRTC (233 buses) and Maharashtra SRTC (196 buses) **Figure 3.2** below refers.

Figure 3.2: Top five SRTUs in terms of new acquisitions/ addition to fleet size in 2016-17



- 3.1.5 The National Capital Delhi has a public transport which consists of two entities i.e. Delhi Transport Corporation(DTC) and Delhi Integrated Multi-Modal Transit System Ltd.(DIMTS) having a fleet of 4,168 and 1,651 buses, respectively. During the year 2016-17 DTC has reduced its fleet size by 396 buses while DIMTS has increased its fleet by 281 buses as compared to the fleet size of 2015-16.

3.2 Age Profile of the Fleet

- 3.2.1 The average age of the fleet is one of the important determinants of its physical productivity. SRTU wise details of average age of the fleet for the years 2015-16 and 2016-17 are given in Annexure I and also presented in Figure 3.3 below in respect of the year 2016-17.

- 3.2.2 The average age of the fleet of the 56 reporting SRTU's in the year 2016-17 ranged from 2.96 years (Calcutta STC) to 13.85 years (Bihar STC). As on 31st March 2017, Bihar SRTC had the oldest fleet, with an average age of 13.85 years, followed by Nagaland ST (12.00 years), J&K SRTC (10.0 years), BEST Undertaking (9.83 years) and Arunachal Pradesh ST (9.32 years). SRTU's having a relatively younger fleet with an average age of less than 5 years are Calcutta SRTC (2.96 years), Haryana ST (4.37 years), Uttar Pradesh SRTC (4.53 years), Kalyan Dombivali MT (4.70), Gujarat SRTC (4.74 years), Chandigarh TU (4.74 years) and Navi Mumbai MT (4.81 years).

3.3 Proportion of Over-aged fleet

- 3.3.1 The age of the fleet has a significant bearing on operational performance of SRTU's. In terms of over-aged vehicles amongst the 56 reporting SRTU's, Bihar SRTC accounted for the highest proportion of over-aged buses (100%) during the period April-March, 2016-17 followed by Nagaland ST (79.82%), State Exp.TC TN Ltd. (78.73%), Metro TC (Chennai) Ltd. (74.92%) and TNSTC(Madurai) Ltd (68.00%). There were a few SRTU's who did not report any over-aged buses in their fleet. (Pune Mahamandal, BEST Undertaking, Kerala SRTC, PUNBUS and Meerut City TSL).

3.4 Staff Strength

- 3.4.1 The total staff strength of the 56 reporting SRTU's decreased by 2.16% from 7,57,161 during 2015-16 to 7,40,831 in 2016-17.
- 3.4.2 The top five SRTU's with the highest staff strength in 2016-17 are Maharashtra (1,03,043) followed by Andhra Pradesh SRTC (56,592), Telangana SRTC (54,117), Kerala SRTC (43,086) and Gujarat SRTC (37,688). During the same period five SRTU's with the lowest staff strength were Tripura RTC (307), Meghalaya STC (260), Kanpur TSL (249), HPTDL (76) and Meerut city TSL(38).
- 3.4.3 In absolute terms Kerala SRTC recorded the highest increase of 846 persons in number of staff deployed by it in 2016-17 as compared to its staff strength in 2015-16, while the staff strength of Delhi TC recorded the highest decline of 2,648 persons during 2016-17 as compared to 2015-16.
- 3.4.4 Out of the 56 reporting SRTU's, data on staff strength has not been reported by one SRTU namely DIMTS. 13 SRTU's reported increase in their staff strength during 2016-17 and 38 SRTU's reported a decline in their staff strength in 2016-17 as compared to 2015-16. Four SRTU's namely Arunachal Pradesh ST, Mizoram ST, Nagaland ST, and Meerut city TSL continued to have the same staff strength in 2016-17 as it had in 2015-16.

Key physical performance ratios:

3.5 Fleet Utilisation

- 3.5.1 Fleet utilization ratio is the buses on road to the average fleet held by an SRTU. The average fleet utilization of 56 reporting STRUs decreased from 90.09% in 2015-16 to 89.72% in 2016-17. Fleet utilisaion category wise is depicted in **Figure 3.4** below:

Figure 3.4 Fleet Utilization across categories of SRTU's in 2016-17

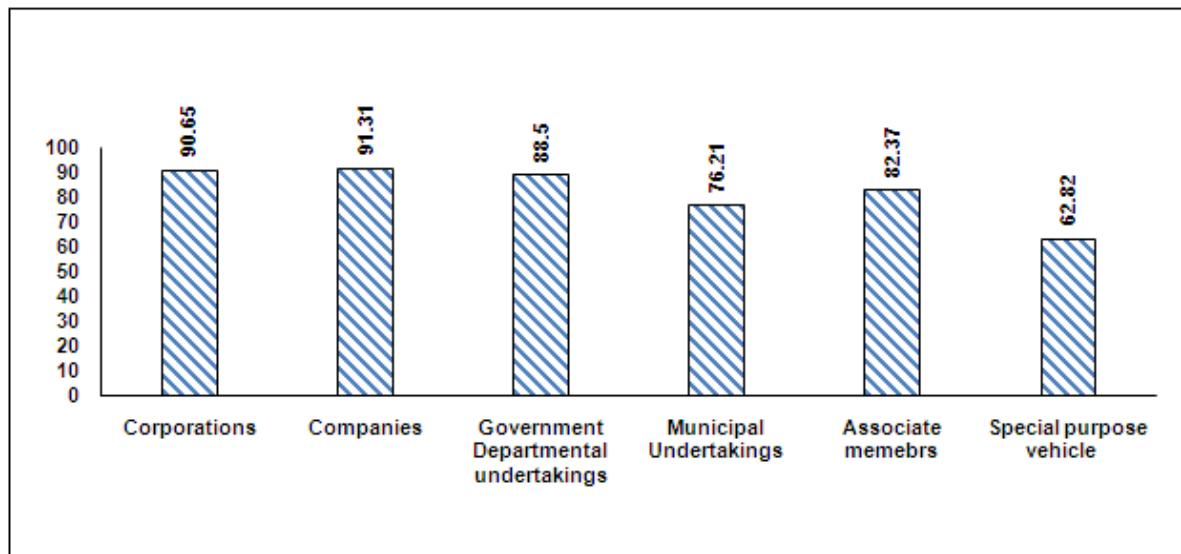


Figure 3.4 reveals that in 2016-17, Companies had the best utilization ratio of 91.31% followed by Corporations (90.65%) and Government Department undertakings (88.50%). The key highlights of inter SRTU comaprision of fleet utilization are:

- 3.5.2 Five SRTUs with the best fleet utilization ratio in 2016-17 were ST Punjab (100%), PEPSU(100%), Telengana SRTC (99.85%), Andhra Pradesh SRTC (99.66%) and Uttar Pradesh SRTC (97.64). On the other hand the bottom five SRTUs in terms of fleet utilization in 2016-17 were (Sholapur MT (24.63%), Nagaland ST (33.63%), Tripura (34.04%), Bihar(42.15%) and Kalyan Dombiwali MT (42.94%).

3.6 Staff-Bus Ratio

- 3.6.1 The staff-bus ratio of all the 56 reporting SRTU's taken together decreased from 5.14 during 2015-16 to 4.97 during 2016-17, with BEST undertaking reporting the highest staff-bus ratio of 8.50 and Meerut City TSL the lowest staff-bus ratio of 0.32 as on 31st March 2017. This decrease in staff bus ratio has been on account of overall reduction in staff of -2.16 % for all 56 SRTUs taken together even when total fleet operated at the overall level increased by about 0.77%.

3.7 Summary of indicators for Top Five leading SRTUs arranged by Fleet size:

3.7.1 The physical performance of the top five SRTUs as per fleet size in 2016-17 has been summarized in **Table** below:

Table 3.3: Physical performance of top five SRTUs during 2016-17

Name of SRTU	Fleet Strength		Average age of fleet		Over aged vehicle		Staff strength	
	Numbers In lakh	Rank (*)	Years	Rank	%age	Rank	Numbers	Rank
Maharashtra SRTC	18,710	1	5.42	17	8.38	19	1,03,043	1
Andhra Pradesh SRTC	12,072	2	5.46	19	13.29	24	56,592	2
Uttar Pradesh SRTC	10,780	3	4.53	3	8.26	18	23,487	13
Telangana SRTC	10,415	4	7.44	41	8.72	20	54,117	3
Karnataka SRTC	8,212	5	5.23	12	25.20	35	37,675	6

★Note: Ranking is amongst the 56 reporting SRTUs

3.7.2 The data in **Table 3.3** reveals that the leading five SRTUs have a relatively young fleet with not very high percentage of overaged vehicles except for Andhra and Karnataka SRTC but are ranked fairly high in terms of staff strength with the exception of UP.

3.7.3 The operational performance of the leading five SRTUs based on the fleet size of 2016-17 has been summarized in **Table 3.4** :

Table: 3.4 Operational performance of top five SRTUs during 2016-17

Name of SRTU/parameter	Unit	Maharashtra SRTC	Andhra Pradesh SRTC	Uttar Pradesh SRTC	Telangana SRTC	Karnataka SRTC
Passengers Carried	Numbers (in Lakh)	24,438	24,017	5,646	34,880	9,959
	Rank	2	3	17	1	10
Fleet Utilization	%age	89.97	99.66	97.64	99.85	90.57
	Rank	18	4	5	3	16
Staff -Bus ratio	Ratio	5.51	4.69	2.18	5.20	4.59
	Rank	37	25	3	32	23
Staff Productivity	(bus km/ staff/day)	54.93	80.27	157.68	64.43	71.62
	Rank	26	8	2	21	15
Effective Kms / Revenue earning Kms covered	(bus km/ bus/day)	302.54	376.29	343.54	334.79	328.58
	Rank	21	8	11	13	15
Fuel Efficiency	Km/ltr of HSD	4.77	5.2	5.24	5.13	4.84
	Rank	20	10	8	15	19
Occupancy ratio	%age	68.75	68.05	68.00	67.88	67.80
	Rank	32	33	34	35	36

Note: Ranking is amongst the 56 reporting SRTUs

- 3.7.4 Passengers carried have a direct bearing on revenue generation, which in turn affects the profit and loss of the respective SRTU. The data in **Table 3.2** reveals that Telangana SRTC which ranks 4th amongst the 56 reporting SRTUs in terms of fleet size (refer **Table 2.1**) takes the first spot in terms of number of passengers carried with Maharashtra SRTC, Andhra Pradesh SRTC taking the second and third spot respectively. Uttar Pradesh and Karnataka though rank 3rd and 5th in fleet size but are placed at 17th and 10th position in respect of passengers carried.
- 3.7.5 Telangana which ranks 4th in terms of fleet size, has the best fleet utilization percentage (99.85) amongst the top five SRTUs and ranks 3rd amongst the 56 reporting SRTUs. Andhra Pradesh SRTC and Uttar Pradesh SRTC also have a higher fleet utilization and rank 4th and 5th amongst the reporting SRTUs. However, Karnataka SRTU and Maharashtra SRTU has a fairly lesser fleet utilization ratio of 90.57% and 89.97%, and are thus ranked 16th and 18th respectively.
- 3.7.6 Uttar Pradesh SRTC is the only SRTU amongst the leading five SRTUs which has the highest staff productivity (157.68 bus km/staff /day) a low staff bus ratio (2.18) and it ranks 3rd amongst the 56 reporting SRTUs. The remaining four SRTUs have much lower ranks. It may also be noted that Andhra Pradesh SRTC has however been able to achieve 8th rank among the 56 reporting SRTUs in terms of staff productivity.
- 3.7.7 Only two of the five leading five SRTUs, namely Uttar Pradesh SRTC and Andhra Pradesh SRTC find place among the top 10 SRTUs in terms of Fuel efficiency.

SECTION-4

Section – 4

SRTU wise Performance: Key Operational Parameters of SRTUs and Ratios

In this section we look at the key indicators of operational performance of SRTUs i.e. passengers carried, Kilometres covered and passenger kilometres performed and the derived ratios from operational performance parameters including Fuel efficiency, Staff productivity and Occupancy ratios. The detailed SRTU wise indicators of operational performance have been given at **Annexure I** of the Report. The top five SRTUs corresponding to each such indicator. The broad summary of the same is given in **Table 4.1** below.

Table 4.1: Key indicators of operational performance of SRTUs and the corresponding top five SRTUs:

Total 56 Reporting SRTUs				Corresponding Top five SRTUs in 2016-17				
	2016-17	2015-16	% increase/decrease					
Passengers Carried (Lakh)	2,59,332	261,535	-0.84	Telangana SRTC	Maharashtra SRTC	Andhra Pradesh SRTC	Bangalore Metropolitan TC	Metro TC (Chennai) Limited
				34880	24438	24017	17611	17184
Revenue Earning Kilometers (Lakh)	1,66,983	1,65,307	1.01	Maharashtra SRTC	Andhra Pradesh SRTC	Uttar Pradesh SRTC	Telangana SRTC	Gujarat SRTC
				20661.17	16580.38	13517.38	12727.13	10740.52
Passenger KMS Performed (Lakh)	56,60,529	57,04,689	-0.77	Maharashtra SRTC	Andhra Pradesh SRTC	Uttar Pradesh SRTC	Telangana SRTC	Gujarat SRTC
				615727	538552.05	445728	432563.53	350277.81
Fuel Efficiency (Km per Kg of CNG)	3.5	3.49	0.29	South Bengal STC	Kanpur City TSL	Uttar Pradesh SRTC	Telangana SRTC	Haryana STC
				4.94	4.65	4.59	4.32	3.26
Fuel Efficiency (Km per litre of HSD)	4.31	4.26	1.16	TN STC (Kumbakonam) Ltd.	TN STC (Villupuram) Ltd.	TN STC (Salem) Ltd.	Gujarat SRTC	Meghalaya STC
				5.68	5.61	5.58	5.42	5.4
Staff Productivity (Kms/Staff/Day)	61.75	59.65	3.52	MEERUT CITY TSL	Uttar Pradesh SRTC	State Exp.TC TN Ltd.	PUNBUS	Uttarakhand TC
				580.68	157.68	103.02	99.89	97.89
Occupancy Ratio (%)	69.13	69.79	0.95	Arunachal Pradesh ST	Sholapur MT	Andaman & Nicobar ST	Pepsu RTC	Rajasthan SRTC
				100	100	98	97	93

4.1 Passengers Carried

The total number of passengers carried by the reporting SRTU's during 2016-17 was 2,59,331.89 lakh passengers which was about 0.84% less than the number of passengers (2,61,534.70 lakh) carried during 2015-16 (refer col. 33 and 34 of **Annexure 1**). Telangana SRTC carried the highest number of passengers (34,879.77 lakh); while Mizoram ST carried the lowest number of persons (0.56 lakh) during 2016-17. The passenger kilometres offered increased by 0.18%, while passenger kilometres performed decreased by 0.77% during 2016-17.

4.2 Effective kilometres/revenue earning kilometres covered by SRTUs

Effective Kilometres/revenue earning KM are actual kilometres actually operated by SRTU buses for the purpose of earning revenues. Thus the revenue kilometres performed by the 56 reporting SRTUs during 2016-17 increased to 1,66,983 lakh kilometres in 2016-17 as compared to 1,65,307 lakh kilometres during 2015-16, an increase of 1,676 lakh KM in absolute terms and 1.01 % in percentage terms. Maharashtra SRTC recorded the highest revenue earning kilometres of 20,661.17 lakh during 2016-17 followed by Andhra Pradesh SRTC (16,580.38 Lakh). In terms of increase and decrease of effective kilometres, Uttar Pradesh SRTC registered the highest increase (1,667.47 lakh) and Maharashtra SRTC registered the highest decline of (345.21 lakh) during 2016-17 as compared to the previous financial year.

The average vehicle productivity, in terms of number of revenue earnings kilometres performed by a bus per day, increased marginally from 306.53 kms/bus/day during 2015-16 to 306.84 kms/bus/day during the corresponding period of 2016-17. During 2016-17, State Exp. TC TN Ltd registered the highest vehicle productivity at 539.74 kms/bus/day while the lowest vehicle productivity was 7.00 kms/bus/day by Tripura RTC.

4.3 Fuel Efficiency

- 4.3.1 Fuel efficiency is measured by average kilometres performed per litre of fuel. The overall average fuel efficiency of the 56 reporting SRTU's in 2016-17 works out to 4.31 km/litre of HSD as against 4.26 in previous year showing a marginal improvement. For the ten SRTUs reporting use of CNG as fuel, the average kilometres performed works out to 3.50 km per kg of CNG for the year 2016-17 as against 3.49 kilometres per kg of CNG in 2015-16.
- 4.3.2 Amongst the SRTUs operating on High speed Diesel, TN STC (Kumbakonam) had the highest fuel-efficient buses which performed 5.68 Km/litre of High-Speed Diesel(HSD) and the least fuel-efficient buses were reported by Calcutta STC (2.04 Km/per litre of HSD).

- 4.3.3 Out of the 56 reporting SRTU's, Delhi TC is the only SRTU which operates all its fleet with CNG and has reported the fuel efficiency of only 2.24 km/kg of CNG. Apart from DTC, there are nine other SRTU's which have reported to have CNG operated fleets. The list of all the ten SRTU's having CNG operated fleet and their fuel efficiency is given in **Table 4.2.**

Table 4.2 : Fuel Efficiency(CNG) - Category-wise

Sr nos	Name of the SRTU	Fuel efficiency
		(Km per litre of CNG)
1	Delhi TC	2.24
2	South Bengal STC	4.94
3	Telangana SRTC	4.32
4	Uttar Pradesh SRTC	4.59
5	Haryana ST	3.26
6	BEST Undertaking	2.67
7	Navi Mumbai MT	2.8
8	Pune Mahamandal	3.06
9	Thane MT	2.48
10	Kanpur city TSL	4.65
	Average	3.5

4.4 Staff Productivity

- 4.4.1 The staff productivity, defined as the average revenue earning kilometres performed per worker per day, increased from 59.65 kms/staff/day during 2015-16 to 61.75 kms/staff/day during 2016-17.
- 4.4.2 Meerut City TSL (580.68) reported the highest level of staff productivity followed by Uttar Pradesh SRTC (157.68 kms/staff/day) by State Exp. TC TN Ltd. (103.02 kms/staff/day), PUNBUS (99.89 kms/staff/day) and Uttarkhand TC (97.89 kms/staff/day).

4.5 Occupancy Ratio

- 4.5.1 Occupancy ratio refers to the ratio of Total passengers to Total seats available in the bus. The combined average occupancy ratio of the 56 SRTU's consolidated in this report decreased slightly from 69.79% during 2015-16 to 69.13% during 2016-17. Considering all the 56 SRTUs Arunachal Pradesh ST and Sholapur MT had the highest occupancy ratio of 100% while the lowest occupancy ratio was reported by Kalyan Dombivali MT 19.65%.

SECTION-5

Section – 5

Financial Performance

5.1 Total Revenue

- 5.1.1 The break-up of Total Revenue i.e Traffic Earnings, Non-Traffic Earnings and receipts through subsidies/Reimbursements for the year 2015-16 and 2016-17 is presented in **Annexure II** of the Report and **Table 5.1** below:

Table 5.1: Combined Total Revenue of 56 SRTU's

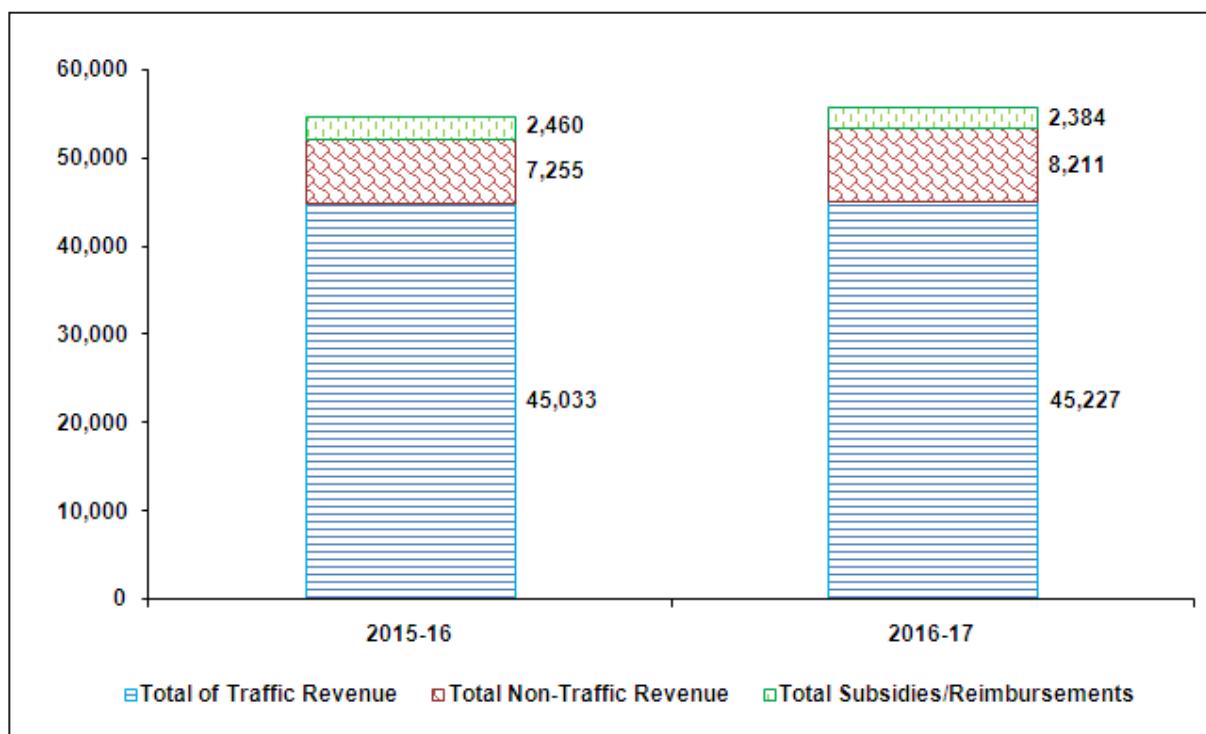
(Rs. in crore)

Sl. No.	Item Description	2015-16	2016-17	Percentage change over 2015-16
1	Total of Traffic Revenue	45,032.60	45,226.91	0.43
	Share of Traffic Revenue in Total Revenue	82.25	81.02	
	Revenue from Passengers	44,209.03	44,484.29	0.62
	Share in Total Traffic Revenue	98.17	98.36	
	Others	823.57	742.62	-9.83
	Share in Total Traffic Revenue	1.83	1.64	
2	Total Non -Traffic Revenue	2,459.75	2,383.64	-3.09
	Share of Non-Traffic Revenue in Total Revenue	4.49	4.27	
	(i) Income from Advertisements	176.06	200.88	14.09
	Share in Total Non -Traffic Revenue	7.16	8.43	
	(ii) Sale proceeds from Scraps	137.07	193.64	41.27
	Share in Total Non -Traffic Revenue	5.57	8.12	
	(iii) Receipt from imposition of penalties /fines	96.89	100.96	4.21
	Share in Total Non -Traffic Revenue	3.94	4.24	
	(iv) Other Receipts	2,049.73	1,888.16	-7.88
	Share in Total Non -Traffic Revenue	83.33	79.21	
3	Total Subsidies/Reimbursements	7,255.33	8,211.40	13.18
	Share of Subsidies/reimbursements in Total Revenue	13.25	14.71	
	(i) Subsidies as reimbursement of fare concessions provided to passenger by SRTU	4,462.00	4,851.74	8.73
	Share in Total Subsidy/Reimbursements	61.50	59.09	
	(ii) Any other form of subsidies (not as capital receipts) received from state government, treated as income	2,793.33	3,359.66	20.27
	Share in Total Subsidy/Reimbursements	38.50	40.91	
4	Total Revenue	54,747.69	55,821.95	1.96

- 5.1.2 Total Revenue of SRTUs including traffic earnings, non-traffic revenue and subsidies/reimbursement of the reporting 56 SRTU's increased by 1.96% to Rs 55,821.95 crore during 2016-17 from Rs. 54,747.69 crore in 2015-16. Traffic revenue constitutes about 81 per cent of the total revenue and increased by 0.43 per cent in 2016-17 over the previous year. Despite a decline in non-traffic revenue, the total revenue increased by 1.96 percent in 2016-17 as compared to 2015-16 because of increase in receipt of subsidies/reimbursements.

- 5.1.3** The data in **Table 5.1** reveals that amongst the three major components of Total Revenue, Traffic Revenue has increased marginally by 0.43 percent in 2016-17 over 2015-16 while Non-Traffic Revenue (NTR) has decreased by 3.09 percent in 2016-17. Subsidies/reimbursements have increased the maximum in 2016-17 over 2015-16 i. e. by 13.18 percent.
- 5.1.4** It may be seen from **Table 5.1** that Non-Traffic Revenue (NTR) in 2016-17 has decreased by 3.09% though the receipts in three of the four sub-heads have increased as compared to 2015-16. The decrease in NTR is thus primarily because of reduction in other receipts. However, because of lack of further information on components of other receipts, it is not possible to comment upon the reasons of reduction in revenue.
- 5.1.5** The composition of total revenue is also presented in **Fig 5.1** below. It reveals that the share of traffic earnings, non-traffic revenue and subsidies/reimbursement in the total revenue during 2016-17 is 81%, 4% and 15%, respectively, which is nearly the same proportion as it was in 2015-16. Traffic earnings, i.e., traffic revenue consisting of receipts from passenger fares and others amounts to Rs. 45,226.91 Crore while Non-traffic revenue which consists of income from advertisements, sale proceeds from sale of scrap, receipt from imposition of penalties/fines and other receipts amount to Rs. 2,383.64 Crore. Subsidies/reimbursement consisting of subsidies as reimbursement of fare concessions provided to passenger by SRTU and any other form of subsidies (not as capital receipts) received from State Government, treated as income amounts to Rs. 8,211.40 Crore during 2016-17.

Figure 5.1 Composition of Total Revenue of 56 reporting SRTU's (2015-16 &2016-17)
(Rs in Crore)



- 5.1.6** The list of top five SRTU's in terms of Total Revenue Generation during 2015-16 and 2016-17 is given in **Table 5.2** below.

Table 5.2: SRTUs with highest revenue generation during 2015-16 and &2016-17

Name of SRTU	2015-16		2016-17		increase/ decrease	
					2016-17 over 2015-16	
	Rs. in Crore	RANK	Rs. in Crore	RANK	Absolute	%age
Maharashtra SRTC	7,345.36	1	7,078.27	1	-267.09	-3.64
Andhra Pradesh SRTC	5,058.52	2	5,250.46	2	191.94	3.79
Telangana SRTC	4,384.72	3	4,295.71	3	-89.01	-2.03
Uttar Pradesh SRTC	3,386.39	4	3,967.48	4	581.09	17.16
Karnataka SRTC	3,178.79	5	3,173.51	5	-5.28	-0.17

The data in **Table 5.2** reveals that the top five SRTUs during the years 2015-16 have retained their ranks in 2016-17 also in terms total revenue generation, though three of the five SRTUs namely Maharashtra SRTC, Telangana SRTC and Karnataka SRTC have registered a decrease in their total revenue generation in 2016-17 as compared to 2015-16. On the other hand, Andhra Pradesh SRTC increased its total revenue in 2015-16 by 3.79 percent while Uttar Pradesh SRTC has made a significant increase of about 17.16 percent in its revenue in 2016-17.

- 5.1.7** The reasons underlying the decline in the total revenue of Maharashtra SRTU, Telangana SRTC and Karnataka SRTC can be seen from below. While in the case of Maharashtra and Karnataka, it is the decline in traffic earnings, in the case of Telangana, it is the decline in the Non traffic earnings. As far as subsidies are concerned, there has been an increase in all the five SRTUs with the exception of UP.

Table 5.3: Reasons underlying the decline in the Total Revenue of SRTUs

Name of SRTU	% change over previous year in total traffic earnings	% change over previous year in Non Traffic earnings	% change over previous year in Subsidies
Maharashtra SRTC	-6	23	1
Andhra Pradesh SRTC	4	-24	25
Telangana SRTC	6	-55	3
Uttar Pradesh SRTC	17	20	
Karnataka SRTC	-1	0	15

5.2 Total Cost

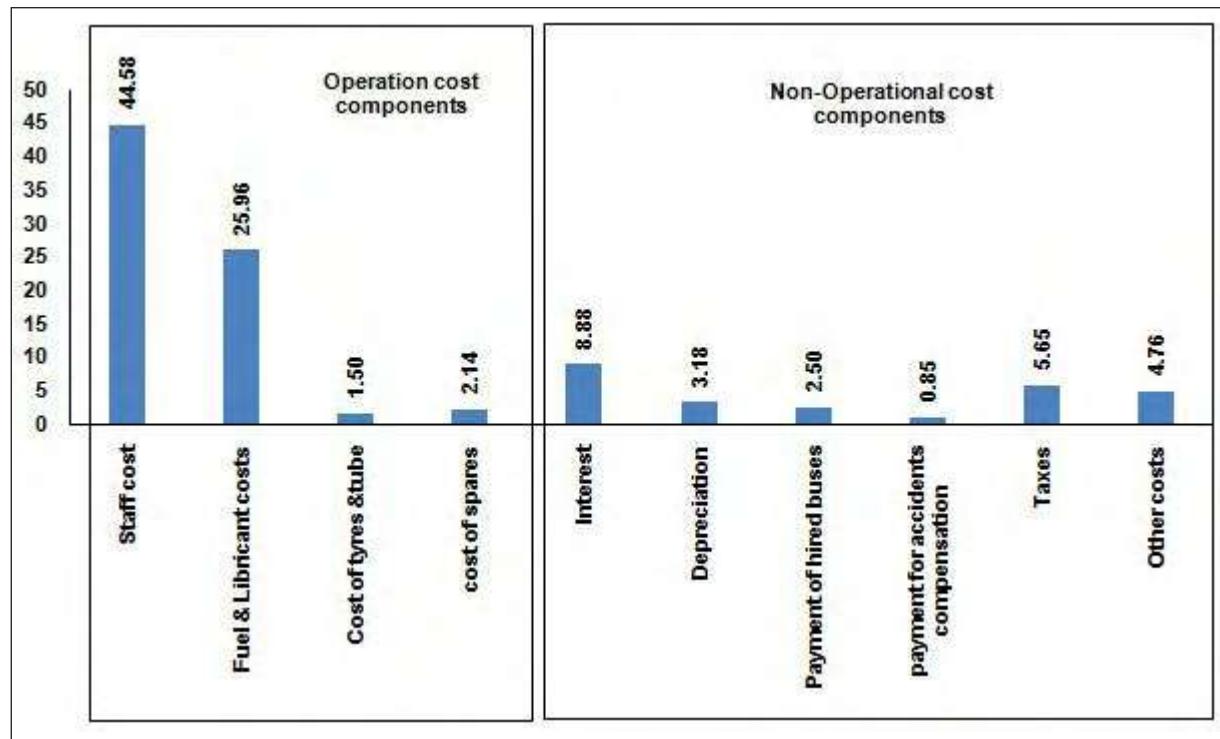
5.2.1 Along with the rise in total revenue, total cost (which includes operating as well as non-operating cost) too increased during 2016-17. The component wise cost of all the 56 SRTU's taken together during 2015-16 and 2016-17 is given in **Table 5.4**. The share of operating cost and non-operating cost in total cost is depicted in **Figure 5.2**.

Table 5.4: Combined total cost of 56 reporting SRTU's during 2016-17

(Rs. in crore)

Item Description	2015-16	2016-17	Percentage change over 2015-16
A: Total Operating cost	48,449.73	51,757.58	6.83
<i>Share in total Cost</i>	<i>73.40</i>	<i>74.17</i>	
(i) Staff Costs.	29,312.54	31,109.86	6.13
<i>Share in total Cost</i>	<i>44.41</i>	<i>44.58</i>	
(ii) Fuel & Lubricants	16,526.12	18,111.13	9.59
<i>Share in total Cost</i>	<i>25.04</i>	<i>25.96</i>	
(iii) Tyres & Tubes	1,156.64	1,043.96	-9.74
<i>Share in total Cost</i>	<i>1.75</i>	<i>1.50</i>	
(iv) Spares & other Materials	1,454.44	1,492.63	2.63
<i>Share in total Cost</i>	<i>2.20</i>	<i>2.14</i>	
B: Total Non-Operating Cost	17,554.23	18,021.13	2.66
<i>Share in total Cost</i>	<i>26.60</i>	<i>25.83</i>	
(i) Interest payments	5,477.73	6,198.82	13.16
<i>Share in total Cost</i>	<i>8.30</i>	<i>8.88</i>	
(ii) Depreciation	2,382.07	2,215.75	-6.98
<i>Share in total Cost</i>	<i>3.61</i>	<i>3.18</i>	
(iii) Payments to Hired Buses	1,885.82	1,744.78	-7.48
<i>Share in total Cost</i>	<i>2.86</i>	<i>2.50</i>	
(iv) Payment for accidents compensation	545.66	591.66	8.43
<i>Share in total Cost</i>	<i>0.83</i>	<i>0.85</i>	
(v) Other costs	3,464.53	3,328.70	-3.92
<i>Share in total Cost</i>	<i>5.25</i>	<i>4.77</i>	
(vi) Taxes	3,798.42	3,941.42	3.76
<i>Share in total Cost</i>	<i>5.75</i>	<i>5.65</i>	
Total cost (A+B)	66,003.96	69,778.71	5.72

Figure 5.2 : Share of Cost Components of 56 Reporting SRTU's during 2016-17 (in %)



- 5.2.2** The data in **Table 5.4** reveals that total cost of all the 56 STRUs taken together has increased by 5.72 % from Rs 66,003.96 Crore in 2015-16 to Rs 69,778.71 Crore in 2016-17. The operating cost in 2016-17 which accounts for a share of 74.17 % has recorded an increase of 6.83 per cent over 2015-16 while non-operating cost has increased by 2.66 per cent. At a further disintegrated level, staff cost accounts for about 44.58% of the total cost followed by cost of fuels & lubricants of 25.96% with cost of tyres & tube accounting for only 1.5%.
- 5.2.3** Non-Operating cost which accounts for about 25.83% of total cost, has interest payments as the largest contributor as it accounts for about 8.88 % in the total cost, followed by Taxes (5.65%), other costs (4.76%), followed by Depreciation (3.18%), payments to hired buses (2.5%). The three components of non-operating costs that have decreased in 2016-17 as compared to 2015-16 are depreciation (6.99%), payments to hired buses (7.48%) and other costs (3.92%).

- 5.2.4** The list of top five SRTU's in terms of Total Cost incurred during 2015-16 and 2016-17 is given in **Table 5.5** below:

Table 5.5 SRTUs with maximum total cost during 2015-16 and & 2016-17

Name of SRTU	2016-17		2015-16		increase/ decrease 2016-17 over 2015-16		Major Reasons for increase/ decrease
	Rs in Crore	RANK	Rs in Crore	RANK	Absolute	%age	
Maharashtra SRTC	7,583.76	1	7,467.24	1	116.52	1.56	Increase in cost of fuel, interest rates and taxes
Delhi TC	6,303.21	2	5,703.79	2	599.42	10.51	Increase in staff costs, interest rates and taxes
Telangana SRTC	5,044.69	3	5,161.32	3	-116.63	-2.26	Decline in staff costs, interest and depreciation
Andhra Pradesh SRTC	4,951.55	4	5,019.57	4	-68.02	-1.36	Substantial decline in depreciation and other costs
Uttar Pradesh SRTC	3,870.28	5	3,370.50	5	499.78	14.83	Increased staff costs, fuel costs, depreciation, taxes, other costs though interest cost fell

- 5.2.5** The data in **Table 5.5** reveals that the SRTUs featuring amongst the top five ranks during the years 2015-16 have retained their ranks in 2016-17 also in terms of total cost incurred. Two of the top five SRTUs namely Telangana SRTC and Andhra Pradesh SRTC have managed to marginally reduce their total costs in 2016-17 as compared to 2015-16. Maharashtra SRTC, Delhi TC and UPSRTC have shown an increase in their total costs during 2016-17. **Notable increase in cost is seen in respect of DTC (10.51%) and UPSRTC (14.83%).**
- 5.2.6** The increase in cost in respect of DTC for the year 2016-17 was on account of increase in staff costs, interest rates and taxes. As regards UPSRTC, total cost increased primarily because of increased staff costs, fuel costs, depreciation, taxes, other costs though interest cost fell.

5.3 Profit/Loss

- 5.3.1** The data in respect profit/loss of SRTUs is given **Annexure-III**. The data shows that the total cost of the reporting 56 SRTU's during 2016-17 outstripped the total revenue resulting in a net loss of Rs. 13,956.77 Crore as on 31st March 2017 as against a net loss of Rs. 11,256.28 Crore in 2015-16, resulting in an increase of 23.99% during the year.

- 5.3.2 During 2015-16, there were ten Profit (Net Profit) making SRTUs while in the year 2016-17 only seven SRTUs could make profit. The list of net profit making SRTUs during 2015-16 and 2016-17 can be seen from **Table 5.6** below:

Table 5.6: List of Profit making SRTUs during 2015-16 and 2016-17

Net Profit (Rs. Crore)					
	2016-17	Rank		2015-16	Rank
Andhra Pradesh SRTC	298.92	1	West Bengal Surface Transport Corp.	263.69	1
Uttar Pradesh SRTC	97.19	2	Karnataka SRTC	50.95	2
Kanpur City TSL	8.16	3	Andhra Pradesh SRTC	38.95	3
Bihar SRTC	7.80	4	Uttar Pradesh SRTC	15.90	4
PUNBUS	4.25	5	Bangalore Metropolitan TC	13.73	5
Sikkim NT	3.66	6	Sholapur MT	6.28	6
Odisha SRTC	1.79	7	Kadamba TC	5.20	7
			Odisha SRTC	5.00	8
			PUNBUS	4.65	9
			Kanpur City TSL	2.74	10

- 5.3.3 The data in **Table 5.6** reveals that some SRTUs which were making profit in 2015-16 and have lost their place in 2016-17. However Andhra Pradesh SRTC and UP SRTC have improved their ranking.
- 5.3.4 The data in **Table 5.6** and **Annexure – III** also reveals that during 2016-17, Andhra Pradesh SRTC recorded a profit of Rs. 298.92 crore which was a significant increase of Rs. 259.97 crore as compared to its profit in 2015-16. This significant increase in profit by APSRTC is on account of increase in total revenue by about 4% which in turn was a result of increase in passenger kms performed (5%), and receipt of subsidies as reimbursement of fare concessions provided to passengers (24%). APSRTC also managed to reduce its total cost by 1.4% by reducing expenditure on tyres and Tubes, spares and payment to hired buses.
- 5.3.5 UPSRTC, the second SRTU making significant increase of Rs 81.29 Crore in its profit over 2015-16, achieved it by enhancing its total revenue by about 17.16% which was primarily on account of increase in traffic related revenue from passengers which in turn was a result of an increase in passenger kms performed as well as fare charged per km during 2016-17.
- 5.3.6 The list of top five SRTU's making net losses during the year 2016-17 and their corresponding ranks in 2015-16 are listed in **Table 5.7**.

Table 5.7 Leading loss making SRTUs during 2016-17 and 2015-16

Net Loss (Rs. Crore)						Increase/Decrease over the Year	
2016-17		Rank	2015-16		Rank	Absolute	%age
Delhi TC	-3,832.11	1	Delhi TC	-3,521.92	1	-310.19	8.81
Kerala SRTC	-1,770.62	2	Kerala SRTC	-1,219.87	2	-550.75	45.15
BEST Undertaking	-990.10	3	BEST Undertaking	-1,061.92	3	71.82	-6.76
Telangana SRTC	-748.98	4	Telangana SRTC	-776.60	4	27.62	-3.56
Haryana ST	-597.73	5	Haryana ST	-486.61	7	-111.12	22.84
Combined loss of 5 SRTUs	-7,939.54			-7,066.93			
As % age of Total loss of 56 reporting SRTUs	-68.80			-61.24			

5.3.7 **Table 5.7** reveals that amongst the top five net loss making SRTU's, Delhi TC ranks first followed by Kerala SRTC and BEST Undertaking. The combined net loss of 5 biggest loss making SRTUs accounted for about 56.88 percent of the total loss of 56 reporting SRTU's.

5.3.8 Analysis of Top five loss making undertakings:

Table 5.8: Analysis of Top five loss making undertakings

Name of SRTUs	% change over prev yr in total Traffic earnings	% change over prev yr in Non Traffic earnings	% change over prev yr in Subsidies	% change over prev yr in Total Revenue	% change over prev yr in Total costs	% change over prev yr in staff costs	% change over prev yr in interest costs	% change over prev yr in taxes	Total Revenue (TR) in 16-17	Total cost (TC) in 16-17	TR as a % of TC in 16-17
Delhi TC	-5.85	-11.81	27.5	13.3	10.5	4.71	16.9	-12.02	2,471.1	6,303.22	39.20
Kerala SRTC	1.66	89.95	#	2.5	19.7	31.49	17.6	2.99	1,861.11	3,631.73	51.25
Telangana SRTC	5.80	-54.95	3.3	-2.0	-2.3	-9.27	-1.1	4.83	4,295.71	5,044.68	85.15
Haryana ST	1.33	3.75	#	1.5	7.0	6.54	2.7	6.00	1,436.02	2,033.75	70.61
BEST Undertaking	-12.46	13.12	#	-10.9	-9.1	-7.14	-5.8	-47.04	1,295.54	2,285.62	56.68

#No Subsidies/Reimbursements received during 2015-16 and 2016-17

In the case of DTC, Total Revenue was only about 39% of the Total costs resulting in huge losses in 2016-17. Further, it is noted both traffic earnings and non traffic earnings declined in 2016-17 in the case of DTC though subsidies which accounted for about 65% of the Total Revenue increased by 27.5% causing Total revenue to increase by 13.3 % over the previous year. In the case of Telangana SRTC and BEST undertaking the total revenue declined by 2% and 11% respectively. Further revenue was only 85% and 57% of cost in resulting in losses. In the case of Kerala SRTC, and Haryana SRTC the Total revenue showed a slight increase, however as Total costs were much higher than and rose by almost 20% and 7 % respectively, the SRTCs registered losses.

5.3.9 An analysis of the loss making SRTUs shows that in the loss making SRTUs, costs are much higher than the revenue earned. This is inter-alia because fare revisions have not kept pace with cost increase. Fair concessions given by State Government lack quantification and transparency and are not reimbursed regularly. A dynamic fare revision policy needs to be in place to compensate for increasing price of fuel, bus spare parts, staff costs of salaries and pension liabilities etc. To offset cost of plying on uneconomic routes as a part of SRTUs social obligation, route rationalization should be a continuous exercise to enable them to cross subsidize their operations.

5.3.10 While on the one hand costs have to be reduced, on the other hand to improve the performance of the fleet, there is a need to improve the technology of vehicles i.e CNG/ Electric buses, change fleet composition through purchase/hiring of buses. There is also a need to deploy IT services and Intelligent Transport Systems such as Electronic ticketing system; GPS vehicles tracking system; online bus reservation system etc to make the bus services more responsive to the needs of the customer so as to improve bus occupancy ratios and make bus based transportation an attractive substitute to personalized mode of road travel.

5.4 Profit/loss before Tax

5.4.1 The profit/loss scenario before and after paying taxes during 2016-17 emerged to be different. While there were seven profit-making SRTU's after paying tax, there were Ten SRTU's which made profit before paying taxes. See **Table 5.9** below:

Table 5.9: Profit/loss before Tax

S.Nos	SRTUs	Profit before Tax (Rs. crores) in 2016-17	Net Profit/Loss (Rs.crores) post tax in 2016-17	Total Taxes paid (Rs crores)
1	Andhra Pradesh SRTC	712.63	298.92	413.71
2	Uttar Pradesh SRTC	543.87	97.19	446.67
3	Maharashtra SRT C	484.90	-505.49	990.39
4	Pepsu RTC	57.99	-23.48	81.47
5	PUNBUS	16.51	4.25	12.26
6	Bihar SRTC	8.84	7.80	1.05
7	Kanpur City TSL	8.81	8.16	0.64
8	Uttarakhand TC	8.35	-19.35	27.70
9	Odisha SRTC	7.60	1.79	5.81
10	Sikkim NT	4.21	3.66	0.55

It will be noted from **Table 5.9** that in the case of Maharashtra SRTC, Pepsu RTC, and Uttarkhand TC , the taxes were so high as to cause the SRTU to go into losses post tax.

5.5 Key financial Ratios

5.5.1 Some key financial ratios of 2015-16 and 2016-17 are presented in **Table 5.10**.

Table 5.10: Key financial Ratios - 2015-16 & 2016-17

Key Financial Ratios	2016-17	2015-16	Change in 2016-17 over 2015-16
Staff Cost as %age of Total Cost	44.58	44.41	Increase of 0.17 percentage points
Fuel & Lubricant Cost as % of Total Cost	25.96	25.04	Increase of 0.92 percentage points
Tyres & Tubes Cost as % of Total Cost	1.50	1.75	Decrease of 0.25 percentage points
Spares Cost as % of Total Cost	2.14	2.20	Decrease of 0.06 percentage points
Interest Cost as % of Total Cost	8.88	8.30	Increase of 0.58 percentage points
Depreciation Cost as % of Total Cost	3.18	3.61	Decrease of 0.43 percentage points
Payments to Hired Buses as % of Total Cost	2.50	2.86	Decrease of 0.36 percentage points
Payment for accidents compensation as % of Total Cost	0.85	0.83	Increase of 0.02 percentage points
Tax Cost as % of Total Cost	5.65	5.75	Decrease of 0.10 percentage points

Thus it may be seen that Staff cost, fuel & lubricants cost, Interest payments and Taxes together account for a significant proportion of the total cost incurred by SRTUs of about 85%.

SECTION-6

Section – 6

Capital Structure of SRTUs

- 6.1 In this section we examine the capital structure of the SRTUs. As details only in respect of liabilities of SRTUs were available, the capital structure has been analysed only with respect to the liabilities and not assets.
- 6.2 The liabilities of SRTUs in 2016-17, SRTU wise are given at Annexure –IX. The total liabilities giving the various sources of finance for 56 reporting SRTUs is summarized in the **Table 6.1** below.

Table 6.1: Total Liabilities of SRTUs during 2015-16 & 2016-17 indicating source of funding, current liabilities etc.

(Rs. in Crore)

Categories	2016 -17	% age Share	2015 -16	% age Share	Increase /Decrease from Previous Year	
					Absolute value	%age
State Government contribution	2,2051.08	15.59	20,091.55	15.67	1,959.53	9.75
Central Government contribution	371.95	0.26	369.82	0.29	2.13	0.58
General & Other Reserves	36,910.01	26.09	36,303.68	28.31	606.33	1.67
Debentures	675.00	0.48	675.00	0.53	0.00	0.00
Loans from Banks & Financial Institutions	31,797.01	22.48	28,495.62	22.22	3,301.38	11.59
Employee & Public Deposits	1,462.63	1.03	1,282.88	1.00	179.75	14.01
Security & earnest Money deposits	874.66	0.62	894.36	0.70	-19.70	-2.20
Others	44,013.11	31.11	37,279.43	29.07	6,733.68	18.06
Current liabilities	3,302.38	2.33	2,847.79	2.22	454.60	15.96
Total Liabilities	1,41,457.84	100.00	1,28,240.13	100.00	13,217.71	10.31

- 6.3 The above **Table** reveals that there has been an increase in the total liabilities of SRTUs by Rs 13,218 crores in 2016-17 of about 10% over the previous year. State Government contributions account for about 16 % of the total contributions as against almost nil (0.26%) from the Centre. The components which contribute the most in terms of their share in liabilities are “Others” (31.11 %), followed by General & Other Reserves (26.09%) and Loans from Banks & Financial Institutions (22.48%). The share of debentures, Employee and Public Deposits etc is very small and has not changed much in the last two years.

- 6.4 Further, an analysis of the leading profit making SRTUs was carried out to understand the structure/pattern followed by those SRTUs for sourcing their funds.
- 6.5 In the year 2016-17 there were seven SRTUs which made net profit. However, out of these seven profit making SRTU, information regarding capital structure was not furnished by Bihar SRTC, Kanpur city Transport and Sikkim SRTC. The details of capital receipts and sources of funds in respect of the remaining four SRTUs making profit in 2016-17 has been considered for analysis and is presented in **Table 6.2**.

Table 6.2: Total Liabilities indicating source of funding, current liabilities etc for four Profit making SRTUs during 2016-17

(Rs in crores)

Categories	APSRTC		UPSRTC		ODISHA SRTC		PUNBUS	
	2016-17	%age Share	2016-17	%age Share	2016-17	%age Share	2016-17	%age Share
State Government's contributions	79.54	0.50	766.17	27.67	166.51	45.90	56.15	7.77
Central Govt. contribution	35.61	0.22	60.01	2.17	15.92	4.39	0.00	0.00
General & Other Reserves	9,515.26	59.70	279.71	10.10	61.21	16.87	488.00	67.52
Debentures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Loans from Banks & Financial Institutions	3,287.90	20.63	149.88	5.41	0.00	0.00	46.82	6.48
Employee & Public Deposits	0.00	0.00	52.13	1.88	0.00	0.00	0.00	0.00
Security & earnest Money deposits	0.00	0.00	0.00	0.00	0.00	0.00	2.31	0.32
Others	14.20	0.09	1,461.09	52.77	10.28	2.83	129.48	17.91
Current liabilities(*)	3,005.59	18.86	--	--	108.85	30.01	--	--
Total liabilities	15,938.10	100.00	2,768.99	100.00	362.77	100.00	722.76	100.00

(*) current liabilities in respect of UPSRTC & PUNBUS have not been reported.

- 6.6 The data in **Table 6.2** reveals that in the year 2016-17 the share of different sources of funds for SRTUs varies widely. The important sources of financing for APSRTC include General & other reserves (60%) and Loans from Banks & financial institutions (21%). Similarly for PUNBUS, the share of General & other reserves is 68% while the share of Loans from Banks & financial institutions is about 7%. In respect of Odisha SRTC, Capital contribution from State Government accounts for 46% and general reserves account for 17%. In the case of UPSRTC Capital contribution from State Government accounts for 28% and general reserves account for 10%. Funding from General Reserves connotes intrinsic strength of the PSU as observed in the case of APSRTC and PUNBUS as against UPSRTC and Odisha SRTC which show greater reliance on State funding.

6.7 An examination of the capital structure of the top five loss making SRTUs during 2016-17 is presented in **Table 6.3** below:

Table 6.3: Total Liabilities indicating source of funding, current liabilities etc for top five loss making SRTUs during 2016-17

(Rs in crores)

Categories	DTC		Kerala SRTC		BEST Undertaking		Telangana SRTC		Haryana ST	
	2016-17	% age Share	2016-17	% age Share	2016-17	% age Share	2016-17	% age Share	2016-17	% age Share
State Government's contributions	1,983.85	6.12	768.04	13.99	0.00	0.00	505.52	4.64	1,400.71	73.76
Central Government's contribution	0.00	0.00	0.00	0.00	0.00	0.00	25.45	0.23	0.00	0.00
General & Other Reserves	1,545.47	4.77	0.00	0.00	4,195.24	77.09	4,957.74	45.53	312.71	16.47
Debentures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Loans from Banks & Financial Institutions	11,676.14	36.02	4,720.35	86.01	938.29	17.24	2,483.17	22.81	0.00	0.00
Employee & Public Deposits	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Security & earnest Money deposits	14.15	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Others	17,196.16	53.05	0.00	0.00	308.78	5.67	29,16.58	26.79	0.00	0.00
Current liabilities	NR	NR	NR	NR	NR	NR	NR	NR	185.66	9.78
Total Capital & Liabilities	32,415.8	100.00	5,488.39	100.00	5,442.31	100.00	10,888.46	100.00	1,899.08	100.00

6.8 The data above reveals that in the case of DTC, which is the largest loss making SRTU, Loans from Banks & Financial Institutions accounted for 36% share of their capital structure, for Kerala SRTC, 86.01% of their capital structure, for BEST Undertaking 17.24% of their capital structure and Telangana SRTC (22.81%). General & other reserves contribute significantly in case of BEST Undertaking (77.09%), while for Telangana and Haryana ST, its share is 46% and 16%, respectively but in the case of DTC and Kerala SRTC, share of general reserves is only 5% and 0 % respectively.

6.9 The data in **Table 6.2** and **6.3** broadly suggest that profit making SRTUs rely more on internal sources of finance i.e. “General & Other Reserves”, while the loss making SRTUs tend to place greater reliance on “Loans from Bank & Financial Institutions” where possible or State funding.

SECTION-7

Section – 7

State/Union Territory-wise Spread of SRTU's

7.1 Spread of SRTU's

- 7.1.1 The 56 reporting SRTU's show wide variation in their spread across States/Union Territories (UTs) during 2016-17. The details are given in **Table 7.1** and **Figure 7.1**.
- 7.1.2 In the combined fleet of the 56 reporting SRTU's, State of Maharashtra claims the largest fleet size with a share of 17.4%, followed by Karnataka with 15.9% and Tamil Nadu with a share of 15.04% (Refer **Table 7.1** below). It is also been observed that some major states like Chhattisgarh, Jharkhand and Madhya Pradesh reported nil SRTUs. Apart from these States there are no SRTU services available in the State of Manipur and Union Territories of Dadar & Nagar Haveli, Daman & Diu and Lakshdweep.
- 7.1.3 The average number of persons per bus for the reporting SRTU was 8,121 (**Table 7.1**). The average number of buses per 10 lakh population for all the States/UTs in which the reporting SRTU's were plying was 123. The State of Bihar had the largest number of persons per SRTU bus (4,66,814) and the UT of Andaman & Nicobar Islands had the lowest number of persons per SRTU bus (1,420). Conversely, the number of buses per ten lakh population was the lowest in Bihar (2) and the highest in Andaman & Nicobar Islands (704).

Table 7.1 : State/Union Territory-wise Spread of SRTU's

Sl. No.	States/UTs	Population (2011 census)	Number of SRTU's as on 31st March 2017	Average Fleet held by SRTU's during 2016-17	Share of Fleet held as a percentage of total fleet held by all reporting SRTU's	Number of Persons per SRTU bus	Number of Buses per 10 lakh population
1	Andhra Pradesh	8,45,80,777*	1	12,072	8.10	3761#	266
2	Arunachal Pradesh ST	13,83,727	1	192	0.13	7207	139
3	Assam STC	3,12,05,576	1	1,067	0.72	29246	34
4	Bihar	10,40,99,452	1	223	0.15	466814	2
5	Chhattisgarh	NIL	NIL	NIL	NIL	NIL	NIL
6	Goa	14,58,545	1	530	0.36	2752	363
7	Gujarat	6,04,39,692	2	8,773	5.88	6889	145
8	Haryana	2,53,51,462	1	4,145	2.78	6116	164
9	Himachal Pradesh	68,64,602	2	3,122	2.09	2199	455
10	Jammu & Kashmir	1,25,41,302	1	529	0.35	23708	42
11	Jharkhand	NIL	NIL	NIL	NIL	NIL	NIL
12	Karnataka	6,10,95,297	4	23,668	15.88	2581	387

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Sl. No.	States/UTs	Population (2011 census)	Number of SRTU's as on 31st March 2017	Average Fleet held by SRTU's during 2016-17	Share of Fleet held as a percentage of total fleet held by all reporting SRTU's	Number of Persons per SRTU bus	Number of Buses per 10 lakh population
13	Kerala	3,34,06,061	1	5,869	3.94	5692	176
14	Madhya Pradesh	NIL	NIL	NIL	NIL	NIL	NIL
15	Maharashtra	11,23,74,333	8	25,879	17.36	4342	230
16	Manipur	NIL	NIL	NIL	NIL	NIL	NIL
17	Meghalaya	29,66,889	1	52	0.03	57056	18
18	Mizoram	10,97,206	1	49	0.03	22392	45
19	Nagaland	19,78,502	1	223	0.15	8872	113
20	Odisha	4,19,74,218	1	455	0.31	92251	11
21	Punjab	2,77,43,338	3	2,881	1.93	9630	104
22	Rajasthan	6,85,48,437	1	4,635	3.11	14789	68
23	Sikkim	6,10,577	1	122	0.08	5005	200
24	Tripura	36,73,917	1	47	0.03	78168	13
25	Tamil Nadu	7,21,47,030	8	22,421	15.04	3218	311
26	Telangana	NA#	1	10,415	6.99	3761#	266
27	Uttar Pradesh	19,98,12,341	3	11,170	7.49	17888	56
28	Uttarakhand TC	1,00,86,292	1	1,242	0.83	8121	123
29	West Bengal	9,12,76,115	4	2,551	1.71	35781	28
30	A & N Islands	3,80,581	1	268	0.18	1420	704
31	Chandigarh	10,55,450	1	533	0.36	1980	505
32	Dadra & Nagar Haveli	NIL	NIL	NIL	NIL	NIL	NIL
33	Daman & Diu	NIL	NIL	NIL	NIL	NIL	NIL
34	Delhi	1,67,87,941	2	5,819	3.90	2885	347
35	Lakshadweep	NIL	NIL	NIL	NIL	NIL	NIL
36	Puducherry TC	12,47,953	1	143	0.10	8727	115
	India	1,21,08,54,977	56	1,49,095	100.00	8121	123

Source: 1. Population: Registrar General of India, Ministry of Home Affairs

2. SRTU's buses: Respective SRTU's

* Includes population of Telangana.

Figures are based on the combined population and average fleet held by both Andhra Pradesh SRTC and Telangana SRTC.

SECTION-8

Section – 8

Performance of SRTU's in Metropolitan Cities

8.1 Financial Performance

- 8.1.1 Out of the 56 reporting SRTU's, 12 are metropolitan cities based SRTU's and the performance of these 12 SRTU's on select financial and physical parameters is presented in **Table 8.1** and **8.2** respectively.
- 8.1.2 The data on financial performance of the 12 Metropolitan cities based SRTU's reveals that all with the exception of Kanpur City TSL are loss making, having incurred a combined loss of Rs. 7,365.75 Crore which is around 52.82 percent of total loss incurred by the 56 SRTU's.
- 8.1.3 The highest losses have been reported by Delhi Transport Corporation, followed by Best Undertaking followed by Metro TC Chennai at 3rd position. Staff cost, which constitutes a significant share in the total cost, was 25 % for DTC, 69% for BEST Undertaking and 50% for Metro TC Chennai. Cost of Fuel & lubricants was, 6% for DTC, 16% for BEST and 22% for Metro TC Chennai. Another cost component which has significant bearing on losses is the Interest cost which in the case of Delhi TC was 61%, 4% for BEST and 6% for Metro TC, Chennai. Payment for hired buses in respect of all three aforementioned STUs was zero.

8.2 Physical Performance

- 8.2.1 Physical performance in respect of all 12 Metropolitan SRTUs are given in **Table 8.2**. The total fleet held by these 12 Metropolitan SRTUs account for 19% of the total fleet size of SRTUs.
- 8.2.2 Focussing on the three highest loss making SRTUs i.e. DTC, BEST and Metro TC Chennai, it is observed their fleet size was higher than the average of the 12 Metropolitan SRTUs with the average age of fleet also being higher than the average reported age with BEST reporting an average age of 9.8 years, DTC 7.5 yrs and Metro TC Chennai 7.08 yrs. Further, Metro TC Chennai reported 75% buses as over-aged buses. The staff bus ratio for these three loss making undertakings was also higher than the average and stood at 6.69 for DTC, 8.5 for BEST and 6.08 for Metro TC Chennai. The vehicle productivity and occupancy ratio etc could also do with some improvement for these STUs.

Table 8.1: Select Financial Parameters of SRTU's plying in Metropolitan Cities during 2016-17

S. No.	Name of State Road Transport Undertaking (SRTU)	Total Revenue (Rs. Lakh)	Total Cost (Rs. Lakh)	Net Profit /Loss (Rs. Lakh)	Profit before Tax	Staff Cost as % of Total Cost	Fuel & Lubricant Cost as % of Total Cost	Tyres & Tubes Cost as % of Total Cost	Spares Cost as % of Total Cost	Interest Cost as % of Total Cost	Depreciation Cost as % of Total Cost	Payment to Hired Buses as % of Total Cost	Payment for accident compensation as % of Total Cost	Tax Cost as % of Total Cost
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Ahmedabad MTS	11,399.79	42,151.26	-30,751.47	-29,223.53	48.07	4.46	0.29	1.39	1.69	0	24.47	0	3.62
2	BEST Undertaking	1,29,553.65	2,28,563.97	-99,010.32	-95,647.92	68.62	15.88	0.64	3.49	4.12	1.64	0	0	1.47
3	Bangalore Metropolitan TC	2,10,610.41	2,36,701.42	-26,091.01	-16,212.34	52.57	27.76	1.07	3.35	2.16	5.28	0	0.47	4.17
4	Calcutta STC	35,311.19	69,398.58	-34,087.39	-34,087.39	31.98	11.74	0.21	1.04	0.88	7.47	0	0	0
5	Chandigarh TU	14,153.67	22,652.36	-8,498.69	-7,442.41	41.14	24.82	1.17	5.2	0.44	5	0	0	4.66
6	TN STC (Coimbatore)	1,26,594.44	1,74,674.25	-48,079.81	-44,616.29	53.11	28.74	0.9	2.31	6.89	1.83	0	1.7	1.98
7	Delhi TC	2,47,110.11	6,30,321.27	-3,83,211.16	-3,81,298.63	24.5	6.06	0.01	4.48	60.77	2.69	0.08	0.31	0.3
8	Kanpur City TSL	1311.44	495.09	816.35	880.52	35.7	1.1	16.5	33.6	0	0	0	0	13
9	TN STC (Madurai)	1,06,380.74	1,40,915.26	-34,534.52	-32,220.24	51.76	29.46	1.64	1.14	5.06	1.94	0	2.89	1.64
10	Meerut City TSL	1,774.33	1,909.10	-134.77	-87.05	21.27	50.82	23.79	0	0	0	0	0	2.5
11	Metro TC (Chennai) Limited	1,39,570.24	1,91,518.24	-51,948.00	-50,804.59	49.46	22.02	1.21	2.54	6.02	2.28	0	2.19	0.6
12	Pune Mahanandal	72,093.06	93,137.51	-21,044.45	-20,701.90	53.89	9.76	2.55	0	0.44	1.28	28.15	0.22	0.37
Average of 12 Metropolitan Undertakings														
Total (SRTU's plying in metropolitan cities)		10,95,863.07	18,32,438.31	-7,36,575.24	-7,11,461.77									
Share of SRTU's plying in metropolitan cities as a proportion of total reporting SRTU's (%)		19.63	26.26	52.78	68.91									

Table 8.2: Select Physical Parameters of SRTU's plying in Metropolitan Cities during 2016-17

S. No.	Name of State Road Transport Undertaking (SRTU)	Avg. Fleet Held (Number)	Avg. Age of Fleet (Year s)	Over aged vehicles (%)	Revenue Earning Kilometres (Lakhs)	Staff/ Bus Ratio	Staff Productivity (Kms/ Staff/ Day)	Vehicle Productivity (Kms/ Bus/ Day)	Fuel Efficiency (Km/litre of HSD or Km/KG of CNG)	Occupancy Ratio (%)	Passengers Carried (Lakhs)	Passengers carried per Bus/Day (Number)
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Ahmedabad MTS	910	5.3	0.18	510.73	5.9	26.08	153.76	3.22	66.09	2,095.00	630.74
2	BEST Undertaking	3,844	9.83	0	2,137.53	8.5	17.92	152.35	2.87	50.39	10,342.64	737.15
3	Bangalore Metropolitan TC	6,270	7.64	22.7	4,205.20	5.47	33.58	183.76	3.74	68.86	17,611.25	769.57
4	Calcutta STC	773	2.96	6.42	291	6.01	17.16	103.14	2.04	58.56	986	349.47
5	Chandigarh TU	533	4.74	22.7	404.95	3.6	57.75	208.15	3.69	85.72	557.85	286.75
6	TN STC (Coimbatore)	3245	6.88	51.8	4,715.37	5.84	68.18	398.11	5.18	52.39	9021.21	761.65
7	Delhi TC	4,168	7.5	6.08	2,578.71	6.69	25.34	169.5	2.24	61.63	11,516.52	757.01
8	Kanpur City TSL	270	7	0	11.17	0.92	12.29	11.33	4.65	86.08	85.10	86.35
9	TN STC (Maduari)	2593	6.46	68	3,972.12	5.82	72.12	419.69	5.39	57.09	6,103.95	644.93
10	Meerut City TSL	120	7	0	80.4	0.32	580.68	183.88	4.19	93.1	104.33	238.2
11	Metro TC (Chennai) Limited	4,002	7.08	74.92	3,483.94	6.08	39.24	238.51	4.5	77.57	17,184.42	1,176.43
12	Pune Mahamandal	2,045	9.17	0	1,093.30	4.72	31.02	146.47	3.1	69.32	3,939.17	527.74
Average of 12 Metropolitan Undertakings		2,398	7	21	1,957	5	82	197	4	69	6,629	580
Total (SRTU's plying in metropolitan cities)		28,773			23,484						79,547	
												23.85

SECTION-9

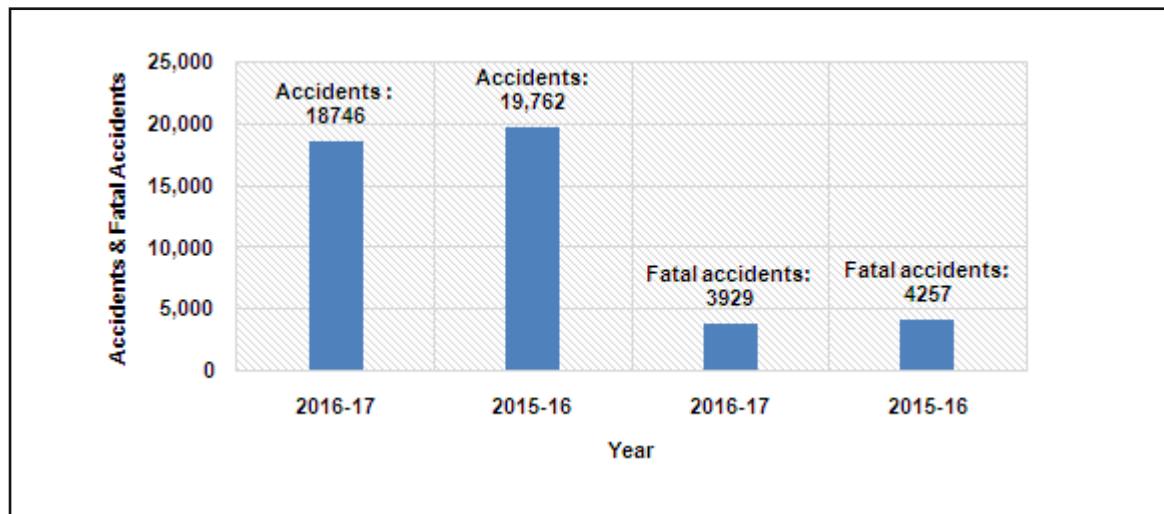
Section – 9

Road Accidents Involving SRTU Buses

9.1 Road accidents and accident rate

- 9.1.1 As per provisions of para 146 subsection (3)(c), under Chapter XI on “Insurance of Motor Vehicles against third Party”, State Transport under takings are exempt from taking insurance for third party insurance but they are still required to pay the compensation to accident victim(s) on case to case basis and this thus becomes a cost for a SRTU.
- 9.1.2 **Annexure V** of the report provides SRTU wise data in respect of accidents and fatal accidents entered into by SRTUs. It will be noted both the number of accidents and fatal accidents reported in 2016-17 for SRTUs declined when compared with the year 2015-16 by 5.14% and 7.07% respectively. The number of total accidents involving SRTU buses fell from 19,762 in 2015-16 to 18,746 in 2016-17 and the number of fatal accidents decreased from 4,257 in 2015-16 to 3,929 in 2016-17(refer Figure 9.1 below).

Figure 9.1: Accidents and Fatal Accidents by reporting SRTU's in 2016-17 and 2015-16



- 9.1.3 The total compensation paid by SRTUs towards accidents however increased from Rs 545.66 crores in 2015-16 to Rs 591.66 crores in 2016-17(**Annexure II** refers)

9.1.4 The payment of accidents compensation in respect of top five SRTUs is presented in **Table 9.1**.

Table 9.1: Top 5 SRTUs in terms of accident compensation paid to victims

Name of State Road Transport Undertaking (SRTU)	P ayment for accidents compensation (Rs. In Lakhs)		
	2016-17	RANK	Share in total cost
1	2	3	4
Maharashtra SRTC	7,831.77	1	1.03
TN STC (Kumbakonam) Ltd.	6,113.56	2	2.89
Kerala SRTC	5,100.00	3	1.40
Karnataka SRTC	4,932.50	4	1.47
Metro TC (Chennai) Limited	4,196.45	5	2.19

SECTION-10

Section – 10

Cross Country Comparison

10.1 Buses per 1,000 Persons

10.1.1 An inter-country comparison of buses (both SRTU and others) indicates that the bus penetration in India per 1000 persons at 1.33 was much lower when compared with some developed countries like Russia(6.06), Australia(3.99), USA(3.02), UK(2.46), and other developing countries like Thailand(8.42), South Africa(6.38), Malaysia(5.90), Brazil (4.74) and Mexico(2.87).

Some other countries like Germany (0.96), Bangladesh (0.97) has bus penetration even lower than India (**Table 10.1**).

Table 10.1: Cross-Country Comparison of Vehicular Penetration

Country	Year	Population	Total Vehicles	Buses	Buses per 1,000 persons	
					Total Vehicle	Bus
Australia	2016	2,42,10,809	1,75,58,171	96,582	725	3.99
Bangladesh	2016	16,29,51,560	8,21,453	1,58,517	5	0.97
Brazil	2016	20,76,52,865	6,85,11,508	9,84,847	330	4.74
China	2016	1,37,86,65,000	18,45,01,356	22,98,484	134	1.67
France	2016	6,68,59,768	3,91,18,000	91,000	585	1.36
Germany	2016	8,23,48,669	5,09,64,751	78,949	619	0.96
India	2016	1,32,41,71,354	4,25,15,000	17,57,000	32	1.33
Japan	2016	12,69,94,511	7,73,01,798	2,30,603	609	1.82
Malaysia	2016	3,11,87,265	1,49,36,039	1,83,989	479	5.9
Mexico	2016	12,75,40,423	3,99,45,510	3,65,419	313	2.87

Table 10.1Contd...

...Table 10.1 Contd.

Country	Year	Population	Total Vehicles	Buses	Buses per 1,000 persons	
					Total Vehicle	Bus
Russia	2016	14,43,42,396	5,23,37,486	8,74,382	363	6.06
South Africa	2016	5,60,15,473	99,27,814	3,57,501	177	6.38
Thailand	2016	6,88,63,514	1,67,36,665	5,80,020	243	8.42
UK	2016	6,55,95,565	3,52,87,562	1,61,500	538	2.46
USA	2016	32,34,05,935	26,01,19,703	9,76,161	804	3.02

Source: World Road Statistics, 2018, International Road Federation, Geneva

SECTION-11

Section – 11

Initiatives by MoRTH for improving public transport

Some of the initiatives taken by Ministry of Road Transport & Highways for improving public transport are enumerated as under:

11.1 Reimbursable Advisory Service Agreement with World Bank:

MoRTH has engaged the World Bank in collaboration with Transport for London (TfL), under Reimbursable Advisory Services (RAS) agreement for improving Public Transport taking in the State of Maharashtra and Andhra Pradesh as a pilot.

The objectives of RAS include Improving Public Transport Policies including Urban Public Transport policy; Improving the service definition and planning of STUs; Augment capacity through 'Innovative Contracting' with lesser cost; and Capacity building to deliver accessible, safe, reliable and affordable transport.

The study would inter-alia, make recommendations on providing sustainable public transport with long term financing; suggestions for improving non fare box revenue; study existing contracting models to suggest improvements; review Intelligent Transport Systems (ITS) to improve customer focus and performance monitoring. The Report is under process and is expected to be finalized by the end of 2020-21.

11.2 Accessible India Campaign (Sugamya Bharat Abhiyan):

The Accessible India Campaign was launched for creating universal accessibility for persons with Disabilities in Built Environment, Transport, and Information & Communication Technology (ICT) ecosystem. The Campaign is based on the principles of the Social Model of Disability, which proposes that disability is caused by the way society is organized, and not based on the person's limitations and impairments. The physical, social, structural and attitudinal barriers prevent people with Disabilities (Divyangjan) from participating equally in the socio-cultural and economic activities. 25% of the Government owned public transport carriers were to be made fully accessible by March 2019.

11.3 Safety and Security of Women Passengers (Nirbhaya Scheme):

The Government of India has set up a dedicated fund – Nirbhaya Fund. Ministry has sanctioned proposals of Uttar Pradesh State Road Transport Corporation (UPSRTC) and Bangalore Metropolitan Transport Corporation (BMTC) under Nirbhaya Fund.

11.4. Strengthening of Public Transport System:

The scheme provide for financial assistance to State Governments for use of latest technologies such as GPS/ GSM based vehicle tracking system, computerized reservation/ ticketing system, inter-modal fare integration, passenger information system etc. for services covering inter-city and mofussil areas and to provide financial assistance for preparation of total mobility plan for the entire State. The Ministry provides one time financial assistance to the tune of 50% of the project cost to the State/ UTs for IT related projects.

ANNEXURES

Financial Performance of SRTUs for the years ending March 2016 and March 2017

S. No.	Name of State Road Transport Undertaking (SRTU)	Other Cost(Misc)(Rs. Lakh)		Total Cost (In lakh)	
		2016-17	2015-16	2016-17	2015-16
1	2	55	56	57	58
1	Andhra Pradesh SRTC	0.00	0.00	4,95,154.61	5,01,957.08
2	Assam STC	421.39	409.33	18,636.11	23,791.96
3	Bangalore Metropolitan TC	5,845.11	5,545.29	2,36,701.42	2,19,375.73
4	Bihar SRTC	0.00	407.98	5,352.72	11,236.86
5	Calcutta STC	32,407.54	13,462.94	69,398.58	48,764.56
6	Delhi TC	0.00	0.00	6,30,321.27	5,70,378.68
7	Gujarat SRTC	12,220.26	10,545.93	3,03,151.52	2,81,487.77
8	Himachal RTC	1,775.98	4,635.41	1,04,076.57	92,922.81
9	J&K SRTC	0.00	0.00	10,276.15	9,183.89
10	Karnataka SRTC	0.00	0.00	3,35,058.78	3,12,783.85
11	Kerala SRTC	0.00	0.00	3,63,173.00	3,03,528.00
12	Maharashtra SRTC(P)	0.00	0.00	7,58,376.16	7,46,724.06
13	Meghalaya STC	81.66	211.58	1,463.65	1,581.73
14	North Bengal STC	325.4	467.1	28,440.96	26,305.98
15	North Eastern Karnataka RTC	13,044.97	19,468.81	1,58,898.91	1,54,417.25
16	North Western Karnataka RTC	0.00	0.00	1,85,992.92	1,77,257.93
17	Odisha SRTC	203.43	183.89	9,521.99	8,411.04
18	Pepsu RTC	0.00	0.00	52,847.82	47,265.63
19	Rajasthan SRTC	5,003.43	4,980.77	2,34,313.00	2,22,595.56
20	South Bengal STC	1,483.20	1,332.43	23,908.25	21,151.04
21	Telangana SRTC	0.00	0.00	5,04,468.81	5,16,132.20
22	Tripura RTC	40.10	39.43	1,876.20	1,992.18
23	Uttar Pradesh SRTC (P)	0.00	0.00	3,87,028.46	3,37,049.86
24	Uttarakhand TC	0.00	0.00	50,936.36	46,943.86
25	Puducherry Road Transport corp	0.00	0.00	5,193.00	4,447.00
26	West Bengal Surface Transport Corp.	1246.95	878.42	9,407.47	8,458.85
	TOTAL Corporations	74,099.42	62,569.31	49,83,974.69	46,96,145.36
27	Kadamba TC Ltd.	27.29	-3.84	17,057.43	16,334.79
28	Metro TC (Chennai) Limited	4,121.90	4,089.67	1,91,518.24	1,80,448.47
29	PUNBUS	653.15	1,148.05	49,049.00	43,099.00
30	State Exp.TC TN Ltd.	10,434.79	7,951.04	85,739.19	79,107.34
31	TN STC (Coimbatore) Ltd.	4,444.90	2,827.62	1,74,674.25	1,60,889.95
32	TN STC (Kumbakonam) Ltd.	5,907.18	5,188.61	2,11,271.91	1,96,452.94
33	TN STC (Madurai) Ltd.	5,656.23	5,367.68	1,40,915.26	1,28,724.90
34	TN STC (Salem) Ltd.	0.00	0.00	1,23,713.45	1,13,507.10
35	TN STC (Villupuram) Ltd.	8,381.59	8,401.10	2,02,480.10	1,93,269.06
36	TN STC (Tirunelveli) Ltd.	5012.43	4507.9	111,887.25	104,544.19
	TOTAL Companies	44,639.46	39,477.83	13,08,306.08	12,16,377.74
37	Andaman & Nicobar ST	0.00	0.00	6,911.68	5,529.33
38	Arunachal Pradesh ST	0.00	0.00	9,573.00	7,866.00
39	Chandigarh TU	3,977.54	4,188.94	22,652.36	21,219.82
40	Haryana ST	6,608.18	6,583.43	2,03,375.20	1,90,133.32
41	Mizoram ST	134.18	272.90	2,614.37	2,674.38
42	Nagaland ST	0.00	0.00	56.99	54.80
43	State Transport Punjab	389.41	566.06	25,270.64	25,399.67
44	Sikkim NT	0.00	0.70	4,168.43	4,561.68
	Total Govt Deptts.	11,109.31	11,612.03	2,74,622.67	2,57,439.00
45	Ahmedabad MTC	6,750.11	7,544.64	42,151.26	40,690.58
46	BEST Undertaking	9,422.90	13,986.70	228,563.97	251,570.09
47	Kolhapur MTU	26.60	6.49	5,021.13	4,678.44
48	Navi Mumbai MT	3,507.93	1,656.43	17,793.11	15,343.34
49	Pune Mahamandal	23.99	11.74	93,137.51	92,855.78
50	Sholapur MT	190.07	223.81	2,875.12	2,434.29
51	Thane MT	0.00	0.00	12,289.98	13,245.67
52	Kalyan Dombivali MT	0.00	0.00	5,953.65	6,509.29
	Total Municipal undertakings	19,921.60	23,429.81	4,07,785.73	4,27,327.48
53	Himachal Pradesh TDCL	0.00	0.00	778.02	767.77
54	DELHI INTEGRATED MTS	0.00	0.00	0.00	0.00
	Total Associate members	0.00	0.00	778.02	767.77
55	MEERUT CIY TSL	0.00	0.00	1,909.10	1,821.50
56	KANPUR CITY TSL	0.00	0.00	495.09	517.42
	Total Special Purpose Vehicle	0.00	0.00	2,404.19	2,338.92
	Total (Reporting SRTUs)	1,49,769.79	13,70,88.98	69,77,871.38	66,00,396.27

*... : Not reported**Source: As reported by the respective SRTUs*

Best and worst performing SRTUs in Terms of Select Parameters: 2016-17

S. No	Average Fleet Held (Numbers)	Average Age of Fleet (Years)	Over-aged vehicles (%)	Number of Accidents per Lakh Revenue Earning Kilometres	Revenue Earning Kilometres (Lakhs)	Staff Strength (Number)	Fuel Efficiency (Km/litre of HSD) or Km/KG of CNG	Passenger Kilometres Offered (Lakhs)	Passenger Kms Performed (Lakhs)	Occupancy Ratio (%)	Passengers Carried (Lakhs)	Passengers carried per Bus/Day (Number)	Net Profit/Loss (Rs. lakh)	Net Profit/Loss per Km (paise)	Net Profit/Loss per Bus/Day (Rs.)
Best performing SRTUs in Terms of Select Parameters: 2016-17															
Worst performing SRTUs in Terms of Select Parameters: 2015-16															
1	Tripura RTC(47)	Bihar SRTC (13.85)	Bihar SRTC (100.0)	Kolahpur MTU(1.43)	Kolahpur TSL(0.36)	Tripura RTC (1.20)	Meenut City TSL (38)	Calcutta STC (2.04)	Tipura RTC (1.15)	Tipura RTC(1.00)	PUNBUS (48.08)	Mizoram ST (0.56)	Delhi TC (-3.83,21.16)	Mizoram ST (-37.39)	Delhi TC (-25,189)
2	Mizoram ST(49)	Nagaland ST (12.00)	Nagaland ST(79.82)	Ahmedabad MTC(1.43)	Meerut City TSL (0.6)	Mizoram ST(5.99)	Himachal Pradesh TCL (76)	Delhi TC(2.24)	Solapur MT (50.49)	Puducherry RTC(23.90)	Tripura RTC(1.80)	Pepsi RTC(8.57)	Kerala RTC (-1,77,062.00)	Delhi TC (-14361)	Mizoram ST (-12,525)
3	Meghalaya STC(62)	J&K SRTC (10.00)	State Exp. TC TN Ltd. (78.73)	Kanpur City TSL(0.98)	North Bengal STC & Kolahpur MTU(0.05)	Sikkim NT(22.86)	Kanpur City TSL(24.9)	Thane MT(2.62)	Anunachal Pradesh ST(60.00)	Solapur MT (50.49)	TN STC (Coimbatore) Ltd.(52.39)	Meghalaya STC(3.88)	BEST Undertaking (-99,010.32)	Calcutta STC (-11,714)	Calcutta STC (-12,082)

Source: As reported by the respective SRTUs

APPENDIX

Appendix - I: Abbreviations

Abbreviations Used	Full names of Reporting SRTUs
Nagaland ST	Nagaland State Transport
Navi Mumbai MT	Navi Mumbai Municipal Transport
North Bengal STC	North Bengal State Transport Corporation
North Eastern Karnataka RTC	North Eastern Karnataka Road Transport Corporation
North Western Karnataka RTC	North Western Karnataka Road Transport Corporation
Odisha SRTC	Odisha State Road Transport Corporation
Pune Mahamandal	Pune Mahanagar Parivahan Mahamandal Limited
Pepsu RTC	Pepsu Road Transport Corporation
Rajasthan SRTC	Rajasthan State Road Transport Corporation
Sikkim NT	Sikkim Nationalised Transport
Solapur MTU	Solapur Municipal Transport
South Bengal STC	South Bengal State Transport Corporation
State Exp.TC TN Ltd.	State Express Transport Corporation Tamil Nadu Limited
Telangana SRTC	Telangana State Road Transport Corporation
TN STC (Coimbatore)Ltd.	Tamil Nadu State Transport Corporation (Coimbatore) Limited
TN STC (Kumbakonam)Ltd.	Tamil Nadu State Transport Corporation (Kumbakonam) Limited
TN STC (Madurai)Ltd.	Tamil Nadu State Transport Corporation (Madurai) Limited
TN STC (Salem)Ltd.	Tamil Nadu State Transport Corporation (Salem) Limited
TN STC (Villupuram) Ltd.	Tamil Nadu State Transport Corporation (Villupuram) Limited
Tripura RTC	Tripura Road Transport Corporation
Uttar Pradesh SRTC	Uttar Pradesh State Road Transport Corporation
PUNBUS	Punjab State Bus Stand Management Co. Ltd.

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Appendix - I: Abbreviations

Abbreviations Used	Full names of Reporting SRTUs
Ahmedabad MTS	Ahmedabad Municipal Transport Service
Andhra Pradesh SRTC	Andhra Pradesh State Road Transport Corporation
Andaman & Nicobar ST	Andaman & Nicobar State Transport
Arunachal Pradesh ST	Arunachal Pradesh State Transport
Assam STC	Assam State Transport Corporation
B.E.S.T. Undertaking	The Brihan Mumbai Electric Supply & Transport Undertaking
Bangalore Metropolitan TC	Bangalore Metropolitan Transport Corporation
Bihar SRTC	Bihar State Road Transport Corporation
Calcutta STC	Calcutta State Transport Corporation
Chandigarh TU	Chandigarh Transport Undertaking
Delhi TC	Delhi Transport Corporation
Gujarat SRTC	Gujarat State Road Transport Corporation
Haryana ST	Haryana State Transport
Himachal RTC	Himachal Road Transport Corporation
J&K SRTC	Jammu & Kashmir State Road Transport Corporation
Kadamba TC Ltd.	Kadamba Transport Corporation Limited
Karnataka SRTC	Karnataka State Road Transport Corporation
Kerala SRTC	Kerala State Road Transport Corporation
Maharashtra SRTC	Maharashtra State Road Transport Corporation
Meghalaya STC	Meghalaya State Transport Corporation
Metro.TC (Chennai) Ltd	Metro. Transport Corporation (Chennai) Limited.
Mizoram ST	Mizoram State Transport

Appendix - II

Explanation of terms relating to standard physical/operational and financial performance of SRTUs used in this publicationSRTUs used in this publication:

SI No.	Terms	Definition
1.	Fleet strength	The number of buses held (owned and hired), (excluding those approved for scrapping) irrespective of whether actually condemned or not. In this report, fleet strength for the year is the average number of buses held during the reporting year.
2.	Fleet operated and idle fleet	Not all the buses held by SRTUs are in road worthy condition and in service at all points of time because of breakdown, repairs, routine maintenance etc. Fleet operated is the average number of buses put into service during the year and the difference between fleet size and fleet operated is idle fleet.
3.	Fleet utilisation	Fleet operated as a percentage of fleet size is fleet utilisation. Fleet utilisation (%) = Fleet operated (i.e., No. of buses on the road) /Fleet strength (i.e., No. of buses held) x 100
4.	Passenger kilometre offered and passenger kilometre performed.	Passenger kilometres offered = Total distance operated (km) x Total carrying capacity Passenger kilometres performed = Total distance operated (km) x Total carrying capacity actually occupied
5.	Occupancy ratio (%)	Occupancy ratio (%) = Total passengers / Total seats available in the bus x100 Occupancy ratio is defined as total passenger carried as percentage of total seats available in the bus. This is different from load factor which is total passengers carried as a percentage of total carrying capacity (seats + standing spaces) in the bus.
6.	Effective kilometre /Revenue earning kilometre	Kilometres actually operated by SRTU buses for the purposes of earning revenues are known as effective kilometres. Total effective kilometres relate to revenue earning kilometres actually operated by buses during any specified period for (i) operation of trips as per schedule (ii) operation of trips for fairs, jhara and other special occasions and (iii) operation of casual contracts.

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SI No.	Terms	Definition
7.	Vehicle productivity	<p>Vehicle productivity refers to the revenue earning kilometres run by each bus per day in a year.</p> <p>Vehicle productivity = Annual Revenue earning km./Average fleet strength / 365 (days)</p>
8.	Staff productivity	<p>Staff productivity refers to revenue earning kilometre performed per worker per day in a year.</p> <p>Staff productivity = Total Revenue earning km./Total staff / 365(days)</p>
9.	Staff bus ratio	<p>Staff to bus ratio represents the number of staff per bus operated</p> <p>Staff : bus ratio = Total staff/Fleet operated</p>
10.	Total revenue	<p>Total revenue includes:</p> <ul style="list-style-type: none"> i) traffic revenue (fare receipts) ii) non-traffic revenue i.e., <ul style="list-style-type: none"> a) income from advertisements, b) sale proceeds from scrap, c) receipts from fines and penalties, d) Other receipts iii) subsidies as reimbursement of fare concessions and other subsidies provided by the government.
11.	Total cost	<p>Total cost includes:</p> <ul style="list-style-type: none"> a) Operating cost <ul style="list-style-type: none"> i) Staff cost ii) Fuel and lubricant cost; iii) Cost of tyres and tubes iv) Cost of spares v) Depreciation – provision against loss of capital asset vi) Payments for hired buses vii) Taxes b) Non-operating cost <ul style="list-style-type: none"> i) Interest cost ii) Other fixed cost – establishment expenses, etc. iii) Payment for Accident compensation.
12.	Net profit/ loss	<p>The difference between total revenue and total cost is net profit or net loss if total cost is exceeds total revenue.</p> <p>The difference between total revenue and total cost excluding tax is profit/loss before tax.</p>



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