

CHAPTER VII

TRANSPORT AND COMMUNICATION

The new Bangalore founded by Kempegowda had limited area and had narrow cartable lanes besides which were lined shops and houses. Some of the main roads were broad enough as cars or *rathas* passed through them during car festival. The Rangaswamygudi Beedi must have been definitely broader as it was the *ratha beedi* of God Ranganatha. The goods were transported on bullock backs, or as head load across ghat paths. Francis Buchanan mentions roads above the ghats around Bangalore district, where asses were used for carrying luggages. Roads appear to have improved during the reign of Kempegowda when the fort was built. Even for the purpose of trade and military activities roads were improved. With the introduction of 'Anche' by Chikdevaraya, improving the road network got a fillip. The question of making the distant places accessible to the Anche messengers regularly helped the improvement of roads. During the days of Haidar and Tipu roads were further improved for military purposes, specially for the movement of cavalry and guns. Dr. Buchanan mentions about the road he travelled from Malur to Bangalore and from there to Srirangapattana *via* Kengeri, Bidadi, Ramanagaram, Channapatna, Maddur and way back he travelled from Channapatna to Bangalore and then on to Dodaballapur.

It appears that the princes and warriors used horses as the mode of conveyance, while the palanquins were used for transporting nobles, rich persons and other travellers. The professional palanquin bearers were hired by the traders, princely class etc. These bearers were called *Khalihaths* who were maintained by the State on the main road from Palamner to Mysore *via* Bangalore. "Everywhere in Karnata they were of Telinga descent, and in their own families spoke the language of their original country". In the language of Karnataka they were called Bui says Buchanan. The practice of carrying *hasibe* (a shoulder bag) or a *kaadi* (weights tied on ends of pole) was prevalent in this district also as elsewhere in other district. By 1831 a road connecting Naikneri and Mysore passed through

Bangalore, and there was another road connecting Bangalore and Harihar. The latter road was perhaps the only road worth the name according to Col. Green's report. These roads and most of other pedestrian roads were not in good condition and it is said that people moving towards Bangalore were stranded for days along with their luggages due to the bad condition of roads in rainy season. With the growth of the city and also the improvement in trade and commerce the road network gradually improved.

During the direct British rule in Bangalore district, much efforts were made for the improvement of roads to connect Mysore with Bangalore as this was also the road connecting the Nilgiris with Madras. The local self-government bodies which were established in 1862 looked after the upkeep and maintenance of roads. Prior to that in 1856, the Public Works Department, a department to look after the task of road building was formed in the administration of Mysore State, which was formerly called Maramat department. With the formation of the Public Works Department, a methodical classification of all the roads, which were existing and the future roads was attempted. Accordingly the classification was Class I-Metalled (a) with bridges or ferries and drains; (b) partially bridged and drained; Class II-unmetalled (a) with bridges or ferries and drained (b) partially bridged and drained; Class III-Banked and surfaced, but not drained; Class IV-Banked but not surfaced, partially bridged; Class V-cleared and partially bridged and drained; Class VI- cleared only. Generally the Class I (a) roads had avenues of trees planted along. Roads were constructed mostly during famine as a famine relief measure and some times forced labour was also deployed. The cost of road building was made good by road cess and by tolls. During 1831-56, a sum of Rs. 20.75 lakhs was spent on roads in this district. Most of the important headquarter stations were connected to Bangalore during this period and few roads extended to all sides of frontier state. When the revenue by the cess and tolls increased, the maintenance of subordinate lines of road previously maintained by the Public Works Department was looked after by the District Local Fund. Later the roads were reclassified as State Fund Roads or District Fund Roads according to the allotment of funds for construction and maintenance from the State or District Revenue. Those roads were further classified as metal roads or gravelled roads depending on the nature of surface. At this period, in the Bangalore district (composite) there were 345 km of State Fund Road with cost of maintenance of Rs. 84,000 and 728 km of District Fund Roads with the cost of maintenance of Rs. 52,000. On the Bangalore Division the length of roads in various classes maintained was as follows: I Class or Imperial Roads 212 kms; II Class or Provincial Roads 98 kms; III Class or District Roads 70 kms; and IV Class or Cusbah Roads-not known; and the total outlay was Rs. 41,122.

Around 1860-70, the following were some of the roads existing in the district.

- (1) From Naikneri to Mysore *via* Bangalore
 - (2) From Bangalore to Harihar
 - (3) Bangalore-Magadi Road.
- By 1900, the following were some of other roads existing

in the district. 1) Bangalore-Nilgiri Road; 2) Bangalore-Mysore (via Kanakapura) Road; 3) Bangalore-Honnar Road; 4) Bangalore Madras Road; 5) Bangalore-Hyderabad and many other roads. By 1920-25, there were 212 miles (239 kms) of Provincial roads, maintained at an annual cost of Rs. 72,500. District roads of a length of 458 miles (732 kms) existed in the District. The following were the provincial and District fund roads (as per the available information). *Provincial Roads*: Madras-Cannanore; Salem-Bellary; Bangalore-Bellary; Bangalore-Cud-dappah (Kadapa); Bangalore suburban roads; and Bangalore-Hindupur Road. *District Fund Roads*: Kolar-Somapur via Nandi, Melkote-Doddahejjala; Hoskote-Anekal; Kodugodi Railway Feeder Road; Bangalore-Magadi-Huliyardurga road; Bangalore-Mysore via Kanakanahalli; Kodihally-Satrur; Iggalur-Anekal-Gummalapur; Bangalore-Dommasandra; Bangalore-Nandidurga; Bangalore Suburban Roads and other roads.

In respect of road development under Nagpur Plan which was perhaps a break through suggested to reclassify the roads as National Highways, State Highways, Major District Roads, Other District Roads and Village roads. As in 1956, the length of roads of NH, SH, MDR, ODR and VR in Bangalore District (both Rural and Urban), was 160 km, 163 km, 500 km, 317 km and 166 km respectively. The total road length per 100 sq km area was 35 in 1956. By 1987, in the whole of Bangalore District, the National Highways increased to 197 km (increase of 23.13 per cent), the State Highways increased to 271 km (66.25%), the Major District Roads to 876 km (75.25%), the Other District Roads to 309 km and village roads to 2,567 km (54.64%). The Nagpur Plan envisaged a rationale for the formation of roads laid down that in a highly developed agricultural area no village should be more than 3.2 km away from a road or 8 km away from the main road. Accordingly most of the villages in the district have been connected by roads. Some of the villages have been acquired by the B.D.A. and they come within the City.

The maintenance of roads is undertaken by the Public Works Department ever since its formation. Of late in Bangalore, the other agencies like the Taluk Development Board, Bangalore Development Authority and the Karnataka Electricity Board, are also looking after the maintenance of roads, under their control. The National Highways are maintained by the Chief Engineer, National Highways assisted by Executive Engineer and Assistant Executive Engineer. The cost of maintenance of National Highway is further reimbursed by the Central Government from 'Road Funds'. The taluk-wise road length of National Highways in the district are as follows:

Bangalore South 22 km, Bangalore North 22 km, Anekal 14 km, Total 58 km. The length of National Highway as in 1989 was nearly three per cent of the total length of NH in the State. The tables showing the length of roads under different categories from 1956 to 1986 in Bangalore district and taluk-wise figures are given here.

Category-wise and surface-wise road length in Bangalore District (including Rural district) from 1956-1987)

Year	NH	SH	MDR	ODR	VR	TDS	Forest Dept.	Total	Road length per sq.km.
1956	160	168	500	312	-	1649	11	2800	35
1961	160	168	735	356	352	1889	5	2865	35
1966	160	217	751	495	559	1433	5	3530	44
1969	160	217	756	417	624	1495	5	3674	45
1975	197	180	753	417	985	2602	-	5134	54
1980	197	271	699	419	2050	2460	-	6096	41
1985	197	271	877	309	2949	2349	18	7070	88
1987	197	271	877	309	2949	2449	18	7069	88

NH: National Highway; SH: State Highway; MDR: Major Dist. Roads; ODR: Other Dist. Roads; VR: Village Roads and TDB: Taluk Development Board Roads.

Source: Public works Department - Karnataka

Besides roads in the different areas coming under the jurisdiction of Bangalore City Corporation, Bangalore Development Authority and Bangalore Water Supply and Sewerage Board are not included in the table. Further, major Public Sector Undertakings like Hindustan Aeronautics Ltd., Hindustan Machine Tools, Bharath Earth Movers, Bharath Electronics, Defence Establishments like NAL, DRDO, Military Colonies, MEG Centres etc. have their own colonies and roads under their control.

Taluk-wise road length in Bangalore Urban Districts as in 1987

Name of Taluk	NH	SH	MDR	ODR	VR	Total	CC	BT	WBM	Total
Bangalore South	22	43	80	11	974	1130	16	208	106	3301
Bangalore North	22	18	34	58	350	482	--	212	84	296
Anekal	14	-	97	1	311	423	--	128	98	226
Total	58	61	211	70	1635	2035	16	548	288	852

NH: National Highway, SH: State Highway, MDR: Major District Road, ODR: Other District Road CC: Cement Concrete, BT: Black Top, WBM: Water Bound Maccadam.

Rural Communication Programme.

Bangalore Metropolitan City does not find a place in the rural communication network. But Anekal taluk and other adjoining villages are covered under this programme. This programme was envisaged in 1959-60 with the object of connecting rural areas by fair weather roads. This programme consisted of (1) Construction of rural roads; (2) construction of missing links and (3) construction of cross drainage works with linear water-way of more than 6.10 metres on non-PWD roads. Roads constructed under this programme were provided with only gravel on local soil and these roads were mainly intended for cart traffic. The length of such completed roads under Rural Communication Programme in Bangalore district (including Rural district) as in 1966 was 1,403 km; in 1969-1,432 km; 1974-1,618 km; 1978-2,021km; 1979- 2,046 km; 1982-2,101 km, and the amount spent was Rs. 209.13 lakhs. As in 1982, two villages in Bangalore South, two villages in Bangalore North and four villages in Anekal taluks were not connected by any roads.

The Rural Communication Programme was further widened and programmes such as (1) Minimum Needs Programme-a scheme to provide all-weather roads to villages having a population of 1,000 and above, (2) Halli Heddari scheme-providing approach roads to roadless villages having a population of less than 1000, (3) Sethubandhana-construction of cross drainage work on non.P.W.D. roads, (4) C.D. works-construction of cross drainage works on rural roads, (5) Integrated Comprehensive Rural Communications Road-row formations and improvements to existing ICRC Roads to make them Fair weather roads, (6) Railway safety works, construction of approach embankments to over-bridges and under bridges and conversion of unmanned level crossings, (7) People's participation programme-a scheme for taking up village roads with labour contribution from the villagers and (8) Tribal Sub-Plan providing all weather approach roads to tribal areas.

This programme envisages the connecting of all the villages in the district with accessible roads. Accessibility of villages is defined as providing all weather roads upto the periphery of the village. In the recent years, an ardent need has been felt to make all the villages accessible by all-weather roads for the all-round development of rural economy and thus to pave the way for the integrated development of rural areas. As in 1985 the accessibility of villages in the district is as shown in the table.

Name of Taluk	No. of villages connected by				Total
	All weather roads.	Fair weather roads.	Katcha roads	Not connected by any roads.	
Bangalore South taluk	68	43	50	-	161
Bangalore North taluk.	25	34	71	1	131
Anekal	58	94	56	1	209
Total	151	171	177	2	501

Traffic Census

Periodical Traffic Census and transport survey are being conducted by the State and also by other agencies in Bangalore with the object of collecting basic data on all aspects of roads. The total quantity of goods and the value in lakhs of rupees carried by lorries on National Highways per day of 24 hours during 1981-82 was 1,29,940 metric tonnes and Rs. 2,410.70 of which food products was 27,107 and 358.65; construction materials, 22,558 and 20,815; petroleum products 11,381 and 105.45; commercial products 49,209 and 7,165.45; and other items 19,685 and 573.

The traffic on National Highways is very much on the increase in view of the immigration and the growth of trade and commerce in Bangalore City. The following table gives the traffic volume intensity on various National Highways in the district in 1981- 82.

Traffic volume intensity - (vehicles plying per day of 24 hours) in Bangalore				
National highway	Heavy vehicles	Light vehicles	Slow vehicles	Total
1981-82				
No. 4	18,443	18,138	97	36,678
No. 7	10,109	8,422	209	18,740
No. 48	1,735	832	97	2,664.
1985-86				
No. 4	59,863	41,181	2,710	1,03,754
No. 7	18,948	22,495	4,168	45,611
No. 48	NA	NA	NA	NA.

It is found that the increase in the traffic intensity in a period of five years is to the extent of 300% on NH 4 and 250% on NH. 7. At a particular point on any one day, the number of vehicles on NH, per minutes was 24 in 1981-82 and rose to 72 in 1985-86.

Statement showing the details of distances of origin and destination of Motor vehicles plying on National Highway per day of 24 hours as observed in the detailed road traffic Census and Road Transport Survey in Bangalore in 1981-82

	ORIGIN				DESTINATION				Total
	Within 50 kms.	50-100 km.	100-300 km	Above 300 km.	Within 50 kms.	50-100 km	100-300 km	Above 300km	
1	2	3	4	5	6	7	8	9	10
Buses	7562	1014	583	1051	6395	1368	735	1712	10210
Lorries	12425	1642	1436	4301	10821	1985	1740	5208	19804

1	2	3	4	5	6	7	8	9	10
Other Vehicles.	24944	1184	601	936	21500	2209	1074	2882	27665
Total	44931	3840	2620	6288	38716	5562	3599	9802	57679

Statement showing the traffic intensity at some important points of intersection in Bangalore City.

Points of intersection	Vehicles/minute	
	1981	1982
1. Malleshwaram Circle	58	66
2. Basaveshwara Circle	83	114
3. Orient Building Circle	96	106
4. Minerva Circle	70	69
5. Bharath Circle	66	50
6. Town Hall Circle	91	95
7. Corporation Circle	109	178
8. City Market Circle	90	128
9. Briand Square	49	92
10. State Bank of Mysore Circle	112	113

Average number of vehicles moving in some selected centres in Bangalore City in three periods in a day i.e., morning (9AM-12 noon) afternoon (12 noon-3PM) and evening (4PM to 7 pm) in 1981 and 1982 is given in the following table

AVERAGE NO. OF VEHICLES PER CYCLE OF 3 HOURS.

Points	Mor- ning	After Noon	Even- ing	Average per day	1981		1982		% in- crease
					Mor- ning	After Noon	Even- ing	Average per day	
Malleshwaram Circle	106	101	114	107	112	113	141	122	14.0
Basaveshwara Circle	162	166	123	150	199	203	217	206	35.9
Oriental Bld. Circle	134	128	138	133	132	147	169	149	12.0
Minerva Circle	159	125	187	157	124	125	155	135	-14.0
Bharath Circle	152	118	116	125	92	66	106	88	-32.8
Town Hall Circle	116	118	117	117	168	139	121	143	22.2
Corporation Circle	110	130	160	133	213	121	245	193	45.1
City Market Circle	114	114	133	120	163	165	174	167	39.1
Briand Square	106	91	117	105	123	105	163	130	23.8
State Bank of Mysore Circle	236	236	223	232	345	248	301	298	28.4

Average traffic volume plying per day of 24 hours in Bangalore District.

Type of vehicles	1970-71			1975-76			1981-82			1985-86		
	HV	LV	SV	HV	LV	SV	HV	LV	SV	HV	LV	SV
State Highways	400	542	79	641	556	57	840	1225	64	1846	2342	78
Major Dist. Roads	NA	NA	NA	160	160	59	154	225	53	586	1323	68
Other Dist. Roads.	NA	NA	NA	96	73	91	148	222	64	694	854	186
Village roads	NA	NA	NA	41	34	112	119	79	301	216	250	81
TOTAL				938	823	319	1301	1751	482	3342	4769	413

HV: Heavy vehicles; LV: Light vehicles SV: Slow moving vehicles. (Source: P.W.D. - Karnataka)

In Bangalore City Corporation the road length was around 324 miles (519 km) in 1950 and the approximate number of vehicles using the road was 20,000 and about 50,000 bicycles, besides carts and pedestrians. As per the Traffic Survey in 1961, about 12,000 vehicles (4,000 lorries) entered and left the city everyday. Out of them 40 per cent was through traffic. The daily number of scheduled transport buses arriving in and going out was 680 and the average number of passengers travelling daily by the city services was about 26,000.

The busiest stretch of the road was between the Town Hall and Corporation Offices carrying a total number of 27,000 vehicles including 14,000 bicycles and 11,000 automobiles between 8 A.M. and 8 P.M. on any one particular day (24th and 25th April 1962). During the peak hour the volume of traffic was 3,000 vehicles which included 1,900 bicycles. The following were the centres of intensive traffic activity in the city. (i) The City Railway Station, (ii) The City Market, (iii) The Kempegowda Road, (iv) The Russel Market, (v) The administrative centres containing offices and institutions, and (vi) approaches to the city on the eight traffic roads. The Traffic circulation sub-Committee made recommendations under two categories viz., long range scheme and interim measures for minimising the traffic hazards. The long range schemes that are recommended constituted parts of the overall transportation plan and included the following: Formation of three concentric roads as hereunder: (1) An inner ring road (Sheshadri Road, Nrupatunga Road, Swimming Pool Extension Road, Lalbagh Road, Mavalli Road, Hardinge Road, Albert Victor Road, Chamarajapet III Cross Road, Kemmangundi Road, Dharmambudhi tank road (West) surrounding the most important business centres of the old city and providing convenient means of access to and from any part of this crowded area, (2) An intermediate Ring Road (St. John's Church Road, Kensington Road, Richmond Road, Hosur Road upto Bannerghatta Circle, Jayanagar 22nd Cross Road, Patalamma temple Road, East Anjaneya Temple Road, North Anjaneya Temple Road, Bull Temple Road, Guttahalli Road, Pipe Line Road upto Magadi Road, Outer Chord road Rajajinagar, Inner Chord Road of Rajajinagar, Tumkur Road, Jayamahal and Nandidurg Road and Miller's Road) which was intended to connect the suburbs and other important residential areas with one another and to enable their inhabitants to travel to and from their places of daily or frequent business without traversing the busiest parts of the City. The inner and intermediate ring roads were aligned for the most part along existing roads and only short lengths of new road were required to supply gaps and ensure continuity of the routes; (3) An outer ring road was proposed to connect the several trunk roads at convenient points beyond the city limits so that goods in transit could be diverted to their destination routes without entering the city.

Bangalore City Corporation and Bangalore Development Authority have formed roads in Bangalore City. The road length in the Corporation limits was 480 km 1951, 960 km in 1974, and BDA formed 480 km road and by 1982, the road length in both BDA and BCC was 1,200 km and by 1989 it was 1,820 km. The important and busy roads in the city are the Narasimharaja Road, Goods Shed

road, Kempegowda Road, Road from Corporation Office to Town Hall, Kasturba Road, K.R. Road, Double Road, St. John's Church Road, Lady Curzon Road, Queen's Road and many other roads. In some of the areas, the roads were of grid iron model. But of late, asphalted roads are coming. The Different categories of vehicles plying on the roads in the City were two wheelers, three wheelers, cars, jeeps, buses, trucks, tractors, trailers and also jutkas and carts around 1956. The autorikshaws started plying in Bangalore City from 1950, initially ten vehicles secured licence. By 1967, the number of three wheelers including goods carriers was 1,341. Later autorikshaws carrying passengers increased and by 1987 their number was 11,574. Initially only two persons were permitted to travel in this vehicle, but from 1987, three are allowed.

Bridges

Bridges play a vital role in communication. There were only bamboo bridges, rope bridges and other temporary bridges using wooden logs during the reign of Tipu, when the army and artillery had to move. Many of these bridges could not be used in the rainy season. Modern bridges, built on tall piers have provided the facility of using the highways in all seasons. Statement showing the culverts and bridges that existed in Bangalore District as on 1987.

Bridges	Name of taluks			Total
	Bangalore South	Bangalore North	Anekal	
Culverts upto 6 mtrs.	209	272	256	737
Minor bridges, having a linear waterway of				
i) 6 mts-12 mts.	99	38	20	157
ii) 12 mts-18 mts	10	5	8	23
iii) 18 mts-24 mts.	2	-	1	3
iv) 24 mts-30 mts	4	2	2	8
v) 30 mts-60 mts.	-	1	-	1
vi) More than 60 mts.	-	-	-	-
Total	324	318	287	929

Road accidents

With the increase in the number of vehicles on the roads in the district, the number of accidents are also on the increase. The causes for the accidents have been classified as (a) due to human error (b) due to mechanical defects of vehicles (3) due to road situations including bad conditions and poor lighting. The table

showing the number of accidents from 1971-72 to 1982-83 in Bangalore district including urban is given hereunder.

Year	Total No. of road accidents.	Persons killed	Persons injured.	Accidents due to		
				Bad con- dition of roads.	Mecha- nical defects	Human errors
1971-72	1634	181	1543	--	--	1634
1972-73	1741	166	1415	--	--	1741
1973-74	2074	176	1722	--	3	2071
1974-75	1721	189	1685	2	20	1699
1975-76	2052	204	1790	1	22	2029
1976-77	2895	201	2616	-	2	2893
1977-78	3682	256	2976	1	15	3666
1978-79	4381	280	4108	-	8	4373
1979-80	4332	314	3221	3	43	4286
1980-81	4311	323	3614	7	10	4294
1981-82	4221	357	3350	175	73	3973
1982-83	4901	521	4125	NA	NA	NA

Statement showing the road accidents in Bangalore City in relation to the accidents in the district and the State from 1971-72 to 1981-82

Year	Bangalore City	As a percentage to the No. of accidents in	
		Bangalore District	Karnataka State
1971-72	1634	84.3	28.25
1972-73	1741	83.86	26.71
1973-74	2074	86.20	30.76
1974-75	1721	82.66	27.33
1975-76	2052	84.96	29.51
1977-78	3682	88.06	36.11
1978-79	4381	89.95	37.76
1979-80	4332	89.19	37.09
1980-81	4311	89.26	38.11
1981-82	4221	85.96	35.57

Table showing the motor vehicles accidents in Bangalore District during recent years.

Year	No. of accidents	No. of persons killed	No. of persons injured
1983-84	616	158	198
1984-85	5203	618	4761
1985-86	5842	655	5445
1986-87	6055	641	5822
1987-88	6459	504	4926

Statement showing the break-up of fatal and non-fatal accidents in 1982, in some important points in Bangalore City.

Important points	Total No. of accidents	Fatal	Non Fatal		
			Serious injury	Slight injury	Collision
Malleswaram	841	74	23	508	236
Seshadripuram	820	57	35	468	260
Ulsoor	888	74	53	498	263
Ulsoor Gate	695	54	41	399	201
Chikpet	410	30	25	226	129
Central	464	42	57	251	114
Total	4,148	331	234	2,350	1,203

Public Conveyance

As in other parts of the State, in this district also, Public Conveyances were not available till the beginning of 20th century. Traders, princely class and rich persons were taking the help of professional planquin bearers and the animal owners for transportation. Later bullock carts, started playing between important places like Bangalore, Mandya, Ramanagaram etc. and they were carrying men and materials. By 1910-20, *jutkas* were plying for carrying passengers from one place to another both within the City of Bangalore and outside. The fare was around 4 annas (25 paise) for a distance of about 5-6 kms. These *jutkas* were mostly used by the passengers arriving at Bangalore by train.

In Bangalore around 1929, conveyance were phaetons, motor cars, governess' carts, rickshaws, motor lorries, omnibusses, bullock carts and *jutkas*. The Municipal tariff rates were for a first class rubber tyred phaeton 25 paise for the first hour or part of an hour, if engaged before midnight, and 8 annas (50 paise) for

every additional hour. For every hour after midnight 10 annas (62 paise) For 6 consecutive hours Rs. 4 up to midnight, but if engaged for 6 consecutive hours and going beyond 12 pm. Rs. 6. A drop trip not exceeding 3 miles was charged for at 25 paise and for every mile or part of a mile in excess of this limit, 25 paise. If a carriage was engaged only for a drop trip but is detained *enroute* for some reason, an additional charge of 1 anna and 3 pies (8 ps) per quarter hour was made. Some of the Phaetons were exceptionally good, and the coachman used to be in attractive livery. It is no exaggeration to say that the Bangalore phaeton was far superior to the *gharry* obtainable in Calcutta or the Victoria to be had in Bombay. Governess carts or iron tyred phaetons were classified as Second class carriages and could be hired at 20 to 33 1/3 per cent cheaper than a first class phaeton, with the exception of the charge made for the first hour which was the same as that charged for a first class phaeton.

Motor vehicles were seen on the roads of Bangalore after 1901. There were no Municipal Tariff rates for the hire of Motor cars or Motor Lorries. The usual charges for the hire of a motor car were 6 annas (36 paise) a mile plus 12 pies (6 paise) per hour for detention. If engaged by the hour, the rates varied from Rs. 2 to Rs. 4 per hour. Motor carts could be even had at 1 rupee for a drop trip not exceeding 3 miles. The charge for hiring a two ton motor lorry was 5 annas (30 paise) per mile each way, and 6 annas (36 paise) per mile for a 2 1/2 ton motor lorry.

Another form of transit was the rikshw. There were double rikshaw and single rikshaw. The Municipal Tariff rates for a double rikshaw were 12 annas (75 paise) for the first two hours and 6 annas (37 paise) for every additional hour, if engaged during the day. If double rikshaws were engaged in the night the charges were 15 annas (94 paise) for the first two hours, and 7 annas (44 paise) for every subsequent hour.

Omnibuses were plentiful beginning from about 1910, and ran during the whole day as well as a part of the night within the Cantonment limit, and in the city. The fares varied from six paise to 12 paise for a trip within the limits of Bangalore. Omnibuses also plied for hire and ran to distant places in the districts, stopping *enroute* at villages and various towns. The fares were extremely cheap, a trip costing from just a few annas to a couple of rupees or so. Many places and objects of interest in and near Bangalore could be visited by paying a very small sum.

The hire charges for a *jutka* was 8 annas (50 paise) for the first hour or part of an hour and 4 annas (25 paise) for every subsequent hour, if engaged before midnight, and 5 annas (31 paise) for every additional hour after midnight. For a full day the charges were Rs. 3 and Rs. 2 for the half day. The rates were double if the *jutka* was drawn by a pair of ponies. The fare by distance by one was 3 annas (19 paise) a mile.

A bullock cart drawn by one bullock was hired at 5 annas per hour and 2 1/2 annas for every subsequent hour exceeding the first. Should the cart be engaged after midnight, the charges were 4 annas (25 paise) per hour. For a full day the

cost was Rs. 1. Four wheeled carts drawn by bullocks cost Rs. 1/2 for the first hour, and 6 annas (36 paise) for every additional hour, if engaged before midnight, and 9 annas (56 paise) for every subsequent hour after midnight. The charges for 24 hours was Rs. 6 and Rs. 4 to Rs. 8 for 12 hours. The fare by distance was 50 paise for the first 3 miles and 4 1/2 annas (28 paise) for every additional mile.

Later, some entrepreneurs who started the operation of buses were: M/S. Standard Motor Services from Bangalore to Sathanur; S.L.N. Motors from Bangalore to Kanakapura; KNS Motors and Sukkur Motors towards Mysore; Srinivasa Motor Transport Co., J.M.S. Motor services, Beereshwara Transport Services, M/S. Sreekanteshwara Transport Services etc. from Bangalore to Mysore *via* Channapatna (break services), Nazeema Transports, M/S. Bhagavan Transport, Leo Bus etc., from Bangalore to Hoskote and Kolar. In Bangalore City late C.M. Garudachar made the maiden attempts to introduce buses. This was not received well by the *jutka* owners. Thereafter S.L.N. Rao, Shanmugam Mudaliar, B.K. Rehman and 'Motor' Raghavachar (also connected with Amateur Dramatic Association) also made efforts to operate bus services on certain specified routes. The depot owned by Garudachar was at Wadia Road with eight vehicles. It is said that the *jutka* owners damaged some vehicles and obstructed the movement of city buses. They also held demonstration in front of the residence of Dewan Mirza. The bus services were mostly from Malleshwaram to Chamarajpet *via* City Market from Cantonment area to other places. The routes were specified by the Government of Mysore and the Collector of Cantonment. Some of the fare structure as prevailed were: One anna (six paise) from Shivajinagar to City Market and half anna (three paise) from Gandhi Bazaar to City Market. Gradually buses became popular and *jutkas* also continued to operate and the *jutkas* were used by rich class and other offices who did not intend to travel by public bus along with passengers. Some of the buses were run on charcoal and some were used as Mail Services also. The Inspector General of Police was the authority to issue licences for the mechanised vehicles. There were very few motor cars and motor cycles owned by Government, other officials and rich people. Mostly motor cycles were owned by Police officials.

In accordance with "The Mysore Motor Vehicles Act XVI of 1928", the annual vehicle tax for various vehicles was as follows: Motor cycles-Rs. 15; motor cars with capacity of 6 + 1-weighing not more than 15 cwts (unladen) Rs. 30; weighing more than 15 cwts unladen Rs. 40; Motor cars with capacity of 7 + 1 Rs. 60; for heavy motor cars exceeding two tons unladen Rs. 100; Motor lorries used solely for agriculture Rs. 60. (These vehicles were exempted from all municipal tolls). Motor lorries without trailers not let or plied for hire or reward fitted with pneumatic tyres in all wheels and whose unladen weight (a) not exceeding 15 cwts-Rs. 30; (b) between 15 and 25 cwts Rs. 50; (c) Between 25 and 30 cwts-Rs. 70; (d) between 30 and 35 cwts-Rs. 90; (e) between 35 and 50 cwts Rs. 112.50 (f) between 50 and 70 cwts Rs. 150; (g) between 70 and 100 cwts Rs. 175; (h) exceeding 100 cwts-Rs. 250. Additional tax payable in respect of such vehicles used for drawing trailers Rs. 60

trailer), and Rs. 125 (for trailers exceeding one ton). Motor Lorries let or plied for hire or reward and used for the carriage of haulage of goods only-one and half times the rate prescribed for each respective class of vehicles. (All the above rates were for one quarter of a year). Later in 1937, the District Magistrate or such other authority as may from time to time be empowered by the Government was the authority to issue licence to drive a motor vehicle in the district as well as in the Mysore State. The fee for granting a licence was Rs. 5 and this licence had to be renewed annually with a renewal fee of Rs. 3. With effect from 1st January 1936, the Mysore Road Traffic and Taxes Regulation was brought into force and the Traffic Board consisting of officials and non-officials (some elected) was constituted to regulate and control the public motor services in the district and introduce a uniform system of taxation of motor vehicles. A Road Fund was established by pooling all the taxes and tolls collected. The following are some of the samples of the rate of tolls as existed in 1937: 1) On every motor cycle with or without side car 25 paise; 2) On every motor cab with carrying capacity of 6 + 1 persons Re. one; 3) On every four wheeled motor car with carrying capacity of 7 + 1 Rs. two; 4) On every motor bus Rs. two; 5) On every motor lorry Rs. three; 6) Four wheeled carriage 50 paise; 7) Two wheeled carriage (other than jutka) 25 paise; 8) Jutka-one anna (six paise) if unladen and if laden Two annas (twelve paise).

The Mysore Civil Motor Cars Control Order 1945, and the Commercially Imported Transport Motor Vehicles Control Order 1946, were promulgated with a view to regulate the price and distribution of the vehicles in conformity with British Indian Central Orders. The Inspector General of Police was appointed the Motor Transport Controller of the State. The Mysore Motor Vehicles and Road Traffic (Emergency) Act 1946 was introduced both in the district and in the State with effect from 1st July 1946 making it compulsory for all vehicles to insure against third party risk.

By 1956, a separate Transport Authority was formed in the integrated State of Karnataka with Regional Transport Authorities at each district. The Regional Transport Officer, Bangalore District is the *ex-officio* Secretary to Regional Transport Authority and is also functioning as Chief Executive Officer of the Region, under the Motor Vehicles Act. Reciprocal agreements were finalised with the neighbouring State Governments of Maharashtra, Tamilnadu, Kerala and Andhra Pradesh in regard to counter-signature of permits of transport vehicles on inter-state routes. Single point taxation was agreed upon in respect of transport vehicles plying regularly on inter-State routes from Bangalore to Kerala and Andhra Pradesh. In the case of vehicles plying between Bangalore and Bombay single point taxation was confined to stage carriages only and level point taxation was confined to goods vehicles. In respect of vehicles plying to Madras, the taxes were recovered in both the States. Non-transport vehicles of all the neighbouring States having valid tax licence were exempted from taxes in Mysore on a reciprocal basis. Several measures to promote tourism were taken. Rules for the grant of

special tourist permits were framed and notifications exempting tax for tourist vehicles registered in one State and plying in the neighbouring States of Kerala, Madras, Andhra Pradesh, Bombay and Orissa were issued by the all the respective Governments on a reciprocal basis. At the time of integration number of different types of vehicles registered in Bangalore District (including Rural district) has been given in the table.

There are five Regional Transport Offices in Bangalore City catering to the needs of the entire Bangalore District including Rural district. The five regional offices are RTO, Bangalore South, RTO Bangalore West, RTO Bangalore East, RTO Bangalore North and RTO Bangalore Central. Besides the Office of the Commissioner for Transport as the apex body for administering the following Acts is in Bangalore: (i) The Motor Vehicles Act 1939 (Central Act 4) and (ii) The Karnataka Motor Vehicles Taxation Act 1957. The Commissioner for Transport is assisted by (1) The Joint Commissioner for Transport, (2) The Deputy Commissioner for Transport and Secretary, Karnataka State Transport Authority, (3) The Headquarters Assistant to the Commissioner for Transport and Planning and Development Officer, (4) The Law Officer (5) The Financial Assistants-2, (6) Two Asst. Transport Commissioners, (8) The Assistant Director of Statistics, (9) Two Assistant Law Officers and (10) Four Assistant Secretaries. Each of the Regional Office is headed by the Regional Transport Officer and assisted by Assistant Regional Transport Officers, Motor Vehicles Inspectors and other supporting staff. All the Regional Transport Officers at Bangalore and R.T.O. at Kolar and Tumkur are under the administrative control of Deputy Commissioner, Traffic, Bangalore. The Motor Vehicles Department is one of the main sources of revenue to the government. In this district, the revenue realised from 1981-82 to 1986-87 is given hereunder: Rs. in lakhs-1981-82-3181; 1982-83-3280; 1988-1989-10662. This when worked out as percentage to the State Revenue as a whole from this source will be as follows:- 1981-82-57.6; 1982-83-55.32 1983-84-42.4; 1984-85- 57; 1985-86-61.4 1986-87-63.1; 1987-88-63.3 1988-89-67.4

The Regional Transport Authorities are the quasi-judicial authorities exercising the powers vested in them under the Motor Vehicles Act. The permits for the transport vehicles for operations on intra and inter district routes and throughout the State are granted by this authority. The RTO is the taxation authority in respect of motor vehicles registered and kept for use in their respective regions. With effect from 1-4-86, life time tax is being collected for two wheelers as per the schedule below. At the time of registration of new vehicles-vehicles not exceeding 50 cc Rs. 500; vehicles exceeding 50 cc but not exceeding 300 cc-Rs. 850; vehicles exceeding 300 cc. - Rs. 1000 Further the life time tax reduces as the age of vehicle increases.

Karnataka State Road Transport Corporation

The different bus services in the district and also in the State were nationalised in 1948. When the routes were nationalised, initial arrangement was to provide bus

services to Bangalore from all the District Headquarters. Under the provisions of the Central Road Transport Corporation Act 1951, the Karnataka (then Mysore) State Road Transport Corporation was statutorily established on 1st Jan. 1961. Bangalore district is served by the Bangalore Division of the KSRTC. KSRTC buses are plying from Bangalore to all the district headquarters and almost all the taluk headquarters in the State. Besides, buses are also plying from Bangalore to Bombay, Madras, Manthralaya, Hyderabad, Trivandrum, Nagarcoil, Vijayawada and other far off places. Buses from other States like Maharashtra, Kerala, Andhra Pradesh, Tamilnadu are also plying from the above mentioned places on reciprocal basis. The longest route is from Bangalore to Bombay.

Bangalore Transport Service: Bangalore Transport Company Ltd., was started in early forties when the then Government of Mysore invested 10 per cent of the capital and the rest by public with a fleet of 20 vehicles. Due to the non-availability of petrol and also the resistance by *jutka* owners, BTC Ltd. suffered loss in the initial stages. Sometimes the buses were even run on charcoal gas plant. In 1956 the BTC Ltd. was nationalised and later became a wing of the Karnataka State Road Transport Corporation in 1961. The routes in the City were nationalised in October 1962. Later this was named as Bangalore Transport Service. As in 1989, the details of the BTS were as follows: The no. of schedules 1,387; service km per day 2.67 lakh km; fleet strength 1,574; no. of routes 609; route kms. 10,668; schedule km per day 3.06 lakhs; average number of passengers carried per day 16 lakhs; earnings per km. Rs. 546.3 ps; revenue per bus on road per day Rs. 1,065; revenue realised per day Rs. 14.60 lakhs. There are three major Bus stations 1) Bangalore Bus Station 2) City Market. 3) Shivajinagar and Minor Bus Stations are at Malleshwaram 18th Cross, Jayanagar, Ulsoor Bus Stand and Kengeri. The Bangalore City Bus Station is one of the unique types of bus stations in Asia. Bangalore perhaps is the only city in India where the City Railway Station, Bus Station and City Bus Stations are situated in one area. In 1958-59, the fares for City services were 6 ps for first mile, 5 ps for 2nd mile 4 ps for 3rd mile and 3 ps per mile for the remaining portion of the journey. As in 1989 the fare structure was, upto first stage 50 ps. with an increase of 25 ps, for 2 stages to a maximum of Rs. 2.

Statement showing the number of Motor Vehicles in all Metropolitan Cities of India from 1977 to 1983.

Sl. No.	Years as on 31st March.	1977	1979	1981	1982	1983.
1	2	3	4	5	6	7
Metropolitan Cities (A)						
1.	Ahmedabad	68104	90193	103237	1,18,962	137758
2.	Bangalore	108437	146309	175325	1,90,653	204649
3.	Bombay	244572	265529	306747	3,37,178	372940

1	2	3	4	5	6	7
4.	Calcutta	147413	155031	172323	N.A.	N.A.
5.	Delhi	389182	458039	536011	5,92,584	668022
6.	Hyderabad	9145	8607	12004	11,327	N.A.
7.	Madras	69390	88730	120047	141184	128091

Statement showing the number of Driving Licences in force (Region-wise) in Bangalore composite district as on 31 st March 1987.

Sl. No.	Name of the Region/ Sub Region	No. of D.L. valid as on 31-3-86	Driving			Total No. of New DLs issued.	No. of DLs. valid as on 31-3-87
			No. of DLs. issued				
			Professional P.S.V.	Non-Professional Others			
1.	a) Bangalore Central.	13,768	3,604	-	3,140	6,744	20,512
	b) Bangalore (East)	31,881	3,260	1,225	7,308	11,793	43,674
	c) Bangalore (North)	9,236	989	210	5,183	6,382	15,733
	d) Bangalore (South)	1,53,857	340	1,114	3,422	4,876	1,58,733
	e) Bangalore (West)	17,848	286	194	4,216	4,696	22,544

Statement showing the Payment of Life-Time Tax of two wheeler vehicles in Bangalore composite district as on 31-3-1987

Sl. No.	Name of the Regions and sub-regions.	No. of two wheelered registered and in use as on 31-3-87	LIFE TIME TAX No. of owners paying tax upto 31-3-87	Total amount of tax collected in Rs. in lakhs 31-3-1987
1.	(a) Bangalore (C)	48,524	24,780	135
	(b) Bangalore (E)	54,730	42,320	213
	(c) Bangalore (N)	50,940	7,309	119
	(d) Bangalore (S)	62,972	37,223	178
	(e) Bangalore (W)	50,879	24,011	162
	Total	2,68,045	1,35,643	805

The following are the details of valid permits of various vehicles in Bangalore District as in 1986-87: Antorikshaws 10,816; Public carriers-8,580; Private carriers-1,798; tractors and trailers-860; tempos 1,570.

There are many driving schools in Bangalore City who give training to those intend to learn driving vehicles. Some of them are, Mani Motor Driving Training School, Malnad Motor Driving Training School, K.S.R.T.C. Driving Training School, Deccan Motor Driving School, Sundar Motor Driving Training School, BEN Motor Driving Training School, Principal I.T.I. Motor Driving Training School, R.V. Motor Driving School, Bharani Motor Driving School, Hegde Driving Training School, Prashanth Motor Driving School, Sreedhar Motor Driving School, etc. All these schools are at Bangalore and are recognised by the Government.

Statement of number of Motor vehicles registered and kept for use as at the end of March 1987.

Sl. No.	Bangalore District					Total	
	R.T.O. Central	R.T.O. East	R.T.O. North	R.T.O. South	RTO West		
1	2	3	4	5	6	7	8
1.	Motor Cycles;						
	(a) 50 cc and below.	14,761	18,525	16,239	21,256	14,986	85,767
	(b) 51 cc to 300 cc. 300cc.	32,402	34,362	32,380	40,288	34,909	1,74,341
	(c) 301 cc and above.	1,361	1,843	2,321	1,428	984	7,937
2.	Motor car	13,164	9,609	15,086	10,204	13,191	61,254
3.	Invalid carriages	3	5	39	3	4	54
4.	Jeeps	3,544	565	730	347	307	5,493
5.	Motor cabs	303	352	649	276	418	1,998
6.	Autorickshaws	3,050	1,929	2,701	1,752	2,042	11,574
7.	Omni buses	884	529	465	409	223	2,510
8.	Station wagons	26	15	142	25	5	313
9.	Stage carriages :						
	a) KSRTC buses	3,301	-	-	-	-	3,301
	b) Private buses	252	13	134	67	121	587
10.	Goods vehicles						
	a) Private carriers.	271	66	-	-	225	562
	b) Public carriers	4,315	1,756	2,574	1,736	2,502	12,883
11.	Tractors	267	366	257	389	102	1,481
12.	Trailors	250	428	290	208	104	1,287
13.	Dumpers	--	7	--	2	-	9
14.	Bulldozers	-	-	-	2	-	2
15.	Road Rollers	--	-	-	-	-	-

1	2	3	4	5	6	7	8
16.	Tippers	66	5	8	4	-	83
17.	Rockers	-	-	-	-	12	12
18.	Fire engines	72	-	1	-	2	75
19.	Power tillers.	85	22	9	8	5	129
20.	Delivery vans	309	104	284	583	173	1,453
21.	Abulance vans	72	35	17	8	17	749
22.	Fire fighters.	3	29	1	-	-	33
23.	Tankers.	57	20	12	2	8	99
24.	Others	141	34	232	54	36	497

Railways

Efforts were made to put Bangalore on the railway map in around 1854-55. In his administrative report of 1854-55 to 55-56 Sir Mark Cubbon stated under the heading "Rail Roads" thus: "A branch to connect Mysore with Madras *via* Bangalore and Calicut had been conditionally sanctioned to be undertaken". But in the meantime the Madras Rail Road Company had been invited to undertake the Madras and Bellary line, so that the Bangalore Branch to the Eastern Coast had been "indefinitely postponed". The Madras Bangalore broad-gauge line was opened for traffic in August 1864, which was constructed by the Madras Railway Company. The then Mysore Government provided the land required for the line. In 1863-64 the survey of a railway line (metre gauge) between Bangalore-Tumkur was undertaken. This was opened for traffic in 1884. This construction was completed by raising a loan of Rs. 20 lakhs at five per cent interest. The construction of Bangalore-Mysore railway line was taken up in 1877-78 as a famine relief work. The earth work between Bangalore and Channapatna was completed as a famine relief measure in 1877-78. The complete project was sanctioned by the Government of India at an estimated cost of Rs. 38.32 lakhs. The section from Bangalore to Channapatna was opened for traffic on 1st February 1881, and by 25th March 1881, a further length of 23 miles (37 km) was opened upto Mandya. The entire line was completed in Feb. 1882. Thereafter, there was not much progress in respect of railway construction upto 1910. By 1911, a vigorous railway programme was adopted and a new State Railway Construction was organised in 1912. The Bangalore-Chikballapur light railway was taken up by a private company with the Government guarantee. But this private company could not continue the work and the Government took up the work under an agreement with the Company. The section from Chikballapur to Yelahanka was opened for traffic in 1915 and through running to Bangalore city by means of a third rail between Yelahanka and Yeshawanthapur was established in 1918. In Oct. 1919, the working and maintenance of Bangalore Mysore line was transferred from Southern Mahratta Railway Company to State Railway department. The Bangalore-Chikballapur Railway

**Statement showing the number of Motor Vehicles registered and kept for use in Metropolitan City of
Bangalore from 1976-77 to 1986-87**

Year as on 31st March	All vehicles	Two wheelers	3 Wheeler passenger vehicles	Cars	Jeeps	Taxis	Buses	Trucks	Tractors	Trailors	Others
1976-77	1,08,437	62,199	8,699	21,760	2,048	1,045	3,487	6,081	1,419	1,121	578
1977-78	1,34,326	78,974	10,132	27,810	2,986	964	3,685	6,516	1,454	1,164	641
1978-79	1,46,309	87,753	10,608	29,302	3,179	999	4,000	6,920	1,531	1,236	781
1979-80	58,369	97,110	10,726	30,145	3,396	1,034	4,301	7,575	1,897	1,680	505
1980-81	1,75,325	1,11,750	10,044	31,738	3,554	1,120	4,671	8,236	1,929	1,734	549
1981-82	1,09,653	1,25,600	10,355	32,429	3,570	1,171	5,090	8,545	1,781	1,637	475
1982-83	2,04,649	1,35,536	11,063	33,506	3,726	1,276	5,507	10,020	1,823	1,678	514
1983-84	2,36,045	1,62,206	11,880	36,064	4,043	1,607	5,931	10,686	1,510	1,361	757
1984-85	2,77,650	1,89,619	11,348	47,787	4,995	2,027	6,155	11,106	1,493	1,444	1,676
1985-86	3,06,589	2,16,234	10,446	53,150	4,914	1,756	5,168	11,532	755	671	1,963
1986-87	3,29,255	2,36,276	10,524	54,885	5,122	1,717	5,704	11,366	496	446	2,269

was the first railway in the State started by private enterprise under a guarantee from the Government. The following are the dates of opening of the different sections. Yelahanka-Devanahalli Goods Traffic-15th Sep. 1914. Passenger traffic 6th April 1915, Devanahalli to Chikballapur, Goods & Passenger traffic-1st Aug 1915; Yelahanka to Yeshwanthapur Passenger and goods traffic 1st Feb. 1917, and Yeshwanthapur to Bangalore Passenger traffic-7th Jan. 1918.

The capital outlay earnings and other details in respect of certain railways as in 1922 were as follows:-Bangalore-Mysore line-mileage 85, total capital outlay-Rs. 55.48 lakhs, gross earnings Rs. 15.05 lakhs, net earnings Rs. 1.87 lakhs, percentage of net earnings to total outlay-3.2; earnings per mile per week Rs. 337 and proportion of expenses to earnings 81:6. Similar details for Bangalore-Chikballapur lines were mileage-39; total capital outlay Rs. 72.88 lakhs; gross earnings-Rs. 1.87 lakhs; net earnings-Rs. 24 lakhs; percentage of net earnings to total outlay 1.89; earnings per week per mile Rs. 93, and proportion of expenses to earnings-8:7. Among all the sections of the State Railways, in the Bangalore-Mysore Section the proportion of working expenses was less and was fairly comparable to the Madras and Southern Mahratta Railway system. In 1922-24, the 41 1/2 lbs rails between Bangalore and Mysore were replaced with 60 lbs rails. By 1890, a metre-gauge line from Yeshwanthapur to Hindupur (83 kms) was completed and connected to Guntakal in 1893. This line was converted into broad-gauge and opened for traffic in January 1983. The Bangalore City-Salem Railway Line (metre gauge) was opened for traffic in 1969.

As in 1989, the railway lines in five different directions terminate at Bangalore City Station: 1) Miraj line (metre-gauge) in the North-Western direction; 2) Guntakal line (broad-gauge) towards North; 3) Salem line passing from north-west to south-west. 4) Madras line towards east; and 5) Mysore line (Metre gauge) towards south-west.

1) *The Bangalore-Miraj metre gauge line* : This line starts from City Railway station and passes through Srirampuram, Malleshwaram, Yeshwanthapur, Rajajinagar industrial area, H.M.T, B.E.L. and other industries towards north-west. Malleshwaram and Yeshwanthapur of Bangalore Urban district are the railway stations located in this line.

2) *The Bangalore-Guntakal broad-gauge line*: This line which was formerly a metre-gauge line running parallel to Miraj line upto Yeshwanthapur and thereafter joining Yelahanka. This was converted into broad-gauge in 1983 and now runs upto Krishnarajapuram and passes through Yelahanka. This line serves Cantonment and Kodigenahalli is also located along this line.

3) *The Bangalore-Salem metre-gauge line*: The Salem line runs towards the South-East passing through Agricultural University campus and the residential areas of Devara Jeevanahalli and Maruthi Sevanagar. Banaswadi and Ballandur

Road are the two railway stations on this line. This line is designed to accommodate broad-gauge line.

4) *The Bangalore-Madras line (broad-gauge)*: Commencing from City Railway Station this line passes through Subashnagar, Madhavanagar, Vasanthanagar, Benson Town, Cleveland Town, Potter Town, Cook Town, Indian Tobacco Company, NGEF, HAL, ITI and White Field Industrial Complex. Krishnarajapuram, Cantonment, Bangalore East and Byappanahalli are the stations belonging to Bangalore Urban District along this line.

5) *Bangalore-Mysore (metre-gauge) line*: This line passes through Binnypet, Vidyanayanagar, Padarayanapura and industrial areas like BHEL, Central Industrial Workshop and Bangalore University Campus; Nayandahalli and Kengeri are also located along this line.

Bangalore City is connected by railway directly to Delhi, Bombay, Ahmedabad, Trivandrum, Hyderabad, Madras, and other important places in the country.

The following are the Railway stations in the district. 1) Bangalore-Mysore Line-Nayandanahalli; (2) Bangalore-Salem Line- Malleshwaram, Yeshwanthapur, Hebbal, Banaswadi, Bellandur Road and Anekal Road; (3) Bangalore-Miraj line-Malleshwaram, Yeshwanthapura, Chikbanavara, Soladevanahalli; (4) Bangalore-Madras Line-Bangalore Cantonment, Bangalore East, Krishnarajapuram, White Field, Devanagondi; (5) Bangalore-Hyderabad line-Bangalore Cantonment, Bangalore East, Chennasandra, Bayyappanahalli, Lottegollahalli, Kodigenahalli, Yelahanka, Rajanakunte and Suradhenupura. Bangalore Cantonment, Krishnarajapura and Yeshwanthpur are considerably big stations. Bangalore City Railway Station is one of the biggest stations in the country. All the trains originate and terminate at this station except the Trivandrum-Ahmedabad trains, which pass through Krishnarajapuram without touching Bangalore City Station. The number of passenger trains originating from Bangalore City are 18 broad-gauge, 18 metre-gauge and 10 narrow-gauge; No. of Mail/Express trains originating are broad-gauge-9 daily, 2 weekly, metre-gauge 11; No. of trains arriving in Bangalore- broad-gauge 14 daily and 2 weekly, metre-gauge 24, and narrow-gauge 10; No. of trains passing through Bangalore: weekly 2 pairs, bi-weekly one pair, triweekly one pair; No. of goods trains originating from Bangalore-broad-gauge 8, metre-gauge 7; Arriving in Bangalore-broad-gauge 9, metre-gauge 7. The goods that are generally being dealt at Bangalore for onward transmission are granite stone, military stores, machinery, casurina poles, military trucks, Food Corporation of India goods, cement (broad-gauge), petroleum, edible oils, empty gas cylinders (metre-gauge).

Bangalore Division: The Bangalore Division of the Southern Railway was carved out with effect from 27-7-1981. The total route km of the Division is 626 km,

with total track length of 820 km, of which the broad-gauge is 318 km, metre-gauge 349 km, narrow-gauge 153 km. The jurisdiction of the Bangalore Division is as follows: Bangalore to Dharmavaram; to Tumkur; to Mysore; to Salem; to Jalarpet and to Marikuppam. Bangalore Division is headed by a Divisional Railway Manager assisted by Divisional Commercial Superintendents, Senior Divisional Engineers, Divisional Engineers, Public Relations Officer and other staff.

Rest houses

As Bangalore was one of the biggest cities, there were considerable number of choultries and rest-houses. Small rest houses providing shelter and other facilities to the postal runners were in existence. These facilities were also being used by the travellers. Choultries came into existence in some such centres. Subedar Chatram near the Dharmambudhi tank was famous. Purnaiah Chatra was at Balepet. Gubbi Thotadappa's choultry, Arasoji Rao Dharma Samsthe, Chathras attached to certain *mathas* like, Utharadi Matha, Vyasaraja Matha, Veerashaiva Mathas and boarding homes attached to Christian Missionaries were some of the choultries that were in existence in Bangalore in earlier days. Outside Bangalore, Attibele, Agaram and Krishnarajapuram have old *chatras*. The rulers and philanthropists constructed many rest houses and *annachatras* catering to the needs of pilgrims and tourists. It is said that Venkataramana Swamy temple at Fort area also provided shelter and meals to the pilgrims in the yester-centuries. Murugesha Mudaliar Choultry at Madivala, Choultry at Krishnarajapura, Bandi-Seshamma's choultry, Choultry attached to Sarpabhushana Matha, Uyyale Chathra, Gurikarara Chathra, Choultry at Chamarajapet, Doddanna Shetty Choultry (SLN), Thigalara choultry, Belimatha choultry and Guddanna's choultry, were some of the choultries that existed in earlier days. Some of the hostels were providing boarding and lodging to the students at nominal prices. When the number of visitors and officers visiting Bangalore increased, number of guest houses and rest houses also increased. The Government Guest Houses are General Hostel, Kumara Krupa Guest House, and Annexe to Kumara Krupa Guest house, and Bangalore Guest house. Accommodation was provided to VIP's in Ballabruvi and Raj Bhavan also. Presently Ballabruvi is used for residential purpose. As in 1982, number of Guest houses were, Kumara Krupa Guest House (Annexure) with 27 rooms, Kumara Krupa Guest House (Main) with 5, and Bangalore Guest House with 3. In General Hostel there were 74 I.B's. There are guest houses belonging to the Hindustan Aeronautics Ltd., Hindustan Machine Tools Ltd., Indian Telephone Industries, Bharath Electronics Ltd., National Aeronautical Laboratory, Bangalore City Corporation, KSRTC, K.E.B., BWSSB at Tathaguni and Tippegondanahalli. Various other public sector undertakings and private factories also maintain guest houses. Though they are meant only to their employees and guests in events of emergency accommodation could be provided to others. Ashoka Hotel

managed by the I.T.D.C, Windsor Manor, Holiday Inn, West End, Taj Residency and Hotel Bangalore International, are the hotels wherein luxurious suits are available.

Air Transport

Air transport service appears to have been introduced in Bangalore in around 1937. In 1937, the Government of Mysore made an agreement with the Indian Aviation Development Company for the establishment of air services from Bangalore to Bombay. The approximate expenses were Rs. two lakhs. The joy rider, charter flights increased the revenue. Vaughan Fowler, an experienced Pilot of the Indian Aviation Development Company was granted permission to operate on 'fix-mothi' registered VT-AOZ model Aircraft for joy riding. Tata and Company also negotiated to connect Bangalore with their Karachi-Madras services *via* Tiruchinapally to Colombo five times a week. The estimated cost of operating tri-weekly service was Rs. 45,000 and bi-weekly service was Rs. 25,000 per year. The aircraft was a low wing cabin mono-plane fitted with 200 HP air cooled engine with latest equipments accommodating three passengers. The average speed was 165-175 km/hour. In the early stages they were enjoyed by European population of the Civil and Military stations. By 1946, Deccan Airways-a Company mooted by the then Hyderabad Government operated a flight between Hyderabad and Bangalore. The airlines in India were nationalised and Indian Airlines was formed and since then Bangalore has seen the growth from Dakotas to Skymaster Turboprops, Viscounts, HS 748, and presently Bangalore is connected with jet services and Air Bus Services to Bombay, Delhi, Madras, Calcutta, Coimbatore, Goa, Cochin and other places. Vayudoot services are also available from Bangalore to Mysore, Bellary, Tirupathi and other places. Instrument Landing System, a vital facility which ensures safe and accurate landing of aircraft is likely to be installed at Bangalore Airport. When the system is installed the pilot will receive accurate information regarding 'guide path', information regarding the angle of descent, the distance between the aircraft and the touch down point and the optimum speed for the aircraft to approach it. The information will help the aircraft land safely even in bad weather conditions leading to poor visibility.

The following figures indicate increase in the number of travellers using airways in Bangalore in the course of last one decade, the figures being passengers: 1977-78: 2,39,513; 1978-79: 2,80,079, 1979-80: 2,54,716; 1980-81: 2,77,960; 1981-82-3,61,292: Growth per year has been 12.7%

Airport

The Bangalore Airport was built by the Hindustan Aeronautics Ltd. for its use and the same is being used by the Director General of Civil Aviation as Civil airport on hire. The technical departments like Aeronautics Communication Station,

Aeronautical Inspection Directorate and pilots briefing section are also situated in the airport. Air Bus, Jamboojet and similar types of air-crafts can land in Bangalore Airport both in day and night. Though Bangalore is not an International Airport, during SAARC meeting in 1987, aircrafts from other countries landed in Bangalore Airport.

The Director General of Civil Aviation is the authority to accord permission for airlines services in the country. There are two types of services namely scheduled and non-scheduled services. In respect of non-scheduled services certain companies (both government and private) seek permission from the Director General of Civil Aviation for operating flights. Air India operates only international flights. Indian Airlines has an office in Bangalore where booking of tickets and cargo could be made. Computerised system of booking tickets has also been introduced. There is one off-line office of the Air India at Bangalore from where booking of Cargo and Passenger tickets could be made. Cargo booked at off line offices are transported by road to the nearest airport. Besides there are many travel agents who book passenger tickets of both Inland and foreign flights. Some of them are: Thomas Cook & Co., Ram Mohan Travels, Airways (India) Indiana Pvt. Ltd., Air Canada, Air France, Air Lift, Arafath Travels, British Airways, Cathay Pacific Airways, Kuwait Airways Corporation and Lufthansa German Airlines. There are many courier services also in Bangalore. Some of them are: Air-Fright Pvt. Ltd, Airpak Courier Services, Blaze Flash Couriers Pvt. Ltd, Concorde Express, Elbo Services Pvt. Ltd., Express Couriers Pvt. Ltd., Southern Courier Service, Transworld Shipping Services Ltd., etc.

Flying Training School: Government Flying Training School, Bangalore, was launched in 1948 and was established as a permanent department in 1959. The functions of this department are (1) to make the youth air-minded by providing flying training required to obtain private pilot licence, (2) to train commercial pilots by providing flying training to enable them to qualify for commercial pilot licence (issued by the Government of India) and (3) Providing training to cadets of NCC Air wing.

It was the dynamism and the far-sightedness of the former Mysore State administration that has conferred on Bangalore the distinction of being called the aviation and electronic capital of India by providing facilities for the establishment of Hindustan Aeronautical Complex, the National Aeronautical Laboratory, the Technical Command of the Indian Air Force, the School of Aviation Medicine, Flying Training School and a number of private sector enterprises for the manufacture of parts of aircraft accessories.

Passport Office: A separate Passport office at Bangalore was established on 12th June 1978. Prior to this date, the nearest Passport office was at Madras. The main functions of this office is the administration of Passport Act and Rules 1922. The Passport Office is concerned with the grant of passport facilities to the Citizens of India residing within the territory of Karnataka. Under the partial powers

delegated by the Ministry of Labour, this office grants such as 'Emigration check required' as well as 'Emigration check not required' on Indian passports. For those coming under the category of tourists, businessmen etc., different endorsement regarding suspension of emigration requirement for a stipulated period is given. This office is headed by a Passport Officer with an establishment of about 50.

POSTS AND TELEGRAPHS

Posts: Some system of 'Anche' (post) was introduced initially by Chikkadevaraja Wodeyar (1673-1704) in this district. The name *anche* is romantic, literally meaning *hamsa* which had served as carrier of message between Nala and Damayanthi of the Puranic tradition. During the administration of Chikkadevaraja Wodeyar a regular postal system was established. There was a news carrier (Anche Harikara) stationed in each revenue division whose duty was to look after the transmission of letters from place to place and also to report matters coming to his knowledge. Of the eighteen departments (Athara Kacheris) established by Chikkadevaraja Wodeyar, one was the Behina Chavadi-the department of intelligence-dealing with the speedy transmission by couriers (Anche Harikara) from the administrative units to the capital and the communication of royal orders (*nirupas*) to the local centres. The messengers were horse-riders or fast runners (to small distances) appointed exclusively for the purpose. It was perhaps used to carry private communication also. Anche Bhakshi was the head of Mysore Anche and there were Gumastas (clerks) assisting him. The Branch Post Masters were Mut-saddis and the runners Begaris. According to Col. Wilks "The post office was not only as in England the passive instrument for conveying intelligence but the active agent for obtaining it". This Anche system was further improved during the period of Haider and Tipu. The East India Company had established in Madras Presidency a regular postal system by opening the Madras G.P.O. on 1-6-1786. As the princely States like Mysore, Hyderabad and Cochin had their own postal system, the post offices opened by the East India Company after 1799 in Mysore State were known as Imperial Post Offices. In 1803, a 'Runner line' was established from Madras to Bombay *via* Bangalore. These services were also made available to public from 1844. The dak postage from Madras to Bangalore (356 km) was nine annas (56 paise). As per the list of post offices subordinate to P.M.G. Madras on 1-12-1837 *vide* Fort. St. George Gazette dated 28-11-1837 there was a post office at Bangalore. The Anche Bakshi was functioning in co-ordination with the Commissioner of the Imperial Post offices. Those offices were located at every taluk headquarter towns and at towns of importance. The establishments of post office clerks, runners etc. though for the most part under-paid, was organised on a complete scale and service was conducted with regularity and efficiency. The letters from Imperial Post Office or those delivered to the Imperial Post Offices were not charged. When there was considerable increase in the bulk of mail, and the runners could not cope up with increased weight, the lines were converted into mail cart lines. When carts were introduced private agencies were entrusted with the task of

carrying mail bags. The mail cart line from Madras to Ooty was *via* Bangalore. When the railway from Madras to Bangalore was completed in 1864, the mail from Madras side was received at Bangalore at 5.30 PM. The local post carried letters, book packets, newspapers etc. Postal stamps were not in use and pre-payment of postage in cash was compulsory. No extra postage was levied by Mysore Anche on letters received for transmission to British territories through British Post Offices or those received for delivery in the State. With effect from 1868-69, all letters etc. despatched by public offices in the State through the British Post Offices were made chargeable. In 1875-76 all judicial processes issuing from Civil and Revenue Courts were exempted from postal charges with certain exceptions. In 1878-79 the charges were changed in accordance with alteration made in the imperial postage. In 1878-80 Hobli School Masters were appointed as Anche Mutsaddis and post cards were introduced. This department was reorganised in Nov. 1822 by reducing the staff and re-organising the Anche lines. Ordinary paid letters and packets, post cards and registered letters posted in British India for Bangalore and other places in Mysore State were delivered free of charge by the Anche Dept. On all articles exchanged between the Imperial Post Offices and Mysore Anche, full postage was charged by Imperial Post Office. Money orders were issued and paid by the State Treasuries and there was an exchange of orders with British India, through the Bangalore Post office. Value payable and insured articles posted in British India for any place in Mysore except the very few stations where there were Imperial Post Offices were detained in Bangalore Post Office until the addressees could make their own arrangements to take delivery from Bangalore. The transfer of Mysore Anche to the Imperial Postal system took place with effect from 1st April 1889, when this amalgamation with the Imperial Post Office took place, one Bombay newspaper wrote "Mysore Anche by which name the post is locally known was organised over 200 years ago, by Chikdevaraja Wodeyar at a time when there were very few regular postal system in existence. Since then many improvements have been made to meet the requirements of Mysore people which it does at the rate which entitles it to be the cheapest in the empire and probably in the world".

The postal charges in Mysore Anche was comparatively less than the Imperial Post. The postal rates depended on the distance and weight of the articles. The registration charges for a letter was 6 pies (3 paise) as against 12 pies (6 paise) in British India. There was an "express post" on payment of one anna (6 paise) a mile which was of great use. The charges for the letters had to be paid in cash in advance. The postage stamps were introduced in 1854 and rates were fixed depending upon the distance. Insuring of postal articles was introduced in 1878 and the charges were 0.25 per cent. In 1898, limit of Rs. 1,000 was fixed as the value of articles to be insured and charges were reduced to one 0.125 per cent. The value payable post was introduced in 1877. Prior to 1880, sums not exceeding Rs. 150 could be remitted by money order from one District Treasury to another with one per cent commission. With effect from 1st Jan. 1880, money order transaction was taken over by the Post Office. In 1884 telegraphic money order was introduced. In 1904, there were

fourteen denominations of stamps, embossed envelopes, post cards and newspaper wrappers. Reply post cards were introduced in 1884. Buchanan mentions about the arrangement existing in Dodballapur area during early nineteenth century. The Gollaru caste people were entrusted with the duty of transporting money belonging to the public and to the individual. He further mentions "It is said that they may be safely entrusted with any sum for each man carrying a certain value they travel in bodies, numerous in proportions to the sum put under their charge and they consider themselves bound in honour to die in defence of their trust, of course they defend vigorously and are armed so that robbers never ventured to attack them".

The Bangalore GPO was opened around 1800. It was the Imperial Post office catering to the needs of the Cantonment area which was under the British. In 1854 Bangalore was a Sudder Post Office (Head Office). In 1855 there was a cart line from Madras to Bangalore and daily *bhangy* services for Ooty was introduced *via* Bangalore and Mysore. Later the cart line was extended to Bellary and daily *bhangy* service was introduced *via* Bangalore and Tumkur. The postage in 1833 from Madras to Bangalore was of nine annas (57 paise) of one tola and Rs. 2/- for a parcel of 50 tolas. In 1870 there were receiving houses at Cantonment area and at City. The Shoolay post office was opened in 1886. The Agram and Cleveland Town offices were opened by 1895 and at Chamarajapet by 1902. By 1903 Sub-post offices were opened at Bangalore City, Chikpet, Cavalry Road, South Parade, Neelasandra and Hebbal camp and Branch post office at Basavanagudi. By 1890 there was a post office at Bangalore Fort and it was a delivery post office for Bangalore City area, and continued upto 1918 and later it was replaced by Bangalore City post office as a delivery office. The old Post Office building was a part of the Residency and the GPO was functioning by about 1862. Residency (Raj Bhavan) and the GPO were the only two buildings around 1862. In order to effect some repairs, the GPO was shifted in 1871. By 1864 there were about 13 delivery peons. They had no uniforms. but they were supplied with leather belts and badges. When the railway from Madras to Bangalore commenced in 1864, the mails from Madras were received by Railway. Mails were received from Madras side at 7.30 A.M. and from Mysore side at 5.30 P.M. In 1880 there were two deliveries the unregistered articles delivery in the morning and account articles delivery at 2 P.M. There was window delivery of the Mysore side mail in the evening. The last clearance was at 6.30 P.M. as the train was leaving at 7.40 P.M. By 1900, there were five deliveries, the last one at 5 p.m. A Mail Agent's office at Cantonment Railway Station was built around 1883. A pillar letter box was placed at City Railway Station in 1887. With effect from 1895, the Bangalore GPO was upgraded and was headed by a Gazetted Officer.

As in 1939-40 there were post office at Hesaraghatta (Branch Office), Yeshwanthapur (B.O.), Chickbanavara (B.O.), Yelahanka (BO), and Indian Institute of Science, Anekal (Post and Telegraph Office), Attibele, Jigani, Sarjapur and Dommasandra and other places in the district. The Karnataka Posts and

Telegraphs Circle was formed in 1960, with headquarters at Bangalore. This circle was headed by a Director of Posts and Telegraphs. This new circle was formed by transferring the areas administered by different circles and One Railway Mail Service Division viz., Q Division with Headquarters at Bangalore. Prior to this Bangalore was included in RMS 'H' Division with Headquarters at Dharwad around 1890. In 1906, there was a Mail Office at Bangalore which was named as 11-50 SMO.

As in 1972-73, there were 535 post offices, 121 Telegraph offices in Bangalore Composite District. The details of the Post offices in Bangalore district (except Anekal) as on 1-4-89 are as follows:- Bangalore South Division-is headed by a Senior Superintendent of Post Offices and is having Head Offices at Basavanagudi and Jayanagar. The Bangalore West Division headed by a Senior Superintendent of Post Offices is having Head Offices at Bangalore City and Rajajinagar. The Bangalore East Division is having under its jurisdiction, HAL II Stage Head Office, and R.T. Nagar Head Office. The Bangalore GPO. The table showing the number of various offices is given in the table.

Table showing the number of various post offices in Bangalore District as on 31-3-1988

Name of Office	Bangalore South Division		East Division		West Division		Total	
	Delivery	No delivery	Delivery	No delivery	Delivery	No delivery	Delivery	No delivery
Head Offices	2	-	--	--	--1	--	--	--
HSG I	1	-	4	--	2	--	3	--
HSG II	3	-	10	2	5	--	7	--
LSG	9	6	25	12	13	3	47	21
I Class (A)	3	7	9	8	2	1	14	16
I Class (B)	4	8	3	16	5	-	12	24
III Class (C)	5	28	8	66	3	32	16	126
EDSO	2	-	1	-	-	-	3	0
EDBO	17	5	42	13	1	5	60	23
Total	46	54	102	117	32	41	180	212

Mobile Post Offices were functioning in Bangalore providing facilities between 5 P.M. to 8.30 P.M. at Rajajinagar, Malleswaram Seshadripuram, M.G. Road, Queen's Road and other places. Presently these Mobile Post Offices are not in use. There are two post offices functioning as night post offices viz., Chikpet and Bangalore (G.P.O.).

Karnataka Postal Circle is headed by Chief Post Master General assisted by Additional Post Master General, Director of Postal Services, Assistant Post Master General, Assistant Directors, and other staff. This Circle has three Railway Mail Service Divisions (1) Bangalore Sorting Division (2) RMS Q Division (3) Bangalore HB Division.

Telegraph : Telegraphic lines appear to have been laid in around 1855 when lines were first laid between Bangalore and Madras around 1855. One of the 13 lines of internal telegraphic communication also passed through Bangalore at this time. By 1883 most of the Post offices were given the telegraph work also. It has been mentioned in the 'Mysore Agreement' of 1913 in respect of Telegraphic lines as under. "The king of Mysore shall give lands free for putting the telegraphic lines by the Governor General, and provide all assistance for doing this work. All the telegraphic lines whether installed by British Government or by the State, to be treated as British Telegraphic lines and the work on these lines are to be executed by British Government unless there is any agreement to the contrary".

The Central Office of the Telegraph Department was situated in the Old Museum Road and was working round the clock. It had a training class where Departmental, Military and Postal Probationers were given training in telegraphy. After the bifurcation of Post and Telegraph Department into separate wings, Bangalore District Telegraph is administered by the Divisional Engineer, Telegraphs with other staff.

Number of Post Offices and number of telephones in Bangalore district (excluding Bangalore City) for some years from 1981-82 to 1986-87 are as follows:- 1981-82- Anekal taluk-32, 89; Bangalore South taluk-28, 183; Bangalore North taluk-53, 315; 1982-83-Anekal 37, 90; Bangalore South; 121, 183; Bangalore North 69, 375; 1983-84-Anekal 37, 184; Bangalore South-121, 487; Bangalore North: 69,608; 1984- 85-Anekal-28,670; Bangalore South-34,327; Bangalore North-50,527; 1985-86-Anekal-31,641; Bangalore South 53,672; Bangalore North, 49, 468; 1986-87 Anekal-31,757; Bangalore South 53,672; Bangalore North, 49,468; 1986- 87 Anekal-31,757; Bangalore South 53,950; and Bangalore North-46 and 613.

Telephones : Telephones appear to have been installed in Bangalore Cantonment when it was first introduced in Madras in 1881. In 1896, a line of 11 miles between Hesaraghatta Reservoir to Banavara was laid at a cost of Rs.4,089. Temporary telephone links were laid in Bangalore for use in anti-plague operations in Bangalore in 1898. In 1899, fifty Government offices were provided with permanent lines and as per a Government report on an average there were 122 calls every day. The Bangalore-Mysore line was laid in 1911-12. Initially the telephones in princely Mysore were under the control of Electricity Department. In 1918 there was a total length of 92 miles in Bangalore City. For the introduction of a wireless telephone system between the cities of Bangalore and Mysore, Government of

Mysore consulted the American Institute of Electrical Engineers, New York and the superior Telephone Institute, Rome. The proposal failed as the New York Company was doubtful about the working of the system in Bangalore and suggested the use of Radio line system.

The Automatic Telephone Exchange was installed in 1930. In 1940 there were about 700 Telephone subscribers in the City and 400 additional lines were proposed at a cost of Rs. 3.6 lakhs. During those days, the extension of telephone facilities to the public was an expensive affair. The rate was Rs. one from Bangalore to Mysore. The Telephone system in Bangalore was linked to Government of India Trunk Telephone system. The trunk line between Bangalore and Mysore was also remodelled so as to be connected to all-India system.

The administration of the telephones in the district falls under the Bangalore Telecom District. There is a separate Bangalore Telecom District headed by a General Manager. The Telecommunication services provided are mainly local and trunk telephone services and the telex services. These services are desired over a common telecommunication network, made up of a large number of local telephone exchange or systems, telex exchanges or systems.

The local telephone system at Bangalore was formed after the Reorganisation of States by merger of telephone exchanges in City area, those controlled by the Mysore Power and Light Department with the local and trunk exchange in civil area controlled by Posts and Telegraph Department. The Bangalore Telephones was upgraded into a major Telephone district on 23-7-1976. As on 1-4-82, there were 55,658 connections. The details in respect of growth of telephones in Bangalore City are as follows: 1955- 3,600; 1956-4,200; 1961-8,500; 1966-13,300; 1969-18,300; 1974- 26,800; 1975-33,700; 1976-37,300; 1977-42,200; 1978-44,800; 1979-49,900; 1982-57,658; 1984-63,200; 1985-72,152; 1986-73,541; 1989- 85,475. In a decade from 1978 to 1988, the increase in the number of Telephones is nearly 100 per cent.

As in 1988, there were 12 Exchanges viz., City, Central, Ulsoor I, Ulsoor II, Jayanagar, Shankarapuram I, Shankarapuram II, Krishnarajapura, Vijayanagara, Malleshwaram I and II, Peenya, with a total capacity of 1,17,050. As in Sept in 1989 the details of the telephones in Bangalore are given in the table.

Subscriber Trunk Dialing system has been introduced in the State and Bangalore is linked to about 700 places in India. International Subscriber Dialing has also been introduced and from Bangalore, a subscriber can dial to nearly 180 countries directly. Besides, there is operator assisted Overseas Telephones services. The following are the tariff. The rates charged are for the first three minutes and for each additional minute or fraction and report charges respectively (in rupees). For SAARC countries, 60,20,6; other neighbouring countries, 75,25,6; countries in Africa, Europe, Gulf Asia, Oceania 135, 45, 8; All countries in American continents and other places in Western Hemisphere 165,55,10.

The administrative set-up of the Bangalore Telecom District at in 1989 was as follows:- General Manager, General Manager (Development), Director, Area Managers (2), Chief Public Relations Officer, Public Grievance Officers (2), Commercial Officers (2), Chief Accounts Officer, Accounts Officers (3)- Directory Officers and other staff.

Telex

Telex was first installed in Bangalore in 1963. A subscriber having a telex connection can reach his counter-part within Indian and abroad dialling the appropriate station, zonal and national codes. They are all provided on co-axial or micro-wave medium. Switching zonal centres are at Madras, Bombay, Delhi and Calcutta. As in January 1988, there were 1,612 working connections of telex with a capacity of 2,030 in Bangalore city.

Radio

Akashvani was the first radio transmission station started in Mysore by private initiative in 1935. It was taken over by Central Government and subsequently shifted to Bangalore in November 1955. The high power transmitter was installed in Bangalore in November 1955. Since then, Bangalore station is functioning. Commercial Broadcasting was also added later and presently Bangalore station has both regular programmes and 'Vividha Bharathi' programmes. The station is headed by Director, assisted by Assistant Station Directors, Stations Engineer, Assistant Station Engineer, Programme Executives, Librarian and other staff. The high power transmission tower is at Hoskote. A vey powerful radio station at Aralu Mallige, Dodballapur taluk is in the offing. In 1972-73, the number of radio licences issued in Bangalore was 2,39,817 (9,47,180) and in 1978-79 it was 2,90,841 (10,79,921), the figures in the brackets indicating the state figures. As the system of obtaining licence for the possession of radios was abolished, in phases, the present figures are not available.

Television

Doordarshan commenced telecasting programmes for Bangalore with effect from November 1981 as relay station of Madras programme. There were considerable number of TV receiving sets in the city even before this to receive programmes from Madras by using boosters. Later, one hour programme in the evenings was telecast from Bangalore. A new powerful TV tower has been constructed with studio and other infra-structure for starting independent programmes. Presently, Bangalore Doordarshan telecasts evening programmes everyday and morning programmes on Sundays besides relaying Delhi programmes. In 1983-84, there were 61,769 television sets in Bangalore city only. As the licence for possessing a TV receiver has been cancelled, figures in respect of number of TVs is not available. In Bangalore city, there are a few TV manufacturers viz., KEONICS, BPL, BUSH, EIKO etc.

Statement showing the details of Telephones in Bangalore City as on 1.9.89

Particulars	Exchanges											Total
	City	Central	Ulsoor	Jaya nagar	Shankar puram	K.R. puram	Vijaya nagar	Malle- shram	Peenya	R.T. nagar	Rajaji nagar	
Capacity	22,000	13,150	20,700	7,000	18,000	900	10,000	14,900	6,750	4,500	3,650	1,17,050
ECO's	248	147	397	88	289	2	144	178	56	37	42	1,620
Total Working lines	17,945	12,531	19,429	6,903	15,993	685	9,775	13,689	2,221	4,220	3,564	1,06,955
Total Extentions	6,226	8,972	10,271	1,020	2,363	472	853	4,913	876	980	316	37,262
Total Phones	23,460	20,336	28,745	7,795	18,164	1,064	10,574	18,163	2,932	5,063	3,854	1,40,150

Source: Bangalore Telephones

BANGALORE DISTRICT