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ROAD TRANSPORT SYSTEM IN HAVERI DISTRICT

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ABSTRACT

Transportation means movement of people and goods from one place to another. In the present day economy the movement has gained so much of importance that without the media of movement and movement facilities the life will almost come to a standstill, which many of us have experienced quite often at the time of power and fuel shortages due to transport bottlenecks. The development of the economic system is a long term and a continuous process and is a result of Geo - historic, socio – cultural and political factor. This fact is true for all the economic activities including transportation which forms one of the basic economic activities. Because through this process men and materials move from one place to another place, thus form spatial linkages between them. Therefore there is a need of hour to make an attempt to study the pattern of road transportation, types of roads and its network as exists today.

Introduction:

Geographers are much concerned about the spatial analysis the transportation is concerned with the study of its location and development functions or operation with the territorial economic complexes of countries or regions. It has the significant relationship with the location of industry, agriculture, population, settlements and natural phenomena and resources. It is primarily the analysis of spatial interpretation as each means of transportation has its own technological- characteristics and its spatial layout or network.

The studies so for made in this field are scattered in individual academic exercises. Some Geographers has attempted to correlate transportation routes with deferent physical features and varying surface configuration while the economists have dealt with such aspects of operational economics such as coasts, revenues, maintenance and profits etc.

Transportation is a measure of the relationships between the areas this relations and connection between areas are frequently reflected in character of transportation facilities and in the flow traffic involving such basic geographical concept as spatial interaction and aerial association. Ullman has rightly observed that "Transportation is the measure of the relations between areas and is therefore an essential aspect of geography". The character of transportation as a whole and detail at any particular time and through its history is altogether determined by its interrelation with physical and social forces and conditions. To understand transportation means simply to analyze these interrelations.

Significance of transportation in regional economy

Transportation is like a blood vassal of economic system. It plays an important role in the development of economy and civilization it is just like a nerves system in the human body. The same has been discussed with different angles and are mentioned below.

- 1) Market development
- 2) Large scale production
- 3) Price stability
- 4) Transportation is a social factor.

Market development

By the transportation of goods every corner of the country, regional, national and international market consumers can get goods very fast.

Large scaleproduction

The development of transportation and market, scale of goods will be increased therefore goods can be produced in large scale.

Price Stability

Transportation is help full in maintaining the stability of price in bigger country like India. Transportation can be able to displace the goods for region of production to market. By this it can be able to maintain the stability of price. It is the one of the important gift of transportation.

Transportation is a social factor

Transportation is the key factor to play its vital role to mobilize the people in view of the socio-cultural and religious aspects .The political movements are so dynamic. The social concern and commitment to the respective facets of life of the people in any region is governed by the transportation.

Objectives

The main objectives of the present study are as fallows.

- 1) To study the existing transportation system in Haveri district.
- 2) To know the transportation network of the study area.

Data Base

In the present study the information is collected from primary and secondary sources so with regards to this the secondary data has been collected from various offices of Haveri district. Data on national highway from the sub-division of Dharwad and state highway, major district roads and minor district roads from the executive engineer, public works department Haveri and the information about road transportation is collected from district statistical office Haveri.

Methodology

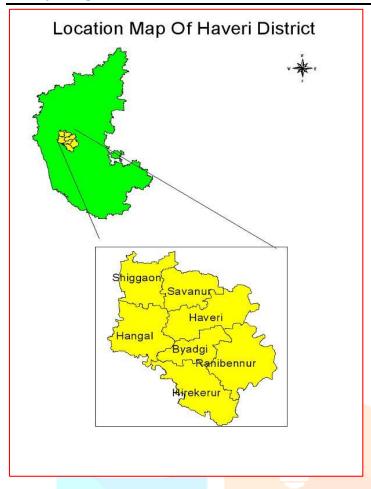
The quantitative techniques have been employed in the present study to arrive at meaningful results. The techniques are developed by geographers and other experts have been used with suitable modifications to suite the nature of the study region. The pattern of road network development is largely influenced by the physical and cultural makeup of the region. It is very essential to understand the salient geographical features of the region. A physical aspect gives the real picture of the region. The human activities prevailing on the geographical space are reflecting the prosperity of the region. The resources and their utilization are the indicators of the economic development of the region. To understand the existing physical characteristics of the region is the base and reflect for further planning. Therefore an attempt has been made in this article to deal briefly with physiography and settlement characteristics etc. These are considered as the basic factors and give the real picture of the district for planning and development of the study area.

Formation of HaveriDistrict:

Haveri district has recently re-organized from the then Dharwad district in 1997 with Haveri as district head quarter. Formerly, the district was sub-division of Dharwad district and responsible to emerge as Haveri district with seven taluks namely Byadagi, Hanagal, Haveri, Hirekerur, Ranebennur, Siggaon and Savanur.

Location and extent

Haveri popularly known for Byadagi chilly verity and its market in south - east Asia, is almost in the center of Karnataka State. Geographically the district is situated between 14-48'to 14-80'north latitude and 75-24' to 75-40' east longitude. Haveri is one of the newly formed district of Karnataka state on 15-08-1997.



Administrative Divisions

After the district formation in 1997 the Haveri district has intervened in the society and polity with plethora of policy packages aimed at promoting balanced development. The former district of Dharwad is fragmented into three different districts these were in varying phases of the development, which have had an impact on the post – unification development pattern of the district of Dharwad. Before analyzing the level of development, it is important to know the administrative structure and the general picture of the district. After the formation of the district, the entire district has been divided into two divisions, which are Haveri division and Savanur division.

Administratively, the entire district is divided into seven taluks and each taluk consisting of varying number of villages. Haveri sub- division included with four taluks and 385 villages of their total geographical area 2945 square kilometers with 60.74 percent for total district. Savanur sub – division consisted of three taluks and 313 villages with geographical area of 1903 square kilometers and its area is 39.25 percent in the district. The Haveri district located in north Karnataka comprises 7 (seven) talukas viz. Byadagi, Hanagal, Haveri, Hirekerur, Savanur, Shiggoan, Ranebbennur. Haveri is the administrative and political headquarters of the district. There are 19 hoblies, 208 gram-panchayats, 705 villages and 8 urban centers.

Table-1: Administrative Divisions

SL.	NAME OF	HOBLIES	NO OF	URBAN	GRAMA	AREA IN Sq.
NO	TALUKA		VILLAGES	CENTERS	PANCHAYATHS	Kms
1	Byadagi	2	66	1	20	436
2	Hanagal	3	155	1	40	773
3	Haveri	3	90	1	31	779
4	Hirekerur	3	129	1	37	806
5	Ranebennur	3	108	1	35	907
6	Savanur	2	65	1	20	539
7	Shiggaon	3	92	2	25	588
8	Total	19	705	8	208	4848

Source: District at Glance – District Statistical Office Haveri

Physiography

Topography plays an important role in the transportation network development. The topography of the study region is examined with this perspective. The distribution of settlements and the concentration of population along with the cultural aspects of a region is largely governed by physical features like land forms, relief and drainage system. Physical environment to large extent is responsible for the distribution of human activities. The relief features of the study area are divided into the three sub-micro regions on the basis of topography, climate and natural vegetation and are as follows and its resources to pose plan for further development of a region. The study area is comes under the semi malnad region.

Hilly Region(Malanad):

This region axtends over western part of Haveri district largely covering the taluks of Shiggoan, Hanagal, Hirekerur and Ranebennur. Its total area is 921.12 (19%) square kilometers and makes its boundaries with the districts of North Canara in the west, Dharwad district in the north, Shimogga in the south and frontier area in east. Physiography, the region represents undulating and often parted Western Ghats region. The malanad or hilly region extended from 25 to 30 kilometers, wide in the western part of the district. Among all the hills of this region, Dundashi and the Hanagal hills are the smaller and roundish in shape. In the south western part of the region the Masur and Marvalli hills are steep and spread in the eastwest direction. The average height of these is 732 meters above the mean sea level and the tallest peak is observed at a height of 825 meters, central part is largely covered with stony wastes and gravels.

Settlement Characteristics:

The settlements are the basic components of man and his system of movement on geographical space. At the initial stages they are the outcomes of the man's hunch for comfortable living but are shaped to a greater extent by the physical environment. At the later stages they get modified by the socio – economic, cultural and sometimes by the political factors. These factors are the function of the resource potential, man's knowledge about the utilization of the resources and the scale of necessity for the resources. Since these vary considerably over space, the resultant factors exercise its different impacts over the settlements in different areas. However the physical environment continues to exercise its clutches over the settlements, their characteristics and distribution, unless otherwise it is totally countered by the factors.

Urban Settlement:

The proportion of urban population to rural population of Haveri district worked out to be 22.27 percent. Haveri district is the less urbanized district of Karnataka State with the 19 rank. In 2001 the urban population formed 20.79 percent of the total population of the district, the corresponding average for the state being 30.92 percent. Haveri holds 20 rank still earlier, in 1991 the total population of urban population in the district was much lower, because of present Haveri district was not formed, it was included in the Dharwad district. Haveri district has suffered in a definite set back in the matter of urbanization. But after formation of district, the process of urbanization gradually picked up the necessary movement and during the past decade the size of the urban component has steadily increased. The economy of the district being predominantly agricultural, this is perhaps the main reason for its slow growth of urbanization.

The distributional pattern of towns in Haveri district is not uniform; the concentration of towns is noticed along the National Highway No-4 and State Highways, which connects the capital cities of neighboring States. There are four urban centers according for 66.83 percent of urban population. Shiggoan, Haveri, Ranebennur and Kumarpattanam lie along the NH-4. Whereas Hanagal, Hirekerur, Byadagi, Bankapur and Savanur lie along the State Highways and broad gauge railway line passes through the district which connects the urban centers of Savanur, Haveri, Byadagi and Ranebennur. The undulating topography with unfertile soil and water scarcity has caused the uneven distribution of the centers. The national and state highways might have attracted the people.

The intensity of urbanization in the district can be well example by the progress of towns during 1951-2011. The last three decades witnessed sporadic increase not only in urban population but also in the number of towns. Byadagi, Kumarpattanam and Ranebennur are developed as industrial and trading centers due to their nodality. Haveri is an administrative headquarter of the district emerged as city municipal council. Byadagi, Hanagal, Savanur and Shiggaon are talukas headquarters declassified as town municipal council. Hirekerur and Kumarpattanam identified as town panchayath with the population of less than 20000persons.

RuralSettlements:

Geographers are paying an attention in the study the rural settlements, their distributional pattern on given space the spatial distribution of rural settlements reflecting the rural development in general. Therefor an attempt has been made to study the settlements. In the study area the average density of rural settlements is observed to be 0.14 per square kilometers i.e. one settlement having 0.94 square kilometers of area. This is too low in comparison to most of the areas within the state as well as the other districts. This conform the fact that the physiography in this district has sufficient binding on the settlements. The analysis of the pattern, in the context of administrative unites has shown the number of villages at taluka level. Irrespective of size the taluka of Hanagal has the maximum number of villages (154) and is followed by Hirekerurtaluk (126) and their respective percentage is 22.06 and 18.05. The minimum number of villages is found in Byadagi (64) and is followed by Savanur (65) taluks i.e. 9.16 and 9.31 percent respectively of the total.

The number of villages at taluk level gives an inaccurate picture until the analysis related to the area of the administrative units. The major parts of the area is confined to the eastern parts of the district has 11 to 14 villages per 100 square kilometers area. The minimum possible is found in the taluka of Haveri i.e. 11 per 100 square kilometers area. Eventhe taluk of Ranebennur which has the maximum number of villages (108) records only 0.12 villages per square kilometers of land. The western margins of the region are better placed in this respect. The number of villages per 100 square kilometers area varies from 15 to 20. The highest 20 villages per 100 square kilometers of land is found in Hanagaltaluk and both of Hirekerur and Shiggaontaluks are having 15 villages per 100 square kilometers of area.

The existing pattern is in accordance with the regional variation of factors controlling the rural settlement pattern. Areas with highest number of villages are those which have irrigated cultivation, good network lines of transport. Contrary to these areas, are those which have the maximum waste land, lowest rainfall and absence of cultivation consequently, they are least number of villages.

Transportation:

Transportation means movement of people and goods from one place to another. In the present day economy the movement has gained so much of importance that without the media of movement and movement facilities the life will almost come to a standstill, which many of us have experienced quite often at the time of power and fuel shortages due to transport bottlenecks. The movement in the district can be divided into two categories i. e. roadways and railways as no town of Haveri district is linked by air routes.

TABLE: 2 - Distribution of Transportation and Communication Network in Haveri District-2011

SL.	NAME OF	ROAD	SURFACE	RAILWAY	POST	NO OF
NO	TALUKA	DENSITY/100	ROAD	LINES / 100	OFFICE/1000	VILLAGE/
		SQ. KMS	LENGTH/100	SQ KMS	POPULATION	POST
	A 16		SQ KMS		10	OFFICE
1	BYADAGI	<mark>12</mark> 1.08	308.32	3.44	9.95	2.78
2	HANAGAL	14 <mark>3.98</mark>	641.04	-	9.02	3.58
3	HAVERI	10 <mark>8.07</mark>	460.46	3.87	9.09	2.02
4	HIREKERUR	144.56	609.37	-	10.01	2.73
5	RANEBENNUR	87.96	470.56	2.98	10.83	2.02
6	SAVANUR	106.08	356.01	4.82	12.02	2024
7	SHIGGAON	129.03	359.55	-	10.66	3.03
8	DISTRICT	121.07	320.56	2.04	10.07	2.69

Most part of the area under study is linked by the State Hhighway (S H) major district roads (M D R) and other district roads (O D R). About 103 kilometers of National Highway serve the area of district. The NH-4 bifurcation at Haveri links Punjim (Goa) through Hanagal, runs 33kilometers in the district. The other important roads constitute the State Highway and Major District Roads. A number of state highways run throughout the district and join almost all the district head- quarters while the major district roads link and the taluka head- quarters and interior parts are linked by other district roads. This will be clear from the comparative picture of the region in related to the state is evident from the above table No 2.3. The region's figures, both for the length of road per lakh population and per hundred square kilometers are higher than

the Karnataka state as a whole. But duo to high traffic intensity the roads are in a bad state of repair. Again the intensity of traffic is increasing at the rate of about 3 percent per annual which will pose problems in the near future. This is mainly because the district lacks in railway transport which is again due to backward ness in industrial development and the district is mainly depend on agricultural economy.

The taluka level variation in road density is also quite satisfactory. The three taluks with highest density of roads per lakh population are Hirekerur (504.41 kms) Hanagal (426.03 kms) and Shiggoan (403.41 kms). But while considered road density in per 100 square kilometers of area the first two taluks are Hirekerur (144.56 kms) and Hanagal (143.98 kms). The Shiggoantaluk has a very high figure because of very sparse population but when the density of roads per 100 square kilometers is considered it is occupied second place in the district. But Hirekerur and Hanagal are more advanced inroad communication both in terms of population served and area served because of rich forest, many state highways passes through the taluks and more number of settlements distributed. Shiggaon (129.03 kms) and Byadagi (121.08 kms) taluks have higher the road density than the district average. Haveri (108.07 kms), Savanur (106.80 kms) and Ranebennur (87.96 kms) are the only talukas which are below the district average (121.07 kms).

The district is very poor served by railways only the Miraj – Bangalore broad gauge line passes through the district with length of four out of a total seven taluks are having railways facilities of 99 kilometers. Even the route density comes down to only 2.04 kilometers / 100 square kilometers of area for 0.61 kilometers / 1000 population. This shows the poor level of railway transport and physiography – economic environment has restricted the development in railway transport in the region. When the railway per hundred square kilometers is considered with that of the Haveri district they are very insignificant.

Table No: 3 – Talukwise length of various roads in Haveri District

							and the same of th
SL NO	NAME OF	NH	SH	MDR	VILLA <mark>GE</mark>	OTHER	TOTAL
	TALUKA			1	ROAD	ROAD	ROAD
1	BYADAGI	13	46.60	188.32	412.40	38.87	699.19
2	HANAGAL		114.48	321.40	602.73	57.92	1096.53
3	HAVERI	20	113.06	280.46	694.93	100.45	1208.9
4	HIREKERUR	-	95.86	347.37	602.91	114.27	1160.41
5	RANEBENNUR	32	83.03	288.56	701.72	110.94	1216.25
6	SAVANUR	5	34.69	181.55	450.39	14.50	686.13
7	SHIGGAON	31	99.49	236.10	528.24	12.25	907.08
8	DISTRICT	103	588.21	1843.67	3993.32	449.20	6977.4
	TOTAL						

Source: Executive Engineer Office PWD Haveri 2011

The development of the economic system is a long term and a continuous process and is a result of Geo - historic, socio - cultural and political factor. This fact is true for all the economic activities including transportation which forms one of the basic economic activities. Because through this process men and materials move from one place to another place ,thus form spatial linkages between them .Therefore there is a need of hour to made an attempt to study the pattern of road transportation, types of roads and its network as exists today .Haveri district is one of the most important which connects north Karnataka and south karnataka. It has an area of 4851.56 square kilometers with the population of 1597768 are distributed in 699 settlements in the district.

Transport system is the backbone of economic development, because the entire economic activities are carried out by the transport system. It is functioning just like nerve system in the human body. The roadways are connecting the places from one in to another which are further inter-connected between them. In the district roads provide the most fundamental mode of transportation. Transport provides very good services to the development of economy. Industrial and commercial activities and their development can be assessed with the economic advancement of region with the means of efficient and effective transport system.

The physiography of Haveri district as already highlighted, the physiography is well guiding the transport system in the study area. As per the transport system of Haveri district is concerned, the present study made an effort to focus the attention towards the pattern of road transport system, types of the roads and vehicles flowing on various roads in the district.

The general road pattern of Haveri district is clearly shown in the road map. By the careful observation of the map one can notice that the most important road in the district is Poona —Benglure national highway no-4 (NH-4) which is the backbone of the entire road transportation in the Haveri district. The length of notional highway is about 103 kilometers which runs from north to south direction. The another important type of road in the district that is state highway which constitute about 588.21 kilometers. The major district road flows about 1884.91 kilometers and village road exist to the length of 4821.60 kilometers which connects village to village. In the district, total road length is about 7416.32 kilometers.

National Highway

There is one national highway that is NH-4 passing through the district, its length 103 kilometers with in the district and it connecting Haveri, Shiggaon, Bankapur, Motebennur and Ranebennur cities of the district.

State Highways

The state highway is the main criteria of trade and commerce and passenger transport in the district, Connecting every towns in the district, these are the second important roads in the district. There are eleven state highways where passes in the district with the length of 588.21 Kilometers. Namely as follows

- 1) Padubidri Chikkalgudda Road: State highway No -1 is having total length of 64.64 Kilometers and passing through Hanagal to Tadas.
- 2) Ekkumbu molaklmur: The state highway No. 2 is having the total length of 77.82 Kilometers and passing through Guttal, Basapur, Haveri, Adur, Akkialur.
- 3) Karwar Ilakal the state highway No- 6 is having the total length of 42.62 Kilometers and passing through Bankapur and Savanur.
- 4) Kalmala Shiggaon: the state highway No 23 is having the length of 19.97 kilometers and passing through Shiggaon, Hulgur and Attigeri.
- 5) Halageri Hulikall: the state highway No 26 is having the total length of 28.95 kilometers and passing through Ranebennur, kuppelur and Tumminakatti.

- 6) Bagalkote Biligiriranganabetta: the tsate highway No 57 is having total length of 55.65 kilometers and passing through Moral, Negalur, Guttal, Ranebennur, Halageri, Rattihalli and Masur.
- 7) Haveri Sagar: the state highway No 62 is having the total length of 56.64 kilometers and passing through Haveri, Kaginele, Haunsbhavi, Hirekerur.
- 8) Kumata Sirasi: The state highway No 69 is having the total length of 15.90 kilometers and passing through Tadas.
- 9) Beerur Sammasagi: The tsate highway No 76 is having the total length of 8.37 kilometers and passing through Hirekerur, Koda and Halgeri.
- 10) Gajendragada Sorba: The tsate highway No 136 is having total length of 61.05 kilometers and passing through Hosaritti, Motebennur, Byadagi.
- 11) Navalguda Banavasi : The state highway No 137 is having total length of 47 kilometers and passing through Hanagal and Bankapur.

Taluka wise distribution of state highway length as concerned Hanagaltaluka have first place which having total length of 114.48 kilometers, second highest Haveritaluka which having the total length of 113.06 kilometers andthird highest length of state highway in Shiggaontaluka (99.49 kilometers) and followed by Hirekeru, Ranebennur, Byadagi and Savanur.

Major District Roads:

Major District roads are another important type of road transport in the study region, the major district roads are connecting different nodes and taluka head- quarters major district road has 1843.67 kilometers of total road length of the District. Hirekerurtaluka having maximum length (347.37 kilometers), Hanagaltaluka has 321.40 kilometers, Ranebennurtaluka having 288.56 kilometersHaveri has 280.46 kilometers and following Savanur, Byadagi and Shiggaontalukas. As compared to national highway and state highway the major district roads are playing an important role in the interior part of the district along with village roads. Almost all roads are interconnected to the state highway and National highway in the district. Because of this interconnection, it can be helpful to the people who are traveling from one place to another place to moment of goods and services in the district.

Almost all major roads are in a single line with the width of 2.00 meters having 1.00 meter of shoulder line. These roads are very congested for the vehicles passing on these roads. Even though the major district roads are useful to the passengers who are traveling and also carrying their goods and not only in towns and also in villages

Village Roads:

Village roads are major roads which connecting the rural settlements, Village roads are playing an important role not only connecting the villages but also interconnected to various national highways, state highways, major district roads and other roads. these are unmetalled roads the village roads have 3993.32 kilometers at total length in the district with the width of 2.00 meters and 1.00 meter of shoulder line. Highest length of distance that is 701.73 kilometers has been observed in Ranebennurtaluka followed by Haveri

(694.93), Hirekerur (602.91), Hanagal (602.73), Shiggaon (528.24), Savanur (450.39) and Byadagi with a least length of 412.40 kilometers.

Other District Roads:

The other district roads are minor roads, these roads also unmetalled road, other district roads with a length of 449.20 kilometers observed in the district, these types of roads is meant for irrigation canal, forest department roads. These roads are observed highest lengthin Hirekerur (114.27 kilometers) taluka and followed by Ranebennur, Haveri, Hanagaland the least length of other roads has noticed in Shiggaontaluka and Savanurtaluka which is the length 12.25 and 14.50 kilometers respectively.

An attempt has been made to highlight about the vehicles flowing on various roads in the study region. There are four type of vehicles namely, two wheelers, three wheelers, cars and trucks. There are 16 category of the vehicles have been registered by the Regional Traffic Office (R T O) in the study area. As per as the number of vehicles are concerned the motor cycles have the highest in number 109461 out of 194514 total percentage 56.27. The Scooters has got second place it has 15.47 per cent and Tractor 6.48 per cent and Trailers 6.10 per cent respectively. Since the tractors are also flowing more number in the district as a multipurpose use of agriculture as well as other services. Hence it has 12620 in number and 6.48 per cent.

SUMMARY AND CONCLUSION

The Geography of transportation is concerned with the study of its location and development functions or operation with the territorial economic complexes of countries or regions. It has the significant relationship with the location of industry, agriculture, settlements, population and of natural phenomena and resources. It is a major part of the "Geography of circulation" and provides a new and deeper in sight to the meaning of areal differentiation.

Today with the technological advancement in the world, we can reach any places in the world even the most inaccessible areas like hilly, rocky areas etc, can easily reach due to the development of technological advanced in transportation. This has provides the way for different technology. Now a days verities and types of vehicles manufactured in the world.

As per as the study region is concerned there is one National Highway it plays an important role in the economy of the district. Because most of the economic activities are carried out through this efficient road, Pune – Bengalore National Highway No-4 it start from north-western part of Haveri district and has the length of 103 kilometers out of 6977 kilometers of various roads in the district and this National Highway connects the major commercial centres are Shiggaon, Haveri and Ranebennur.

There are 11 State Highways are passing through the district, with a distance of 588.21 kilometers. Hanagaltaluka has highest length of 114.48 kilometers whereas Savanur has least length of 34.69 kilometers. Haveritaluka has 113.06 kilometers and followed by Shiggaon, Hirekerur and Ranebennur with a length of 99.49 kms, 95.86 kms, and 83.03 kilometers respectively.

There are various major district roads connecting different parts of district. The total length of 1843.67 kilometers connected with different nodes and talukas headquarters. As compared to National Highway and State Highways the Major District Roads are playing an important role in the interior part of the district along with village roads.

Village roads are playing an important role not only connecting the villages but also interconnected to various National Highways, State Highways and Majior District Roads. It has 3993.32 kilometers and highest length of distance 701. 72 kilometers has been observed in Ranebennurtaluka and least length of 412.40 kilometers in Byadagitaluka.

Other district road with a legth of 449.2 kilometers, observed in the district, this types of road is meant for irrigation, canals, forest roads. These are the roads have been observed highest in Hirekerurtaluka(114.27kilometres), and least length of 12.25 kilometers in Shiggaontaluka.

The general road pattern of Haveri district is clearly shown in the road map. By the careful observation of the map one can notice that the most important road in the district is Pune – Bangalore National Highway No - 4. Which is one of the backbon of the entire road transportation in the district. The length of National Highway is about 103 kilometers, which runs from north to south direction. Another important road in the district is State Highway which constitutes about 588.21 kilometers. The Major District Road(1843.67 kilometers), Village Roads(3993.32 kilometers), and Other Roads(449.2 kilometers).

There are 16 category of the vehicles have been registered by the Regional Traffic Office (R T O) in the study area. As per as the number of vehicles are concerned the motor cycles have the highest in number 109461 out of 194514 total percentage 56.27. The Scooters has got second place it has 15.47 per cent and Tractor 6.48 per cent and Trailers 6.10 per cent respectively. Since the tractors are also flowing more number in the district as a multipurpose use of agriculture as well as other services. Hence it has 12620 in number and 6.48 per cent.

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