Chapter V

CONCLUSION
Development of modern means of transport is a measure of civilization and economic development of a nation. The national government in all countries irrespective of the economic systems they adopted, embarked on a massive state towards the development of transport infrastructure commensurate with the requirements of the economy and the available resources. Naturally, a great deal of effort has been made and is being made in research and documentation on the subject.

A review of important studies on different aspects of the subjects revealed that urban and metropolitan transportation was studied by several researchers in several countries to forecast the demand for transportation. In India, though a few researches were undertaken, they lacked depth and comprehensive coverage. This study cannot fill the gap but can be considered as a step in that direction.

We have seen from our empirical investigation, using both primary and secondary data, that demand for transport is increasing everyday due to various reasons. These factors are:

i) Increase in economic activities from original centre Shillong to other district headquarters.

ii) Increase in the number of educated people.
iii) Institutions of higher learning are mostly concentrated in urban areas.

iv) Growth in state income.

v) Rapid rate of population growth.

vi) Improvement in the field of agricultural marketing specially in finished goods.

With the growing expansion of the city, more people, more activities, etc. there is the resultant growth in demand for transport too, which of course, must be complemented with an extension of infrastructure and infrastructural facilities. Being a common experience of almost all expanding and growing cities, increased aspects in demand for food, for transport etc. the sphere is normally one of the shortage of supply not meeting the demand. As a consequence, urban transport is beset with many increasing difficulties, such as easy passage, obstruction, congestion, etc. Thus a balance must be struck between the demand and supply of infrastructure and in doing so, care must be taken such that the capacity of the existing infrastructure may be better utilized.

Shillong is already overcrowded with a large number of vehicle on its road, and any effort to increase the number of vehicles to meet the increasing demand will create congestion in all important areas of the city, as the sum total of the problem is the absence of further scope to widen the roads.
If at all it is to be done it would involve demolition of houses by hundreds. The penalty for road offence are either so small or nil, that people are not afraid of repeating offence after offence. Encroachments like unauthorised use of pavements and roads add to the confusion.

The scene of urban transportation system can present a much more improved outlook with the perfect co-ordination of transport and landuse planning. Optimal landuse planning is a long drawn out and costly process, the results of which, are unlikely to be available for immediate relief to urban transport problems. This does not imply that attention should not be paid to restructuring landuse planning, the point to be emphasized is that while steps should be taken immediately their impact would be felt only after two decades or so. Secondly, dispersal of population and economic activity within the city would lead to better distribution of trips and reduce congestion in central areas but in such a case total transport requirement of the area are likely to increase. This in turn calls for strengthening and expansion of transport facilities.

With virtually no scope for widening roads the fast growing traffic highlights the need for strengthening public transport in the city. It is only through quick, efficient and economic public transport facilities that commuters can
be diverted from using personalized modes of transport to public transport system.

Preferential treatment should be given to public transport such as buses with the possible reservation of lanes for them alone, and the construction of proper tracks for pedestrians, to ensure their safe and unhindered commuting, when on foot.

The existing road laws such as vehicle licensing, speed regulations, anti-accident measures, access to main roads, noise and pollution, etc. be reviewed from time to time keeping up with the trend, and the changes made public as early as possible, keeping an open mind to the need for effective enforcement of the law.

To discourage private users from cluttering the road during the peak hours, differential pricing technique may be adopted. Congestion tax may be imposed in the congested area or the Central Business District (CBD).

Enabling the coming up of small shopping centre in different localities to meet the daily needs of the public would help in the reduction of unnecessary demand for travel.

Further, if we can decentralize the work places and other such institutions to nearby suburbs, the heavy concentration of people and hence demand could be greatly reduced. A ring-road may prove to be most convenient under
the circumstances. The decentralization would help in reducing road traffic, specially during the peak hours.

Improved traffic management methods should be given priority. Proper traffic cells should be organised for carefully studying traffic problems on all arterial roads, major intersections and terminals for adoption of suitable remedial measures.

Further elimination of traffic hazards largely depends on the efficiency of regulating and controlling the public transport system. Such hazards will not go unless the traffic police is empowered to penalise those obstructing roads and pavements. The penalty should be deterrent. There should be some judicial sanction under which the police can realise the penalty for a particular offence on behalf of the courts.

There is also a need to construct sufficient number of fly-overs at major traffic intersections, to enable the traffic to flow without detention. A local cess may be improved on all vehicles and fuel as supplementary of road tax to finance the construction of these fly-overs.

The flow of traffic is not uniform throughout the day, rather it is during the peak period that the situations really worsens. If the traffic flow is spread over longer hours, the intensity of overcrowding may be significantly reduced. This may be attained by resorting to such measures
like fixing different timings for different organisations, and activities for example educational centres may be opened at 7 a.m., markets and shopping centres at 8 a.m., bank and offices at 9 a.m. and accordingly be closed at different timings. Further, arrangement of different weekend holidays for different institutions and activities will no doubt help in spreading traffic in a more even manner and thus reduce demand to some extent.

Town planning, traffic planning and road development should be undertaken in a practical way with a creative imagination such as development of suitable road system, development of appropriate vehicle stand and construction of loading and unloading platform of goods traffic on the outskirts of the city, which is a must and which would deter the heavy lorries from entering the city areas. The entrance and plying of big vehicle in the city itself is hazardous made especially more pronounced because of the topography of the region. This suggestion may thus be taken in real earnestness. The narrow lanes with just passenger traffic minus the goods traffic especially during the daily commuting hours of the inhabitants of the city would definitely lower the degree of congestion in the city.

There is also an urgent need to educate the general public and drivers of cars, buses, trucks, etc. of the simple truth of courtesy in living together in an environment, the
utter indifference of the pedestrians and the adventuring motor cyclist, which constitute a frightening phenomenon in our traffic behaviour.

So as to reduce travel demand, there should not be a one-city centre but perhaps, a whole series of commercial centres ringed with residential ones striving for a lower intensity in the mad-rush from home to work places, to educational institutions to the shopping centre, etc.

In concluding, it is obvious, that urban transport planning should breed both short-term as well as long term or perspective planning. The long-term planning should embrace as far as possible all the relevant factors such as nature and volume of present and future traffic, the need to control accidents and the noise and environmental pollution, not foregoing the constraints which may be financial and physical.

Considering all such problems associated with Shillong urban transportation, all relevant steps should be taken for their rectification and appropriate modification of the road system in the city, which should not be divorced from human welfare. In fact the major goals of transport in the region must be "to develop a safe, convenient, efficient and publicly owned transportation system which optimise accessibility for all persons and goods with minimum disruption to the environment."
This theoretical approach to the study of "An Econometric analysis of demand for public transportation in Shillong", perhaps host many a shortcoming. The study is beset with such difficulties as the stipulated time allotted for the purpose, the half hearted response of the public in transmitting information into the questionnaire type of enquiry etc. However, we honestly believe that this type of study will not only bring out the problems of increased demand for transportation in the city, but will also help the town planners to solve the problems to a certain extent. However, the traffic problem in Shillong is a complicated one, unless all the agencies involved co-operate, the rule of law would be a distant dream.