NATIONAL TRANSPORT RESEARCH CENTRE

MOTOR VEHICLE UTILIZATION SURVEY

NTRC-77

SHAMIM AHMAD
RESEARCH OFFICER

JUNE, 1985

P R E F A C E

It is a well known maxim that 'Road Transport' is the back bone of the economy of a country with a direct influence on its development.

Motor Vehicle Utilization Survey was carried out to obtain realistic estimates of utilization of various types of vehicles, and the traffic catered by road transport and its finding are contained in this report. These findings would be of great use in planning for the targets laid down in the Sixth Plan for the Transport Section.

During the survey and preparation of the Report particular emphasis was placed on the freight tonnage transport by road and the number of passengers travelling by road. A sufficient data base and references have been supplied in the report.

This study in its various aspects it addressed to those who formulate policy and allocate resourse.

June, 1985

(M. SADIQ SWATI)
CHIEF

C O N T E N T S

LIST OF TABLES

A N N E X U R E S

I N T R O D U C T I O N

CHAPTER - I

INTRODUCTION

Transport planning for a country has to be comprehensive, integraties the urban and rural areas takes into consideration the financial containments of the economics. The role of public transport, private transport, new road construction and traffic management measures have to be examined as a whole to achieve the best use of the limited resources available. A transport plan has to be developed as a complete package of projects and policies. It should be implemented as a carefully conceived and financially realistic short term phased programme.

Background

Due to increasing complexity of special relationships as a result of economic growth, policies of regional development and other socio-economic consideration, the need for such detailed information as the direction and volume of major flows of various categories of goods and passengers traffic cannot be over-emphasised for network planning inter-model distribution and other investment and policies.

This survey has assesed the utilization of various types of vehicles during their useful life span and collected information about tonnage of commodities carried by road and number of passengers travelled by road and also the existing position of passengers and goods vehicles. Such information is needed for comparison with other modes and formulation of policies for future planning.

Importance

Transportation consists of movement of persons and goods form one place to another. It therefore, involves considerations of both time and place, and is a creater of other public service utilities. In the process of creating these utilities, Road transport becomes an integral part of production. Travel may be undertaken by people for the share enjoyment it affords, an activity which has reached enormous proportions in the country.

One of the most important feature of transport is that it is one of the processes in the production of goods and services. Vehicles do not of course move about roads for reasons of their own, they move only because people want them to move in connection with activities in which they are engaged. Traffic is therefore a function of activities. These fundamental activities are number-less, but there are only four basic ways in which motor vehicles are used in connection with these activities :-

(1) Transport of raw materials, merchandise and food.
(2) Conveyance of passengers in bulk (buses, coaches, etc.).
(3) Conveyance of persons individually or in small numbers (cars, motors, cycles, etc.).
(4) Mobile services (fire engines clinics, libraries, etc.).

Within this four-fold classification of the use of vehicles there is one single distinction of great importance, i.e. the difference between the use of vehicles for essential

purpose in connection with trade, business, and industry, and the optimal use of cars for private pleasure and convenience.

The survey was carried out to obtain realistic estimates of vehicles utilization in respect of various types of vehicles, so that accurate estimates of traffic catered by road transport may be arrived at for planning purpose.

In this survey, vehicle utilization is cross-classified by a wide variety of vehicle characteristics as well as by areas and form of operations, is the relationship between vehicle age and utilization, and the population growth projections.

Coverage

The survey was carried out from June 1982 to September 1983 at 137 points of eight main districts and 4704 vehicles were interviewed during on road survey. The district wise coverage is as follows :

Districts	Numbers
Rawalpindi/Islamabad	575
Lahore	1786
Faisalabad	964
Multan	703
Peshawar	282
Karachi	183
Hyderabad	94
Quetta	117
Total :	4,704

Survey points were selected. Timings of the survey and selection of vehicles at each point was determined on sampling basis. The proporation of vehicles surveyed varied inversely with the volume of traffic although absolute number of observations increased in the volume. This is in accordance with standard sampling techniques.

Survey Points

The Survey points were located mostly at or near district boundries, the underlying reason is that most of the socio-economic data is available for districts. A map showing the surveyed districts is placed at Annex-A.

During the survey vehicles were also covered according to make and model to find out the actual fleet position of each make and model.

Goods transportation was divided into private and public sectors. Trucks operators in the private sector, as in the case of passenger transport, are supposed to be licenced and authorised by the transport authority in each province. In public sector there is only one organization transporting goods by road, namely the National Logestic Cell (NLC) which was established in 1978, when Pakistan was faced with a serious problem of effectively handling and distributing commodities imparted at Karachi Port which were in critical supply down country.

A distinctive feature of NLC fleet is its heavy duty trucks, such as full trailors (Mercedez Benz 22 tons) and

semi-trailors (Fiat and Hino 20-30 tons). Private trucks are mainly composed of Bedford (7-10 tons). Load bearing capacity of NLC trailors are as follows :-

Model	Load bearing capacity
Hino (Container)	30.5 Tons
Mercedez Benz (Full Trailor)	22.3 "
Hino (Semi-Trailor)	20.0 "
Fiat (" ")	21.3 "
Hino Truck	8.5 "
Saviem Truck	7.3 "
Ford Truck	7.0 "
Dodge Truck	5.0 "
Hino Bowzer (Tanker)	28,000 Liters
Fiat Bowzer (Tanker)	27,000 "

Data Collection

Interview of vehicles was carried out on sampling basis. Road side method was used for collection of information on the prescribed questionnaires which were filled by the help of registration books of the vehicles and interviews of the drivers/ owners of the vehicles.

On the main roads selected for survey it was difficult to cover all the vehicles crossing the survey point to prevent traffic hold ups and to keep the cost of the survey down. Vehicles at each survey points were selected to sampling basis following the principles of vehicles sampling proportions. The proportions of vehicles surveyed varied with the volume of traffic.

Road side surveys have to be very short and brief as the vehicles can be stopped for very short time and only that information can be collected which is recorded in registration books provided by the drivers. If complete information was not

entered in registration books, it was collected through interviews with the Drivers/Owners. Details of vehicles interviewed from each survey points is shown at Table-I.

Police Assistance

Police assistance was necessary and was obtained for stopping and managing the traffic at survey sites. Normally two police men of the rank of Constable/Head Constable were deputed by the provincial police authorities from the nearest local police station.

The presence of Police ensured the compliance of instructions of survey staff by drivers. It also ensured safety of survey staff at distant places.

Laden/Un-Laden Weight

Laden and Un-laden wieght of vehicles was also interviewed, as the laden weight was not mentioned in the registration books and the same was recorded from the drivers statement. The load bearing cpacity was required to assess the tonnage of commodities carried by road.

Estimated Mileage/Kilometer Performed

The question about mileage/kilometers was asked in four different ways, viz. mileage last one day, last one week, last one month, and last one year. For obvious reasons the estimations for recent period are more accurate then for the past periods.

Type of Vehicles

Vehicles were classified into 14 categories as follows :

Motor Cycle	Jeeps	Pickup
Scooter	Van	Truck
Motor Cab	Wagon	Emergency Vehicle
Motor Car	Mini-Bus	Ambulance
Rickshaw	Bus	Others

The said survey is for 'Motor Vehicles Utilization' therefore all types of vehicles were covered both for goods and passengers and 4704 vehicles were covered during road side survey.

The Questionnaire

Questionnaire used for the collection of information regarding 'Motor Vehicles Utilization Survey' contained 27 questions. Specimen questionnaire is placed at Annex-B.

The main questions are briefly described as follows :

(1) Registration Number : Registration number of vehicles were required to be recorded on the questionnaire to prevent take entires by Surveyers and to find out the frequency of vehicles.

(2) Make and Model/Year of Manufacture : Make and Model of each covered vehicles were required to assess the life time load bearing capacity and passengers carrying capacity, of the different makes and model.

(3) Seating Capacity : The question 'Seating Capcity' was included to assess the actual utilization of passenger road transport. In the transportation survey the drivers and conductors are excluded in case of public service vehicles. As eregards, cars and motor cycles, drivers were treated as passengers.

A N A L Y S I S

CHAPTER - II

Analysis

In an investigation of this type where the only data source is the vehicle operator it is necessary to ensure that the information collected is as accurate as possible. In order to ensure this it is necessary to work very closely with the operators of the vehicles.

It is important to resist the temptation to go for quantity of information rather than quality. Once the data is more than a few months old it is almost impossible to check back on a suspect figure with any confidence, and with this type of data suspect information cannot be allowed to go forward to the final data set for analysis. The cooperation received from vehicle operators was quite satisfactory. There was no case of refusal.

The Motor Vehicle Utilization Survey, is cross-classified with a wide variety of vehicle characteristics as well as with the area and form of operation of particular interest from the point of veiw of this survey.

Analysis of the collected data are given below under main headings :

Vehicles Interviewed

During survey total 4704 vehicles were covered from the following eight districts :

Sr. No.	Districts	No. of Vehicles Interviewed
1.	Rawalpindi/Islamabad	575
2.	Lahore	1,786
3.	Peshawar	252
4.	Karachi	183
5.	Faisalabad	964
6.	Multan	703
7.	Hyderabad	94
8.	Quetta	117
	Total :-	4,704

The total number of survey points were 127. Detailed number of vehicles covered at each survey point may be seen at table-II. The overall fleet position of the above eight districts in 1982 (the year of survey) was 906,179 out of these, 4704 vehicles were covered which is 0.52% of total on road vehicles.

Total eight type of vehicles were interviewed and the percentage of interviewed vehicles of the respective districts out of total on road vehicles were as under :-

Sr. No.	Type of Vehicles	Actual on Road	Interviewed	Percentage
1.	Buses	28,222	810	2.87
2.	Wagons	9,130	373	4.09
3.	Pickups	10,700	772	7.21
4.	Rickshaws	48,405	410	0.85
5.	Motorcyles/ Scooters	481,488	611	0.13
6.	Trucks	53,707	908	1.69
7.	Jeeps	170,374	38	0.02
8.	Motor Cars	104,153	782	0.75
	Total	906,179	4,704	0.52

As shown above the percentage of interviewed vehicles at serial number 4,5,7 and 8 were less then others, while the coverage of these vehicles were more than other vehicles, it means that the volume of vehicles at serial number 4,5,7 and 8 were higher then others.

The number of Motorcycles/Scooters only on road were more then the total numbers of other vehicles.

The availability of road passenger vehicles per 1000 people of surveyed districts were also calculated and it was concluded that the availability of passenger vehicles remained between 13-67 seats at district level except at Quetta district where 205 seats were available per 1000 people. Detailed exercise may be seen at Table-III.

The availability of certain number of passenger vehicles is not guaranted all times and places particularly during peak hours. Rather some shortage during certain times of the day and certain parts of the routes is inevitable due to wide fluctuations in demand. Besides, the possibilities of there being more shortage at one place then at the other cannot be ruled out. Individual operator is perdominate in road transport. The owner/operator of car makes the small enterprise efficient and successful. As the jeep, car, and Motorcycles are in the use of only single man.

Vehicles Covered

The Passenger Road Transport in the country is being shared by both the semi-public and private sectors. Every

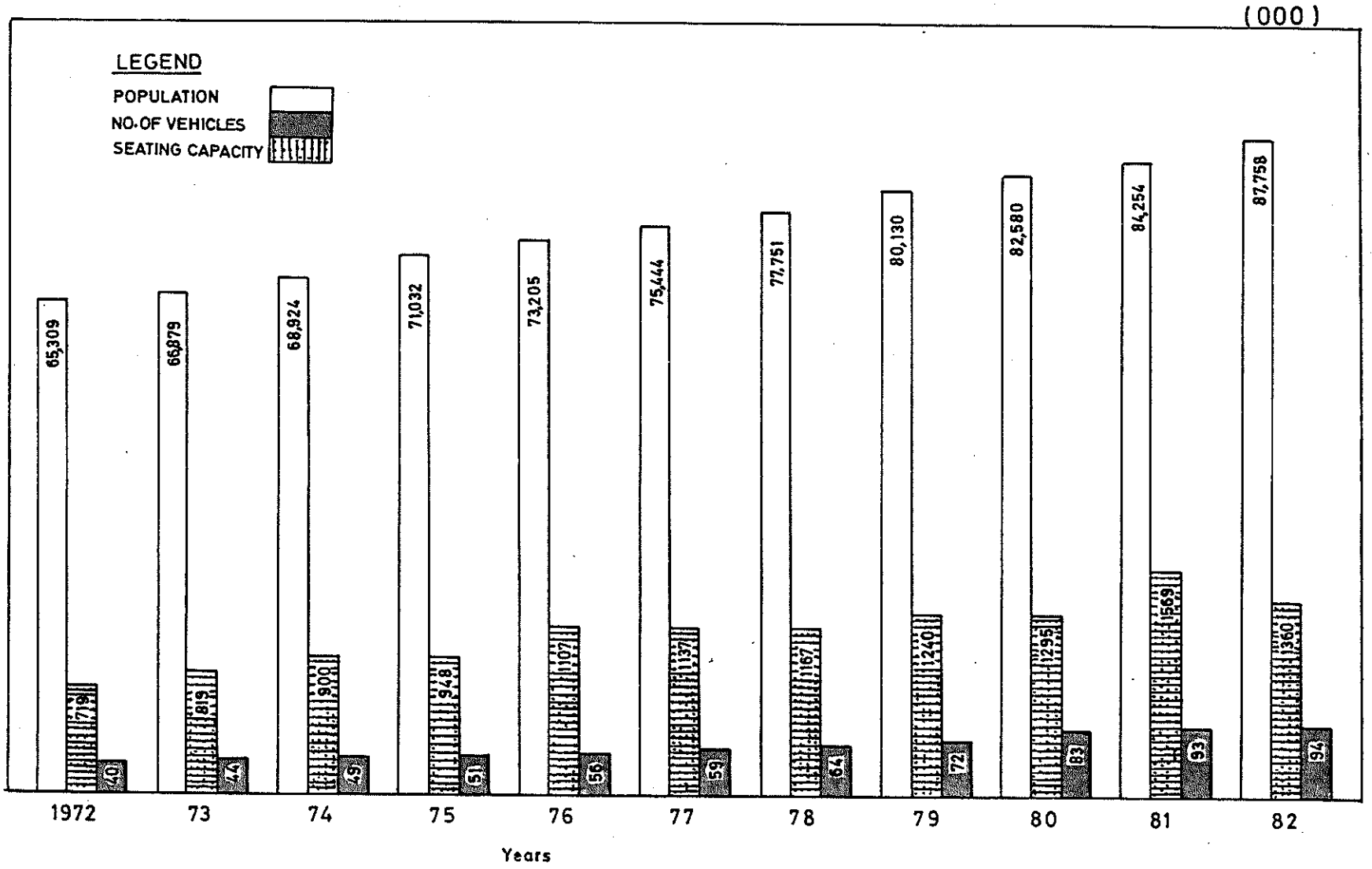
transport in the private sector, either in the form of Corporation or individual operator, comes under control of the Transport Authorities in each provincial government.

In Pakistan five semi-public Corporations are cater to the growing needs of big cities like Karachi, Lahore and Rawalpindi/Islamabad, Two urban transport Corporations viz. Karachi Transport Corporation, (KTC) and Punjab Urban Transport Corporation,(PUTC) for Lahore and Rawalpindi-Islamabad were established under the Federal Government in February, 1977. With effect from 3rd November, 1982 these Corporations were handed over to Provincial governments.

The following vehicles are serving as public vehicles. The seating capacity of each vehicles are also mentioned against each according to make :-

Sr. No.	Type of Vehicle	Make	Seating Capacity excluding driver
1.	Bus	Bed Ford	50
2.	Bus	Fiat	50
3.	Bus	Dodge	50
4.	Bus	Bed Ford (Rocket)	42
5.	Mini Bus	Mazda	25
6.	Mini Bus	Toyota	25
7.	Motor Cab	Datsun	4
8.	Motor Cab	Moris	4
9.	Wagon	Ford	13
10.	Wagon	Toyota	13
11.	Rickshaw	Vespa	2

PROPORTION OF VEHICLES ACCORDING TO NET POPULATION



STATEMENT SHOWING NUMBER OF PASSENGERS TRAVELLED BY URBAN TRANSPORT CORPORATIONS

(Million)

ORGANIZATION	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983
1. Punjab Urban Transport Corporation (in million)	-	-	-	114.14	134.69	112.88	101.70	130.91	154.18	146.42
2. Karachi Transport Corporation (No)	-	-	-	39.96	52.96	70.19	-	145.46	135.94	105.35
3. Punjab Road Transport Board (in million)	103.4	154.73	259.3	196.93	126.72	-	-	36.237	28.954	25.29
4. NWFP Road Transport Board (No)	27.73	32.24	33.82	31.12	30.44	31.04	21.78	25.42	39.19	38.07

Laden Un-Laden Weight

Average loads of passenger and goods vehicles drived from the survey data are included in the analysis to find out the load bearing capacity as well as seating capacity of each type of vehicle.

The average number of passengers found for different type of vehicles is as follows :-

Vehicle	(AVL)
Bus	38.4 Tons
Wagon	12.0 "
Car	3.2 "

Average load of major commodities per vehicles is as follows :-

Commodity	A.W.(Tons)
Wheat	10.17
Rice	10.23
Cotton	7.32
Edible Oil	8.55
Sugar	9.35

In the case of commodities not expressed in weight i.e. sand and stone which are usually measured in cubic capacity and in the case of POL, litres were converted into tons on the basis of specific gravity for each product.

The details of each vehicle make wise with its Laden and Un-Laden Weight may be seen at Table-IV.

Average load bearing capacity of private trucks, commodities wise, is as follows :-

Commodity	Average Load (Tons)
Cement	11.10
Rice	10.23
Wheat	10.17
Fertilizer	10.20
Coal	9.84
Sugar	9.35
Edible Oil	8.55
Fire Wood	8.36
Iron and Steel	8.32
Fruit and Vegitable	8.08
Other Commodities	7.36
Cotton	3.37

The above mentioned weights are based on drivers statement as the same were not mentioned in the registration books.

The registration unladen weight of standard Bedford Trucks is 12300 Lbs. (150 Mound) or 5.5 Tons. Taking into account the weight of body and accessories carried by trucks, the vehicles in gross load category upto 200 Mound are empty.

A General comparison of percentage distribution of vehicles into various net load categories as reported by drivers with corresponding distribution of vehicles into gross load resulting from actual weighing of vehicle (after allowing for standard unladen weight) has not produced consistant results, due to the fact that vehicles covered at the two places were not the same.

Annual Mileage

If data on 'Mileage Covered' is not available then it is not possible to utilize effectively any vehicle maintenance information which may be provided by the operators.

The question about mileage was asked in four parts viz. mileage since vehicle was on road, mileage during last one year, last one month, last one week and the mileage on last day. The results are briefly as follows :

Sl. No.	Type of Vehicle / Period	Last One Year	Last One Month	Last One Week
1.	Buses	43912	4467	1194
2.	Trucks	46489	4383	1128
3.	Wagons	28872	2691	606
4.	Pick-Ups	16718	1721	385
5.	Motor Cars	18661	1784	415
6.	Rickshaw	16300	941	430
7.	Motorcycle/Scooter	7465	695	176
8.	Jeeps	16147	1325	477

For comparison, mileage last year, last month and last week would need to be converted to a uniform base. Accordingly mileage last month and last week have been converted to annual mileage. Relative magnitudes are shown below :-

In addition to above and the average daily distance travelled was also worked out and is placed at Table-V.

Sl. No.	Type of Vehicle / Period	Last Year	Last Month	Last Week x 52
1.	Buses	43912	53604	62088
2.	Trucks	46489	52596	58656
3.	Wagons	28872	32292	31512
4.	Pick-ups	16718	20652	20020
5.	Motor Cars	18661	21408	21580
6.	Rickshaws	16300	11292	22360
7.	Motorcycle/Scooter	7465	8340	9152
8.	Jeeps	16147	15900	24804

It would be seen that in case of buses, trucks, etc., mileage last week is relatively more than last month. This is in line with the argument that there is less probability of ideal period being accounted for in mileage last week than for last month and hence higher mileage. However, the above argument does not appear to hold for mileage last month and last year where the latter is higher.

Period Off Road :

Commerical vehicles remain off road for some time during the year for repair, maintenance periodical inspection for obtaining certificate of fitness. Accordingly, a question about the period the vehicle remained off road was included in the questionnaire. For similar reasons as mileage, the questions were asked in two different forms viz. the period vehicle remained off the road last year, last month and last week.

The results are shown as follows :

Sl. No.	Type of Vehicle / Period	During Last Year	During Last Month	During Last Week
1.	Buses	53.00	5.00	1.00
2.	Trucks	62.00	6.00	1.00
3.	Wagons	51.00	5.00	1.00
4.	Pickup	47.00	5.00	1.00
5.	Motor Car	31.00	3.00	1.00
6.	Rickshaws	44.00	4.00	1.00
7.	Motorcycle	30.00	3.00	1.00
8.	Jeep	35.00	3.00	1.00

Fuel Consumption

Reliable data on fuel consumption is very difficult to obtain and in most cases the information collected can only be considered as an approximate estimate of the likely true figure. However, the fuel consumption data does provide a good method of cross checking the kilometers run by a vehicle and where a large discrepancy occured a specific investigation of data was made in an attempt to un-cover the erroneous figure. In the complimentary study the fuel consumption of a limited number of specific vehicles was measures in order to obtain accurate fuel consumption figures for representative vehicles in several vehicle classes.

FUEL CONSUMPTION BY TYPE OF VEHICLES IN PAKISTAN

TYPE OF VEHICLES	NO. OF VEHICLES	AVERAGE FUEL CONSUMPTION(K.P.L.)	STANDARD DEVIATION	CO-EFFICIENT OF VERIATION
Buses	810	3.58	0.22	6.15
Trucks	908	3.42	0.30	3.33
Wagons	373	4.95	1.08	21.82
Pick-Ups	773	10.66	0.71	6.66
Rickshaws	410	14.88	1.88	12.63
Motor Cars	782	10.03	0.59	5.88
M.Cycle/Scooter	611	32.04	4.09	12.77
Jeeps	37	9.29	1.73	18.62

Distance wise details of each type of vehicles may be seen in Table-VI.

The average fuel consumption (gallon per mile and litter per kilometer) reported by the drivers is shown as under :-

Sl. No.	Type of Vehicles	Mileage per Gallon	K.M. Per Littre
1.	Buses	9.49	3.41
2.	Trucks	9.00	3.23
3.	Wagons	10.5	3.78
4.	Pick-ups	19.68	7.08
5.	Motor Cars	25.33	9.11
6.	Rickshaws	34.79	12.52
7.	Motor Cycles	55.47	19.94
8.	Jeeps	20.08	7.22

As shown at Table-V. the majority of vehicles available in the country have small seating capacity. The proportion of buses of fiat makes are very small in the fleet of the country's buses. These makes have large seating capacity i.e. 52 and 42 while other makes like Mazda, Toyota and Mercedez have small seating capacity i.e. 25 or 28.

Shown below is a sample of different Model and Makes of buses with their fuel cost, maintenance cost and total summary cost per Ps./K.M.

Make	Model	Mileage	Fuel Cost Per Gl.	Fuel Cost Ps/K.M.	Maint.Cost (Ps/K.M.)	Total Fuel Maintenance Cost (Ps/K.Ms.)
Fiat	1967	121323	16.6	138.4	59.2	197.6
Fiat	1986	237276	16.48	135.68	18.0	153.72
Isuzu	1974	86824	19.2	116.32	54.37	170.66
Isuzu	1975	129672	16.0	139.52	65.76	205.28
Bedford	1972	163980	17.92	124.8	58.38	183.18
Bedford	1974	119280	17.6	126.88	74.69	201.57

It can roughly estimated that the FIAT 1968 bus is giving a good mileage and the running cost and maintenance cost of this is also less then other.

Make and Modal

To find out the proportion of vehicles by make and modal the information was collected in respect of each type of vehicles and during the survey total 34 makes and 29 modals were covered from 127 points of eight districts.

Many factors such as the initial cost, economic life, carrying capacity, overheads etc. go into the determination of cost effectiveness of a bus previously, except for the first two factors viz. initial cost and economic life, the overall effect on cost of most other factors used to be generally only marginally different from one make and modal to another.

However, all affort have been made to reduce all available information in one plane to make the comparison more objective. In the analysis comparison of various makes is based on mileage done and the number of months since the vehicles was put 'on road'.

Maintenance expenditure is the most important factor. A vehicle may cost less to buy but higher cost of its spares needed for its maintenance may off set this obvious advantage. A vehicle which may cost less to buy may prove to be the most expensive over its economic life due to higher maintenance cost.

During the survey it was observed that the majority of buses and trucks on road were Bedford makes. The total number of buses and trucks interviewed was 812 and 908 respectively, and the percentage of the same is as follows :-

	Number of Vehicles Interviewed	Bedford	Percentage of total Vehicles Interviewed
Buses	812	662	82%
Trucks	908	743	82%

As regards, the total 373 wagons interviewed 300 were Ford makes viz. 80% of total interviewed wagons. Details of interviewed vehicles by make and model is placed at Table-VII and Table-VIII respectively.

Fuel Type

Out of 4704 total interviewed vehicles, 2611 were on petrol and 2093 on diesel viz. 56% and 44% respectively. The 4704 vehicles interviewed were only privately owned vehicles.

Route Status

This survey was directed on the collection of data relevant to the utilization of motor vehicles by area,

population and its make. Information was obtained on present day movements for comparing with prediction of movements.

Out of 4704 total interviewed vehicles 2417 were on Urban Routes i.e. 51% and for Rural Routes no vehicle was observed during survey, as all survey points were within city. However, the majority of vehicles are playing on both routes. Trucks and buses are 37% of the total interviewed vehicles, detailed may be seen at Table-II.

Before, preparation of any urban or rural transportation studies. The actual requirements of both zones i.e. urban and rural, have to be collected according to the route status.

It has been shown by the Table-IX, that particularly Heavy Commercial Vehicles (HCVS) are serving both urban and rural routes.

The survey shows that only profitable routes are attractive for Private Sector.

Axles

During the survey information about the number of Axles were also collected and it was found that all surveyed vehicles i.e. 4704 were 2 Axles.

Average Age

The information about the estimated life of each vehicles were also collected, based on drivers statement. Total 4704 vehicles were divided into four groups viz. 5-10, 11-15, 16-20 and 20 years and above. The average life,

Standard Deviation and Co-efficient of Veriation have also been calculated of each type of vehicles. Out of total 4704 vehicles interviewed the estimated group wise life span is as under :

5-10	1126
11-15	1751
16-20	1763
20 and above	64

The estimated average life of each category of vehicle is as follows :-

BUSES	13 Years
WAGONS	12 "
PIC UPS	12 "
RICKSHAWS	12 "
M.CYCLE/ SCOOTER	15 "
MOTOR CARS	15 "
TRUCKS	16 "
JEEPS	16 "

As shown above, the average estimated life of heavy vehicles is more than others, viz. 13 to 16 years. The Standard Deviation and Co-efficient of variation were also worked out. Details may be seen at Table-X.

ESTIMATED LIFE BY GROUP

Sr. No.	Type of Vehicles	AGE GROUP				Average life (year)	Standard Daviation(S.D)	Co-efficient of Variation (C.V)
		5 - 10	11 - 15	16 - 20	20 & above			
1.	Buses	290	259	261	2	12.66	4.24	33.49
2.	Wagons	132	183	56	2	11.85	3.37	28.61
3.	Pick-ups	272	368	128	4	11.93	3.75	31.43
4.	Rickshaws	121	180	108	1	11.86	4.98	41.99
5.	M.Cycle/Scooter	96	216	293	5	14.60	3.84	26.30
6.	Motor Cars	98	309	362	13	14.72	3.72	25.30
7.	Trucks	113	226	534	35	15.56	3.81	24.49
8.	Jeeps	4	10	21	2	15.68	8.27	52.24

It was also important to work out the model wise estimated average life of each vehicles at the different localities. Therefore the same have been worked out in detail i.e. vehicle wise as well as district wise and it is found that the estimated life of each model/year manufacture shown at table-XI.

However, the above information is not reliable as the information regarding the estimated life of each vehicles was based on drivers statements.

SUMMARY AND CONCLUSIONS

CHAPTER - III

SUMMARY AND CONCLUSION

SUMMARY

The Survey was carried out at eight districts covering 127 points. Total 4704 vehicles were covered out of which 812 (17%) were Buses, 772 (16%) were Pickups, 782(17%) were Cars, 373 (8%) were Wagons, 37(0.8%) were Jeeps, 410(9%) were Rickshaws, 610(13%) were Scooter/Motor Cycles and 907 (19%) were Trucks.

The total vehicles interviewed district wise was 575 (12%) at Rawalpindi/Islamabad 1786(38%) at Lahore, 964(20%) at Faisalabad, 703(15%) at Multan, 282(6%) at Peshawar, 183 (4%) at Karachi, 94(2%) at Hyderabad and 117(2%) at Quetta district.

The best buses would give good mileage, consume less fuel, cost less on maintenance, be docked for repairs less frequently and make good revenue per seat mile.

One ean reasonably expect numerous difficulties for effective maintenance and speady repairs of dozens of makes of vehicles.

Many buses out of total bus fleets are small seating capacity of 24 and 28 seated i.e. Mazda, Toyota, etc. etc.

For the proper maintenance of vehicles workshop facilities are insufficient.

CONCLUSIONS

The registration of the vehicles should be according to their requirements due to the following reasons :

Since only the profitable routes on good roads are attractive for the private sector, large areas of the country are left without transportation. Neither Government and Private operators are filling the gap.

For standarization purpose the import should be only 2 or 3 makes in the country. As at present we have to import entire range of spares of each and every type of makes. This puts burden on resources and results in blockage of capital. Our policy of indiscriminate freedom to import all types of makes demand a change. It is restricted ourselves to one or two makes only.

The availability of a certain number of buses does not guarantee availability of buses all times and places. Rather some shortages during certain times of the day and certain parts of the route are inevitable due to wide fluctuations in demand. Similar will be the case for increase in demand in rush timings and evening timings. This is the most crucial problem and should be looked at according to the requirements.

It is also concluded from the analysis that proportion of L.C.Vs and H.V.Cs are not balanced.

The distribution of vehicles by route status and according to actual requirement are not maintained.

TABLE - I

NUMBER OF VEHICLES INTERVIEWED AT EACH SURVEY POINT

S.No.	Point of Interview	No. of Vehs. Interviewed
I.	Rawalpindi/Islamabad	
1.	Wagon Stand Rawalpindi	99
2.	Committee Chowk	30
3.	Aabpara Market	60
4.	Rawal Dam	20
5.	Pirwidhai Bus Stand	78
6.	Jinnah Super Market	28
7.	Covered Market	10
8.	Islamabad Club	10
9.	Near Pindora Choungi	30
10.	Gang Mandi	20
11.	Faizabad	50
12.	Sittara Market	30
13.	Near Lal Masjid	20
14.	Commercial Market	30
15.	Near Polyclinic	20
16.	Ayub Park	10
17.	Liaquat Bazar	20
18.	Imam Bari	10
	Total :-	575
II.	Lahore	
1.	Badami Bagh	36
2.	Pakistan Chowk	53
3.	Azadi Chowk	42
4.	Chowk Near Railway Station	26
5.	Chowk Yateem Khana	83
6.	Near Data Darbar	35
7.	Chowk Shalimar	31

S.No.	Point of Interview	No. of Vehs. Interviewed
8.	Kasur Road	35
9.	Shahdara Town	75
10.	Liberty Chowk	72
11.	Near Jhangir Tomb	36
12.	Near Zoo	34
13.	Baghe-Jinnah	53
14.	Chuburgi Chowk	55
15.	Near Gulberg Market	52
16.	Katchery Chowk	107
17.	Muzang Choungi	35
18.	Near Air Port	61
19.	Near Jallo Park	58
20.	Baghban Pura	37
21.	Near Mayo Hospital	26
22.	Model Town	36
23.	General Bus Stand	151
24.	Lower Mall Road	67
25.	Bilal Ganj	61
26.	Regal Chowk	31
27.	Nu-Lakha Goods Stand	29
28.	Truck Stand Sabzi Mandi	35
29.	Truck Stand	22
30.	Mochi Gate	30
31.	Bhati Gate	44
32.	Ishra Wagon Stand	60
33.	Lahore Gate	25
34.	Gram Market	30
35.	Crown Bus Stand	57
36.	Moghal Pura	34
37.	Shah Alam Market	32
	Total :-	1,786

S.NO.	Point of Interview	No. of Vehs. Interviewed
III.	Faisalabad	
1.	Nishat Abad	35
2.	Railway Station Chowk	37
3.	Fawora Chowk	35
4.	Manarwa Chowk	42
5.	Katchery Chowk	40
6.	Near Jhang Bazar	43
7.	General Bus Stand	74
8.	Sityana Road	42
9.	Reagal Chowk	41
10.	Airport Chowk	45
11.	Samundri Road	42
12.	Sargodha Road	40
13.	Chowk Near Jinnah Colony	37
14.	D. Ground Market	36
15.	Jhang Road	35
16.	Jaranwala Road	67
17.	Circular Road	40
18.	Partah Nugar (Truck Stand)	36
19.	Chowk Near Rail Bazar	39
20.	Chowk Near Gintagher	35
21.	Near Iqbal Stadium	42
22.	Chowk Near Iqbal Park	38
23.	Near D. Type Colony	43
	Total :-	964
IV.	Multan	
1.	Chowk Near Ginta Ghar	28
2.	Dera Bus Stand	26
3.	Chowk Near Hussain Agahi	64
4.	Chowk Near Nishtar Medical College	30
5.	Chowk Near Qasim Bagh	34
6.	Chowk Near General Bus Stand	64

S.No.	Point of Interview	No. of Vehs. Interviewed
7.	Truck Stand Near Babar Gate	28
8.	Chowk Near Railway Station	30
9.	Chowk Cantt Station	28
10.	Near Air Port	35
11.	Chowk Kamran	54
12.	Chowk Aziz Hotel	32
13.	Mumtaz Abad	34
14.	Vehari Road	30
15.	Katchery Chowk	32
16.	Bahawalpur Road	32
17.	Truck Stand Sabzi Mandi	64
18.	Chowk G.T.S. Bus Stop	35
19.	Chowk Majderya	23
	Total :-	703
V.	Peshawar	
1.	G. T. Road	60
2.	Jamroud Road	20
3.	General Bus Stand	20
4.	Shouba Chowk	20
5.	Bajouri Gate	30
6.	Railway Station	10
7.	Fakhre Alam Road	10
8.	F.C. Chowk	30
9.	Kheyber Chowk	22
10.	Kohat Bus Stand	20
11.	Rickshaw Gate	30
12.	Quarter Chowk	10
	Total :-	282

S.NO.	Point of Interview	No. of Vehs. Interviewed
VI.	Karachi	
1.	Bus Stand Karachi	10
2.	Truck Stand Maripur	26
3.	Hyderabad Wagon Stand	21
4.	Chowk Near Shershah	20
5.	Chowk Near Clifton	24
6.	Landi	22
7.	Chowk Near National Stadium	28
8.	Korangi	32
	Total :-	183
VII.	Hyderabad	
1.	Bus Stand Hyderabad	16
2.	Near Wagon Stand	26
3.	Latifabad Chowk	24
4.	Chowk Near Truck Stand	28
	Total :-	94
VIII.	Quetta	
1.	Saryah Chowk	12
2.	Kachlor Road	21
3.	Near Liaquat Chowk	22
4.	Air Port Chowk	20
5.	Toungi Road	21
6.	Near Railway Station	21
	Total :-	117

TABLE - II

STATEMENT SHOWING TOTAL NUMBERS VEHICLES INTERVIEWED

Sr. No.	Station	Type of Vehicles								Total
		Buses	Pickups	M/Cars/ M/Cabs	Wagons	Jeeps	Rickshaws	Scooter/ M/Cycles	Trucks	
1.	Rawalpindi/Islamabad	105	74	209	73	8	10	61	35	575
2.	Lahore	234	371	280	220	4	192	213	272	1786
3.	Faisalabad	209	106	114	16	5	35	166	283	964
4.	Multan	180	82	70	7	11	79	102	172	703
5.	Peshawar	54	50	26	48	-	47	11	46	282
6.	Karachi	13	46	48	3	5	15	27	26	183
7.	Hyderabad	10	15	11	-	-	2	8	48	94
8.	Quetta	7	28	24	6	4	-	22	26	117
	Total :-	812	772	782	373	37	410	610	908	4704

TABLE - III

STATEMENT SHOWING SEATS AVAILABILITY FOR 1000 POPULATION

Districts	NUMBER TYPE OF VEHICLE				TOTAL NO. OF VEH.*	AVERAGE SEATS AVAILABILITY	POPULATION ** (000)	SEATS AVAILABLE PER 1000 POPULATION
	Buses	Wagon	Rickshaw	Taxies				
Rawalpindi/Islamabad	2402	1552	-	2370	6324	144952	2169	67
Lahore	2351	752	9725	672	13500	144762	3633	40
Peshawar	2500	1050	4080	1860	9490	149250	2312	65
Karachi	1282	2956	14271	6292	24801	153674	5593	27
Faisalabad	1795	843	2534	40	5212	102347	4704	22
Multan	960	164	1410	460	2994	52872	4108	13
Hyderabad	1291	1891	3323	1102	7607	97605	2133	46
Quetta	1288	1459	2263	54	5064	85533	417	205

		SEATING CAPACITY	
1.	Bus	Bed Ford	50
2.	Bus	Fiat	50
3.	Bus	Dodge	50
4.	Bus	Bed Ford (Rocket)	42
5.	Mini Bus	Mazda	25
6.	Mini Bus	Toyota	25
7.	Motor Cab	Datsun	4
8.	Motor Cab	Moris	4
9.	Wagon	Ford	13
10.	Wagon	Toyota	13
11.	Rickshaw	Vespa	2

Source :

* Excise and Taxation Offices
** Population Census Organization

TABLE - IV

STATEMENT SHOWING SEATING CAPACITY AND LADEN/UN-LADEN WEIGHT MAKE - WISE

Sr. No.	Type of Vehicle	Make	Seating Capacity Excluding Driver	Un-Laden Weight(KG)	Laden Weight (KG)
1.	Bus	Bedford	51	5600	10920
"	"	"	41	5200	9957
"	"	B.M.C.	41	5200	10920
"	"	Doge	51	5600	10920
"	"	Fiat	51	5600	10920
"	"	Isuzu	51	5600	10920
"	"	Isuzu	41	5200	9957
2.	Mini Bus	Mazda	25	4620	8960
"	"	Mercedez	20	4400	8500
"	"	Ford	25	4620	8960
"	"	Toyota	25	4620	8969
"	Pick Ups	Suzuki	9	650	1350
"	"	Toyota	2	1670	2470
"	"	Datsun	2	1466	2070
3.	Wagon	Ford	12	1600	2525
"	"	Toyota Hiace	12	1440	2525
4.	Rickshaw	Vespa	2	300	-
5.	Motor Cab	Datsun	4	750	-
6.	D/Van	Suzuki	3	750	1350
7.	M/Car	Datsun	3	870	-
"	"	Suzuki	3	539	-
8.	Jeep	Nissan	4	780	-
9.	Scooter	Vespa	2	98	-
10.	Motor Cycle	Yamaha/Honda,etc	1	98	-
11.	Truck	Bedford	2	5600	10920
"	"	Nissan	2	6240	12480
"	"	Ford	2	5600	10920
"	"	Isuzu	2	6500	10920
"	"	Hino	2	5600	10920

TABLE - V

STATEMENT SHOWING AVERAGE DAILY DISTANCE TRAVELLED BY EACH VEHICLE

Type of Vehicle	No.of Vehicles	Average Daily Distance Travelled (ADDT) (K.M)
Rawalpindi/Islamabad		
BUSES	105	359
WAGONS	73	166
PICK-UPS	74	66
RICKSHAWS	10	70
M/CYCLE/SCOOTER	61	38
TRUCKS	35	284
JEEPS	8	58
MOTOR CARS	209	85
Lahore		
BUSES	234	275
WAGONS	220	152
PICK-UPS	271	79
RICKSHAWS	192	98
M/CYCLE/SCOOTER	212	42
TRUCKS	272	188
JEEPS	4	59
MOTOR CARS	280	131

Type of Vehicle	No. of Vehicles	Average Daily Distance Travelled (ADDT) (K.M.)
Peshawar		
BUSES	54	238
WAGONS	48	191
PICK-UPS	50	83
RICKSHAWS	47	98
M.CYCLE/SCOOTER	11	23
TRUCKS	46	236
JEEPS	-	-
MOTOR CARS	26	78
Karachi		
BUSES	13	315
WAGONS	3	173
PICK-UPS	46	80
RICKSHAWS	15	107
M.CYCLE/SCOOTER	27	48
TRUCKS	25	389
JEEPS	5	109
MOTOR CARS	48	122

Type of Vehicle	No.of Vehicles	Average Daily Distance Travelled (ADDT) (K.M.)
Faisalabad		
BUSES	207	368
WAGONS	16	216
PICK-UPS	106	87
RICKSHAWS	65	92
M.CYCLE/SCOOTER	167	37
TRUCKS	287	314
JEEPS	5	55
MOTOR CARS	114	67
Multan		
BUSES	180	382
WAGONS	7	79
PICK-UPS	82	48
RICKSHAWS	79	99
M.CYCLE/SCOOTER	102	41
TRUCKS	172	326
JEEPS	11	130
MOTOR CARS	70	78

Type of Vehicle	No. of Vehicle	Average Daily Distance Travelled (ADDT) (K.M.)
Hyderabad		
BUSES	10	662
WAGONS	-	-
PICK-UPS	15	105
RICKSHAWS	2	105
M.CYCLE/SCOOTER	8	38
TRUCKS	50	426
JEEPS	-	-
MOTOR CARS	8	131
Quetta		
BUSES	7	324
WAGONS	6	337
PICK-UPS	28	161
RICKSHAWS	-	-
M.CYCLE/SCOOTER	22	47
TRUCKS	26	379
JEEPS	4	107
MOTOR CARS	24	131

TABLE - VI

FUEL CONSUMPTION BY TYPE OF VEHICLES

District : Rawalpindi/Islamabad

Type of Vehicle	No. of Vehs.	Average Fuel Consumption (K.P.L.)	Standard Deviation	Co-Efficient of Veriation
BUSES	105	3.58	0.81	22.63
TRUCKS	35	3.30	0.62	18.79
WAGONS	73	5.45	2.21	40.55
PICK-UPS	74	10.22	2.62	25.64
RICKSHAW	10	14.00	2.29	16.36
MOTOR CARS	209	9.70	2.84	29.28
M.CYCLE/ SCOOTER	61	34.80	10.62	30.52
JEEPS	8	9.00	2.12	23.56

TABLE - VI.1

FUEL CONSUMPTION BY TYPE OF VEHICLES

District : Lahore

Type of Vehicles	No. of Vehicles	Average Fuel Consumption (K.P.L.)	Standard Deviation	Co-Efficient of Veriation
BUSES	234	3.47	1.19	34.29
TRUCKS	272	3.15	1.00	31.75
WAGONS	220	4.35	1.81	41.61
PICK-UPS	371	10.75	2.34	21.77
RICKSHAWS	192	14.53	4.60	31.66
MOTOR CARS	280	9.56	2.50	26.05
M.CYCLE/ SCOOTER	213	27.05	7.29	26.95
JEEPS	4	11.25	2.49	22.13

TABLE - VI.2

FUEL CONSUMPTION BY TYPE OF VEHICLES

District : Peshawar

Type of Vehicles	No. of Vehicles	Average Fuel Consumption (K.P.L.)	Standard Deviation	Co-Efficient of Veriation
BUSES	54	3.70	0.78	21.08
TRUCKS	46	3.59	0.69	19.22
WAGONS	48	5.75	1.92	33.39
PICK-UPS	50	11.94	4.21	35.26
RICKSHAWS	47	17.61	5.70	32.37
MOTOR CARS	26	11.19	2.40	21.45
M.CYCLE/ SCOOTER	11	22.05	6.03	26.80
JEEPS	-	-	-	-

TABLE - VI. 3

District : Multan

Type of Vehicles	No. of Vehicles	Average Fuel-Consumption (K.P.L.)	Standard Deviation	Co-Efficient of Veriation
BUSES	180	3.55	0.75	21.13
TRUCKS	172	3.41	0.76	22.29
WAGONS	7	11.50	2.96	25.74
PICK-UPS	82	10.79	2.07	19.18
RICKSHAWS	79	13.20	4.55	34.47
MOTOR CARS	70	10.59	2.68	25.31
M.CYCLE/ SCOOTER	102	34.75	10.28	29.58
JEEPS	11	11.05	2.50	22.62

TABLE - VI. 4

FUEL CONSUMPTION BY TYPE OF VEHICLES

District : Faisalabad

Type of Vehicles	No. of Vehicles	Average Fuel Consumption (K.P.L.)	Standard Deviation	Co-Efficient of Veriation
BUSES	207	3.55	0.89	25.07
TRUCKS	283	3.40	0.79	23.24
WAGONS	16	5.63	2.34	41.56
PICK-UPS	106	11.01	2.42	21.98
RICKSHAWS	65	14.27	5.91	41.42
MOTOR CARS	114	11.08	2.41	21.75
M.CYCLE/ SCOOTER	167	34.93	8.13	23.28
JEEPS	5	8.10	3.50	43.21

TABLE - VI. 5

FUEL CONSUMPTION BY TYPE OF VEHICLES

District : Karachi

Type of Vehicles	No. of Vehicles	Average Fuel Consumption (K.P.L.)	Standard Deviation	Co-Efficient of Veriation
BUSES	13	5.00	0.70	14.00
TRUCKS	26	4.35	0.55	12.64
WAGONS	3	4.67	0.47	10.06
PICK-UPS	46	10.33	1.52	14.71
RICKSHAWS	15	22.07	2.08	9.42
MOTOR CARS	48	10.17	1.31	7.76
M.CYCLE/ SCOOTER	27	37.56	7.34	19.54
JEEPS	5	8.40	1.96	23.33

TABLE - VI.6

FUEL CONSUMPTIO N BY TYPE OF VEHICLES

District : Hyderabad

Type of Vehicles	No. of Vehicles	Average Fuel Consumption (K.P.L.)	Standard Deviation	Co-Efficient of Veriation
BUSES	10	4.43	0.87	19.64
TRUCKS	48	4.00	0.55	13.75
WAGONS	-	-	-	-
PICK-UPS	15	9.90	1.20	12.12
RICKSHAWS	2	20.00	2.05	12.05
MOTOR CARS	11	9.95	2.15	21.61
M.CYCLE/ SCOOTER	8	32.50	8.29	25.51
JEEPS	-	-	-	-

TABLE - VI. 7

FUEL CONSUMPTION BY TYPE OF VEHICLES

Disctrict : Quetta

Type of Vehicles	No. of Vehicles	Average Fuel Consumption (K.P.L.)	Standard Deviation	Co-Efficient of Veriation
BUSES	7	4.00	0.82	20.50
TRUCKS	26	4.35	0.68	15.63
WAGONS	6	5.17	0.69	13.35
PICK-UPS	29	7.64	1.93	25.26
RICKSHAWS	-	-	-	-
MOTOR CARS	24	10.13	1.42	14.02
M.CYCLE/ SCOOTER	22	36.36	6.19	17.02
JEEPS	4	5.75	0.43	5.55

TABLE - VII

TOTAL NUMBER OF VEHICLES INTERVIEWED BY MAKEWISE

Sr. No.	Make/Type of Vehicles	Bus	Truck/ Tractor	Wagon	Pick-Ups	M/Car & M/Cab	Rick-shaw	Jeep	M.Cycle Scooter
1.	Bedford	662	743	-	-	-	-	-	-
2.	Ford	31	35	300	-	8	-	1	-
3.	Ley Land	-	3	-	13	-	-	-	-
4.	Isuzu	16	11	-	-	-	-	-	-
5.	Mercedeze	-	2	-	-	12	-	-	-
6.	Dodge	8	1	1	1	-	-	-	-
7.	Messay Fergoson	-	27	-	-	-	-	-	-
8.	Belarus	-	12	-	-	-	-	-	-
9.	BMC	1	17	-	1	-	-	-	-
10.	Hino	-	7	-	-	-	-	-	-
11.	Nishan	-	23	12	-	-	-	-	-
12.	Mazda	80	10	-	17	57	-	-	-
13.	Fiat	7	11	60	-	15	-	-	-
14.	IMT	-	2	-	-	-	-	-	-
15.	Toyota	-	2	-	71	494	-	16	-
16.	Chiverlet	-	2	-	-	2	-	-	-
17.	Vespa	-	-	-	-	-	410	-	161
18.	Yamaha	-	-	-	-	-	-	-	235
19.	Honda	-	-	-	-	2	-	-	104
20.	Suzuki	-	-	-	617	11	-	12	81
21.	Kawasaki	-	-	-	-	-	-	-	29
22.	Land Rover	-	-	-	-	-	-	2	-
23.	Willys	-	-	-	-	-	-	3	-
24.	Osten	-	-	-	-	2	-	1	-
25.	Universal	-	-	-	-	-	-	1	-
26.	Kausar	-	-	-	-	-	-	1	-
27.	Datsun	-	-	-	52	132	-	-	-
28.	Charade	-	-	-	-	2	-	-	-
29.	Moris	-	-	-	-	32	-	-	-
30.	Opel	-	-	-	-	2	-	-	-
31.	Berlina	-	-	-	-	1	-	-	-
32.	Lancer	-	-	-	-	5	-	-	-
33.	Folks Wagon	-	-	-	-	4	-	-	-
34.	Skoda	-	-	-	-	1	-	-	-

TABLE - VIII

STATEMENT SHOWING VEHICLES COVERED BY MODEL WISE

Model / Type of Vehs.	Buses	Wagons	Pick-Ups	Rick-shaw	M.Cycle Scooter	M.Car/ M.Cab.	Trucks	Jeeps	Total
1956	-	-	-	-	-	-	3	-	3
1957	-	3	-	-	25	-	2	-	30
1958	-	-	2	-	-	-	7	-	93
1959	-	-	-	-	35	-	3	-	38
1960	-	-	-	-	-	-	5	-	5
1961	7	3	-	-	-	-	15	-	25
1962	5	-	-	-	34	-	10	-	49
1963	3	2	-	3	-	-	8	-	26
1964	9	-	4	5	-	16	29	-	63
1965	5	-	-	12	16	03	37	-	73
1966	10	-	-	10	-	12	40	-	72
1967	16	5	4	12	-	11	20	-	68
1968	19	13	-	14	27	20	42	-	135
1969	40	10	-	10	-	34	73	-	167
1970	34	19	-	5	23	92	39	-	212
1971	30	9	-	15	-	25	29	-	108
1972	31	26	3	13	18	54	31	-	176
1973	45	17	7	14	-	79	70	-	232
1974	51	36	17	17	50	58	86	10	325
1975	57	22	15	13	-	44	89	-	240
1976	68	42	24	35	35	52	46	-	302
1977	35	26	23	11	68	31	49	-	243
1978	68	32	18	25	-	30	36	05	214
1979	84	24	86	60	28	29	36	-	347
1980	65	27	163	57	112	62	20	3	519
1981	64	24	153	46	-	12	52	8	509
1982	56	22	236	23	47	15	12	-	411
1983	10	7	4	10	53	103	4	5	196
1984	0	4	13	-	39	-	-	6	67
Total :	812	373	772	410	610	782	908	37	4704

TABLE - IX

STATEMENT SHOWING ROUTES STATUS

Districts / Routes and Type of Public Vehicles	Rawal-Pindi/Isla-mabad	Lahore	Pesh-awar	Karachi	Faisa-labad	Multan	Hyde-erabad	Quetta
BUSES								
Urban	32	38	24	13	19	34	-	-
Rural	-	-	-	-	-	-		-
Both	73	196	30	-	190	146	10	7
Total	105	234	54	13	209	180	10	7
WAGONS								
Urban	54	36	10	3	7	1	-	1
Rural	-	-	-	-	-	-	-	-
Both	19	184	38	-	9	6	-	5
Total	73	220	48	3	16	7	-	6
PICK-UPS								
Urban	74	371	35	46	106	82	15	28
Rural	-	-	-	-	-	-	-	-
Both	-	-	15	-	-	-	-	-
Total	74	371	50	46	106	82	15	28
RICKSHAWS								
Urban	10	192	47	15	65	79	2	-
Rural	-	-	-	-	-	-	-	-
Both	-	-	-	-	-	-	-	-
Total	10	192	47	15	65	79	2	-
M.CYCLE/ SCOOTER								
Urban	61	213	11	27	166	102	8	22
Rural	-	-	-	-	-	-	-	-
Both	-	-	-	-	-	-	-	-
Total	11	213	11	27	166	102	8	22
MOTOR CARS								
Urban	209	280	26	48	114	70	11	24
Rural	-	-	-	-	-	-	-	-
Both	-	-	-	-	-	-	-	-
Total	209	280	26	48	114	70	11	24
TRUCKS								
Urban	3	-	37	16	-	172		-
Rural	-	-	-	-	-	-	-	-
Both	32	272	9	10	283	--	48	26
Total	35	272	46	26	283	172	48	26
JEEPS								
Urban	8	4	-	5	5	11	-	4
Rural	-	-	-	-	-	-	-	-
Both	-	-	-	-	-	-	-	-
Total	8	4	-	5	5	11	-	4

TABLE - X

AVERAGE LIFE OF VEHICLES DISTRICT-WISE

DISTRICT RAWALPINDI

Type of Vehicles	No. of Vehicles	Average Life (Years)	Standard Deviation	Co. Effecient of Variation
Buses	105	7.86	1.57	19.97
Trucks	35	8.43	3.40	40.33
Wagons	73	9.71	1.31	13.49
Pickups	74	8.68	0.74	8.53
Rickshaws	10	12.90	2.21	17.13
Motor Cars	209	15.67	2.65	16.91
M.Cycle/ Scooter	61	13.97	3.99	28.56
Jeeps	8	12.50	4.09	32.72

TABLE - X.1

AVERAGE LIFE OF VEHICLES DISTRICT-WISE

DISTRICT LAHORE

Type of Vehicles	No. of Vehicles	Average Life (Years)	Standard Deviation	Co. Effecient of Variation
Buses	234	10.96	1.40	12.86
Trucks	272	14.79	2.49	16.84
Wagons	220	12.73	2.00	15.71
Pickups	371	11.82	1.40	11.84
Rickshaws	192	11.68	2.22	19.01
Motor Cars	280	14.59	1.69	11.58
M.Cycle/ Scooter	213	14.94	1.24	8.30
Jeeps	4	17	3.00	17.65

TABLE - X.2

AVERAGE LIFE OF VEHICLES DISTRICT-WISE

DISTRICT PESHAWAR

Type of Vehicles	No. of Vehicles	Average Life (Years)	Standard Deviation	Co.Effecient of Variation
Buses	54	13.24	2.97	22.43
Trucks	46	13.78	3.27	23.73
Wagons	48	11.31	1.60	14.15
Pick-ups	50	8.92	1.32	14.80
Rickshaws	47	11.28	1.22	10.82
Motor Cars	26	13.19	2.54	19.26
M.Cycle/ Scooter	11	11.00	3.74	34.00

TABLE - X.3

AVERAGE LIFE OF VEHICLES DISTRICT-WISE

DISTRICT FAISALABAD

Type of Vehicles	No. of Vehicles	Average Life (Years)	Standard Deviation	Co. Effecient of Variation
Buses	207	14.90	1.60	10.74
Trucks	283	16.36	2.19	13.39
Wagons	16	14.50	2.09	14.41
Pickups	106	13.29	1.29	9.71
Rickshaws	65	13.45	1.96	14.97
Motor Cars	114	15.45	0.86	5.57
M.Cycle/ Scooter	167	15.42	0.97	6.29
Jeeps	5	17.60	1.50	8.52

TABLE - X.4

AVERAGE LIFE OF VEHICLES DISTRICT-WISE

DISTRICT MULTAN

Type of Vehicles	No. of Vehicles	Average Life (Years)	Standard Deviation	Co. Effecient of Variation
Buses	180	15.89	2.10	13.22
Trucks	172	16.28	1.60	9.83
Wagons	7	13.43	5.56	41.40
Pickups	82	12.79	1.00	7.82
Rickshaws	79	16.14	2.37	14.68
Motor Cars	70	15.60	1.80	11.54
M.Cycle/ Scooter	102	13.66	2.07	15.15
Jeeps	11	15.64	2.50	15.98

TABLE - X.5

AVERAGE LIFE OF VEHICLES DISTRICT-WISE

DISTRICT KARACHI

Type of Vehicles	No. of Vehicles	Average Life (Years)	Standard Deviation	Co. Effecient of Variation
Buses	13	14.77	1.80	12.19
Trucks	26	19.42	1.42	7.31
Wagons	3	13.00	1.63	12.54
Pickups	46	13.28	1.17	8.81
Rickshaws	15	16.93	3.13	18.49
Motor Cars	48	15.40	1.20	7.79
M.Cycle/ Scooter	27	16.67	1.25	7.50
Jeeps	5	22.00	2.45	11.14

TABLE - X.6

AVERAGE LI FE OF VEHICLES DISTRICT-WISE

DISTRICT HYDERABAD

Type of Vehicles	No. of Vehicles	Average Life (Year)	Standard Deviation	Co. Effecient of Variation
Buses	10	16.8	1.94	11.55
Trucks	48	17.04	3.70	21.71
Pickups	15	12.93	1.06	8.20
Rickshaws	2	17.5	2.5	14.29
Motor Cars	11	16.82	2.08	12.37
M.Cycle/ Scooter	8	16.63	1.41	8.48

TABLE - X.7

AVERAGE LIFE OF VEHICLES DISTRICT-WISE

DISTRICT QUETTA

Type of Vehicles	No. of Vehicles	Average Life (Year)	Standard Deviation	Co. Effecient of Variation
Buses	7	16.71	2.66	15.92
Trucks	26	17.77	1.25	7.03
Wagons	6	14.83	1.46	9.84
Pickups	28	15.07	1.51	10.02
Motor Cars	24	16.00	2.24	14.00
M.Cycle/ Scooter	22	16.82	1.95	11.59
Jeeps	4	19.50	0.50	2.56

TABLE - XI

MODEL-WISE AVERAGE LIFE (DISTRICT-WISE)

RAWALPINDI/ISLAMABAD

Sl. No.	Model (Year of Manuf.)	No. of Vehicles	Average Life (Estimated)
Buses			
1.	1969	4	13 years
2.	1970	2	13 years
3.	1973	5	12 years
4.	1974	3	9 years
5.	1975	4	10 years
6.	1976	6	8 years
7.	1978	5	8 years
8.	1979	12	8 years
9.	1980	25	7 years
10.	1981	29	7 years
11.	1982	8	7 years
Wagons			
1.	1974	4	13 years
2.	1975	2	13 years
3.	1976	9	11 years
4.	1977	13	10 years
5.	1978	11	9 years
6.	1979	7	8 years
7.	1980	17	9 years
8.	1981	8	9 years

Sl. No.	Model (Year of Manuf)	No. of Vehicles	Average Life (Estimated)
Pickups			
1.	1976	5	8 years
2.	1977	4	9 years
3.	1978	8	8 years
4.	1979	19	8 years
5.	1980	17	9 years
6.	1981	16	9 years
7.	1982	4	11 years
Rickshaws			
1.	1978	3	11 years
2.	1979	2	15 years
3.	1981	2	12 years
M.Cycle/Scooter			
1.	1964	2	19 years
2.	1974	3	14 years
3.	1975	2	15 years
4.	1976	4	17 years
5.	1977	5	19 years
6.	1978	2	11 years
7.	1979	15	11 years
8.	1980	9	14 years
9.	1981	11	10 years
10.	1982	2	15 years

Sl. No.	Model (Year of Manuf.)	No. of Vehicles	Average Life (Estimated)
Motor Car			
1.	1965	4	20 years
2.	1966	10	22 years
3.	1967	3	13 years
4.	1968	4	21 years
5.	1969	6	19 years
6.	1970	7	17 years
7.	1971	5	20 years
8.	1972	12	15 years
9.	1973	12	18 years
10.	1974	22	15 years
11.	1975	6	16 years
12.	1976	16	15 years
13.	1977	8	13 years
14.	1978	23	16 years
15.	1979	20	14 years
16.	1980	17	15 years
17.	1981	27	12 years
18.	1982	5	16 years

Sl. No.	Model (Year of Manuf.)	No. of Vehicles	Average Life (Estimated)
Trucks			
1.	1966	2	18 years
2.	1974	3	10 years
3.	1975	4	8 years
4.	1976	6	8 years
5.	1978	4	8 years
6.	1979	2	5 years
7.	1980	4	6 years
8.	1981	5	7 years
9.	1982	2	6 years

TABLE - XII

MODEL-WISE LIFE (DISTRICT-WISE)

LAHORE

Sl. No.	Model (Year of Manuf.)	No. of Vehicles	Average Life (Estimated)
Buses			
1.	1967	2	17 years
2.	1970	2	14 years
3.	1971	4	14 years
4.	1972	8	17 years
5.	1973	6	9 years
6.	1974	2	8 years
7.	1975	19	12 years
8.	1976	17	12 years
9.	1977	22	12 years
10.	1978	20	10 years
11.	1979	31	11 years
12.	1980	45	10 years
13.	1981	46	10 years
14.	1982	10	11 years
Wagons			
1.	1969	2	15 years
2.	1970	6	15 years
3.	1971	7	15 years
4.	1972	24	15 years
5.	1973	20	13 years
6.	1974	31	12 years
7.	1975	36	12 years

Sl. No.	Model (Year of Manuf.)	No. of Vehicles	Average Life (Estimated)
8.	1976	33	12 years
9.	1977	16	11 years
10.	1978	3	12 years
11.	1979	14	14 years
12.	1980	13	11 years
13.	1981	8	11 years
14.	1982	4	11 years
Pickups			
1.	1961	2	23 years
2.	1971	3	16 years
3.	1973	7	15 years
4.	1974	5	12 years
5.	1975	7	13 years
6.	1976	17	12 years
7.	1977	17	12 years
8.	1978	12	12 years
9.	1979	58	11 years
10.	1980	66	12 years
11.	1981	97	11 years
12.	1982	75	12 years

Sl. No.	Model (Year of Manuf.)	No. of Vehicles	Average Life (Estimated)
Rickshaws			
1.	1970	5	15 years
2.	1971	4	14 years
3.	1972	7	13 years
4.	1973	6	11 years
5.	1974	8	14 years
6.	1975	4	14 years
7.	1976	12	13 years
8.	1977	25	7 years
9.	1978	19	13 years
10.	1979	15	12 years
11.	1980	51	13 years
12.	1981	34	10 years
M.Cycle/Scooter			
1.	1964	2	19 years
2.	1969	3	16 years
3.	1970	5	17 years
4.	1971	2	19 years
5.	1972	2	17 years
6.	1973	5	15 years
7.	1974	8	16 years

Sl. No.	Model (Year of Manuf.)	No. of Vehicles	Average Life (Estimated)
8.	1975	9	15 years
9.	1976	8	14 years
10.	1977	22	16 years
11.	1978	25	15 years
12.	1979	28	14 years
13.	1980	41	14 years
14.	1981	31	15 years
15.	1982	18	14 years
Motor Cars			
1.	1965	4	19 years
2.	1966	19	18 years
3.	1967	12	17 years
4.	1968	5	16 years
5.	1969	2	18 years
6.	1970	17	16 years
7.	1971	9	14 years
8.	1972	23	14 years
9.	1973	24	15 years
10.	1974	30	14 years
11.	1975	7	14 years
12.	1976	11	12 years
13.	1977	17	15 years

Sl. No.	Model (Year of Manuf.)	No. of Vehicles	Average Life (Estimated)
14.	1978	17	15 years
15.	1979	15	13 years
16.	1980	31	12 years
17.	1981	21	15 years
18.	1982	16	14 years
Trucks			
1.	1958	2	22 years
2.	1960	4	24 years
3.	1961	5	20 years
4.	1963	4	17 years
5.	1964	12	18 years
6.	1965	6	19 years
7.	1966	22	18 years
8.	1967	13	16 years
9.	1968	10	15 years
10.	1969	6	15 years
11.	1970	14	14 years
12.	1971	13	15 years
13.	1972	15	15 years
14.	1973	14	14 years
15.	1974	14	15 years
16.	1975	19	14 years

Sl. No.	Model (Year of Manuf.)	No. of Vehicles	Average Life (Estimated)
17.	1976	7	13 years
18.	1977	10	13 years
19.	1978	16	14 years
20.	1979	25	13 years
21.	1980	11	14 years
22.	1981	16	11 years
23.	1982	14	11 years
Jeeps			
1.	1970	2	14 years

TABLE - XI.2

MODEL-WISE AVERAGE LIFE (DISTRICT-WISE)

PESHAWAR

Sl. No.	Model (Year of Manuf.)	No. of Vehicles	Average Life (Estimated)
Buses			
1.	1966	7	18 years
2.	1969	4	14 years
3.	1972	7	14 years
4.	1973	4	15 years
5.	1975	2	12 years
6.	1976	2	13 years
7.	1978	6	14 years
8.	1979	10	11 years
9.	1980	2	8 years
10.	1981	4	10 years
11.	1982	2	6 years
Wagons			
1.	1973	4	14 years
2.	1974	11	11 years
3.	1975	12	11 years
4.	1976	10	11 years
5.	1977	6	12 years
6.	1979	2	13 years

Sl. No.	Model (Year of Manuf.)	No. of Vehicles	Average Life (Estimated)
Pickups			
1.	1974	3	11 years
2.	1975	3	9 years
3.	1976	2	9 years
4.	1977	5	9 years
5.	1978	3	6 years
6.	1979	4	12 years
7.	1980	8	8 years
8.	1981	17	9 years
9.	1982	5	8 years
Rickshaws			
1.	1974	3	10 years
2.	1976	3	12 years
3.	1977	5	12 years
4.	1978	4	11 years
5.	1979	8	11 years
6.	1980	5	12 years
7.	1981	14	11 years
8.	1982	3	13 years

Sl. No.	Model (Year of Manuf.)	No. of Vehicles	Average Life (Estimated)
M.Cycle/Scooter			
1.	1979	2	8 years
2.	1981	5	9 years
Motor Cars			
1.	1968	3	17 years
2.	1972	1	12 years
3.	1973	2	9 years
4.	1974	4	15 years
5.	1975	2	11 years
6.	1976	2	13 years
7.	1977	2	13 years
8.	1980	6	12 years
9.	1981	2	13 years
Trucks			
1.	1964	2	20 years
2.	1966	3	17 years
3.	1967	2	17 years
4.	1969	5	15 years
5.	1971	2	13 years
6.	1975	3	14 years
7.	1976	3	13 years
8.	1977	2	12 years

Sl. No.	Model (Year of Manuf.)	No. of Vehicles	Average Life (Estimated)
9.	1978	2	13 years
10.	1979	5	11 years
11.	1981	6	12 years
12.	1982	3	8 years

TABLE - IX.3

MODEL-WISE AVERAGE LIFE (DISTRICT-WISE)

FAISALABAD

Sl. No.	Model (Year of Manuf.)	No. of Vehicles	Average Life (Estimated)
Buses			
1.	1963	2	24 years
2.	1967	2	17 years
3.	1968	2	17 years
4.	1969	5	16 years
5.	1970	11	16 years
6.	1971	6	17 years
7.	1972	14	16 years
8.	1973	9	16 years
9.	1974	7	16 years
10.	1975	17	16 years
11.	1976	10	15 years
12.	1977	8	16 years
13.	1978	23	14 years
14.	1979	40	13 years
15.	1980	17	15 years
16.	1981	21	14 years
17.	1982	11	15 years

Sl. No.	Model (Year of Manuf.)	No. of Vehicles	Average Life (Estimated)
Wagons			
1.	1971	2	16 years
2.	1975	3	16 years
3.	1976	3	15 years
4.	1980	2	12 years
5.	1982	2	15 years
Pickups			
1.	1977	6	14 years
2.	1978	2	14 years
3.	1979	20	11 years
4.	1980	19	14 years
5.	1981	25	13 years
6.	1982	29	14 years
Rickshaws			
1.	1969	2	18 years
2.	1970	2	16 years
3.	1972	2	15 years
4.	1973	4	15 years
5.	1974	5	14 years
6.	1975	2	14 years
7.	1976	8	14 years
8.	1977	7	13 years

Sl. No.	Model (Year of Manuf.)	No. of Vehicles	Average Life (Estimated)
9.	1978	6	14 years
10.	1979	13	11 years
11.	1980	8	14 years
12.	1981	3	11 years
M.Cycle/Scooter			
1.	1966	2	18 years
2.	1973	4	17 years
3.	1974	4	16 years
4.	1975	7	13 years
5.	1976	9	15 years
6.	1977	10	16 years
7.	1978	22	14 years
8.	1979	17	16 years
9.	1980	30	16 years
10.	1981	31	15 years
11.	1982	27	16 years
Motor Cars			
1.	1970	4	16 years
2.	1971	3	18 years
3.	1972	7	15 years
4.	1973	12	14 years
5.	1974	14	15 years
6.			

Sl. No.	Model (Year of Manuf.)	No. of Vehicles	Average Life (Estimated)
6.	1975	2	16 years
7.	1976	9	15 years
8.	1977	6	17 years
9.	1978	5	16 years
10.	1979	9	15 years
11.	1980	20	16 years
12.	1981	11	15 years
13.	1982	9	16 years
Trucks			
1.	1960	3	22 years
2.	1961	8	22 years
3.	1962	5	23 years
4.	1963	2	21 years
5.	1964	5	19 years
6.	1965	6	19 years
7.	1966	12	19 years
8.	1967	10	18 years
9.	1968	9	17 years
10.	1969	11	17 years
11.	1970	14	17 years
12.	1971	7	16 years
13.	1972	15	17 years

Sl. No.	Model (Year of Manuf.)	No. of Vehicles	Average Life (Estimated)
14.	1973	14	17 years
15.	1974	15	15 years
16.	1975	15	15 years
17.	1976	15	15 years
18.	1977	14	13 years
19.	1978	21	16 years
20.	1979	30	14 years
21.	1980	18	16 years
22.	1981	10	16 years
23.	1982	23	15 years
Jeeps			
1.	1981	1	20 years
2.	1982	2	16 years

TABLE - XI.4

MODEL-WISE AVERAGE LIFE (DISTRICT-WISE)

MULTAN

Sl. No.	Model (Year of Manuf.)	No. of Vehicles	Average Life (Estimated)
	Buses		
1.	1960	2	16 years
2.	1967	6	17 years
3.	1968	4	16 years
4.	1969	4	17 years
5.	1970	13	16 years
6.	1971	5	16 years
7.	1972	19	15 years
8.	1973	9	16 years
9.	1974	8	17 years
10.	1975	7	16 years
11.	1976	15	15 years
12.	1977	7	16 years
13.	1978	8	17 years
14.	1979	22	16 years
15.	1980	23	14 years
16.	1981	14	15 years
17.	1982	7	15 years
	Wagons		
1.	1970	2	16 years

Sl. No.	Model (Year of Manuf.)	No. of Vehicles	Average Life (Estimated)
Pickups			
1.	1978	4	12 years
2.	1979	22	14 years
3.	1980	13	13 years
4.	1981	24	12 years
5.	1982	16	12 years
Rickshaws			
1.	1964	7	17 years
2.	1965	8	19 years
3.	1966	8	18 years
4.	1967	5	18 years
5.	1968	6	17 years
6.	1969	4	18 years
7.	1970	6	16 years
8.	1971	4	17 years
9.	1973	5	16 years
10.	1974	3	17 years
11.	1975	2	11 years
12.	1977	4	12 years
13.	1978	3	15 years
14.	1979	10	12 years
15.	1980	2	16 years

Sl. No.	Model (Year of Manuf.)	No. of Vehicles	Average Life (Estimated)
	M.Cycle/Scooter		
1.	1972	2	16 years
2.	1973	2	16 years
3.	1976	3	14 years
4.	1977	4	18 years
5.	1978	9	15 years
6.	1979	15	11 years
7.	1980	20	13 years
8.	1981	22	13 years
9.	1982	19	15 years
	Motor Cars		
1.	1966	3	21 years
2.	1968	3	18 years
3.	1969	3	17 years
4.	1970	4	16 years
5.	1972	9	15 years
6.	1973	5	17 years
7.	1974	5	15 years
8.	1975	3	12 years
9.	1976	3	16 years
10.	1978	2	15 years
11.	1979	5	16 years

Sl. No.	Model (Year of Manuf.)	No. of Vehicles	Average Life (Estimated)
12.	1980	12	14 years
13.	1981	5	14 years
14.	1982	7	17 years
Trucks			
1.	1961	2	21 years
2.	1963	2	18 years
3.	1964	4	19 years
4.	1965	4	20 years
5.	1966	10	19 years
6.	1967	9	14 years
7.	1968	2	18 years
8.	1969	19	17 years
9.	1970	2	14 years
10.	1971	4	16 years
11.	1972	3	15 years
12.	1973	7	17 years
13.	1974	10	17 years
14.	1975	11	15 years
15.	1976	14	16 years
16.	1977	2	13 years
17.	1978	8	14 years
18.	1979	20	17 years

Sl. No.	Model (Year of Manuf.)	No. of Vehicles	Average Life (Estimated)
19.	1980	11	15 years
20.	1981	9	16 years
21.	1982	17.	15 years
Jeeps			
1.	1980	2	16 years
2.	1982	4	13 years

TABLE - XI.5

MODEL-WISE AVERAGE LIFE (DISTRICT-WISE)

KARACHI

Sl. No.	Model (Year of Manuf.)	No. of Vehicles	Average Life (Estimated)
	Buses		
1.	1979	2	15 years
2.	1980	5	14 years
	Pick-ups		
1.	1976	3	13 years
2.	1977	6	12 years
3.	1978	2	13 years
4.	1979	4	15 years
5.	1980	6	14 years
6.	1981	7	13 years
7.	1982	11	13 years
8.	1983	4	12 years
	Rickshaws		
1.	1966	3	20 years
2.	1978	3	15 years
3.	1979	2	15 years
4.	1981	2	14 years

Sl. No.	Model (Year of Manuf.)	No. of Vehicles	Average Life (Estimated)
M.Cycle/Scooter			
1.	1974	2	16 years
2.	1976	3	16 years
3.	1977	3	17 years
4.	1978	3	17 years
5.	1979	2	16 years
6.	1980	5	16 years
7.	1981	2	16 years
8.	1983	3	16 years
Motor Cars			
1.	1970	5	15 years
2.	1972	8	15 years
3.	1973	5	15 years
4.	1974	5	16 years
5.	1975	2	16 years
6.	1977	8	15 years
7.	1978	3	15 years
8.	1979	2	16 years
9.	1981	2	16 years
10.	1982	4	15 years

Sl. No.	Model (Year of Manuf.)	No. of Vehicles	Average Life (Estimated)
Trucks			
1.	1963	2	22 years
2.	1966	4	20 years
3.	1970	2	19 years
4.	1976	2	20 years
5.	1980	2	18 years
6.	1981	3	17 years
7.	1982	2	20 years
8.	1983	3	18 years
Jeeps			
1.	1983	2	20 years

TABLE - XI.6

MODELWISE AVERAGE LIFE (DISTRICT WISE)

HYDERABAD

Sl. No.	Model (Year of Manuf.)	No. of Vehicles	Average Life (Estimated)
BUSES			
1.	1972	2	17 Years
2.	1974	2	17 Years
PICK-UPS			
1.	1977	3	11 Years
2.	1979	4	13 Years
3.	1980	2	14 Years
4.	1981	3	14 Years
5.	1982	3	13 Years
M.CYCLE/SCOOTER			
1.	1980	2	15 Years
2.	1981	2	18 Years
MOTOR CARS			
1.	1968	2	18 Years
2.	1974	2	18 Years
TRUCKS			
1.	1966	2	22 Years
2.	1967	3	19 Years
3.	1969	5	11 Years
4.	1970	2	16 Years
5.	1973	3	16 Years

Sl. No.	Model (Year of Manuf.)	No. of Vehicles	Average Life (Estimated)
6.	1974	7	18 Years
7.	1975	4	17 Years
8.	1976	4	11 Years
9.	1977	2	18 Years
10.	1979	3	18 Years
11.	1980	2	18 Years

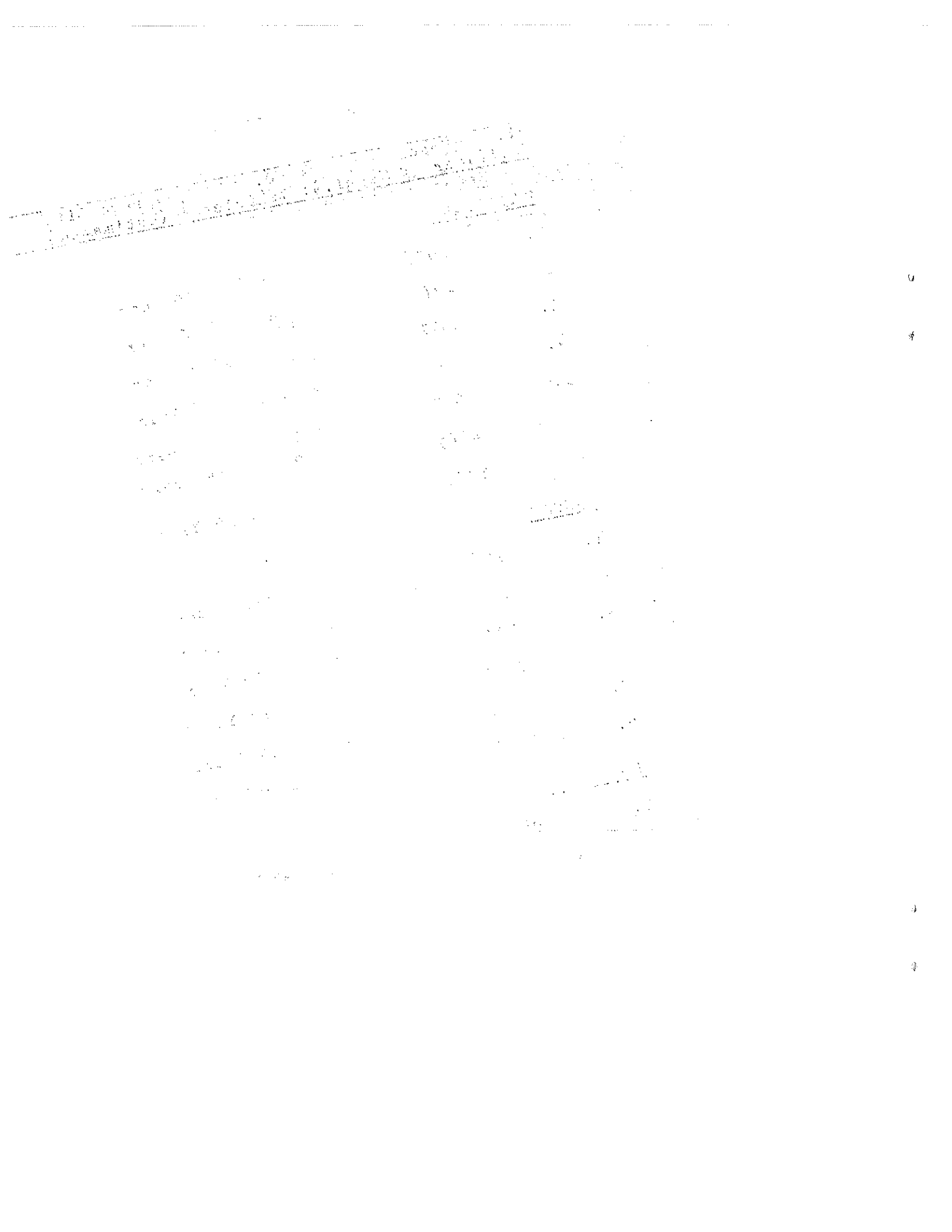
TABLE - XI.7

MODELWISE AVERAGE LIFE (DISTRICT WISE)

QUETTA

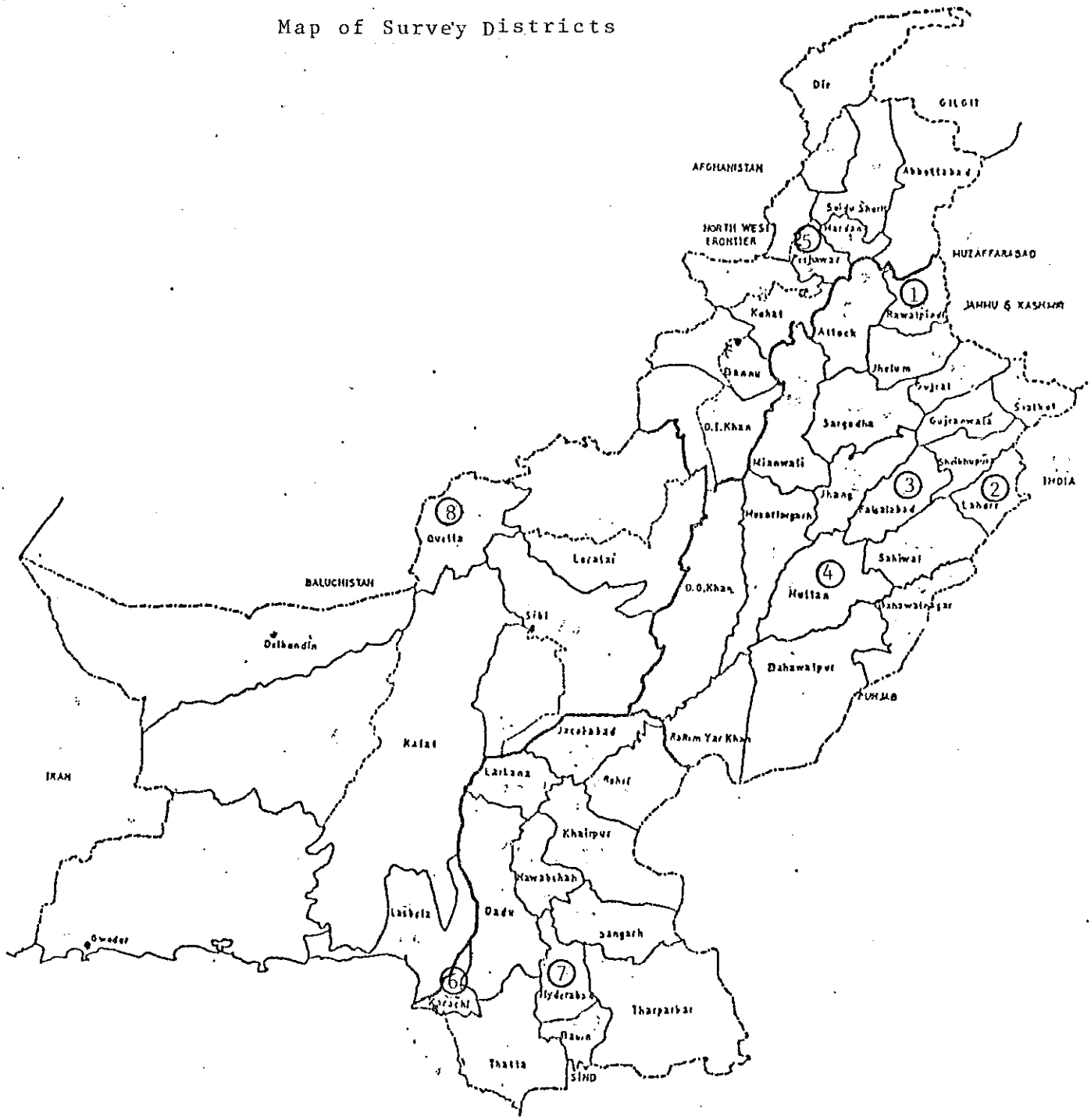
Sl. No.	Model (Year of Manuf.)	No. of Vehicles	Average Life (Estimated)
BUSES			
1.	1981	2	16 Years
WAGONS			
1.	1977	2	16 Years
PICK-UPS			
1.	1976	2	12 Years
2.	1977	2	18 Years
3.	1979	3	18 Years
4.	1980	4	15 Years
5.	1981	4	14 Years
6.	1982	9	16 Years
7.	1983	2	16 Years
M. CYCLE/SCOOTER			
1.	1977	2	15 Years
2.	1979	3	17 Years
3.	1980	2	16 Years
4.	1981	3	17 Years
5.	1982	5	16 Years
6.	1983	4	17 Years

Sl. No.	Model (Year of Manuf.)	No. of Vehicles	Average Life (Estimated)
MOTOR CARS			
1.	1976	2	19 Years
2.	1970	2	16 Years
3.	1971	2	15 Years
4.	1972	3	16 Years
5.	1973	6	15 Years
6.	1979	2	15 Years
7.	1980	3	16 Years
TRUCKS			
1.	1969	3	17 Years
2.	1972	2	20 Years
3.	1974	3	19 Years
4.	1975	3	18 Years
5.	1981	6	17 Years
6.	1982	5	17 Years
J E E P S			
1.	1981	2	19 Years



Annex - A

Map of Survey Districts



Annex-B (Contd.)

Form: |_|_|_|_|_|_|_| (1 7)

25. Estimated Mileage/Kilometers performed during:

-- Last one day: _____ ☐ Miles ☐ Kms |_|_|_|_|_| (8 12)

-- Last one week: _____ ☐ Miles ☐ Kms |_|_|_|_|_| (13 18)

-- Last one month: _____ ☐ Miles ☐ Kms |_|_|_|_|_| (19 24)

-- Last one full year: _____ ☐ Miles ☐ Kms |_|_|_|_|_|_|_| (25 32)

(Information provided from ☐ Memory ☐ Written record) |_| (33)

26. Average fuel consumption: Petrol _____ ☐ MPG ☐ KPL

Diesel _____ ☐ MPG ☐ KPL

Other (Specify) _____ ☐ MPG ☐ KPL |_|_|_|_|_|_|_| (34 40)

(Information provided from ☐ Memory ☐ Written record) |_| (41)

27. Estimated life of the vehicle: _____ Years _____ Months |_|_|_|_| (42 45)

_____ ☐ Miles ☐ Kms |_|_|_|_|_|_|_| (46 53)

28. Enumerator's name and signature: _____ |_|_| (54 55)

29. Coder's name and signature: _____ |_|_| (56 57)

REMARKS BY

Enumerator: _____

_____

_____

_____

Office Staff: _____

_____

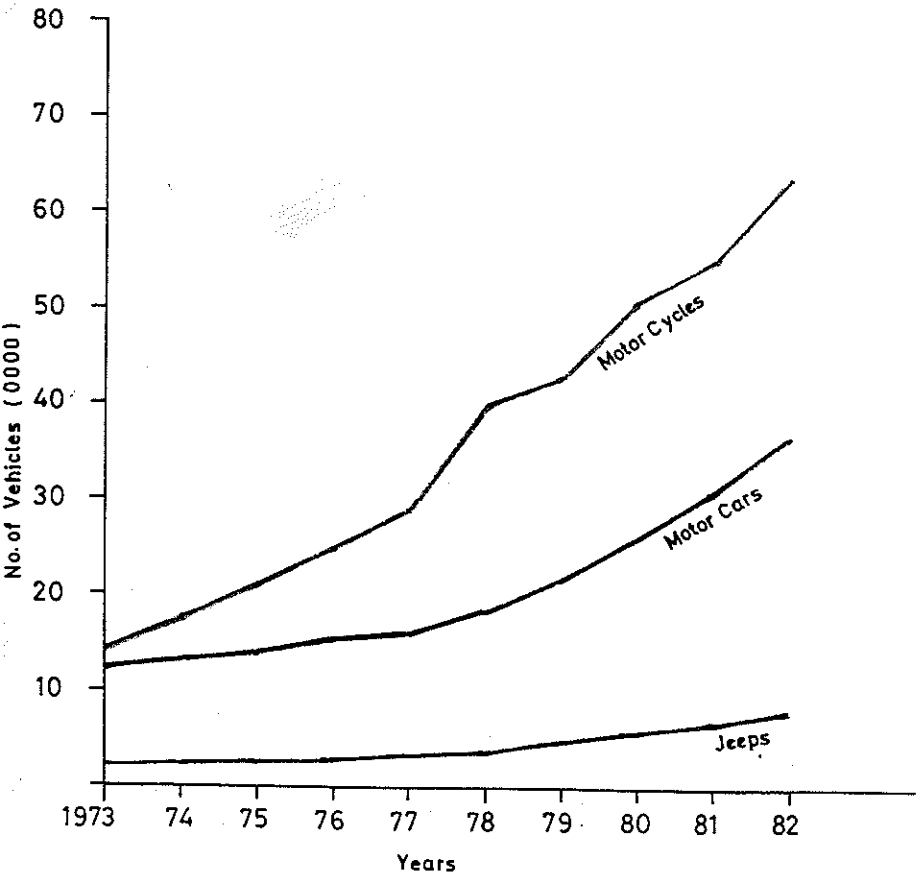
_____

_____

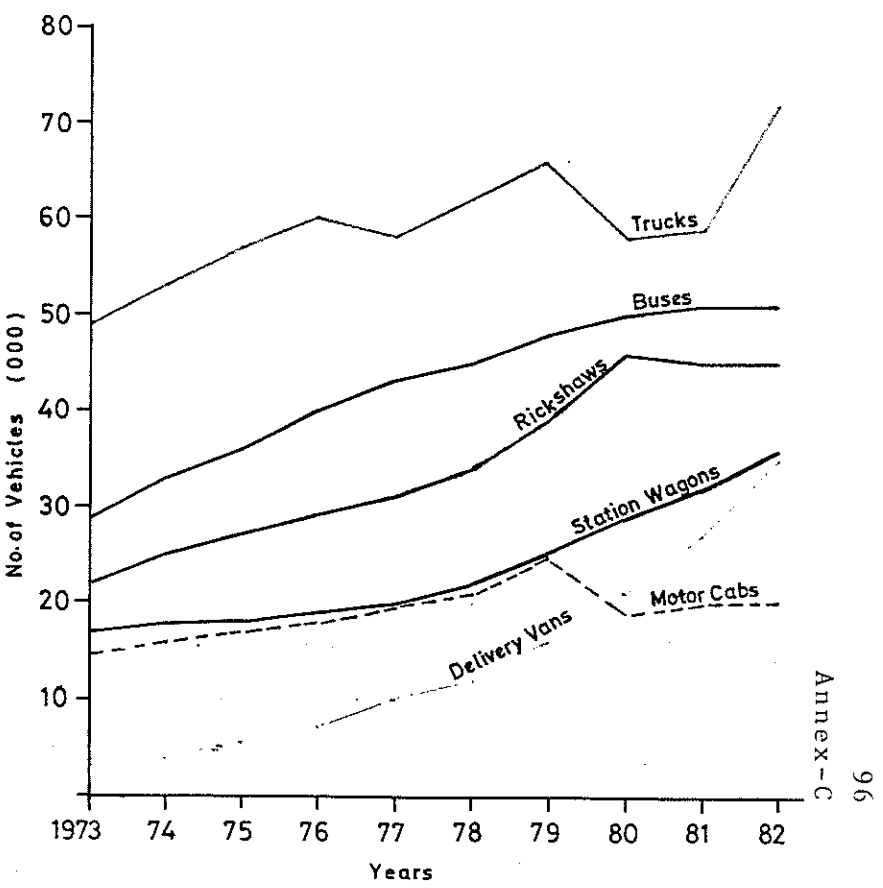
PCPPI -1877(82) N.T.R.C.-7,500 -8-9-1982.

PRIVATE VERSUS PUBLIC VEHICLES GROWTH

PRIVATE VEHICLES



PUBLIC VEHICLES



PRIVATE AGENCIES
PUBLIC AGENCIES
HOWARD
PRIVATE AGENCIES
PUBLIC AGENCIES
HOWARD