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Traffic Problems in Jammu City

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Abstract

In recent past Jammu has experienced a fast growth of population and increasing rate of urbanization process. The failure of public transport system has led to phenomenal increase in number of private transporters and also the vehicles. The traffic volume rises to alarming heights on major roads of the city, vehicular congestion is increasing day by day making the situation more complex. The present paper tries to analyses the traffic problems of Jammu city and gives some suggestions to overcome from these problems.

Introduction

Transport geography as a discipline, emerged from economic geography in the second half of the 20th century. Traditionally transportation has been an important factor over the economic representations of the geographic space namely in terms of the location of economic activities and monetary costs of distance (Hoover 1948). The growing mobility of passengers and freight justified the emergence of transport geography as a specialized field of investigations.

Cities represent places having a high level of accumulation and concentration of economic activities. Urban productivity is highly dependent on the efficiency of its transport system, notably to move labour consumers and freight between several origins and destinations. The growing complexity of cities has been accompanied by a wide array of urban transportation problems. Some problems are ancient like congestion and others are new environmental impacts. Rise in number of motor vehicles increases congestion on roads. Jammu the marked increase of population and number of vehicles on one side and fast urbanization on the other, have resulted in rapid growth in traffic volume in recent years. There has not been matching increase in traffic infrastructure. This has aggravated the traffic and transportation problems of Jammu city. Moreover, topographical factors also add to city problems.

Study Area

Jammu, the city of temples as it is know, is located on both the banks of river Tawi. The old city is confined to the right bank and the expansion of new city has taken place largely on the left bank of the river but a number of new colonies such as Roopnagar, Janipura, Barnai, Bantalab, Anand Vihar etc. have come up on the right bank also. Large scale urbanization and industrialization have given rise to what is now called as Greater Jammu, the name given to old, new and the suburbs of Jammu. The study area lies between 32^0 36' N to 32^0 39'N latitudes to 74^0 55'E to 74^0 59'E longitude. The city is well connected by roads with all parts of J&K. Due to its location advantage Jammu assumes importance on the linkage corridor to Sala project, Rajouri, Poonch, Kishtwar, Doda.

Aims and Objectives

To fulfill the aim of the present study following objectives are kept in mind.

1. To have general idea of traffic scenario in Jammu city.
2. To study traffic as urban transport problem in Jammu city.
3. To study the traffic flow and traffic volume in different parts of the city.
4. To study the problems associated with traffic movement in the city.
5. To provide solutions in tackling the rising problem of traffic in the city.

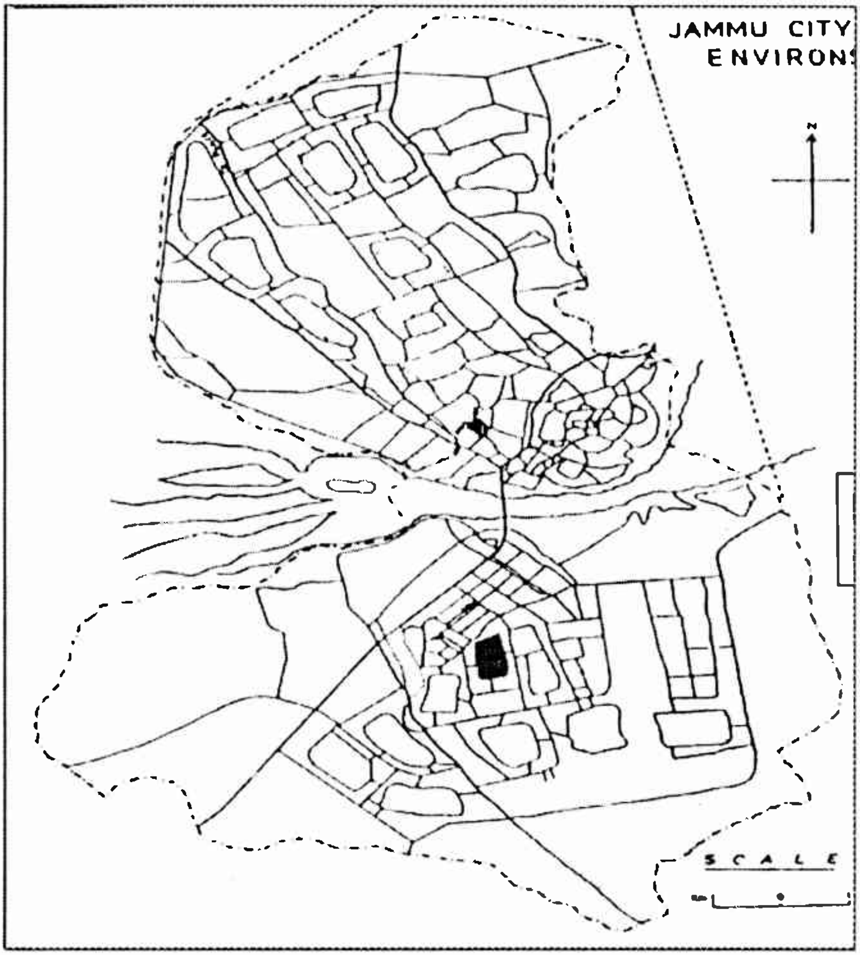
Post independence development of Jammu City

The physical condition of this development is better than old city. The post independence development of the city can be studied under the three different divisions.

1. Bakshi Nagar Sarwal
2. Extensions of Bakshi Nagar
3. Gandhi Nagar and its extensions.

1. Bakshi Nagar Sarwal

These colonies are extensions of old city. They were originally developed for the



refugees affected by the partition. Now these have expanded up to Janipur. It is densely populated region. The whole area lies between west of B.C Road up to Janipur Nallah. Numbers of unauthorized colonies like Shakti-Nagar have emerged recently. Middle and upper class groups mainly have their residence here.

2. The extension of Bakshi Nagar

It lays between Janipura nallah and Domana limits. A major proportion of this area is allotted to B.S.F and C.R.P.F. This area also has Ranbir canal. J.D.A has developed a number of colonies at Bantalab, Roopnagar, Muthi, Paloura etc. Migrant families also settled here.

3. Gandhi Nagar and its Extensions

This area lies in left bank of river Tawi and it was developed after 1950. National highway connecting Pathankote with Srinagar passes through this region. The Gandhinagar colony is well planned and almost has all the facilities. The major functional land uses are residential, commercial, industrial and institutional. The cost of the land is extremely high in this region.

Traffic Scenario in Jammu City

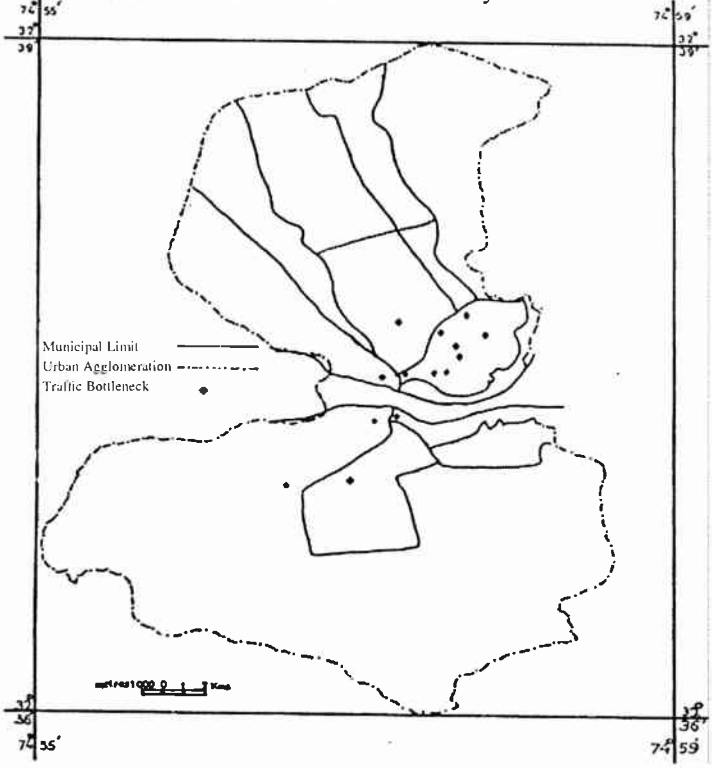
The traffic scenario in the city has witnessed major changes during the past 25 years. Jammu, the city of temples over the past few years, has been experiencing intensification of its activities practically at a feverish pitch. It is increasingly gaining in importance as tourist, defence, administrative and commercial center in the region. Various economic and socio political compulsions have been considered to be responsible for the transformation that has been witnessed in the city of Jammu which is also winter capital of state J&K. With increase in population the traffic on the roads has also multiplied. This has caused the problems concerning the smooth flow of traffic to the different areas in the city. The population of the city was 2.23 lakh in 1981 which rose to 6.60 lakh in 2001. This rapid increase in

Table No.1: Growth of Registered Vehicles in Jammu

S.No	Type of Vehicles	**1990-1991**	**1994-1995**	**1998-99**	**2003**	**2008**	**Growth Rate from 1990 to 2008**
1	Trucks	**8871**	10770	13585	16229	21394	**4.60**
2	Buses	**3162**	3610	4202	4747	5385	**3.91**
3	Mini-Buses	**1580**	2111	3477	4970	6526	**17.39**
4	Taxi	**1114**	1123	1798	2731	3450	**11.64**
5	Three-Wheelers	**1990**	2886	5203	6082	12548	**29.47**
6	Jeeps	**3520**	4004	5498	6193	6471	**4.65**
7	Cars	**7224**	10692	19051	37547	64216	**43.82**
8	Two-Wheelers	**40853**	64745	100634	158890	217819	**24.06**
9	Others	**3128**	5330	8166	10202	13257	**17.98**
	Total	**71467**	**105271**	**161552**	**247591**	**351066**	

Source: R.T.O office Jammu.

Traffic Bottlenecks in Jammu City



population will exert pressure on traffic. The limited transport infrastructure of the city has to meet the increasing travel needs of residents and floating population. The city, with its topographic peculiarities inherited road pattern and limited road capacity, is facing extreme difficulty in meeting the rapidly increasing mobility requirements. In the absence of effective public transport system, the use of personalized modes of transport is increasing which has resulted in lower level of service on roads.

Traffic Network in Jammu City

Traffic network in the city has radial pattern consisting of six radial roads converging to the city from six different directions viz. Srinagar road (NH-1A), Pathankote road (NH-1A), R.S Pura road, Gajansoo road, Akhnoor road and Ambgrota road. Traffic movement is concentrated on these. A bypass has been constructed for NH-1A connecting Pathankote road and Srinagar road for through traffic. In Jammu city the network is divided in to the north and south parts by river Tawi and is connected by bridges. The network on the north is having narrow lanes and congested streets while the network on the south shows a gridiron pattern of development.

Tawi Bridge was the most loaded traffic section, creating traffic jams and congestion. Another bridge (2999 m with 4 lanes) is build across the river Tawi, which is located 700 m upstream of the already existing bridge. With the construction of this second bridge there is reduction in traffic

Table No. 2. Road Accidents in Jammu City

Year	Fatal	Non Fatal	Total
1989	311	550	581
1990	56	928	984
2002	145	1341	1486
2003	137	1464	1601

Source- S.P Office Traffic Police Jammu

Table No.3: Causalities of Road Accidents

Year	Persons Killed	Persons Injured
1989	36	437
1990	65	924
2002	166	1459
2003	157	1683

Source- S.P Office Traffic Police Jammu

Parking Facts about Jammu City

S.No	Road/Stretch/Lot	Type of Parking
1.	Opposite Ranbir Market	Off Street
2.	Raghunath Mandi to City Chowk	On Street
3.	Residency Road	On Street
4.	City chowk to Shalamar chowk	On Street
5.	Hari Market	On Street
6.	Parking Lot near Shalamar Chowk	Off Street
7.	Golemarket Gandhi Nagar	On Street
8.	B.C Road	On Street
9.	Canal Road	On Street
10.	Kachi Chawani	Off Street
11.	Purani Mandi	On Street
12.	Channi Himmat Road	On Street
13.	Shastri Nagar Road	On Street
14.	Dogra Road Satwari Chowk to Nai Basti	On Street

Source: Jammu Development Authority (JDA) office Jammu 2004.

congestion. This bridge helps in diverting the traffic to and from C.B.D to residential colonies like Channi Himmat, Fruit Market, Transport Nagar, New University Campus etc. The C.B.D is connected mainly by two arterial roads B.C road and Vinayaka Bazar. These two arterial roads merge in to one road which leads to Tawi Bridge. Length of major roads covering primary and secondary roads in the urban area is 150Km.

To connect residential areas with C.B.D and to separate the local traffic an arterial expressway corridor commonly known as Fly over project is being constructed. The circle of local traffic movement operates from Bikram Chowk to C.B.D the interstate goods movements are by roads only. The internal movement of trucks is high on railway station, Digiana, Satwari, Gangyal, Chattha etc.

Growth of Registered vehicles

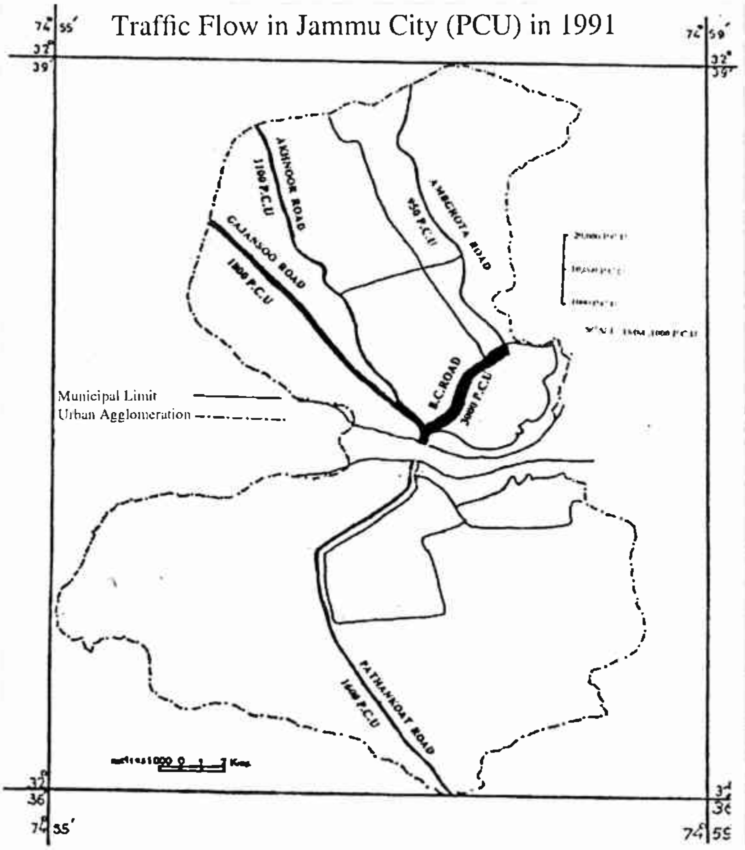
It is apparent that the marked increase of population and fast urbanization will lead to more demand of vehicles as a result vehicles are growing very sharply showing an increasing trend which will rise to alarming proportions in future. The marked growth is observed especially in case of two wheelers and cars which register growth rate of 27.03% per annum. The public transport vehicles (Buses and Mini-buses) registered annual growth rate of 8.40%. Due to high growth rate of personalized vehicles, the share of public transport has fallen. This high increase in motor vehicles has brought down the level of service on the limited road system. The highest increase is experienced in two wheelers and cars. People prefer to use their vehicles rather than the public transport facilities. Taxis are popular for

Projected Future Traffic Scenario in the Jammu City

Description	2011	2021
Population	12.51	18.34
Daily Trips (Lakhs)		
Intra City Trips	13.76	22.01
Inter-City Trips	4.95	7.33
Total Trips	18.71	29.34
Intra City Trips with Purpose (Lakhs)		
Work	5.63	8.80
Education	4.88	7.52
Other	3.25	5.69
Road	**Peak Hour Traffic (P.C.U)1991**	**Peak Hour Traffic (P.C.U)2021**
B.C Road	3000	10500
Pathankote Road	1600	10200
Canal Road	2500	12200
Akhnoor Road	1100	9800
Ambgarota Road	950	6800

Source- Rites Report J.D.A Office Jammu.

Traffic Flow in Jammu City (PCU) in 1991

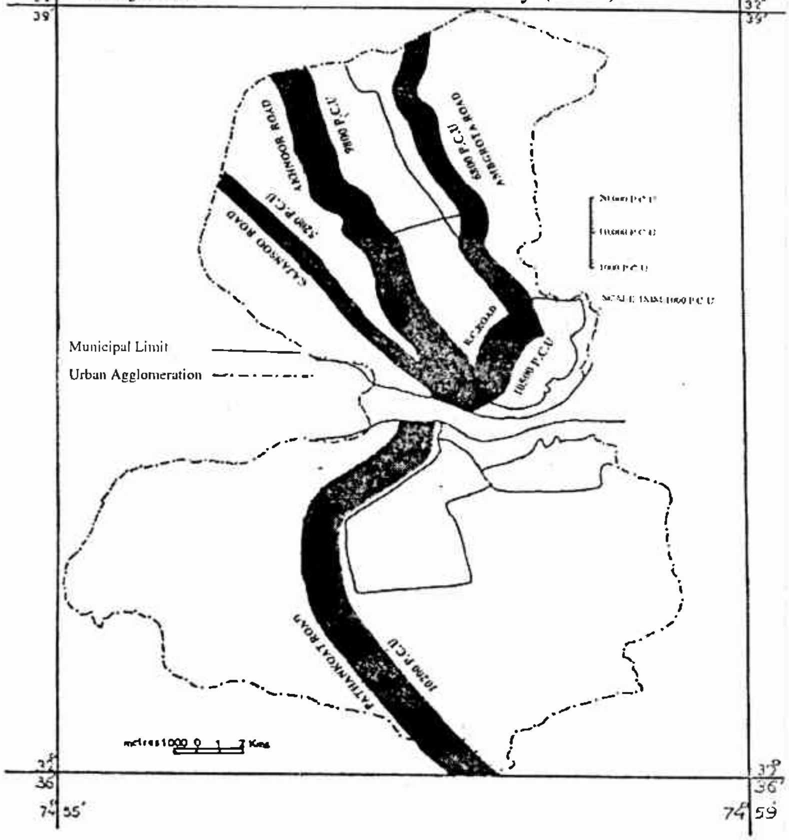


pilgrims going to Katra. As a result there is increase in taxis. Majority of taxi trips originate from Residency road, Railway station and Airport. Increase in vehicles will eventually lead to high traffic volume on roads leading to traffic problems.

Lack of traffic control, congested roads and increase in vehicles will automatically generate accidents. In the city there are numerous traffic incidents leading to road accidents. Growing vehicular traffic and inadequate road system lead to sharp increase in road accidents. As it is clearly evident from the table no. 2 that there is an increase in accidents from 1989 to2003. In 1989 there were total of 581 accidents where as the situation in 2003 has reached to alarming proportion of that of 1601 accidents. As a result to road accidents there is increase in number of casualties which are given in table no.3 in majority of accidents vehicles involved are Scooters/ Motorcycles, buses and trucks. Apart from growing traffic and inadequacy of road network, these accident statistics also indicate lack of traffic education.

Traffic is studied in Jammu city as an urban transport problem. One can easily infer from this study that as the city is going rapidly so does the needs of people for a better transport network. In Jammu motor vehicles are growing at 14.21% per annum and personalized modes at 25.50% per annum respectively. As per table the daily

Projected Traffic Flow in Jammu City (PCU) in 2021



intra city passenger's trips by 2021 will be of the order of 22.01 lakh. The inter city daily passenger trips will be of the order of 7.33 lakh which gives the total of 29.34 lakh passenger trips per day. In addition, the intra city goods trips may be of the order of 31000. The area under circulation network in the old city area is 4% and in the rest of the city it is 9% which is very low. In future the traffic levels on the roads such as B.C Road, Pathankote Road, Akhnoor Road etc are expected to increase to 3 or 4 times. Projected in to the future, one meets with an extreme grim scenario of traffic if no corrective measures are adopted and implemented. The traffic volume on major roads in the city in 1990 and its projected picture in 2021 is represented cartographically. In Jammu growth rate of vehicles from 1990 to 2008 is 21.73% which is very high.

Traffic Problem in Old City

Old city is the main business center and as such the movement of the people to and from this are to the adjoining localities/ villages has increased tremendously. Old city caters to wholesale and retail business frm Kanakmandi, Lakhdata bazaar, Rajinder bazaar and Ragunath bazaar. Activities are increasing due to increase in pilgrims visiting

Vaishno Devi. The residential areas of link road, Puranimandi, Raj Tilak road have been shifted into shops. Residential houses along Ragunath bazaar, Shalamar area has been converted into lodges and hotels. The net result of such commercialization and change of land use has adversely affected the traffic movement in the core city. Increasing activities in old city has resulted in mushrooming of unauthorized housing colonies at Krishna nagar, Talabtillo, Shakti nagar, Bhagwati nagar etc. The problems of Jammu city may be summarized as under:-

- There is high residential density in the central areas because of growing population and the area in the old city under roads is very small and is only 4%.
- Circulation pattern is poor with excessive congestion due to ribboning of commercial activities along the roads and lanes.
- Lack of open spaces, parks, inadequate parking and existing of wholesale market at Kanakmandi.
- Existence of Old Secretariat, New Secretariat and other important administrative buildings in the city generates heavy traffic.
- General Bus stand with in the city core further add to traffic.
- Heavy tourist pedestrian traffic in Ragunath bazaar, Rajtilak road, Purani Mandi, Link road etc.
- Increasing pressure of personalized modes of transport and parking of personalized modes on city roads.
- In recent years, commercial establishments such as restaurants, hotels, dhabas, petrol pumps and vehicle repair activities, workshops etc. have been opened along the roads which not only reduced the road capacity due to encroachment but make road expansion difficult.
- Poor traffic and transportation system in Jammu is the manifestations of poor urban development management and lack of professional approach to management of traffic and transportation in Jammu.
- Lack of traffic control, congested roads and increasing number of vehicles has resulted in high rate of accidents on roads in Jammu.

Suggestions

Traffic problem today is the most concerned issue. It originated due to industrialization, which has assumed alarming heights today. If future trend continues in the Jammu city the problem of traffic will rise to such an extent that it would be rather impossible to control the problem. So to manage traffic efficiently and to control traffic flow in Jammu city the following suggestions are given:-

- Widening and construction of new roads as much as possible.
- In order to ease the traffic flow on roads more one way schemes need to be made and implemented.
- Construction of flyovers at important location.
- Additional parking spaces must be created in the core area.
- Construction of one more bridge at river Tawi.
- Construction of new bypass such as Bari Brahmana- R.S Pura- Akhnoor etc.

- Increasing the city area under circulation network.
- Creation of footpaths and zebra crossing for pedestrians.
- Number of traffic assistance booths must be increased.
- Traffic police personnel equipped with technical and managerial skills is the need of the hour.
- The most important thing is Jammu city needs a better planning perspective and a good and efficient management to deal with the growing traffic problem.

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