



## Service Quality Analysis of Public Road Transport Service: Rapid Growth of Private Vehicles in the Border Zone Area of Rajasthan

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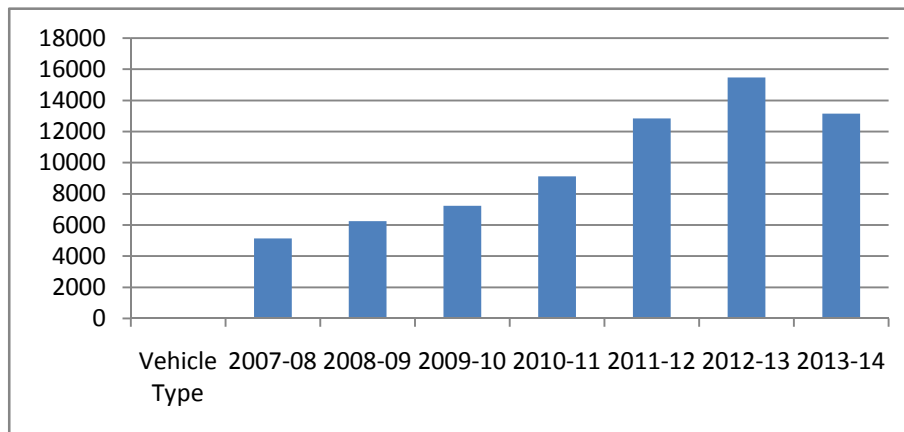
**ABSTRACT:** Road Transport Plays a Vital Role in Development of any country. In Developing Country like India having a road, rail network is about 468882 km&115000 km respectively shows the importance of road transport. Rajasthan State Road Transport Undertakings is Provide Mobility to passenger in Rajasthan by offering Various Services. But Rapid Growth of private vehicles signifies that customer satisfaction is dose not seen identical. Assurance of maintain Proper quality in Services is essential for developing and maintaining good image. In this paper a Public Opinion Survey is carried out for finding service quality standards and based upon the respondents perceptions several recommendations have been made.

### I. INTRODUCTION

Population of India grow at a growth rate of almost 2% per year since last two decades. More than 2.8% population move towards the big cities for job, good education due to limited connectivity towards the city and having more travel time [5], despite from this it is the fact that more than 60% of the total GDP comes from urban areas [6]. Proper public transportation plays an important role in growth of any country [4]. At present service quality is necessary because people have several options to choose the better mode of transport. It is essential to provide better service quality

for economical stability in this trend of competition [3]. The Planning for Quality and Customer satisfaction is plays a very effective role in generating revenue in whole globe. Public Opinion Survey becomes an important tool today for knowing the service quality and customer perceptions for provided service and also their expectations. These surveys attract the customer towards the service as their thinking that he or she alone is also valuable person for service provider [7].

**Rapid Growth in Private vehicles.** According to motor transport statistics annual growth of personal vehicles increase very fast shown below [8].



**Fig. 1.** Growth Rate of 2 wheeler.

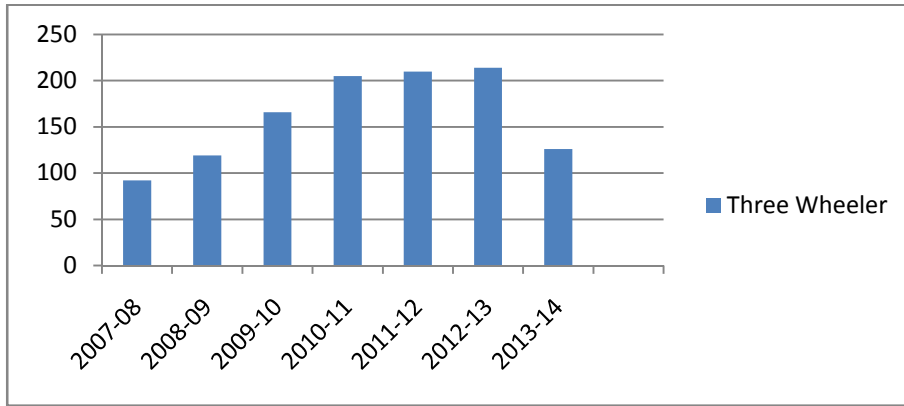


Fig. 2. Growth Rate of 3 wheeler.

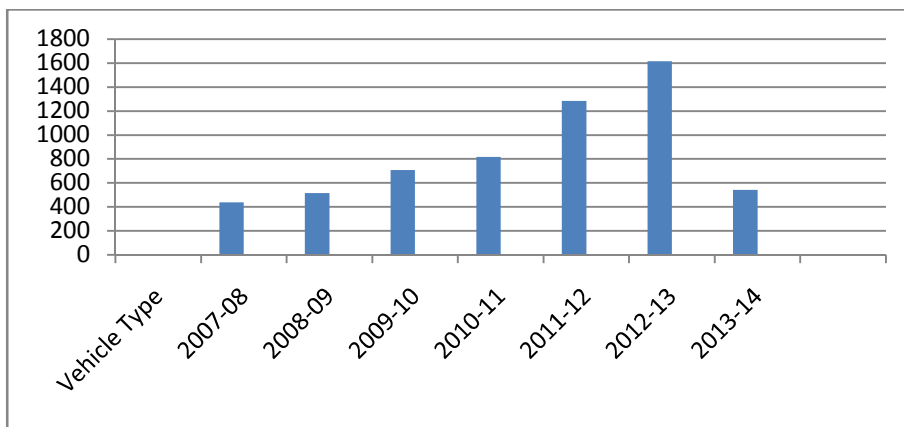


Fig. 3. Growth Rate of 6seat car.

**Study area Detail.** RSRTC is the unit of state transport service with the undertaking of Government of Rajasthan was established in the year 1964 by the state government to extend the transport facility to the citizens having governing control office Jaipur [2].

**II. PASSENGER OPINION SURVEY**

**Site description.** A Preliminary Survey was carried out and based on that MDR 103 in this zone is selected and Further primary survey was performed Hanumangarh Bus stand was performed to know the study site by Interaction with the officers and passenger for design a questionnaire format and collect the data [9].



Fig. 4. Study Locations.

The Detailed survey is carried out at CBS Hanumangarh which covered a weekend; weekdays Apart from Hanumangarh Passengers are also consulted at Pilibanga, Surathgarh, and Dulamana. The Duration of Survey Typically Extended from 09:00 to 15:00 hrs. The Survey Location is shown in figure below [10].

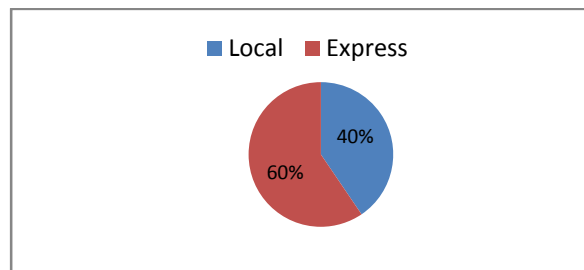
**Passenger Characteristics.** For passenger opinion survey passenger characteristics using RSTC bus

service must be find out. This survey includes type of service used, age, gender, profession, frequency of using RSRTC services. The objective of the survey is to find the problem faced by different category customer.

**Type of Service used.** Due to lack of time and communication gap between respondents the service is classified in terms of speed data tabulated below.

**Table 1: Service Used by Respondents.**

Types of Service	No of Respondents
Local	81
Express	119

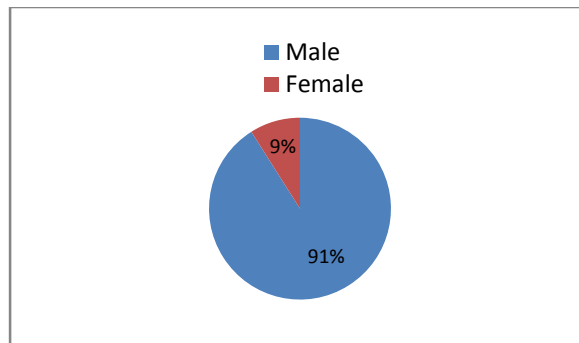


**Fig. 5. Service Used by Respondents.**

**Gender:** About 91% of the respondents are male only 9% of Respondents are female because females are highly apprehensive about responding to the survey questionnaire.

**Table 2: Respondents Gender.**

Gender	No of Respondents
Male	182
Female	18

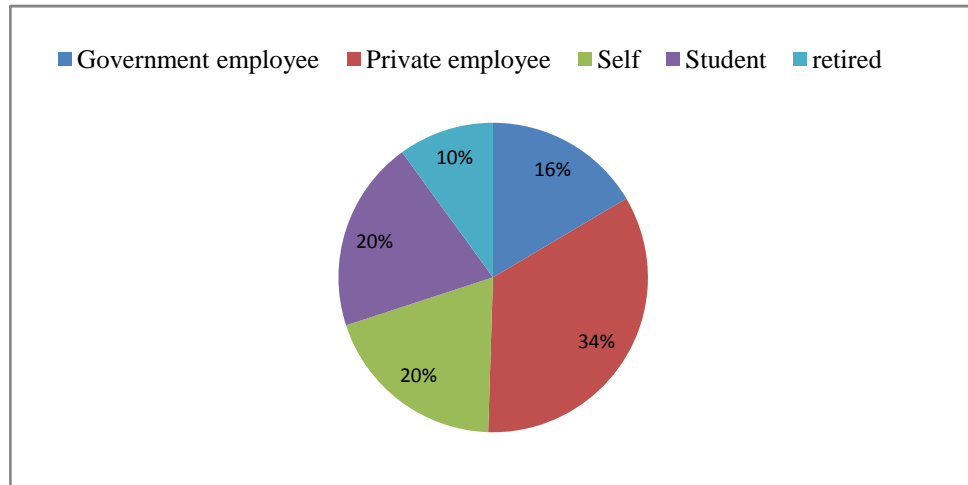


**Fig. 6. Gender of Respondents.**

- **Profession**

**Table 3: Professions of Respondents.**

Types of Profession	No of Respondents
Government employee	33
Private employee	68
Self	39
Student	40
Retired	20

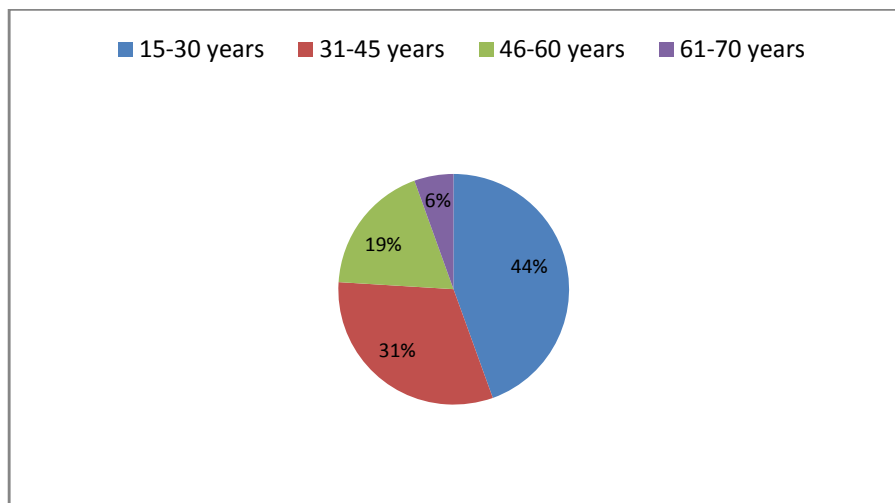


**Fig. 7.** Professions of Respondents.

**Age.** Minimum 15 years age criteria were fixed to overcome difficulty of understanding questionnaire.

**Table 4: Respondents age.**

Age Group	No of Respondents
15-30 years	89
31-45 years	63
46-60 years	37
61-70 years	11



**Fig. 8.** Age of Respondents.

## For Express Bus Service

Table 5: Respondents Opinion for Express bus Service.

Sr. No.	Statement question	Level of Perception (No. of Person)				
		Highly Unsatisfied	Unsatisfied	Neutral	Satisfied	Highly Satisfied
1	Maintaining Journey Time	26	34	26	30	3
2	Maintaining Arrival and Departure Time	30	38	26	16	9
3	Capabilities of employee to handle Break down Problem during Journey	4	10	48	28	39
4	Cooperation of Driver and Conductor at the time of Personal Problem During Journey	14	16	30	32	27
5	Ticket Price is Reasonable	52	38	29	0	0
6	Buses/Bus Stations are neat & clean	28	34	36	21	0
7	Display signs/Board at Bus Stand helpful	15	52	30	13	1
8	Necessity facility like Drinking water, toilets are	45	52	2	10	2
9	RSRTC Ensure Safe And comfortable Journey	4	10	46	52	7

- Opinion Results for local service

Table 6: Opinion Result for Local Bus Service.

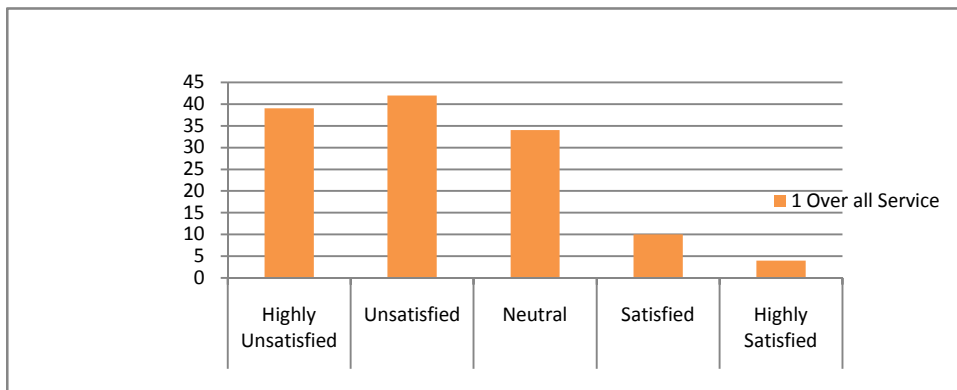
Sr. No.	Statement question	Level of Perception (No. of Person)				
		Highly Unsatisfied	Unsatisfied	Neutral	Satisfied	Highly Satisfied
1	Maintaining Journey Time	42	17	30	0	0
2	Maintaining Arrival and Departure Time	42	17	30	0	0
3	Capabilities of employee to handle Break down Problem during Journey	4	26	56	3	0
4	Cooperation of Driver and Conductor at the time of Personal Problem During Journey	11	9	42	17	10
5	Ticket Price is Reasonable	82	7	0	0	0
6	Buses/Bus Stations are neat & clean	16	16	19	28	10
7	Display signs/Board at Bus Stand helpful	15	45	10	10	9
8	Necessity facility like Drinking water, toilets are	46	34	9	0	0
9	RSRTC Ensure Safe And comfortable Journey	4	6	20	51	8

**Over all Service Perceptions.** In addition with above statements an overall service system is also categorised to compensate any other factor which is missing.

**For Express Bus Service**

**Table 7: Overall Perceptions for Express Service.**

Sr. No.	Statement	Level Of Perception ( no. of People)				
		Highly Unsatisfied	Unsatisfied	Neutral	Satisfied	Highly Satisfied
1	Over all Service	39	42	34	10	4

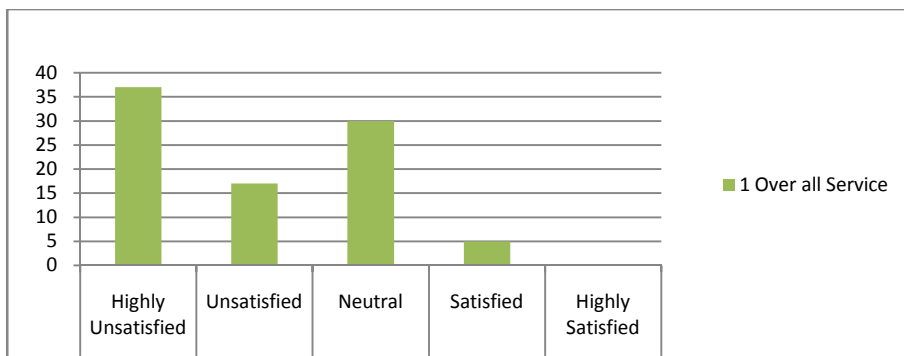


**Fig. 9.** Overall Express Service Perception.

**Overall Local Bus Service**

**Table 8: Overall Perceptions for Local Bus Service.**

Sr. No.	Statement	Level Of Perception ( no. of People)				
		Highly Unsatisfied	Unsatisfied	Neutral	Satisfied	Highly Satisfied
1	Over all Service	37	17	30	5	0



**Fig. 10.** Overall Perceptions Local Service.

### III. STUDY RECOMMENDATIONS

#### Deployment of Buses

- (i) RSRTC should have need to explore flexibility in time schedule in case of peak and non peak hours
- (ii) RSRTC should have explored last mile connectivity after 19:00hrs since the passengers has complained no connectivity after that.
- (iii) RSRTC management should have concerned on the passenger complained that crew allows the people to board in between designated stands specially in case of express buses that causes delay in journey

#### Facility at Bus stand

- (i) Proper Drinking water facility must be provided in case of summer cool water facility is available.
- (ii) Departmental canteen should be opened where passenger can take refreshment
- (iii) Almost all the respondents have complain regarding especially female respondents regarding Toilet facilities are highly unhygienic, Unclean and close. RSRTC authority must have concern with respective department's i.e. Use and pay facility may be used

#### Fare Charges

- (i) More Than 80% Respondents are unsatisfied with the ticketing rate that there is no difference in case of ticket prizes especially local or express bus services .RSRTC authority must have concern on this crucial matter because this one of the main reasons as far as respondents concern.

#### Others

- (i) Security at the bus stand must be improved with proper lighting equipments
- (ii) Mobile charging points may be provided.
- (iii) Online complaint app may be provided to passengers so that passenger can register their compliance from their suitable places it will also help to improve service quality

### IV. CONCLUSIONS

RSRTC Works with the Principal of Safe, Comfortable journey having 4500 buses on fleet working as a one of the biggest STU'S of the country. But the study suggests using periodical public opinion survey to know the exact performance of service on ground and provide better service and facility in economical manners to attract the passengers for using state transport service and compensate economical losses.

### REFERENCES

- [1]. [https://en.wikipedia.org/wiki/Transport\\_in\\_India](https://en.wikipedia.org/wiki/Transport_in_India).
- [2]. <http://transport.rajasthan.gov.in/rsrtc/>
- [3]. [https://en.wikipedia.org/wiki/Service\\_quality](https://en.wikipedia.org/wiki/Service_quality)
- [4]. Federal highway administration (July 2001),"Planning for transportation in rural area".
- [5]. Census of India (2011).
- [6]. Dr. Ahulwalia (sep.29,2011). "High Powered Report and Recommendations".
- [7]. CIRT, Pune (Feb, 2012). "Service quality management for RSRTC Operations".
- [8]. Statistics department Rajasthan.
- [9]. RSRTC Hanumangarh Depot.
- [10]. Google earth.