

# Design of public transportation in Shopian City of Jammu and Kashmir

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**Abstract** - The Public transportation is a key role in the progressive development and wellbeing of the society. The public transportation is to be established by specifying the bus network designs. In this study the various transportation surveys were done and the possible outcomes for the maximum use of public transportation were procured. The various issues faced by the use of public transporters are being studied and the suggestive measures for minimizing the same have been given. Busses have been the most economical and efficient source of the public transportation hence the root solution for growing traffic congestion environment preservation and road safety problems. The private and public transport preference is based on the individual choice but the influential measures have been shown which act at the time of decision. Besides these measures the study focuses on the Bus rapid transit system to be introduced as a well stabilized and long term solution to the traffic congestion.

**Key Words:** Public Transport, Buses, Traffic, Passengers, Design, Transit system, Congestion.

## 1. INTRODUCTION

Public transport is that type of road transport which is a shared passenger transport service and includes the modes such as Busses, Taxi, Cabs, passenger trains, ferries etc. But among all these buses and trains are considered as the main modes. From the long time the Indian railways is doing hard to make the possibility of communication into remote areas and as such India is having longest rail network in the world. Public Transport plays a major role in the livability of all communities it is connecting the transit dependent people to the better healthcare facilities educational, institutions, offices and other activities. Public transportation restricts in consumption of petroleum and since it helps maintaining the proper resource management. Improving public transportation and infrastructure prior to any modal choices by travellers is essential as doing so would help travellers make rational choices motivated not merely by the simple desire to escape somehow from tremendously poor conditions of the existing transportation supplies [1]. Introduction of the public transportation in the City like shopian which is 51 KM from the state capital Srinagar, Jammu and Kashmir is a major concern and the need of time. By having a good and accessible public transportation the blossom beauty of the city and the tourist sector will be flourished well. The problem of ineffective public transportation is leading to major problems to the public in general. Hence the major need of the time for effective

utilization of the employability and the manpower resources is the introduction of the public transportation in the city.

## 1.1 The study area

Shopian is a district among the 22 districts of Jammu And Kashmir State. It is having the total population of 265,960 according to census 2011 and the population density is 852 inhabitants per square kilometer [2]. The district is well known hilly district and is famous for the cultivation of the highest quality of Apples. The district is having lush green beautiful forests. The economic development of the people is much dependent upon the Apple production, although it is having an abundant capacity of natural beauty and a wildlife sanctuary at Hirpora shopian which is 12 kilometer from the shopian main. This can flourish the tourist sector not only of the shopian but of whole Jammu and Kashmir State. To the extent district shopian is having well road connectivity with the nearby districts of Kulgam, Anantnag and Pulwama but is lacking in rail network [3]. In state the Jammu and Kashmir state road transportation runs busses in every major cities and making connectivity between villages and districts but it is also lacking in shopian district. The road transport on the one hand if well developed but the passengers still have to use either personal transport of the sheared taxies like Tata sumo due to the non availability of the proper public transportation.

## 1.2 Existing public transportation conditions

The public transportation playing generally in the city of shopian include sheared taxi four wheelers and the busses which are playing very less in number on the shopian to Srinagar route only. The major outer city connecting roads shopian to Nehama, shopian to kulgam, shopian to Srinagar take most of the trips generated via pulwama other font types may be used if needed for special purposes.

## 2. Modal share figures for passengers and freight

The modal share data given here are showing the higher dependency on the road transport and on the other side the public transportation modes among which busses are the main modes that contribute to the road transport are lacking in the city. Hence from the modal share data full passenger dependency on the road transportation can be seen but on the other side the public transportation which gives the main shape to this is missing from the Shopian district.

**Table -1:** Modal shares for passengers and freight

Mode	Road Transport	Rail Transport	Sea Transport	Air Transport
Passenger	84.1%	7.3%	1.8%	1.5%
Freight	91.3%	0.6%	1.0%	0.1%

**2.1 Public transportation in user’s viewpoint**

Public transportation with through measures to be introduced in the city and in contrary to this the study about the users point of view was established. The user views were also recorded by conducting the public transport survey through direct interviewing the passengers and the results are being tabulated as:

**Table -2:** Passengers opinions about introducing public transportation

Option	Agree	Disagree	No answer	Total
I would like to travel through bus if easily available.	67%	27%	6%	100%
Public Transport is economical than private	60%	30%	10%	100%
Public transport is much safe than private travel	52%	36%	12%	100%

The main purpose of this survey was to get the overview about of how the general public perceives the public transport and what sort of changes they want to see in public transport so that they can use the it maximum.

The results after analyzing reveal that the 67 % of the people want to travel through bus but due to non availability of the same they are forced to use the other modes. The passengers were asked that if they want to travel by bus if available on which 67 % agreed that they will for sure use to travel through bus and 27 % disagreed the same while 6 % of passengers did not respond. The next passengers were asked whether they feel public transport is cost effective or economical at which 60 % were agreed on the same 30 % disagreed and 10 % did not responded at all. At the last passengers were asked that public transport is safer than the private transport on which 52 % agreed 36 % disagreed and 12 % did not responded. At the same time the public transportation is found much economical and safer than the private transportation system. The other features that affect the use of public transportation are based on preferential and priority treatments to the passengers [4].

**3. CONCLUSIONS**

The author demonstrated in the paper that the passenger trips are very much disturbed due non availability of the proper public transport in the city of Shopian is very much

affected due to the lack of the public transportation facilities. The passenger frustration mostly in case of the student community of the city is seen by conducting the surveys. According to the respondents of the study area the facilities provided by the existing transportation system is not up to the required level. The population in the outskirts of the city if connected by the public transit system would get the more benefits.

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