

An efficient transport system is not only the key infrastructural input for the growth process but also plays a significant role in promoting national integration. Transport is an important component in a large country like India. Transport is an important and economic life of any country. It is necessary for the survival of a country. The most popular mode of transport system in our country is the road transport. The road transport system helps in social integration and affects the trade, commerce and industry. The road transport system consists of goods transport and passenger road transport including bus transport. The bus transport has been acclaimed as the most important means in the sphere of road transport as it is basic to mankind and is fundamental for the maintenance of quality of life. In Punjab, bus transport service is being provided by the public as well as private sector. Public sector bus transport includes two undertakings, viz. Punjab Roadways and Pepsu Road Transport Corporation (PRTC). The main objectives of the study are to evaluate the operational and financial performance of Pepsu Road Transport Corporation. The present paper is based on the secondary data taken from various sources like Statistical Abstract of Punjab, Annual Reports of PRTC, publications of Punjab government, research papers, books, journals, articles and data from transport-related websites. The secondary data pertains to the period 1999-2000 to 2012-13. Operational performance is assessed on the basis of various ratios like staff-bus ratio, staff employed kilometer ratio, increase/decrease in number of buses, breakdown ratio and accident ratio. Financial performance is assessed by profit/loss analysis. On the basis of various parameters, the study revealed that Pepsu Road Transport Corporation showed negative growth rate in number of buses run, staff employed and kilometers allotted. In the financial performance, the losses of PRTC were increased in the period of study and it shows that financial performance of PRTC is not satisfactory.

## **Performance Analysis of Pepsu Road Transport Corporation (PRTC) : A Case Study**

**Sawinder Kaur**

*Department of Commerce, Punjabi University, Patiala, Punjab*

### **Abstract**

Transport is an important part of human life and economic life of any country. It is necessary for the survival of commerce, agriculture and service sector. It helps to move people and things from one place to another place. The most popular mode of transport system in our country is the road transport. The road transport system consists of goods transport and passenger road transport including bus transport. The bus transport has been acclaimed as the most important means in the sphere of road transport as it is basic to mankind and is fundamental for the maintenance of quality of life. In Punjab, bus transport service is being provided by the public as well as private sector. Public sector bus transport includes two undertakings, viz. Punjab Roadways and Pepsu Road Transport Corporation (PRTC). The main objectives of the study are to evaluate the operational and financial performance of Pepsu Road Transport Corporation. The present paper is based on the secondary data taken from various sources like Statistical Abstract of Punjab, Annual Reports of PRTC, publications of Punjab government, research papers, books, journals, articles and data from transport-related websites. The secondary data pertains to the period 1999-2000 to 2012-13. Operational performance is assessed on the basis of various ratios like staff-bus ratio, staff employed kilometer ratio, increase/decrease in number of buses, breakdown ratio and accident ratio. Financial performance is assessed by profit/loss analysis. On the basis of various parameters, the study revealed that Pepsu Road Transport Corporation showed negative growth rate in number of buses run, staff employed and kilometers allotted. In the financial performance, the losses of PRTC were increased in the period of study and it shows that financial performance of PRTC is not satisfactory.

## INTRODUCTION

An efficient transport system is not only the key infrastructural input for the growth process but also plays a significant role in promoting national integration, which is particularly important in a large country like India. Transport is an important part of human life and economic life of any country. It is necessary for the survival of commerce, agriculture and service sector. It helps to move people and things from one place to another place. The most popular mode of transport system in our country is the road transport. The road transport system helps in social interaction and affects the trade, commerce and industry. The road transport system consists of goods transport and passenger road transport including bus transport. The bus transport has been acclaimed as the most important means in the sphere of road transport as it is basic to mankind and is fundamental for the maintenance of quality of life. In Punjab, bus transport service is being provided by the public as well as private sector. Public sector bus transport includes two undertakings, viz. Punjab Roadways and Pepsu Road Transport Corporation (PRTC).

## OBJECTIVES OF THE STUDY

1. To evaluate the operational performance of PRTC.
2. To evaluate the financial performance of PRTC.

## METHODOLOGY

The present paper is based on the secondary data taken from various sources like Statistical Abstract of Punjab, Annual Reports of PRTC, publications of Punjab government, research papers, books, journals, articles and data from transport related websites. The secondary data pertains to the period 1999-2000 to 2012-13. Operational performance is assessed on the basis of various ratios like staff-bus ratio, staff employed-kilometer ratio, increase/decrease in number of buses, breakdown ratio and accident ratio. Financial performance is assessed by profit/loss analysis.

## OPERATIONAL PERFORMANCE

It can be viewed in terms of physical performance. The following parameters were studied for the purpose of operational performance:

### 1. Staff-Bus Ratio

Staff-bus ratio is an important indicator for analysis of the performance of transport sector. It is calculated by dividing the total staff by the number of buses

or the size of the fleet i.e.,

$$\text{Staff Bus Ratio} = \frac{\text{Total Staff} * 100}{\text{No. of Buses}}$$

More the staff-bus ratio, lower would be the efficiency of the staff employed in the undertaking and vice versa. Table 1 showed the data of staff-bus ratio of PRTC.

**Table 1**  
**Staff-Bus Ratio PRTC**

Year	No. of Buses	Staff	Staff-Bus Ratio
1999-00	1126	5061	4.44
2000-01	1142	5037	4.41
2001-02	1120	5028	4.48
2002-03	1037	4571	4.40
2003-04	1012	4488	4.43
2004-05	1021	4669	4.57
2005-06	1035	5017	4.84
2006-07	1013	4893	4.83
2007-08	1007	4600	4.56
2008-09	974	4866	4.99
2009-10	974	4715	4.84
2010-11	1118	3908	3.49
2011-12	1076	4376	4.06
2012-13	1076	4376	4.06
Exponential Growth Rate	-0.62	-1.15	—
Mean	1052.21	4686.07	4.957

Source : Statistical Abstract of Punjab for various years.

Table 1 showed the data regarding number of buses held, number of staff employed and staff-bus ratio of Pepsu Road Transport Corporation. The number of buses held and number of staff employed showed a negative growth rate of -0.62 per cent and -1.15 per cent respectively. However, staff-bus ratio showed a constant trend during the period of study as in 1999-2000, it was 4.44 per cent which decreased to 4.06 per cent in 2012-13.

## 2. Staff Employed Kilometer Ratio

The use of staff to operate one hundred kilometers is also an important indicator for measuring the efficiency of the transport undertakings. It is calculated by staff employed per bus divided by kilometers operated by transport undertaking.

$$\text{Staff Used for 100 Kilometers of Operation} = \frac{S * 100}{K}$$

Where, S = Stands for staff employed per bus; and

K = Stands for average vehicle utilization in terms of kilometers.

Lesser is the ratio, higher would be the efficiency of the staff employed in the undertaking and vice versa. The staff employed-kilometer ratio of PRTC for the period 1999-2000 to 2012-13 has been shown in Table 2.

**Table 2**  
Daily Vehicle Utilization and Staff Kilometer Ratio of PRTC

Year	Daily Vehicle Utilization (KM)	Staff-KM Ratio
1999-00	253	1.75
2000-01	259	1.70
2001-02	274	1.63
2002-03	280	1.57
2003-04	299	1.48
2004-05	306	1.49
2005-06	317	1.52
2006-07	325	1.48
2007-08	318	1.43
2008-09	310	1.60
2009-10	310	1.56
2010-11	304	1.14
2011-12	265	1.53
2012-13	265	1.53
Exponential Growth Rate	1.13	—
Mean	291.7	1.529

Source : Statistical Abstract of Punjab for various years.

The data given in Table 2 has been analysed in terms of staff employed to the number of effective kilometers operated by PRTC. It showed a positive

exponential growth rate of 1.13 per cent for daily vehicle utilization in kilometers. In 1999-2000, it was 253 kms which increased to 265 kms in 2012-13. PRTC showed a stagnant staff-kilometer ratio with minor changes only. It was 1.75 in 1999-2000 which decreased to 1.48 in 2006-07, but it further increased to 1.53 in 2012-13.

### 3. Breakdown Ratio

A breakdown occurs when buses stop to work due to mechanical or non-mechanical reasons. Breakdown rate is defined with respect to per 10,000 effective kilometers and is expressed as under :

$$\text{Breakdown Rate per 10,000 Effective Kilometers} =$$

$$\frac{\text{Total Number of Breakdowns} * 10,000}{\text{Total Effective Kilometers}}$$

$$\text{Total Effective Kilometers}$$

More the number of breakdowns per 10,000 kilometers, lesser would be the efficiency and productivity. The data showing the breakdowns of buses in PRTC for the period 1999-2000 to 2012-13 is presented in Table 3.

Table 3

Breakdown Ratio of PRTC

Year	Breakdown (per 100 kilometers)	Total Effective Kilometres (00)	Ratio
1999-00	72	988110	7.28
2000-01	60	1095130	5.47
2001-02	82	1140290	7.19
2002-03	78	1112050	7.01
2003-04	22	1128540	1.94
2004-05	24	1139700	2.10
2005-06	30	1187180	2.52
2006-07	24	1203410	1.99
2007-08	23	1173690	1.95
2008-09	21	1128040	1.86
2009-10	21	1128040	1.86
2010-11	15	1189360	1.26
2011-12	32	1144880	1.13
2012-13	32	1144880	1.13
Exponential Growth Rate	-13.54	0.788	—
Mean	38.28	1135950	3.192

Source : Statistical Abstract of Punjab for various years.

Table 3 reflected that PRTC breakdown rate, showed a negative growth rate of -13.54 per cent as in 1999-2000 there were 72 breakdowns which came down to 32 in 2012-13. Further, PRTC recorded 7.28 per cent breakdown ratio in 1999-2000 which fell to 1.13 per cent in 2012-13.

#### 4. Accident Ratio

Another determinant of the quality of service and efficiency of a transport undertaking is the number of accidents suffered by it.

Accident Rate per lakh of effective kilometers =

$$\frac{\text{Total Number of Accidents Per Annum} * 1,00,000}{\text{Total Effective Kilometers Per Annum}}$$

The relationship between efficiency and accidents is inverse, in the case of accidents. More the number of accidents, lesser would be the efficiency and vice versa. The data pertaining to the number of bus accidents in PRTC for the period 1999-2000 to 2011-12 is reflected Table 4.

Table 4

Accident Ratio of PRTC

Year	Accidents (per KM) (000)	Effective KM (00)	Accidents Ratio (per lakh KM)
1999-00	24	9881100	24.28
2000-01	22	1095130	20.08
2001-02	24	1140290	21.04
2002-03	20	1112050	17.98
2003-04	22	1128540	19.49
2004-05	24	1139700	21.05
2005-06	30	1187180	25.26
2006-07	24	1203410	19.94
2007-08	23	1173690	19.59
2008-09	21	1128040	18.61
2009-10	21	1128040	18.61
2010-11	15	1189360	12.61
2011-12	13	1144880	11.35
2012-13	13	1144880	11.35
Exponential Growth Rate	-3.18	0.78	—
Mean	21.14	1771163.57	18.66

Source : Statistical Abstract of Punjab for various years.

Table 4 reflected that PRTC showed a negative exponential growth rate of -3.18 per cent in relation to the accidents which increased the efficiency of the undertaking. But in the case of PRTC, the rate of accidents was more as compared to that of Punjab Roadways. PRTC recorded 24.28 per cent accidents per lakh kilometers in 1999-2000 which increased to 25.26 per cent in 2005-06, but the number of accidents decreased to 11.35 per cent in 2012-13.

### FINANCIAL PERFORMANCE

Making an assessment of financial performance of an undertaking is also an important indicator. The financial performance of Pepsu Road Transport Corporation has been appraised on the basis of following three variables :

1. Revenue or Income
2. Cost or Expenditure
3. Profitability

Table 5

#### Year-wise Financial Performance of PRTC

Year	Total Receipt (Rs. Crores)	Total Expenditure (Rs. Crores)	Total Loss (Rs. Crores)
1999-00	221.31	310.57	89.25
2000-01	224.65	321.17	96.52
2001-02	214.45	316.19	101.73
2002-03	198.12	296.29	98.16
2003-04	206.44	293.31	86.86
2004-05	183.79	276.43	92.63
2005-06	155.86	235.51	79.64
2006-07	123.07	200.09	77.02
2007-08	880.2	151.55	63.52
2008-09	591.2	57.85	75.64
2009-10	578.5	130.48	72.62
2010-11	83.27	83.22	73.21
2011-12	83.22	205.31	122.08
2012-13	68.59	188.76	120.17
Exponential Growth Rate	-3.76	-8.26	-0.104
Mean	272.34	219.05	89.21

Source : Statistical Abstract of Punjab for various years.

Revenue refers to the income earned by the undertaking by sale of tickets, giving buses on rent and loans received from the government. Revenue is the source of income for running the business in a proper manner. Cost refers to the expenditure occurred by the undertaking for running its buses. It includes diesel, lubricants, repair and maintenance, spares and other instruments needed for operation of buses, etc. Profitability means the profit of the undertaking remained after spending some amount of earning. Table 5 shows the financial position of PRTC.

Table 5 reflected that PRTC showed losses during the whole period of this study as in 1999-2000 the amount of loss was Rs. 25.41 crore which increased to the highest Rs. 30.90 crore in 2000-01. This may have been for the reasons such as bad condition of buses, lack of grant from the government and offering free services to different categories of persons. In 2001-02, PRTC suffered a loss of Rs. 28.93 crore which came down to Rs. 10.09 crore in 2002-03. However, in the years 2003-04, 2004-05 and 2005-06 were to the tune of Rs. 7.14 crore, Rs. 11.50 crore and Rs. 12.50 crore respectively. The sincere efforts of PRTC helped it to bring down the losses to Rs. 3.73 crore, Rs. 7.57 crore and Rs. 10.46 crore in year 2007-08, 2009-10 and 2011-12 respectively. But in the year 2012-13, the amount of losses further increased to Rs. 10.46 crore.

#### FINDINGS OF THE STUDY

On the basis of various parameters, the study revealed that Pepsu Road Transport Corporation showed negative growth rate in number of buses run, staff employed and kilometers allotted. Staff-bus ratio, staff-kilometer ratio, breakdown ratio and accidents ratio shows efficiency in the operations of PRTC. In the financial performance, the loss of PRTC was 89.25 crore which increased to 120.17 crore in 2012-13. It shows that financial performance of PRTC is not satisfactory.

#### References

- Annual Report, Pepsu Road Transport Corporation from 1999-2000 to 2012-13.  
Statistical Abstract of Punjab, 1999-2000 to 2012-13.

#### Website :

- [www.cirtpune.com](http://www.cirtpune.com)  
[www.punjabgovernment.com](http://www.punjabgovernment.com)  
[www.statisticalabstract.com](http://www.statisticalabstract.com)