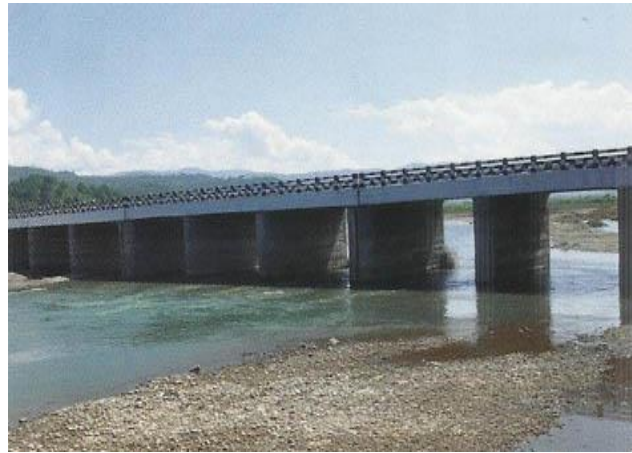


STATE TRANSPORT POLICY, MANIPUR



**TRANSPORT DEPARTMENT
GOVERNMENT OF MANIPUR
JUNE, 2013**

REVISED DRAFT STATE TRANSPORT POLICY, MANIPUR:

Introduction: The State Transport Authority, Manipur vide its decision taken in the meeting held on 31st March, 2010 constituted a Sub-Committee to examine various issues pertaining to Public Transport System in the State and formulate a State Transport Policy under the Chairmanship of Shri A. Shivadas Sharma, the then Deputy Director of Transport (Adm), Manipur with Shri M. Mani Singh, DTO (Imphal West) as Convenor and Shri Ng. Haridas Singh, Gen. Secretary, Transporters & Drivers Council (TDC), Manipur, Shri A. Priyokumar Singh, President, All Manipur Bus Owners Association (AMBOA), Shri Brojendro Luwang, Secretary, All Manipur Light Motor Transporters Union (AMLMTU), Shri Md. Rehaman, President, EMOINU and Shri L. Somorendro Singh, VP, EMOINU as members. The Sub-Committee co-opted Smt. Victoria Yengkhom, MPS, Deputy Superintendent of Police (Traffic), Imphal West District Police Authority, as additional member.

Background: The Sub-Committee duly formulated "The Draft State Transport Policy" with certain recommendations for examination by the State Transport Authority, Manipur and the same was made available to the following Departments/Offices for offering their views, suggestions and comments circulated vide Directorate of Transport letter no. DT-5/26/Tpt (Policy/2012) dated 16th January '2013:-

1. The Commissioner (IT), Govt. of Manipur.
2. The Commissioner (Revenue & MAHUD), Govt. of Manipur.
3. The IGP (LAW & Order) 1, Manipur Police.
4. The Register Cooperative Society, Manipur.
5. The Chief Engineer (PWD), Manipur.
6. The Chief Engineer (Power), Manipur.
7. The Chief Town Planner, Manipur.
8. The Executive Director (MARSAC), Manipur.
9. The Member/Secy, Pollution Control Board, Manipur.
10. The Executive Director, Environment & Ecology Wing, Manipur.
11. The DSP Traffic (Imphal West), Manipur.
12. The District Transport Officers ((IE/IW/TBL/CCP/BPR/SPT/KPI/UKL), Manipur.

However, till the middle of May' 2013, no specific comments /suggestions / views/ observations are received from the above mentioned Departments/Offices. Meanwhile, Shri. M. Luilkham. IAS, the Director of Transport cum Secy/STA, Manipur entrusted Shri. B.K.Sharma, Dy. Director of Transport(Plg) cum Asso. Secy/STA, Manipur to examine the outline of Draft State Transport Policy duly submitted by Shri. A. Shivadas Sharma, the then DDT(Adm) and to explore the scope of further development with critical evaluation & analysis of the present Transport System of the State and formulate certain measures evolving a sustainable/reliable /compatible Transport System of the State. During the process of critical evaluation, analysis & re-structuring of the Draft Transport policy, the following handbooks, references, draft policies and papers are considered as references which are applicable in the State of Manipur: -

- (i) Interim report of National Transport Development Policy Committee published by the Planning Commission, Govt. of India (April, 2012).
- (ii) National Urban Transport Policy formulated/published by the Ministry of Urban Development, Govt. of India.
- (iii) Report of the Committee on Road Safety and Traffic Management (commonly known as Sunder Committee Report/February, 2007).
- (vi) National Road Safety Policy framed by the Sunder Committee.
- (v) Sustainable Urban Transport, A Source Book for Policy –makers in South Asian Cities published by GTZ (Transport Policy Advisory Services on behalf of Federal Ministry for Economic Cooperation and Development.
- (vi) Transportation, Land-Use and Environment published by Division of Engineering and Applied Science, Harvard University, Cambridge, USA and Centre for Transport Policy and Economic, Central Institute of Road Transport, Pune, India.
- (vii) A Guide Book on Bus Planning and Operations published by EMBARQ.
- (viii) Hand books published by the Japan International Corporation Agency (JICA) under various aspects of Urban Transport Planning & Projects /Development of Urban Transport Infrastructure like ITS/ TDM (Transport Demand Management)/ PTPS (Public Transport Priority System/STRADA (systemic Transportation Development Analysis), GIS for Comprehensive Urban Planning and concept of Peak Hour Peak Direction Trips (PHPDT) for fixing different modes of Urban Mass Transit System etc.
- (ix) Draft Transport Policy for Kerala drafted by the National Transport Planning and Research Centre, Thiruvananthapuram on behalf of the Transport Department, Govt. of Kerala, Case Studies done for Chennai & Bangalore cities through World Bank (2004-05).
- (x) Urban Transport Policy Strategies/Case Studies of 30 designated cities conducted by the State of Himachal Pradesh with the technical/institutional support of Institute of Urban Transport, Ministry of Urban Development, Govt. of India.

The ground works done for formulating/drafting the revised Draft State Transport Policy, Manipur are completed by 1st week of June'2013 and the same revised draft was made available to the Secy, STA/ Manipur in the 2nd week of June' 2013 for placing before the STA/ Board, Manipur for consideration & concurrence for seeking approval of the Administrative Department for final publication of the State Transport Policy, Manipur. During the process of drafting the revised State Transport Policy, Shri. Kennedy Khundrakpam, ASI (Tax) has assisted Shri. B.K.Sharma, Dy. Director of Tpt (Plg) who worked as i/c Director (Transport) during the period from 6th March'2010 to 17th Oct' 2012.

CONTENTS - contd/-

I. REVISED DRAFT STATE TRANSPORT POLICY, MANIPUR	8
1.1 Introduction to the Interim Report	8
1.2 Modes of Functioning of the Committee: Working Groups	8
1.3 Studies	9
1.4 Concept/Vision	9
1.5 Overall Approach: Growth Projections	9
1.6 Transport Strategy	10
1.7 Regional Connectivity	10
1.8 Roads	10
1.9 Human Resource Development	11
1.10 Safety	11
1.11 North East Region	11
1.12 Institutional Framework for Formulation of Transport Policy, Planning and Coordination	12
1.13 Transportation in the North East: Introduction	12
2.14 Multi-modal Transport Planning	12
2.15 Development of Railways in NER	13
2.16 Development of Roads in the North East Region	13
2.17 Air connectivity in the NER	13
2.18 Inland Water Transport in the NER	13
II. MANIPUR	14
2.1 MANIPUR: Physical Setting	14
2.2 Location	14
2.3 Topography	14
2.4 Climate	15
2.5 Demography	15
2.6 The detailed population of the State of Manipur: Source: Census of India	16
III. CITIZEN CHARTER: PROFILE OF TRANSPORT DEPARTMENT COMMONLY KNOWN AS MOTOR VEHICLES DEPARTMENT	16
3.1 Introduction	16
3.2 Organisational Set Up: Administrative Structure	16
3.3 State Level	16
3.4 District Level	17
3.5 District Level Support Cells/Sections	17
3.6 Basic Functions/ responsibilities of the DTOs/RTOs	17
IV. TRANSPORT STATISTICS	17
4.1 Transport Statistics	17
V. TRANSPORTATION ISSUES & CHALLENGES	18
5.1 Present Status of Public Transport System in the State	18
5.2 Strategies/Policies	18
5.3 Role of Intermediate Public Transport(Contract Carriages)	19
5.4 Class A & B Routes	19
5.5 Limitation of Stage & Contract Carriage Permits along the categorized routes:	

Provisions of Section 71 (3) (a) & 74(3)(a) of the MV Act' 88 are reproduced Below: 19

5.6 Strategies/Policies	20
5.7 Stage Carriages Vs Contract Carriages	20
5.8 Strategies/Policies	20
5.9 Concept of Last Mile Connectivity & Feeder Services	21
5.10 Operation of Luxury Buses (33 seat capacity) operating under the Inter State Stage Carriage Permits under the provisions of Single Point/ Double Point Taxation	21
5.11 Special Permit under the Agreement	21
5.12 Taxation	21
5.13 Operation of Maxi Cabs (12 seater including driver) under the All India permit for Tourist Transport Operators, Rules' 1993	22
5.14 Role of Para Transit in the State & its Regulation & Control: Introduction	22
5.15 Present Status	22
5.16 Regulation & Control	22
5.17 Strategies/Policies	23
5.18 Present Status of Transportation of School going Children, its Regulation & Control: Introduction	23
5.19 Background of Legal Framework	23
5.20 Recommendations of the Drafting Sub Committee, State Transport Policy	23
5.21 The recommendations of the joint seating are listed below	23
5.22 Strategies/Policies	24
5.23 Status of Freight/Goods Transport System : Operation of Local Trucks / Public Carriers:	24
5.24 Operation of Inter State Public Carriers	24
5.25 Petroleum Products Carrier	24
5.26 Public Amenities at Jiribam	25
5.27 New National Permit Scheme: Introduction	26
5.28 Status	26
5.29 Working Rules	26
5.30 Public Amenities at Jiribam	26
5.31 New National Permit Scheme: Introduction	26
5.32 Status	26
5.33. Working Principle/Rules	27
VI. ADMINISTRATIVE FRAMEWORKS	27
6.1 Constitution of State Transport Authority, Manipur & Regional Transport Authorities	27
6.2 Regional Transport Authorities	27
6.3 Fixation of Fare, freight & Hiring Charges of Vehicles	28
6.4 Principle of Calculation of Cost of Operation & Evaluation of Rate Analysis adopted for fixing /revising the passenger fare, freight & hiring charges of private vehicles in the State	28
6.5 Cost of Operation	28
6.6 Rate analysis: Standard assumptions (in case of a 50 seater ordinary bus)	28
6.7 Operating costs	28
6.8 End result	28
6.9 Institutional Mechanism of Periodic Revision of Fares	29

VII. INTERNATIONAL BUS SERVICE	29
7.1 Proposed Introduction of Imphal (India)- Mandalay(Myanmar) Bus Service:	29
7.2 Background	29
7.3 Ministries/Departments involved	29
7.4 Present Status	29
7.5 Major Issues	29
7.6 Total Road Length	30
7.7 Driving regulations	30
7.8 Security	30
7.9 Proposals	30
7.10 Transit Pass	30
7.11 Other Issues and Suggestions	30
VIII. THE INDO-MYANMAR FRIENDSHIP ROAD	30
8.1 Asian Highways	31
8.2 A sketch map of Trans-Asian Highway	31
8.3 Final Report of ASEAN Land Transport Working Route	31
IX. BORDER TRADE	32
9.1 Link between Moreh-Mandalay	32
X. TRANSPORTATION, LAND USE & ENVIRONMENT	33
10.1 Development of Inner & Outer Ring Roads encircling Imphal & Greater Imphal Areas	33
10.2 Steps taken by the Transport Department, Govt. of Manipur on the aspects of Pollution Control in the State	34
XI. CREATION/DEVELOPMENT OF TRANSPORT INFRASTRUCTURE IN THE STATE	34
11.1 Inter State Bus Terminus at Dewlahland	34
11.2 Construction of 2 (two) nos. of ISTTs	34
11.3 Construction of 10 nos. of Inter District Bus Terminals (IDBT)	34
11.4 Construction of 3 ICPs	35
11.5 Strengthening and improvement of Transport Department Infrastructure during the 12 th Five Year Plan.	35
XII. INFORMATION TECHNOLOGY (IT) PROJECTS: IT (Computerisation / E-Governance)	36
12.1 Status of Vahan & Sarathi & Smart Card Project	35
12.2 Status of Oracle Data Integration (ODI)	35
12.3 Strategies/Policies	35
12.4 Back end Data Entry	36
12.5 Strategies/Policies	36
12.6 High Security Registration Number Plate (HSRP) Project: HSRP Scheme	36
12.7 Policy	36
XIII. ROAD INFRASTRUCTURE OF THE STATE: SOURCE: PWD, MANIPUR	37
13.1 State Highways	37
13.2 Major District Roads	37
13.3 Other District Roads	37
13.4 Status of NEC Roads in Manipur	38
13.5 PMGSY Roads	38
XIV. ROAD SAFETY AND TRAFFIC MANAGEMENT	38

14.1 National Road Safety Policy	38
14.2 The National Road Safety and Traffic Management Act, 2007	41
14.3 Constitution of State Level Road Safety Council & District Level Road Safety Committee	41
14.4 Road Accident Statistics during the last 5 (five) years	42
14.5 Major Issues and Challenges in the State: Road Safety Activities: Steps to Strengthen Road Safety	43
14.6 Status: Education: Central-State	43
14.7 Enforcement	43
14.8 Engineering	43
14.9 Environment and Emergency Care of Road Accident Victims	44
14.10 Status	44
14.11 Setting up Model Inspection and Certification Centres for Vehicles	44
14.12 Setting up of Training Institutes on Driving & Research	44
14.13 National Highway Accident Relief Service Scheme (NHARSS)	44
XV. DISASTER MANAGEMENT	45
15.1 Hazard	45
15.2 Consequences	45
15.3 Chemical Disaster	45
15.4 Disaster Management: Concept & Planning	45
15.5 Strategies designed	45
15.6 Road Transport Safety Initiative	45
15.7 Achievements of the Road Transport Safety initiative	45
15.8 Policies	46
XVI. OTHER MODES OF TRANSPORT	46
16.1 RAILWAYS	46
16.2 CIVIL AVIATION	49
16.3 INTRODUCTION OF HELICOPTER SERVICE	51
16.4 INLAND WATER TRANSPORT (IWT)	51
16.5 Inland Water Transport (IWT) Wing, Manipur	51
XVII. URBAN TRANSPORT	53
17.1 Highlights of the Interim Report of the National Transport Development Policy Committee: Introduction	53
17.2 Pattern of Urban Transport in India	53
17.3 The Need for a Comprehensive Approach	53
17.4 Emphasis on Public Transport	54
17.5 Emphasis on Mass Rapid Transit (MRT)	55
17.6 Buses and Bus Rapid Transit	55
17.7 Demand Management	56
17.8 Non Motorised Transport	56
17.9 Capacity Building for Decision Making	57
17.10 Capacity Building for Implementation	57
17.11 Capacity Building in Educational Institutions	58
XVIII. INTRODUCTION (IMPHAL CITY)	58
18.1 Characteristics of Imphal City	58
18.2 Main Cause of Traffic Congestions	59

18.3 Secondary causes of Traffic Congestions	60
XIX. TRAFFIC CONTROL/MANAGEMENT MEASURES/TRAVEL DEMAND MANAGEMENT/STANDARD TYPE OF SURVEYS	60
19.1 Zebra Crossing	60
19.2 Rotary Traffic Island	61
19.3 Installation of LED Based Traffic Signal System	61
19.4 Concept of Parking Lots Established by Private Parties or under PPP (Public Private Partnership) Model	61
19.5 Role of TRPC(IW/IE)	61
19.6 Concept of Trip Generation (Travel Demand)	61
19.7 Demand- Supply	61
19.8 Travel Demand Management (TDM)	62
19.9 Secondary Objectives	62
19.10 STRADA(Systematic Travel Demand Analysis)	63
19.11 Working Principle	63
19.12 Urban Planning Vs Urban Transportation Planning	63
19.13 Concept of Volume Capacity Ratio	63
19.14 Necessity for Investigation	63
19.15 Other Investigations	63
19.16 Different types of Surveys Under Actual Situation of Urban Transport	63
19.17 Traffic Volume Observation	64
19.18 Traffic Count Measures	64
19.19 Counting Duration	64
19.20 Traffic Speed Survey	64
19.21 Purpose of Traffic Speed Survey	64
19.22 Purpose of Spot Speed Survey	64
19.23 Methods of Survey	65
19.24 Presentation & Analysis	65
19.25 Advanced Origin Destination (O-D) Survey	65
19.26 Person Trip Survey	65
19.27 Survey of Vehicles	65
XX.PRESENT ISSUES OF URBAN TRANSPORT & ITS CHALLENGES	66
20.1 Role of Intermediate Public Transport (IPT) in Urban Transport Sector	66
20.2 Major Issues	67
20.3 Remedies/Policies	67
20.4 Area of Operation of City Bus Services	68
20.5 Revival of City Bus Service: Operation of JnNURM Buses in Imphal City	68
20.6 Preparation of 2 nd DPR & Engagement of Consultant	68
20.7 Strategy/Policies of the UMTA	68
20.8 Proposed Introduction of Ring & Radial City Bus Services	69
20.9 Proposed Development/Enhancement of Urban Transport infrastructure	69
VISION	70
OBJECTIVE	70
CONCLUSION	71

CHAPTER-I

REVISED DRAFT STATE TRANSPORT POLICY, MANIPUR:

INTERIM REPORT OF THE TRANSPORT DEVELOPMENT POLICY COMMITTEE: It is felt indispensable to highlight the critical analysis/evaluation of the present scenario of Transport System in the country and the interim observations /recommendations /strategies policies made/formulated by the National Transport Development Policy Committee (NTPDC) on various issues/areas concerning the Transport Demand based on macro framework with anticipated investments in development of infrastructural requirements of the country which were captured/drawn out of their studies (/International Experience (wherein technical assistance obtained from the World Bank to get information on best practice and international experiences in the areas like Railways, Urban Transport, and Ports & Shipping) while restructuring the Draft State Transport Policy because the State Transport Policy has to be formulated/framed within the logical scope of the Interim Report of the National Transport Policy Development Committee which is being finalised shortly.

1.1 Introduction to the Interim Report: The Government of India set up the National Transport Development Policy Committee (NTDPC) as a High Level Committee on February 11, 2010 under the Chairmanship of Dr. Rakesh Mohan. The NTDPC was appointed to provide guidance on long term transport policy of the country. The policy would help in devising overall strategy for the sector, including decision making for investments that need to be made for the provision of transport infrastructure and derived services that are commensurate with the country's growth aspirations. As India continues its current growth trajectory to attaining middle income status and beyond, the NTPDC is addressing critical questions on capacity augmentation and the types and magnitudes of transport investments required to support rapid economic growth. In addressing these issues, the NTDPC is paying particular attention to building the institutional and informational foundations that will help in meeting specific challenges as they emerge over time. As technologies, institutional capacity, prices and incomes will undergo a significant change over the next 20 years, the absence of such institutional foundations brings the risk of “ lock ins” with currently available options dominating choices that may have to be made in later periods. This is particularly important investments typically have long lives of 25 to 100 years.

1.2 Modes of Functioning of the Committee: Working Groups: To aid in its work, the Committee initially set up five Working Groups: on Roads, Railways, Civil Aviation, Ports & Shipping and Urban Transport. Later, it also set up specialised Working Groups on two major issues which needed focussed attention: one on Bulk Transportation of Energy and another on Development of Transport Infrastructure in Inaccessible Areas, focussing particularly on the North East. Intermodal integration and improving logistics also forms an important part of the NTDPC's approach. So a special group was also formed to deliberate on the various issues relating to the logistics sector.

1.3 Studies: The committee has also commissioned a few research studies to aid in its work. First, the National Council of Applied Economics Research (NCEAR) was commissioned to study the extent to which taxes and subsidies are distorting prices and functioning of the transport sector. A second study is under way on the regulatory framework governing the transport sector. Third, The Energy and Resources Institute (TERI) has been commissioned to do another study on life cycle costs of emissions of different transport modes.

1.4 Concept/Vision: The NTDP is in the process of assimilating all the various inputs as detailed above in order to compile its final report. This Interim Report is being issued as an input to the Twelfth Five Year Plan. An attempt has been made to focus on the major issues that have emerged in the deliberations of the Committee. As such this report eschews detail and focuses on the key strategic directions that need to be taken in the Twelfth Five Year Plan. It also incorporates specific comments on the Twelfth Plan draft chapter on Transport and the Urban Transport section of the draft chapter on “Managing Urbanisation”. This Interim Report incorporates the overall approach being adopted by the National Transport Development Policy Committee, and goes beyond the specifics in the draft chapters reviewed.

1.5 Overall Approach: Growth Projections: Different Overall Growth Projections imply vastly different levels of traffic growth over a 20-year period. For example, even under assumptions of unit elasticity for both passenger and freight traffic with respect to GDP growth, a 7-percent annual growth rate over 20 year implies an expansion in traffic by a factor of four,; whereas 10 percent annual growth would result in an eight-fold increase in traffic over the same period. With the expectation needs to be paid to the appropriate pricing of all models of transport so that users are aware of and pay all the inherent costs. Users would then be able to make choices over different transport modes on a more rational basis. The Twelfth Plan Transport chapter should begin by providing an overall view of the expectation of growth in transport demand that is consistent with the economic growth projections being made for the Twelfth Five Year Plan. These traffic projections should then be divided into different modal shares-rail, road, air, shipping and inland water transport-for both passenger and freight transport that are expected or desired. Further, it is desirable that these projections be placed in a longer 15 to 20 years perspective. This is important since the transport investments that may be needed in the 13th, 14th, and 15th Five Year Plans are likely to be predicated on prior actions that need to be taken in the Twelfth Plan period. Unit elasticity for transport demand is a conservative assumption. In fact, it is estimated that freight transport grew by a factor of 5 over the last 30 years or so. If, as is likely, industrial and trade growth rates are each higher than GDP growth, the growth elasticity of demand for transport will be greater than one, thereby implying a much larger expansion in the demand for transport services. Thus the strategy for all constituent modes of the transport sector, including ports and airports, ought to be designed with these projections in mind. The proposals put forward by the relevant administrative ministries for the Twelfth Plan can then be evaluated with reference to such traffic projections.

1.6 Transport Strategy: The current approach, as articulated in the Twelfth Plan draft chapter is essentially piecemeal. A more integrated approach is desirable once the relevant transport projections mentioned above are available. The desired “end state” would be an overlay of transportation networks, allowing for the efficient transportation of passengers on the one hand and of each commodity type on the other, as well as natural interchange points where networks intersect and where large quantities are broken down into smaller volumes for last mile transportation into urban centres. A vastly superior logistics infrastructure is thus essential to achieve such a transportation system. We need a modal mix will make feasible an efficient, sustainable, economical, safe, reliable, environmentally friendly and regionally balanced transportation system. A similar approach is needed for passenger for transportation. Choices will need to be made on the priorities to be placed on different investments. The optimal movement passengers, and of freight by matching cargo category with transportation mode, will be crucial in a scenario of expanding magnitudes across categories. This implies some judgement on the normative modal shares that are desired for rail, road, air, shipping, and inland water way traffic. At present, this prioritization and decision-making is disjointed. For example decisions on investments in road expressways on the one hand, and potential railway Dedicated Freight Corridors (DFCs) and even possible high speed trains, are being in isolation of each other. Investments in ports also need to be co-ordinated more closely with other investment in the overall transport network.

1.7 Regional Connectivity: In formulating a transport strategy for India, it is imperative that this is also undertaken within the larger context of connectivity within South Asia and between South Asia and South- East Asia. As political & diplomatic conditions improve in the region consideration will need to be given to promote connectivity of countries with each other through a dense web of transport links, encompassing road, rail, waterways, and air. A corollary to this is the need to develop modern, efficient and convenient, cross –border transport linkages, in particular, by rail and road. Most of our border areas have been left deliberately underdeveloped because of an outdated notion of security which looks upon borders as walls separating India from a hostile neighbourhood, rather than as connectors bringing peoples and economies together. Transport linkages across our border regions must be developed in tandem with “backward linkages” i.e. links with the Indian heartland. If the latter fall behind the former, there is a danger of further alienating our border regions and the people inhabiting them. Efficient transport linkages can be a significant multiplier in promoting economic development, both within the country and within the larger region in which India is located. For India to emerge an economic powerhouse in South Asia and South East Asia, the Development of a dense network of transport issues in the North East. A wider view however, needs to be taken with respect to linkages with all our neighbours, particularly in view of recent developments promoting intra regional trade.

1.8 Roads: India’s roads network has benefited greatly from the articulation of the National Highways Development project (NHDP). In the year 2000, a strategic decision was taken to implement a phased programme of four-lane highways connecting the four metro cities 9the Golden Quadrilateral) and constructing key transport arteries on the East-West and North-South axes of the country.

The plan has been augmented to connect key ports and other major economic nodes, along with special attention to roads in the North-East region. Further, a plan is now under consideration for building limited-access expressways on the heavily travelled trunk routes. This is somewhat similar to the interstate highway system of about 41,000 miles that was initiated in the United States in 1956 and which was largely completed in the following 20 years/ it is important that the desired routing for the NHDP 4-lane highways and expressways is frozen now and a clear phased programme is put in place for its implementation. Similarly, a strategic decision was made to initiate the Pradhan Mantri Gram Sadak Yojana for rural roads, which has guided the rollout of rural roads since then. However, there has not been a similar approach for state highways. The Twelfth Plan should therefore initiate a similar strategic programme in every state for the development of state highways for the next 20 years.

1.9 Human Resource Development: In the course of its work the NTDP has noted a severe lack of expertise in the country in almost every sphere of transportation. Thus, in order to meet the transportation requirements of a growing economy, and to make up for past transport deficits, there is a need for a quantum jump in capacity augmentation for all modes. This would not only require financial resources but also the availability of skilled manpower in a whole range of activities, related to the development and operation of transport infrastructure and services. This includes development, implementation, monitoring and management on the other. The NTDP is of the view that human resources development would be the most critical factor in achieving the objective of creating a well developed and efficient transport system in the country. The NTDP is therefore paying special attention to all aspects of human resources development related to the transport sector. It is, therefore, necessary for the Twelfth Plan to initiate steps as outlined in this interim report.

1.10 Safety: Safety in transport operation is emerging as an area of increasing concern with the rapid growth in both passenger and freight traffic in all modes. With acceleration in the rate of growth of the economy, there has been emphasis on improving accessibility and mobility, along with speed. This trend is expected to continue for the foreseeable future. The increase in traffic, crowding, payloads and higher speeds, all contributes to the increasing frequency of accidents and for the severity of consequences in terms of fatalities, injuries, overall human and economic costs to the economy with the safety of transport operations and feels that this should be one of the thrust areas in the Twelfth Five Year Plan. The issues relating to safety have therefore been dealt with in a separate section of the interim report as well as in the section relating to individual modes of transport.

1.11 North East Region: Despite being richly endowed with natural resources, the North East Region (NER) has missed out on the economic growth acceleration witnessed in the other parts of India. The recent results of the National Sample Survey show that poverty has actually increased in the region unlike other parts of the country. The lack of adequate connectivity has virtually segregated and isolated the region not only from the rest of the country and the world, but also within itself. The state of poor infrastructure, particularly transportation infrastructure is the single biggest constraints to the region's prosperity.

Thus, improving connectivity is an important precondition for social and economic mobility and market integration in the NER. The NTDPC has therefore paid special attention to this region as an integral part of the country's transport strategy. The Twelfth Plan devise an integrated transport strategy, plans and programmes for the region encompassing all transport modes. In order to forge closer and deeper economic integration with its Eastern and Southern neighbors, the Government of India has articulated its Look East Policy. Trade with these countries has been increasing and can be expected to grow rapidly in future. This would require opening of land/inland water routes particularly through Bangladesh and Myanmar. However, in the first instance, it is necessary to focus on the improvement of intra regional connectivity between the North East and rest of the country through the development of a multi-modal transport network which would usher in better connectivity with rest of the world.

1.12 Institutional Framework for Formulation of Transport Policy, Planning and Coordination: At present, the transport planning and policy co-ordination mechanism is very weak. We do not have any single agency either at the centre or at the state level for coordination of policy formulation for the transport sector as a whole. In the absence of such arrangements, the responsibility of investment coordination rests with the Planning Commission. In addition it is also expected to co-ordinate the policy formulation of the transport sector as a whole. In order to assist the Planning Commission, it is necessary to develop suitable institutional entities at both central and state levels which are endowed with adequate expertise to perform such coordination on a continuous basis. Such coordinating entities can take into account logistics and intermodal issues that are now essential for formulating and implementing coordinated transport planning and policy. The NTDPC will make concrete recommendations on this issue in its final report.

1.13 Transportation in the North East: Introduction: The NTDPC constituted a special Working Group to address issues related to the improvement and development of transport infrastructure in the North East. The Committee decided to give special attention to this region since transport infrastructure is vital to strengthen integration within the region, to its integration with the rest of the country, and also for India's increased integration with the East in the future. At present, India's international transport linkages with the East are highly underdeveloped, as are its linkages with Bangladesh. With the change in political climate in Myanmar and intensification of discussions with Bangladesh, the Committee felt that this is an opportune time to take strategic long term view on intensifying international transport linkages to be productive there has to be even better transport integration of the region internally, and with the rest of India. The NTDPC's final report will have detailed recommendations emerging from such an approach.

1.14 Multi-modal Transport Planning: The North East region has a number of characteristics that make it imperative for more organised inter-sectoral planning to be done for transportation in the region: it is remote from the rest of India; several areas feature difficult hilly terrain; it also has many rivers, which can permit significant inland water transport options, but also contribute to difficulties in engineering transport infrastructure; it has a long border with neighbouring countries which increases the importance of transport infrastructure from strategic and security viewpoint;

and it consists of 8 states, each of which have their own requirements and priorities. Thus the Twelfth Year Plan must initiate action to undertake region-wide transport sectors—roads, civil aviation, rail and inland waterways – in an integrated framework. Therefore, a body to undertake regional transport planning, with adequate technical expertise, needs to be conceptualised.

1.15 Development of Railways in NER: The Railway infrastructure in the North East Region needs to be strengthened and expanded so that the aspirations of the people in the area can be met in a significant manner. A decision has already been taken to connect all the state capitals in the North east with the rest of the country. The state capitals of Assam and Tripura are already connected. New lines for connecting state capitals of Arunachal Pradesh, Manipur, Nagaland, Mizoram and Meghalaya have been sanctioned and work is in progress. In the 12th Five Year Plan, the work on these railway lines may be expedited so that all state capitals in the North East Region are on the rail map by 2020.

1.16 Development of Roads in the North East Region: The need to develop the road network in the North East Region has been well organized. A number of programmes have been launched for the development of National Highways, State Highways and other roads in the North East Region. As a result of these programmes investments have been increasing. As a matter of fact, the implementing agencies are unable to spend the allocated amount and complete the projects in time. Hence there is great need for capacity augmentation and institutional strengthening in the areas related to evolving of projects, preparations of projects reports, implementation, monitoring and management of projects in the North East Region as a whole.

1.17 Air connectivity in the NER: Air connectivity in the North Eastern States is hampered by difficult terrain, relatively low levels of economic development and poor connectivity. Considering the importance of the development of civil aviation to the development of the NER, a new policy centred around small aircraft is required to implement a hub-and-spoke model. With more frequent flights in and out of this geographically difficult region, there may be considerable reduction in the physical exclusions of the North east region. The development of existing airports and operationalization of non-operational airports would not only make air links feasible between the state capitals but also with neighbouring countries. Multi-utility based air services which enable the movement of high value cargo can also be instrumental in improving the economic vitality of the region. However, in order to achieve the objective of uninterrupted and reliable air services and to prevent accidents, there is a need to develop state of art weather and navigation information systems and human resources together with the actual physical airport infrastructure. Guwahati Airport should also be developed as a potential major gateway to South East Asia, both for passenger and freight traffic.

1.18 Inland Water Transport in the NER: Historically, undivided Bengal and the North East Region were an integrated market prior to independence where riverine transport was used extensively for both passenger and freight transport. IWT has a natural fit with the bulk commodities that the North east Region imports and exports from the rest of India. Tea, oil, cement and coal are exported, while food grains, fertilizers and petroleum products are

imported. All these items are non-perishable and transported in high volumes, making them suitable for transportation by IWT. In principle such transport is cheaper and more energy efficient than other modes, though slower.

CHAPTER-II

2.1 MANIPUR: Physical Setting: Manipur is one of the North Eastern Indian States. It is a land lock isolated with a geographically distinct identity.



The State is almost rectangular in shape and is one of the smallest in India with an area of 22,327 sq. km. This constitutes about 0.7% of the total area of the Indian Union. Manipur State can be divided broadly into two natural regions of the Hills & the Valleys. The Hills encircle the Valleys and stretch from the north to the south with an average altitude of between 1500 m. & 1800 m. above mean sea level. The Hills in the North of the State are higher and reach 3000 m. The Hills have sub temperate to temperate climate. The central valley is surrounded by rows of hills and the average valley elevation is 790 m. The Central Valley is considered to be the “Rice Bowl” of the State .

2.2 Location: The State is bounded in the north by Nagaland State on the east by Suma and Upper Chindwin in Myanmar (Burma), on the south by the Chin Hills (Myanmar) and Mizoram State, and on the west by Cachar district in Assam. It lies between longitude 92° 58’ E to 94° 45’ E and latitude 23°50’N to 25° 42’N. The centrally located capital is Imphal with an elevation of 790 m. The State Border totals 854 Km. of which 352 km. comprise the International border with Myanmar. The remaining 502 km separate Manipur from the neighbouring States.

There are 9(nine) Districts in Manipur generally divided valley & hill districts as follows:-

Valley Districts ----- Imphal West, Imphal East (inclusive of Jiribm Sub Division) , Thoubal & Bishnupur.

Hill Districts ----- Senapati, Ukhrul, Chandel, Churachandpur & Tamenglong.

2.3 Topography: Approximately 90% (20089 sq. km) of Manipur is covered by the outer Hills regions surrounding the small Imphal valley of 1843 sq.km at the centre. Another smaller valley of 395 sq.km lies on the western border between the Barrak and Jiri Rivers.

The two important rivers in Manipur the Imphal river and the Barrak River. There are numerous smaller streams and rivers that flow in various directions depending on the inclines. These originate mostly as rainfall streams having being carved into the soft mountainous rocks. There are lakes in the Imphal valley, among them Loktak lake situated at Moirang in the Bishnupur District, which is the biggest fresh water lake in north east India.

2.4 Climate: The sub-tropical to sub-temperate climate in Manipur exhibits a distinct winter, with warm humid and rainy season. Temperatures range from approximately 0.0° C minimum to 38° C maximum in both the central valley and in hilly regions.



Rain occurs during the south west monsoon generally from the month of June to September and weather is cooler and dryer for the remaining months, January being the coldest month in a year. The average rainfall during the last ten years was 1482.2 mm per annum. Manipur historically has experienced heavy rainfall every year, the heaviest falls being in the northern half of the State. Most rainfall occurs during June, July & August but also has falls during March, April and May as thunder showers and pre monsoon rain.

2.5 Demography: The population of Manipur was less than 300,000 during the 1901 census with only 0.12 % of the population of India. The population increased to more than 1,000,000 in 1971. In 2011 it reached 25,70,390 comprising 0.212 % of the Indian total and since the population has continued to increase.

2.6 The detailed population of the State of Manipur : Source: Census of India

Year	India			Manipur		
	Male	Female	Total	Male	Female	Total
1951	18,55,28,462	17,55,59,628	36,10,88,090	2,83,683	2,93,950	5,77,635 (0.16)
1961	22,62,93,201	21,29,41,570	43,92,34,771	3,87,058	3,92,979	7,80,037 (0.18)
1971	28,40,49,276	26,41,10,376	54,81,59,652	5,41,675	5,31,078	10,72,753 (0.20)
1981	35,33,74,460	32,99,54,637	68,33,29,097	7,21,006	6,99,947	14,40,953 (0.21)
1991	43,92,30,458	40,70,72,230	84,63,02,688	9,38,359	8,98,790	18,37,149 (0.22)
2001	53,12,77,078	49,57,38,169	102,70,15,247	12,07,338	11,81,296	23,88,634 (0.23)
2011	62,31,21,843	58,74,47,730	121,05,69,573	12,90,171	12,80,219	25,70,390 (0.212)

CHAPTER-III

CITIZENS' CHARTER: 3.1 Profile of Transport Department commonly known as Motor Vehicles Department:

3.1 Introduction: The Directorate of Transport commonly known as Motor Vehicles Department was initially a part of the Police Department. During that period, a Dy.S.P. of Police Department functioned as Motor Licensing Officer cum Secretary, State Transport Authority, Manipur. Later, a Civil Service Officer was appointed as the Secretary, State Transport Authority, Manipur. The Department was later bifurcated from the Police Department and was renamed as Directorate of Transport in the year 1979. This Department is also one of the revenue generating & public service/ utility Department. A sum of Rs. 17,55,29,134/- was collected as Revenue during the year 2012- 2013. In the present context, apart from carrying out its basic responsibilities, this Department is also looking after the works of Civil Aviation (expansion of Imphal Airport / Night Landing Facility/ introduction of Helicopter service) , Railways (construction of Jir- Tupul- Imphal Railway Line/ computerised Railway Reservation System) and Inland Water Transport (Loktak Inland Water Transport System /exploration of Barak River) on the capacity of Nodal Department/ Agency.

3.2 Organisational Set Up: Administrative Structure: The Minister in charge of Transport is assisted by an Administrative Secretary, an Additional Secretary, an Under Secretary and then a Section Officer(SO) & subordinate staff.

3.3 State Level: The Director (Transport) is the head of Department and also functioning as ex-officio MD/MSRTC, Manipur. He is assisted by 2 (two) Dy. Directors of Transport (one as Dy. Director /Plg, being the Departmental Officer who is looking after the works of Research & Planning Cell, & other matters, another as Dy. Director /Adm on deputation from State Civil Service Cadre as i/c of Administration, Service/Financial matters, (HOO/DDO) and 1 (one) Asstt. Director of Transport(Departmental Officer).

3.4 District Level: There are 7 (seven) District Transport Offices (IW/IE/CCP/KPI/TBL/BPR/UKL) besides one Transport Office set up at Senapati

3.5 District Level Support Cells/Sections: In the Office of the District Transport Officers, the following support Cells/ Sections are established for carrying out various works/responsibilities:- (i) Ministerial Section: (looking after the works of accounts/audit/service matters/ & establishment). (ii) Taxation Section. (iii) Mechanical Section (iv) Enforcement Section.

3.6 Basic Functions/ Responsibilities of the DTOs/RTOs: Registration of vehicles, issue of driving license/ fitness certificates/pollution under control certificates, local permits for trucks, collection of taxes/fees/fines, implementation & enforcement of M.V. Act & VMV Rules, notifications issued from time to time, conduct of mobile courts under the JMIC(Transport) for booking of motor vehicle offences & imposition of penalties/ compound fees, & requisition of vehicles for the conduct of general elections/ PPIP/ visits of VVIPs in the State besides carrying out of specific jobs/ works assigned/ entrusted by the Director(Transport) from time to time.

CHAPTER-IV

4.1 TRANSPORT STATISTICS: Nos. of Vehicles Registered as on 31.3.2013

Categories of vehicles	Imphal West	Imphal East	Thoubal	Bishnupur	Kangpokpi	Senapati	Ukhrul	Churachandpur	Total
Truck	7866	677	849	1138	578	367	164	891	12530
Bus	1646	194	179	198	174	114		172	2677
M/Bus	542	1	147	160	115		1	138	1104
Jeep	10223	660	1170	281	369	234	219	287	13443
Car	18375	2115	334	380	252	407	247	852	22962
Taxi	1975	323	9	49		18	15	88	2477
Tractor	962	587	594	18		8	2	127	2298
Auto-rickshaw	7754	1831	956	402	274	425	45	928	12615
2 - wheelers	114977	12791	12801	1461	175	905	353	7391	150854
Trailers	395	2	66					56	519
Others	405	24	251				2	73	755
Total	165120	19205	17356	4087	1937	2478	1048	11003	222234

Remarks: (1) The number of two- wheelers registered as on 31-3-2013 is 67.88 % of the total population.

(2) The number of personalised vehicles as on 31.3.2013 is 84.26% of the total population. The quantum of rise in number of personalised vehicles in the State clearly shows that there is lack of compatible/reliable/sustainable/affordable/comfortable Public Transport System in the State.

(3) It is estimated that about 8000 – 9000 vehicles per year are increasing & therefore by 2030, the vehicular population of the State would be around 4- 5 lakhs whereas the total road length & road density of the State may not have significant rise/increase accept PMGSY roads. However, the Roads under NEC & New National Highways shall play an important role in overall development of socio-economic status of the State.

CHAPTER-V

TRANSPORTATION ISSUES & CHALLENGES:

5.1 Present Status of Public Transport System in the State: (i) **Liquidation of Manipur State Road Transport Corporation (MSRTC)** : The Manipur Road Transport Corporation (MSTRC) was liquidated in the year 2003 by a decision of the State Cabinet with the prior approval of the Ministry of Shipping, Road Transport & Highways, GOI now re-structured as Ministry of Road Transport & Highways.

(ii) **Status of operation of Buses/Medium Buses in the State (Stage Carriages)** : After the liquidation of MSRTC, private bus operators have had been taking the responsibility of providing passenger transport services under the Stage Carriage permits granted by the State Transport Authority, Manipur u/s 72 of the M.V. Act'88 in both Urban & Rural areas connecting Imphal City through NHs, State Highways, Major District Roads, Other District Roads as well as other major Corridors. However, the concerned Tpt Societies /Assns who are operating buses under stage carriage permits approached the State Transport Authority, Manipur for sanction of phasing out of their fleet of old/polluted buses with replacement by Maxi Cabs mostly Tata Magics & Tata Wingers under the contract carriage permits (u/s 74 of the M.V.Act' 88) in most of the monopolized routes accepting 3(three) major Corridors namely Burma Sugnu Line (Imphal to Sugnu/Serou/Chandel/Kakching/Pallel etc along NH/102, Imphal to Saparmeina/Kangpokpi/Senapati/Mao along NH/02, Imphal to Churachandpur via Moirang along NH/150 renamed as NH/02 (about 5-6 wingers introduced under the contract carriage permits by the bus operators besides 30 wingers being operated by the CITOS). As per records maintained, it reveals that about 1000 Intermediate Public Transport vehicles mostly Tata Magics & Tata Wingers are operating under the Contract Carriage Permits granted u/s 74 of the MV Act'88 in the routes which were earlier operated by the Buses & Medium Buses under the stage carriage permits granted u/s 72 ibid.

5.2 Strategies/Policies: It is high time to discourage such practices adopted by the cocd Transport Societies/Assns approaching for sanction of phasing out of their old/polluted public transport vehicles (buses/md. buses which are/were operating under the stage carriage permits) with replacement of Intermediate Public Transport (Tata Wingers/ Tata Magics under contract carriage permits) because phasing out of old /polluted vehicles is quite satisfactory but replacement of public transport (under stage carriage) with intermediate public transport (under contract carriage) has become a critical issue which is characterised by maximum occupation of road space (carriageways), compounded with traffic congestions along major corridors connecting Imphal City, parking problems in & around Imphal areas and environmental impacts like noise/air pollution. Therefore, the Transport Societies/Assns are to be encouraged in the line of approach for induction of newly purchased/brand new buses/ md. buses and to ensure proper maintenance of their existing fleet of public transport vehicles rather than making replacement with IPT vehicles under the contract carriage permits in order to promote/maintain reliable/sustainable/comfortable public transport system in the State.

Comments: Operator is expected to maintain specified standard of comfort and cleanliness in the vehicles. Object of Motor Vehicles Act and the permits issued there-under is to provide travelling facilities without exposing public to risk of human life. Where the vehicle being in shabby condition does not give reasonably comfortable travelling facilities for the public, the purpose for which the permits are granted stand frustrated- *Hindustan Bus Service v. State Transport Appellate Tribunal AIR 1991 All 382.*

5.3 Role of Intermediate Public Transport(Contract Carriages) : During the past 5 years, the entire scenario of Public Transport System in the State (Urban, Suburban & Rural areas) has turned into a dramatic change with introduction of a large fleet of Intermediate Public Transport Vehicles like diesel driven A/Rs (3000), Maxi Cabs (Tata Magics/Tata Wingers/Tata Sumos etc =1000 plus) under the Contract Carriage Permits & under the administrative management of different private operators which were registered as Co-operative Societies/Associations with the offices of the Registrar Co-operative Societies/ Dy. Labour Commissioner in the cases of forming of Trade Unions. The impacts are having indulged in monopolistic nature in providing Public Transport with lack of healthy competition among the passenger service providers, and compromising with traffic congestion/ safety aspects, environmental impacts & passenger comforts. In addition to the above issues, it is also found that factional disputes amongst Intermediate Public Transport service providers due to overlapping/ encroachment of their respective Area of Operations. The background of most of the disputes are found to be the lack of understanding among themselves with and having been convinced with the wrong interpretation of the “Area of Operations” . That, the office of the District Co-operative Officers/ARCS concd. used to assigned respective “Area of Operations” while clearing/making registration of Tpt Societies/Assns as a formality, however, in certain cases , that Area of Operations may not be found as co-terminus with the “ Name of Routes” assigned by the Office of the Secy/STA, Manipur while granting the Contract Carriage Permits because route permits are usually granted considering the public demand, necessity, road conditions, viability and within the provisions of MV Act/ Rules etc.

5.4 Class A & B Routes: (a) Imphal- Churachandpur route is categorized as Class-A Route; all passenger transport vehicles shall have to pay 10% of the permit fee more in addition to permit fees payable.

(b) Imphal to Thoubal extended upto Kakching is categorized as Class-B Route; all passenger transport vehicles shall have to pay 5% of the permit fee more; as per Special Clause C of the Manipur Motor Vehicles taxation (Amendment) Act '2011.

5.5 Limitation of Stage & Contract Carriage Permits along the categorized routes: Provisions of Section 71 (3) (a) & 74(3)(a) of the MV Act' 88 are reproduced below: “ The State Government shall, if so directed by the Central Government having regard to the number of vehicles, road conditions and other relevant matters, by notification in the Official Gazette, direct a State Transport Authority and a Regional Transport Authority to limit the number of stage carriages generally or of any specified type, as may be fixed and specified in the notification , operating on city routes in towns with a population not less than 5 lakhs.” Same in the case of contract carriages as only the words “stage carriages” is to be replaced by “ contract carriages.”

5.6 Strategies/Policies: The above provisions prescribed the minimum population of the cities/towns with a population not less than 5 lakhs, and hence, as almost all the cities/towns falling along the above categorized routes A & B are having population of less than 5 lakhs, and therefore, there is no role of the Central Government in giving directives to the respective State Governments in making limitation of the number of stage & contract carriages, however, it shall be much more meaningful provided the Origin – Destination (O-D) survey & Peak Hour Peak Direction Trips (PHPDT) studies are conducted every 3 years along the above mentioned categorized routes so as to ascertain /evaluate per capita travel demand which would be enable to forecast the quantum of supply in terms of additional number of public transport & Intermediate Public Transport vehicles to be introduced in the existing fleets besides enhancement of road infrastructure & development of transport infrastructure.

5.7 Stage Carriages Vs Contract Carriages: The root cause of factional disputes which are experiencing amongst the stage carriage & contract carriage passenger service providers along the major corridors is mainly because of indulging in unhealthy competition due to violation of Permit Conditions of Contract Carriages by the later as noticed in some cases as the Contract Carriages are used to operate more or less in the nature of Stage Carriages, thereby disturbing the interest of the Stage Carriage operators. The magnitude of tussles are sometimes so sensitive however, most of the cases are used to settle at the level of the Secy/ STA, Manipur through negotiations & some of the cases subsequently resulted to filing of litigation in the Law Courts.

5.8 Strategies/Policies : (i) To formulate Time Tables/minimum frequencies in respect of Contract Carriage Passenger Service Providers subject to approval by the STA/Manipur.

(ii) To ensure appointment of Time Keepers by the respective Tpt Societies /Associations subject to wearing of standard uniforms to be supplied by the respective Tot Societies/Associations with proper control & supervision of the time keepers and the duty may be assigned in two shifts morning / evening with 1 person for each shift. The time keeper should be responsible for keeping /maintaining the time table with formulated modality for rotation system including picking up and setting off the passenger. Any irresponsibility or adverse conduct/activity or punctuality/integrity etc . if committed by the time keeper, the cocd. Tpt Society/ Assn shall be fixed responsibility.

(iii) To ensure proper maintenance/repairing of Passenger Transport Vehicles for public safety & comfort with restriction of issuance of Fitness Certificates(FC) & Pollution Under Control Certificates(PUC).

(iv) To ensure that each & every PT & IPT vehicles should display a distinguished board (yellow background with black letters) indication the routes under operation Origin-Destination with via and nature of permit.

(v) To make/frame Rules u/s 96(2)(xviii) of the MV Act '88 for regulation of painting of Intermediate Public Transport vehicles (like yellow & black) operating under the Contract Carriage Permits accepting Mega Diesels/ARs.

(vi) To discourage forming/floating of new Tpt Societies/Assns and restriction in issuing No Objection Certificates to the concerned Registering Authorities.

(vii) To conduct advanced Origin- Destination (O-D) survey besides Peak Hour Peak Direction Trips (PHPDT) study along the major corridors where Public Transport as well as Intermediate Public Transport vehicles are operating.

(viii) To ensure that no gas horn is fitted with the vehicles.

(ix) To ensure that right side of the Auto Rickshaws including Mega Diesels are properly closed with steel/iron bars so that enlightening of passengers from the right side is totally prohibited.

(x) To streamline the conduct of surprise checking so as to book motor vehicle offences with specific reference to violation of contract carriage permit conditions other than routine checking with imposition of penalties to be followed by suspension/cancellation of route permits.

5.9 Status of Petrol Driven Auto Taxis: There is a large fleet of petrol driven Auto Rickshaws in the State operating as Auto Taxis under the permits “ All Routes in the State” granted by the respective Secy/ RTAs (DTOs). However, this fleet of Auto Taxis are not fitted with taxi meters and therefore inconveniences are mostly caused to the general public as commuters/passengers mainly due to random charging of fares at their own wish.

5.10 Strategy/Policy : In order to regulate & to ensure proper control over the present practice, it is recommended that Rules for provision of taxi meters on motor cabs (seating capacity upto 6 excluding driver) requiring approval or standard types of taxi meters to be used in examining, testing and sealing taxi meters shall be framed under the provisions of section 96(2)(xx) of the MV Act '88.

5.11 Concept of Last Mile Connectivity & Feeder Services: The State Transport Authority, Manipur has envisaged the concept of introduction of Intermediate Public Transport Vehicles in the sectors like last mile connectivity & feeder services in the major corridors where Public Transport is operating with larger seating capacity vehicles with restriction of grant of Contract Carriage Permits in favour of Motor & Maxi Cabs for transportation of passengers along the major Corridors so as to encourage healthy competition in Urban Transport System besides redressing the traffic congestion in Imphal city.

5.12 Route Monopoly: In fact, as a common practice in the State of Manipur, there is a tradition of making route monopoly by the established Tpt Societies/Assns while rendering public transport services in the designated routes offered by the Office of the Secy/State Transport Authority, Manipur. But there should not be any short of route monopoly while rendering public transport services and to encourage healthy competition among the passenger service providers.

Comments: Even an existing operator has no right to claim that he shall be heard at the time of consideration of application for grant of permit.- *V. Shymala v. Kalawati AIR 1992 AP 298.* 21

5.13 No Objection Certificates (NOCs): The importance of No Objection Certificates granted by the respective Tpt Societies/Assns which was one of the basis for consideration for grant of route permits by the Transport Authorities under the provisions of MV Act'1939 has been abolished/scraped in the prevailing MVACT'88 and replaced with certain criteria for consideration for grant of route permits like provided that other conditions being equal, preference shall be given to the application for permits (in the case of stage carriage) from – (i) State Transport Undertaking; (ii) co-operative societies registered or deemed to have been registered under any enactment for the time being in force; (iii) ex-servicemen; (iv) any other class or category of persons, as the State Government may , for reasons to be recorded in writing, consider necessary and in the case of contract carriage permits, from - (i) Indian Tourism Development Corporation; 9ii) State Tourism Development Corporation; (iii) State Tourism Departments; (iv) State Transport Undertakings; (v) Co-operative Societies registered or deemed to have been registered under any enactment for the time being in force (vi) Ex-servicemen. However, the practice has been continued rather in order to identify the applicant for grant of route permits because permits are granted in the name of the individual applicants/owners and after identification of the permit holders, parking lots are usually allotted in the name of the Tpt Societies/Assns under which the permits holders are affiliated being members.

5.14 Operation of Luxury Buses (33 seat capacity) operating under the Inter State Stage Carriage Permits under the provisions of Single Point/ Double Point Taxation: As per records maintained in the office of the Secy/STA, Manipur, 120 deluxe busses are operating in the route Imphal- Guwahati via Dimapur/Kohima (30 buses under single point taxation & 90 buses under double point taxation which has no limit) with Inter State Stage Carriage Permits under the Reciprocal Agreement entered between the States of Manipur & Assam in the year 1993 under the provisions of section 88(5) & (6) of the MV Act' 88 :-

5.15 Special Permit under the Agreement : State Transport Authority of each State shall be eligible to grant without any restrictions any number of Special Permits for public service vehicles under Sub-Section 8 of Section 89 of the Motor Vehicle Act, 1988. The special permit shall not require prior countersignature but shall be restricted to marriage and pilgrimage parties only.

5.16 Taxation: The principles of Taxation in respect of the permits for the routes/areas covered by the agreement to be followed by both the States shall be as: there shall be a single point taxation in respect of permits to be granted, by State Transport Authority of each State within the agreed quota fixed (30 permits) in this agreement. This will mean that vehicle will be liable to pay tax/taxes under the Taxation Act & Rules made there-under of the Home State and shall be exempt for payment of Motor Vehicle Tax of the reciprocating State. There, shall however be no exemption for payment of Passengers tax, goods tax is leviable in respect of any clauses of Motor Vehicles enter any other reciprocating States. Any permit issued beyond the agreed quota shall be subject to double point taxation i.e. they will be liable to pay taxes of the both States.

5.17 Operation of Maxi Cabs (12 seater excluding driver) under the All India permit for Tourist Transport Operators, Rules' 1993: As per record maintained in the office of the Secy/STA, Manipur, about 55 maxi cabs mostly Tata Wingers, Tata Sumos & Tata DIs are operating in the routes Imphal – Guwahati via Kohima/Dimapur with temporary permits (3 months subject to renewal) under the All India permit for Tourist Transport Operators, Rules' 1993.

5.18 Role of Para Transit in the State & its Regulation & Control: Introduction: Para - transit is normally expected to fulfil a need neither public transport or personalized vehicles are able to fulfil. Such mode normally cater to a category of occasional trips like trips to airports or railway stations etc. with excessive baggage, or emergency trips that have to be undertaken immediately under the circumstances of having no time to wait for public transport. Para transit would not normally be used for regular commuted trips, however, when the quality of public transport deteriorates, para- transit tends to substitute the public transport. As such, this policy would seek to restore para- transit to its normal role by persuading the improvement of public transport.

5.19 Present Status: In the State of Manipur, some individuals as well as private groups used to form/float Associations for indulging in random operation of their vehicles (mostly Maruti Vans, Ambassador Cars, petrol driven jeeps and even Boleros, Scorpions etc) for para -transit on hiring basis under contract subject to payment of negotiated fares/ hiring charges for transportation of air passengers from hotels to Imphal Airport & from Airport to respective hotels, transportation of patients/ patient parties from the point of origin to destination (to/from the Govt/Pvt Hospitals) and even the corpses & mourners, and just to meet a specific trip demand such as marriage ceremonies, social gatherings, rituals/ religious events, tourism/ entertainment etc. However, in the present scenario/ context, such vehicles are registered as private vehicles and having no route permits/FCs, mostly un-insured and even no passenger taxes are paid and therefore, the practice is in violation of provisions of MV ACT'88 & CMV Rules' 1989..

5.20 Regulation & Control: In fact, such vehicles indulging in Para-Transit operations may be classified as Transport/ Commercial vehicles and therefore should be registered as a Passenger Transport Service Vehicle (Motor Cab/ Maxi Cab) subject to obtaining of requisite route permit [DTOs are authorised /empowered to grant Contract Carriage Permits for “ All routes in Manipur” u/s 74 of the MV Act' 88 & in case of Special Permits, Secy/ STA may grant u/s 88(8) of the M.V.Act' 88], FC, PUC, I/C (at least 3rd Party Risk as mandatory u/s 146 of the MV Act '88) and payment of Passenger Taxes at the rates prescribed vide Manipur Gazette Extraordinary No. 316 (A) , Friday, September 24, 2010 under Transport Department Notification No. 19/4/2002-T(MV) dated 9th March' 2010.

5.21 Strategies/Policies: The Transport Department shall take up necessary steps for ensuring early regularisation of Par-Transit system in the state of Manipur under the provisions of M.V Act '88 & C.M.V Rules '1989 including painting of such vehicles subject to framing of Rules u/s 96(2)(xviii) ibid.

5.22 Present Status of Transportation of School going Children, its Regulation & Control:

Introduction: About 3000 Maruti Vans & 200 plus Buses are operating under contractual engagement with the different Private School Authorities located in Urban /Suburban/Rural areas for transportation of School Going Children subject to payment of negotiated monthly fares by the parents. It is pointed out that this large fleet of Maruti Vans are registered as private vehicles as were done in the case of Para-Transit system and whereas about 50 buses out of 200 plus buses are found operating with requisite route permits obtained from the office of the Secy/STA, Manipur as per records maintained. Further, payable passenger taxes in r/o School Vans as prescribed vide Manipur Gazette Extraordinary No. 316 (A) , Friday, September 24, 2010 under Transport Department Notification No. 19/4/2002-T(MV) dated 9th March' 2010 are mostly not paid by the concerned operators but continued to operate without FC, PUC & I/C etc compromising the safety aspects & comfort of the school going children due to overloading above the seating capacity mostly in case of School Vans.

5.23 Background of Legal Framework: As per Section 2(47) of the Motor Vehicles Act, 1988 an educational institution bus is a transport vehicle and therefore requires a permit to ply on the road. Being a transport vehicle it would also need to undergo mandatory fitness test every year without which the permit cannot be renewed. Hence, they have to be advised that the drivers of the school buses are required to maintain traffic discipline. Any lapse on this account will invite stern action against the defaulters or violators of above instructions & will be challaned or prosecuted accordingly

5.24 Recommendations of the Drafting Sub Committee, State Transport Policy:

Considering the need for formulating a sustainable/ reliable modality for regulation and control of school buses/ vans pertaining to operation of school Bus/Van service, giving importance to the safety & comfort of school going children, a detailed discussion with DSP-Traffic and DTO Imphal West was made on 10th May' 2010 in the office chamber of Deputy Director of Tpt (Adm), the then Chairman of the Drafting Sub Committee, State Transport Policy, Manipur.

5.25 The recommendations of the joint seating are appended below:

A. Strict Implementation/compliance of the Hon'ble Supreme Court of India's Guidelines:-

1. School buses should be painted yellow.
2. School Bus must be written on the back and front of the bus. If it is hired bus, "on School Duty" should be clearly indicated.
3. Bus should have a First Aid Box.
4. Bus should be fitted with speed governor of specified standard.
5. The windows of Bus should be fitted with horizontal grills.
6. There should be a fire extinguisher in the Bus.
7. School Name & Telephone No. must be written on the Bus.
8. The doors of the Bus should be fitted with reliable locks.
9. To keep the school bags safely, there should be a space fitted under the seats.
10. There must be a qualified attendant in the Bus to attend to Children.
11. Any parent or guardian sitting in the bus or a teacher may also travel to ensure these safety norms.

12. The driver should have at least 5 years of experience of driving heavy vehicles.
13. A driver who has been challaned more than twice in a year for offences like red light jumping, violation of lane discipline or allowing unauthorized person to driver cannot be employed.
14. A driver who has been challanned even once for the offence of over speeding, drunken driving and dangerous driving etc. cannot be employed.

B. Since, a large fleet of Maruti Vans are extensively used for transportation of school children, the following guidelines are suggested for general safety & comfort of the school going children:

1. The vehicle be painted with a strip/band of yellow colour of 6 inches wide for easy identification just below the window.
2. "School Van" or On School Duty along with the name of the School / Telephone No on a board should be fix in the front and rear side.
3. Carriers should be fitted on the roof for keeping school bags of the students.
4. The van should carry a detailed list of students along with their blood groups, contact numbers of the parents etc.
5. The van must have a First Aid Box".
6. A devise/ mechanism may be adapted for ensuring internal locking of the sliding doors.
7. The sitting capacity should be limited to 16 students only for the class group nursery to class V, 14 for class VI to XII for ensuring safety & comfort of the children. The front seat may be occupied by 2 primary students/by only one student above primary level.

C. Each & every School Authority which may be under the administrative management of Govt/ Semi Govt/ Private may set up a School Transport Committee which shall be headed by its Principal & other members drawn from the Parents/Guardian Form, School Transport Service Providers Assn, Local Bodies and if possible representatives of Transport Department & Traffic police Authorities, and the Committee shall be responsible for safe transportation of the students as per strict enforcement of the prescribed guidelines laid down by the Hon'ble Supreme Court of India & other recommendations/guidelines issued by the competent authorities from time to time, finalisation of fares chargeable, ensuring conversion of School Buses/Vans as Transport Vehicles subject to fulfilment of requisite criteria such as obtaining of relevant vehicular documents such as route permits, FCs, PUCs, I/Cs & payment of passenger taxes etc., identification of routes, bus stops, etc.

5.26 Strategies/Policies:

(i) To take up necessary steps for early regularisation of School Buses & Vans in the state of Manipur as per the guidelines laid down by the Hon'ble Supreme Court of India and the recommendations made by the Drafting Sub Committee, State Transport Policy on 10th May' 2010 as far as practicable & under the provisions of M.V Act '88 & C.M.V Rules '1989 for ensuring effective control over the nature/mode of operations of the school buses/vans for general safety & comfort of the school going children.

(ii) To frame relevant Rules considering the recommendations made by the Joint Seating of dated 10th May' 2010 with specific reference to enhancement of seating capacity of School Vans & painting thereof: under the provisions of section 96(2) (xv) of the MVAct'88: the determination of the number of passengers a stage carriage or contract carriage is adapted to carry and the number which may be carried & u/s 96(2)(xviii) ibid : regulating the painting or marking of transport vehicles and the display of advertising matter thereof.

5.27 Status of Freight/Goods Transport System : Operation of Local Trucks / Public Carriers: This fleet of local trucks are operating in the State with the local permits issued by the respective District Transport Officers on the capacity of Member/Secy, Regional Transport Authorities, Manipur specifically meant for local purposes.

5.28 Operation of Inter State Public Carriers: Inter State bound public carriers other than the New national Permit Holders are operating with temporary permits for 3 (three) months under the Reciprocal Agreement entered between the States of Manipur & Assam in the year 1993 under the provisions of section 88(5) & (6) of the MV Act' 88 :-

(a) Imphal – Guwahati Route :- 800 Trucks

(b) Imphal – Silchar Route :- 300 Trucks

5.29 Petroleum Products Carrier:-

(a) Imphal – Tinsukia Route :- 50 Trucks

(b) Imphal – Khatkhati Route :- 150 Trucks

(c) Imphal – New Bongaigaon Route :- 50 Trucks

(d) Imphal – Dulaijan :- 50 Trucks

Total: 300.

5.30 Public Amenities at Jiribam for the Drivers/Workers of NH/53 bound Trucks/tankers/Buses/Bullets etc. : The Transport Department, Govt. of Manipur has taken up a Project for development of Public Amenity at Jiribam with an estimated cost of Rs. 1.88 crores under State Plan during the year 2009-10 for providing facilities like 100 men capacity make shift barrack with dedicated basic amenities for the NH/53 bound drivers/workers. This infrastructure was constructed at the site of the land earmarked for the ISBT/Jiribam by the MDS. Meanwhile, the Transport Complex, having basic amenities for night halt with parking facility of about 100 plus Trucks at a time, located at Jiribam near the Railway Station was also made available to the Drivers/Workers of Manipur bound Trucks/Tankers etc as an interim arrangement.

5.31 New National Permit Scheme: Introduction: The New National Permit Scheme was made effective wef 08.05.2010 & whereas the electronic system grant/renew of National Permits is made effective wef 15. 09. 2010. However, in the State of Manipur, the same system has been introduced wef 28th April '2011, being the date of publication in the official gazette under Transport Department Notification No. 19/1/99 dated 18th April '2011.

5.32 Status: The Office of the Secretary/ State Transport Authority, Manipur has been connected to the electronic mode of grant/renew of National permits via NP web-portal (<https://vahan.nic.in/npermit>) and NPs are issued/renewed through designated web portal. 26

5.33. Working Principle/Rules: Under the electronic mode, there are two options for mode of payment either by cash or internet banking. In Manipur, goods/freight transporters/concd. Owners usually opted cash payment mode & in the case of payment made by cash, the applicant will get a print out machine generated challan from the counter of the New National Permit Scheme opened in the office of the Secy/STA, Manipur, on request & then he/she shall have to deposit a sum of Rs 15,000/- per truck per year (now revised to Rs. 16,500/- wef 1st April' 2012, circulated vide Ministry of Road Transport & Highways Notice memo no. RT-16031/6/2010-T dated 28th March' 2012) on the strength of the machine generated challan at any branch of SBI & get the stamped copy of the same challan. The electronic confirmation of the payment of Rs. 16,500/- by cash or by demand draft issued by the SBI in favour of the " Common National Permit Account " payable to the Secretary, State Transport Authority, Manipur is uploaded by the SBI on T+1 day. So, in the case of cash payment, the applicant has to wait one more day after depositing the amount to get electronic confirmation which is a mandatory pre-requisite condition to check fraudulent practices. After getting electronic confirmation, the applicant shall approach the New National Permit counter for getting the print out National Permit duly signed by the Secy/STA, Manipur subject to payment of Rs.1000/- as authorisation fee & Rs. 720/- being local permit fee/yr in addition to the New National Permit fee of Rs. 16,500/-.

(iv) **Transportation of goods/raw materials/finished products in c/w trade & business carried on under the private service vehicles:** Permits are granted u/s 76 of the M.V. Act' 88.

CHAPTER-VI

ADMINISTRATIVE FRAMEWORKS: 6.1 Constitution of State Transport Authority, Manipur & Regional Transport Authorities, Manipur: The State Transport Authority, Manipur under the Chairmanship of Administrative Secretary is constituted under the provisions of section 68 of the MV Act' 88 with Director (Transport) as Member/ Secy & three other members namely, Secretary(Law), Govt. of Manipur, Chief Engineer(Works) or his nominee not below the rank of Superintending Engineer, Director General of Police (DGP), Manipur or his nominee not below the rank of DIGP to discharge the following duties/functions :

(a) to co-ordinate and regulate the activities and policies of the Regional Transport Authorities, if any, of the State.

(b) to perform the duties of a Regional Transport Authority where there is no such Authority, and if it thinks fit or if so required by a Regional Transport Authority, to perform those duties in respect of any route common to two or more regions;

(c) to settle all disputes and decide all matters on which differences of opinion arise between Regional Transport Authorities;

(d) to discharge such other functions as may be prescribed.

6.2 Regional Transport Authorities: In the Districts/Regions, Regional Transport Authorities are also u/s 86 of the MV Act '88 constituted under the Chairmanship of District Magistrates concerned excepting for Imphal Districts wherein the Director of Transport, Manipur is the Chairman. The DTOs concerned are the Members/Secretaries of the RTAs so constituted & the Additional District Magistrates are the Members of their respective Districts.

6.3 Fixation of Fare, freight & Hiring Charges of Vehicles: In exercise of the powers conferred u/s 67 (1) (d)(i) of the M.V. Act' 88, the State Government issues the directives to the State Transport Authority, Manipur to fix the revised rates of Passenger Fare , freight and Hiring Charges of motor vehicles plying on roads in Manipur from time to time.

6.4 Principle of Calculation of Cost of Operation & Evaluation of Rate Analysis adopted for fixing /revising the passenger fare, freight & hiring charges of private vehicles in the State:

6.5 Cost of Operation : The cost of operation per passenger per km. And cost of operation per quintal per km. Have been calculated based on the formula adopted in the Transport Department since the inception and the same is more or less of National standard but due to different working conditions, standard/quality of roads and socio economic conditions, there are certain deviations while assuming the variables for calculation of Rate Analysis. The rate of fare per passenger per km & freight charge per quintal per km are derived from the unit cost so calculated taking into consideration the fixed cost, variable cost & the profit of the owner using MS Excel Worksheet. Then, once the rate are calculated, the Hiring charges including the holding charges are further worked-out in respect of different types of commercial vehicles.

6.6 Rate Analysis:

Standard assumptions (Case Study: in case of a 50 seater ordinary bus): Mileage = 4 km per 1 litre, carrying capacity=50 passengers, effective km. Being operated per day = 140 kms, dead distance = 10 kms per day, no. of working days per year = 309 days, servicing/overhauling (minor repairing/replacement of engine oil/filter/other lubricants = once in 6 months, major repairing / replacement of parts (3 % of the cost of the vehicle) / replacement of tyres / tubes for every 35,000 kms provided all the 7 tyres are retreaded once, depreciation = 10 %, rate of Bank interest 12 %, profit of the owner = 10 % of the total operating cost etc.

6.7 Operating Costs: (i) Fixed Cost : like motor vehicle taxes/fees, insurance Premium (3rd Party Risk in case of Local & whereas Comprehensive Insurance in case of Inter State), Bank interest, personal investment, remunerations of driver/handyman etc.

(ii) Variable Cost: (cost of POL/lubricants, servicing/ overhauling charges, replacement of tyres & tubes due to wear & tear, replacement of parts and depreciation etc.) Toll and other contingency charges/ expenses

(iii) Profit of the Operator: 10% of the total operating cost.

6.8 End result = cost of operation per passenger per km. for a passenger bus and per quintal per km in case of freight carriage are calculated by summing up the unit fixed cost factor, unit variable cost factor and the profit of the operator divided by the effective km run per day & seating capacity of the respective vehicle.

Observations: The present existing system of revision of fare, freight & hiring charges is quite cumbersome due to lengthy process involving in obtaining the approval of the State Cabinet for each & every revisions proposed besides facing of hardships while requisitioning private vehicles for utilisation during the conduct of General Elections for induction/ transportation of security personnel(CPMF) & polling materials/parties due to the fact that the pvt. vehicle owners, Tpt Societies/Assns are not willing to accept the existing rates of Fare, Freight & Hiring charges on the ground of escalation of cost of diesel and price index of other commodities taken into consideration while evaluating the cost of operation by the Transport Department resulting to hectic negotiations involving the Office of the Chief Electoral Officer, Manipur and State Election Commission, Manipur. Hence, it is high time to envisage /formulate a mechanism for periodic revision of fare, freight & hiring charges subject to approval of the proposed Mechanism/Structure for automatic fare & freight revision by the State Cabinet. However, the evolved Structure meant for automatic fare revision should have different logical aspects for petrol driven vehicles.

6.9 Institutional Mechanism of Periodic Revision of Fares: The Ministry of Urban Development, GOI has adopted a policy on automatic fare revision in case of JnNURM funded buses is affected by 1st of April every year taking into consideration of 50% on cost of Diesel and 50% on whole sale price index which shall be linked to the established Fare Formula. In this aspect, Cabinet Decision would be warranted as there is an established formula adopted in the State of Manipur for fixing & revision of fare, freight & hiring charges of private vehicles.

The existing rate of passenger fare, freight & hiring charges are based on the Manipur Gazette Extraordinary No. 250, published on Thursday, October 16, 2008 under the Transport Department Notification No. 1/Revision/Fare/Freight/2008-T(MV) dated 16th Oct' 2008 and yet to be revised.

CHAPTER-VI

INTERNATIONAL BUS SERVICE: 7.1 Proposed Introduction of Imphal (India)-Mandalay(Myanmar) Bus Service:

7.2 Background: A comprehensive proposal for introduction of Imphal – Mandalay Bus service was submitted to DONER & MORTH after a public demand was passed by the Manipur Legislative Assembly.

7.3 Ministries/Departments involved : Ministry of DONER, Ministry of Road Transport and Highways (MORTH), Ministry of Home External Affairs (MEA), Ministry of Home Affairs (MHA) GOI, Government of Manipur and Republic of the Union of Myanmar.

7.4 Present Status: Government of India and Republic Government of Myanmar are actively considering for early introduction of Imphal –Mandalay Bus Service once the impending issues/conditions are mutually redressed and fulfil.

7.5 Major Issues: Road conditions, Driving regulations, Security and Visa on Arrival/Setting up of Immigration Offices at Tamu/Moreh (Imphal).

7.6 Total Road Length: 579 km (Imphal –Mandalay): (i) Imphal –Moreh : 110 km (All seasons motor able), mostly two lanes and stretch from 320.32 – 326.66 km of NH-39 (renamed as NH-2) is four lanes.

(ii) Tamu- Mandalay : 470 km (Moreh-Kalewa: 149 km, Kalewa-Monywa: 184 km, road condition is very bad motorable only in dry season and Monywa – Mandalay: 136 km)

7.7 Driving regulations: Right Hand drive in Indian territory & left hand in Myanmar: The matter was discussed, and the scope of exploration for radial transfer of bus at Moreh & the present status of introduction of foreign made cars with right hand drive in Myanmar were highlighted & the MEA, & MORTH, GOI were requested to examine the scope/feasibility & submit report to the DONER, GOI.

7.8 Security: On the Indian side, Manipur Police shall provide dedicated security scope and Assam Rifles has agreed to provide environmental security along en-route.

Visa on Arrival: It was proposed that Republic of the Union of Myanmar set-up an Immigration Establishment at Imphal to facilitate issues of Visas for Indian passengers.

7.9 Proposals: It is proposed to have frequency of once a week during winter and non-rainy seasons with the provision of selection of reliable/ experienced private operators of both the countries dealing in operation of tourist travel coaches and preparation of travel documents subject to transfer of passengers from one bus to another at Moreh/Tamu.

7.10 Transit Pass: Presently Indian citizens/ traders are allowed to access upto 16 km from the border inside Myanmar to carryout trade by Myanmar Authorities; on the other hand Myanmar traders are allowed access up to 16 km inside India (Manipur).

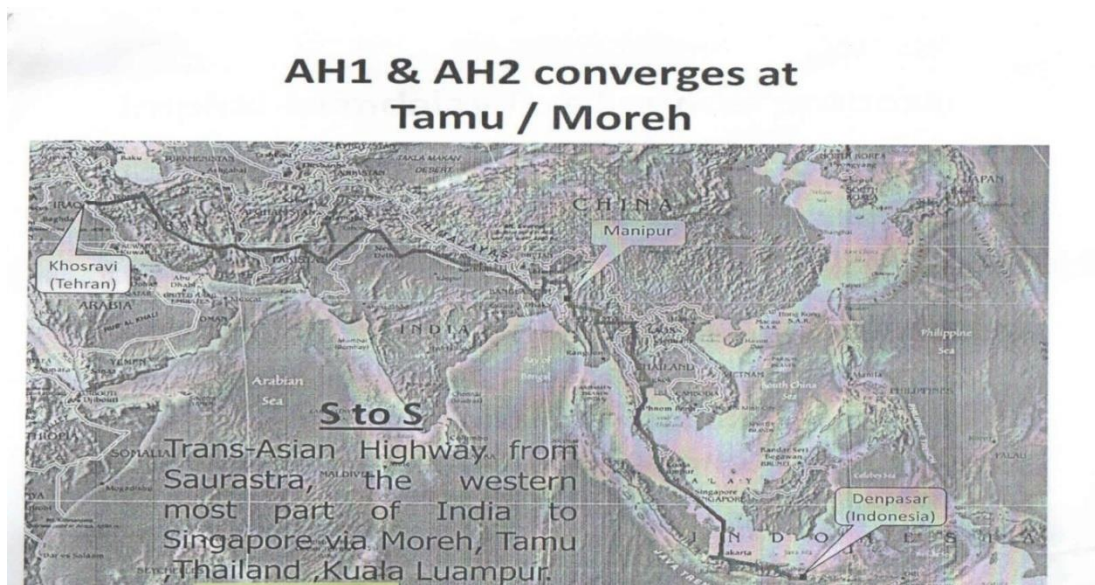
7.11 Vision/Outlook: The proposed Bus Service between Imphal (India) and Mandalay (Myanmar) will ultimately facilitate the people of Manipur and Myanmar in promoting trade, tourism, reconstructing old ties, culture, socio- economic environment and will also streamline the Indo- Myanmar Border Trade. The proposal is one of the long cherished dreams of most of the Manipur is who are hoping for opening of Eastern Gate –Way of India through the land of Manipur connecting South Asia and South East Asia- via Trans Asian Highway.

CHAPTER-VIII

The Indo-Myanmar Friendship Road: The Indo-Myanmar Friendship Road (Tamu – Kyigone-Kalewa /150 km) was constructed by the Government of India through BRO and handed over to Myanmar in October, 2009 and the remaining 28 km stretch of Tamu-Kalewa-Kalemiyo (TKK) road segment of the trilateral highway to be completed by Border Road Organization (BRO). The approval of the Border Roads Development Boards (BRDB) to the revised DPR submitted by BRO is being finalized with the scope of strengthening/construction of bridges on the TKK road route (the issue was highlighted in the Inter-Ministerial Meeting on Myanmar taken by Foreign Secretary, Govt. of India on 15th November, 2011 for expeditious implementation of decisions taken during the visit of President of Republic of Union of Myanmar to India in October, 2011.

8.1 Asian Highways: The Asian Highway (AH) project is one of the three pillars of Asian Land Transport Infrastructure Development (ALTID) projects, endorsed by Economic and Social Commission for Asia and the Pacific (ESCAP) Commission at its 48th Session in 1992 comprising Asian Highway, Trans Asian Railway (TAR) and facilitation of land transport project was initiated in 1959 with the aim of promoting development of international road transport in the region. During the first phase of the project, (1960-1970) considerable progress was achieved however, progress slowed down when financial assistance was suspended in 1975. Most recently the Inter-Governmental Agreement (IGA) on the Asian Highway Network was adopted on 18th November, 2003 by the member countries in total approximately 1, 40,000 km. And also classifies Design Standards. ESCAP has conducted several projects in cooperation with Asian Highway Member Countries in 1992. The signing ceremony of the IGA was reportedly held during the 60th session of ESCAP at Shanghai, China, in April 2004.

8.2 A sketch map of Trans-Asian Highway is shown below for reference:



:

On the occasion of the State visit of the President of Republic of the Union of Myanmar to India from October 12th – 15th 2011, both sides reiterated their commitment for an early implementation of the Rhi-Tiddim Road Development Project with grant assistance from India. (Item No. 20 of the Joint Statement). Reviewing the progress in establishing the trilateral connectivity from Moreh in India to Mae Sot in Thailand via Myanmar, it was noted that substantial progress had been achieved in the preparation of a DPR for roads and causeways in Myanmar. Both sides reiterated the commitment to realize this project. (Item No. 21 ibid)

8.3 Final Report of ASEAN Land Transport Working Group: During the 21st ASEAN Land Transport Working Route Meeting held on 3-5 July, 2012 in Vientiane, Lao PDR, the updated status of AHN Project falling on Myanmar was highlighted under para 6.7 LTA-7 under the mission of Complete the ASEAN Highway Network (AHN) by constructing the missing links the upgrading to Class III and above and under sub-para 24:

Country	Project	Status
Myanmar	AH-1 (781 km), AH -2 (593 km) and AH-3 (93 km)	Ah-1 (781 km): Targeted to be completed in 2014-1015 Ah-3 (93 km): Completed

CHAPTER- IX

Border Trade: . Source: Ministry of External Affairs (BSM Division): Border Trade Agreement between Govt. of India and Republic of the Union of Myanmar was signed in 1994 and Formal Trade between the two countries through the Moreh Land Custom Station was opened on 12th April, 1995. Tough, the trade is to be conducted in freely convertible currencies mutually agreed by the two countries under Article –III of the agreement, the trade is functioning under Barter Mechanism. Presently Moreh is the only functional Land Custom Station through which Trade across land route from India to Myanmar takes place. A second border trading point at Zowkhathar-Rhi was opened in January, 2004. In October 1998, it was also decided to allow trade on Letter of credit basis and a MOU on banking arrangements for L/C trade was signed under which the Myanmar Economic Bank at Tamu and the United Bank of India at Moreh are the designated banks for negotiating L/Cs . Border trade is also permissible in US dollars in cash. During the Second Meeting of Joint Trade between India and Myanmar whi9ch was held in May, 2006, leader of the Indian delegation requested trade and industry representatives of both sides to suggest items which could be focused for increasing bilateral trade between the two neighbours. The Trade and representatives from India side detailed about the opportunities and barriers they face in their trade and investment relations with Myanmar. They informed that law and order problem and lack of adequate infrastructure as the cause for very low regular trade or border trade through Moreh Tamu border. On the occasion of State visit of the President of the Republic of Union of Myanmar to India from October 12-15, 2011, with a view to promoting border trade, the two sides agreed that meetings between Indian and Myanmar Customs, immigration, border chambers of commerce, official of bank branches at the border, border trade officials (Tamu and Rhi-OSS Team) and Government officials would take place at Tamu-Moreh and Rhi-Zowkhathar at regular intervals. The business representatives of the Manipur/Sagaing Region and of Mizoram/Chin State will also participate in these meetings. (Item No. 28 of the joint statement). It was agreed to consider opening up new Border Trading points along the border for the economic up-liftmen of the people of the area. It was also agreed to consider better functioning of the existing points and to facilitate movement of people and goods between the two countries. (Item No. 29 of the joint statement, ibid)

9.1 Link between Moreh-Mandalay: GOI had committed a line of credit of US \$ 7 million for setting up of Optical Fibre Link between Moreh and Mandalay. The Amended Supply Contract Agreement between Telecommunication Consultants of India Ltd. (TCIL) and Myanmar Post and Telecommunication (MPT) was signed during Hon'ble President's visit to Myanmar. TCIL is expected to commence its implementation shortly.

CHAPTER-X

TRANSPORTATION, LAND USE & ENVIRONMENT: Traffic congestion/ safety aspects due to rapid urbanisation and subsequent deterioration of air quality are the major issues and challenges. It is a fact that urbanisation & motorisation are ongoing processes that have not yet peaked. The air quality In Imphal city & greater Imphal areas is now becoming a major concern with dangerously high TSP (total suspended particulates) level. Therefore, the land use change and its relationship with transportation and air quality are in a spatial context to pinpoint locations for concern. Like many urban processes the spatial nature of these problems is self evident. Air quality affects the various strata in the population differently depending on where they live and people live in different parts of the State/Imphal city itself depending on their socio- economic status. Average speeds vary from about 15- 20 kmph on major corridors of Imphal City during peak hours, to about 40- 60 kmph along arterial roads beyond city limits and connecting with other district hqs. No. of traffic related fatalities is very high and whereas pvt 2 wheeler & car ownerships are also very high & rising every year. Mixed traffic flow on the major corridors of Imphal City is unique & as the road space is shared by non- motorised as well motorised vehicles. When this is coupled with a lack of adequate road width/length/density/ infrastructure with poor maintenance and limited agreement among the government agencies as to appropriate ways to tackle the problem of motorisation and urbanisation, congestion and consequently air quality continue to worsen. As India/ Manipur adopts Euro III & IV guidelines, vehicles are supposed to get cleaner, however sheer numbers of people and vehicles forecasted in the future for Imphal City and its environs indicate that congestion will continue to worsen and therefore congestion & air quality need to be talked through other alternative policies. Further, it is considered that the significant relationship between land use mixing, auto ownership, mode choice and that pedestrian friendly locations encouraged more walking. In order to have a proper data for having Transportation & Land Use Planning of the Imphal City in particular, it is recommended to carry out such exercises such as Origin- Destination (OD) studies and transit surveys of all major corridors of Imphal City including major arterial roads connecting Imphal City Centre.

Alternative Policies being envisaged/famed to lessen the traffic load on NH/39 (renamed as NH/2) intersecting Imphal City: Construction of Urban By-passes: The State Cabinet has approved the proposal for construction/development of Urban By-Pass for diversion of NH/39 one from Pheidinga via lamsang upto Chajing in Imphal West District and another from Kyamgei to Chajing via Maiba Khul, keikhu to Bamon Kampu via Kiyamgei in Imphal East District. Selection of Consultants through NIT is being floated for preparation of DPRs.
Source: PWD, Manipur.

10.1 Development of Inner & Outer Ring Roads encircling Imphal & Greater Imphal Areas: Works for widening of roads along the proposed alignments are in good progress. 33

10.2 Steps taken by the Transport Department, Govt. of Manipur on the aspects of Pollution Control in the State:

(i). Framing of relevant Rules & implementation: The Motor Vehicles Rules for Manipur (Amendment) Rules, 1994 & The Moto Vehicles (Fourth Amendment) Rules for Manipur, 1997 prescribing the rates of vehicular emission testing fees & designated testing officers of the Transport Department as well as Manipur Pollution Control Board were framed, published in official gazettes & implemented in the State of Manipur.

(ii). Establishment & Commissioning of Vehicular Emission Testing Stations for grant of : Pollution Under Control Certificates: Five vehicular emission testing stations at the following DTO offices have already been established for testing of smoke emission & issuance of PUCs: Imphal West(MSRTC, Complex, Moirangkhom/2011), Imphal East(Mantripukhri/2004), Kangpokpi (2009), Thoubal (2011), and Churachandpur (2004). Proposal has been submitted to the Ministry of Road Transport & Highways. Govt. of India for release of more sets of Gas Analysers (petrol driven vehicles) & Smokemeters (diesel driven vehicles) so that the remaining offices of the District Transport Officers could be covered during the 12th Plan.

(iii). Levy of Green Tax: A special clause for levy of Green Tax has been incorporated in the Manipur Motor Vehicles Taxation (Amendment) Act, 2011 (Manipur Act No.5 of 2011) and the revenue generated from this text may be utilized for the purpose of environmental protection.

CHAPTER-XI

CREATION/DEVELOPMENT OF TRANSPORT INFRASTRUCTURE IN THE STATE: 11.1 Inter State Bus Terminus at Dewlahland: The project was sanctioned during 11th NEC plan with an estimated cost of 26,39,74,000/- Further, a sum of Rs 10 lakhs(SPA) was incurred on acquisition of land measuring 9.135 acres from IMC, payment of compensation, cost of demolition & land development etc. The Foundation stone was laid by Hon'ble Minister (DONER), Sri. Mani Shankar Aiyer on 22nd Feb 2009. The ISBT Dewlahland was inaugurated on 3rd Dec. 2011 by Dr. ManMohan Singh , the Hon'ble Prime Minister of India in the presence of Smt. Sonia Gandhi, Chairperson, UPA . However, the residual works of IEI & Sanitary Fittings are yet to be completed. The complex is designed with the capacity of catering about 100 plus buses at a time and having various modernized components/facilities.

11.2 Construction of 2 (two) nos. of ISTTs: with an estimated cost of Rs. 25 crores each one at Imphal along NH-39(NH-2) and another at Jiribam (NH-37) through NLCPR/NEC during 12th five Year Plan. Land measuring 14.82 acres at Chandrapur, Jiribam has already been acquired for construction of 1(one) ISTT and 1(one) ISBT . The site for Imphal, ISTT is yet to identify.

11.3 Construction of 10 nos. of Inter District Bus Terminals (IDBT): with an estimated cost of Rs. 10 core each. It is proposed to provide necessary funds in 5(five) equal instalments so that this Transport Infrastructure Project may be completed by the end of March'2017. 34

11.4 Construction of 3 ICPs : The Government of Manipur has decided to construct 3 Integrated Check Posts in the State at Moreh, Jiribam & Taphou. Once, these ICPs are commissioned, it would encourage the concept of seamless freight & passenger transport system with the enhanced facility of checking overloading vehicles.

11.5 Strengthening and improvement of Transport Department Infrastructure during the 12th Five Year Plan.

(i) Construction of Directorate of Transport Office Building & District Transport Office, Imphal East Office at Mantripukhri (existing MSRTC Land, south of STPI) with an estimated cost of Rs. 10 crores. It is proposed to provide the funds in 3(three) equal instalments so that the project may be completed by the end of March '2016

(ii) Construction of Office of the District Transport Office, Imphal West at Moirangkhom (existing MSRTC land) with an estimated cost of Rs. 5 crores. It is proposed to provide the funds in 3(three) equal instalments so that the project may be completed by the end of March '2016.

CHAPTER-XII

INFORMATION TECHNOLOGY (IT) PROJECTS: IT (Computerisation / E-Governance) : Background:

12.1 Status of Vahan & Sarathi & Smart Card Project: All 6 DTOs [DTO/IW(02-11-2008), DTO/CCP (18-11-2009), DTO/IE(20-11-2009), DTO/KPI(05-01-2011), DTO/BPR (05-01-2011), and DTO/TBL (05-01-2011)] are working with Vahan & Sarathi and all D/Ls & RCs are issuing in Smart Card in collaboration with the MANITRON & n- Vision IT Solutions Ltd. Kolkata.

12.2 Status of Oracle Data Integration (ODI): From DTO to SCR(State Consolidated Register) = Replication of both Vahan & Sarathi are completed & SCR to SR(State Register)= Replication for Vahan are completed but replication for Sarathi are completed for 3 DTOs only (IW/CCP/KPI). Remaining 3 DTOs shall be completed during 2013-14.

12.3 Strategies/Policies:

(i). To expedite the early completion of site preparation, electrifications & laying of cables in the offices of DTO/UKL & Transport Office /Senapati for early implementation of Smart Card Project in these remaining 2(two) offices during the current financial year (2013-14) with facility of broad band connectivity. Necessary hardware items including computer terminals (10 nos), 2 (two) servers & other requisite accessories for each office were already released/delivered.

(ii). To finalise the scope for setting up/ establishment & opening of a full fledged Website of Transport Department in consultation with NIC, Manipur State Unit & Department of IT , Govt.. of Manipur besides the existing facility for accessibility to National Web Portal via www.vahan.nic.in and www.sarathi.nic.in wherein the vehicle owners and d/l holders can visit the above websites for checking their vehicular & d/l data.

(iii). To expedite the process for completion of incorporation of other requisite components of VAHAN such as issuance of route permits, Fitness Certificates (FC) , Pollution under Control Certificates (PUC) & booking of motor vehicle offences & imposition of penalties/ compound fees etc.

(iv). To expedite rationalisation of maintenance of State Registry for both VAHAN & SARATHI in all the Transport Offices with transition of Data into ORACLE format for enabling uploading of formatted data to the National Registry via National Web Portal during the current financial year for (TBL,BPR,CCP,KPI) & during 2014-15 for (SPT & UKL)

(v). To envisage/formulate the provisions of “on line service” under the e-governance project mission like payment of motor vehicle taxes/fees & to activate the facilities of downloading of application forms for obtaining driving licences/registration of vehicles and uploading of duly filled up forms via State Wide Area Network (SWAN) once the State Data Centres (SDCs) are fully commissioned & functional.

12.4 Back end Data Entry: The work of back end entry of vehicular & driving licence data are carried out normally at the time of conversion of manual rc & d/l format into the smart card format while processing for transfer of ownership, assignment into Manipur registration marks, issuance of duplicate rc & dl, endorsement/ cancellation of bank/financier charges (in the cases of hire purchase vehicles). Further, special care has also been taken up for entry of Back End Data as outsourced to MANITRON was outsourced to the MANITRON at negotiated rate of Rs. 2.50 per unit record and during the process, capturing of 70,000 out of 2,00,000 targeted records, had been completed by the end of 31st March’ 2013.

12.5 Strategies/Policies: (i) To make a decision as to continue the process with MANITRON with the existing terms & conditions or to de-centralize at the level of DTOs as per their projected requirement under certain terms & conditions regarding payment & target date of completion.

(ii) To complete the computerisation of all the vehicular & driving license data by the end of 2015-16 subject to availability of fund.

12.6 High Security Registration Number Plate (HSRP) Project: HSRP Scheme: The High Security Registration Number Plate Scheme has been implemented in the State of Manipur (in the office of DTO/IW) w.e.f 12th April ’2012 by outsourcing the works of embossing & fitment process to Shimnit Utsch India Pvt Ltd, Mumbai under the BOOT model. This project is meant for to check/control the cases /instances of stolen vehicles. Further, the same scheme has also been implemented in the office of the DTO/IE during the year 2012-2013.

12.7 Policy: To expedite the early completion of implementation of this project in the remaining District Transport Offices during the year 2013-14 [DTOs(TBL, BPR & CCP) & 2014-15 [DTOs(KPI, SPT & UKL)].

CHAPTER-XIII

ROAD INFRASTRUCTURE OF THE STATE: SOURCE: PWD, MANIPUR. The total road length of the State of Manipur is 15,272.98 km and road density is 68.41 km per 100 sq. Km.

National Highways:

Sl. No.	Name of National Highways			Road Length			Remarks
	Portion	Old	New	Under BRO	Under PWD	Total	
1	2	3	4	5	6	7	8
1	Mao to Imphal	NH-39	NH02		106.515	106.515	
2	Imphal to Moreh	NH-39	NH-102		111.560	111.560	
3	Tipaimukh to Imphal (North AOC Junction)	NH-150	NH-02	262.000	62.750	324.750	
4	Imphal(North AOC Junction) to Jessami	NH-150	NH-202	171.000	23.250	194.250	
5	Imphal to Jiribam	NH-53	NH-37	218.780	3.220	222.000	
	Total			651.780	307.295	959.075	
	Newly Declared NHs						
1	Tamenglong to Khongsang		NH-137	39.500		39.500	
2	Churachandpur to Tuivai		NH-102B		160.170	160.170	
3	Tadubi to Ukhrul		NH-102A	144.000		144.00	
4	Jessami to Melori		Nh-155	5.000		5.000	
	Total			188.500	160.170	348.670	
	G/Total			840.280	467.465	1307.745	

13.1 State Highways: There are 42 (forty-two) State Highways under the PWD, Manipur having total length of 926.54 km

13.2 Major District Roads: There are 60 (sixty) Major District Roads (MDR) under the PWD, Manipur having total length of 1187.15km.

13.3 Other District Roads: There are 127 Other District Roads under the PWD, Manipur having total length of 1041.22 km.

13.4 Status of NEC Roads in Manipur:

State: Manipur

Sl No	Name of Road	Total Length(in km)	Remarks
1	2	3	4
1	Tamenglong- Tamei	49.75	Tamenglong- Tamei is a part of Imphal-Tamenglong Road.
2	Kangpokpi- Tamei	70.25	----do----
3	Bishupur- Nungba	89.52	Sanctioned by NEC during 2011-12
Total		209.52	

13.5 PMGSY Roads: It is projected that by the year 2020-30, there may be about 5000 km PMGSY roads.

CHAPTER-XIV

ROAD SAFETY AND TRAFFIC MANAGEMENT: 14.1 National Road Safety Policy:

The Government constituted a Committee under the Chairmanship of Shri S. Sundar, Former Secretary (MoST) in the year 2005 to deliberate and make recommendations on creation of a dedicated body on road safety and traffic management. The Committee was also subsequently requested to finalise a draft National Road Safety Policy for consideration of the Government. The Committee while submitting its report in February, 2007 inter alia, recommended a draft National Road Safety Policy. Based on the recommendations of Sunder Committee, the Union Cabinet on 15.03.2010 approved National Road Safety Policy. The National Road Safety Policy outlines the policy initiatives to be framed / taken by the Government at all levels to improve the road safety activities in the country. The highlights of **National Road Safety Policy** are appended below: :-

I. **Preamble:** The Government of India is deeply concerned about the growth in the number of road accidents, injuries and fatalities in recent years. It recognizes that road accidents have now become a major public health issue, and the victims are mainly the poor and vulnerable road users.

2. The Government of India further recognizes that as road accidents involve roads, motor vehicles as also the human beings, road safety needs to be addressed on a holistic basis. It also recognizes that regardless of jurisdictions, the Central and State Governments have a joint responsibility in reducing the incidence of road accidents, injuries and fatalities.

3. In the light of this, the Government of India, through this National Road Safety Policy, states its commitment to bring about a significant reduction in mortality and morbidity resulting from road accidents.

II. **Policy Statements:** In order to achieve a significant improvement in road safety, the Government of India is committed to:

(i) **Raise Awareness about Road Safety Issues:** The Government would increase its efforts to promote awareness about the various aspects of road safety, the social and economic implications of road accidents and what needs to be done to curb the rising menace of road accidents. This would enable and empower the different stakeholders to play a meaningful role in promoting road safety.

(ii) **Establish a Road Safety Information Database:** The Government will provide assistance to local bodies, Union Territories and States to improve the quality of crash investigation and of data collection, transmission and analysis. A National Road Safety Information System will be established for providing continuity and policy guidelines to this activity.

(iii) **Ensure Safer Road Infrastructure:** The Government will take measures to review standards pertaining to safety in the design of rural and urban roads and bring them in consonance with international best practices keeping in view Indian traffic conditions. Continuing application of Intelligent Transport Systems (ITS) under a national framework to establish a safe and efficient transport system will be encouraged.

(iv) **Safer Vehicles:** The Government will take steps to ensure that safety features are built in at the stage of design, manufacture, usage, operation and maintenance of both motorized and non-motorized vehicles in line with international standards and practices in order to minimize adverse safety and environmental effects of vehicle operation on road users (including pedestrians and bicyclists) and infrastructure.

(v) **Safer Drivers:** The Government will strengthen the system of driver licensing and training to improve the competence and capability of drivers.

(vi) **Safety of Vulnerable Road Users:** The design and construction of all road facilities (rural and urban) will take into account the needs of non-motorized transport and the vulnerable and physically challenged in an appropriate manner. The Government will seek to disseminate 'best practices' in this regard to town planners, architects, and highway and traffic engineers.

(vii) **Road Traffic Safety Education and Training:** Road safety knowledge and awareness will be created amongst the population through education, training and publicity campaigns. Road safety education will also focus on school children and college going students, while road safety publicity campaigns will be used to propagate good road safety practices among the community. The Government will encourage all professionals associated with road design, road construction, road network management, traffic management and law enforcement to attain adequate knowledge of road safety issues.

(viii) **Enforcement of Safety Laws:** The Government will take appropriate measures to assist various state and other governments to strengthen and improve the quality of enforcement in order to ensure effective and uniform implementation of safety laws. The Government will actively encourage the establishment and strengthening of highway Patrolling on National and State Highways in cooperation with State Governments and Union Territories as appropriate.

(ix) **Emergency Medical Services for Road Accidents:** The Government will strive to ensure that all persons involved in road accidents benefit from speedy and effective trauma care and management. The essential functions of such a service would include the provision of rescue operation and administration of first aid at the site of an accident and the transport of the victim from accident site to nearby hospital. Hospitals alongside the National Highways and State Highways would be adequately equipped to provide for trauma care and rehabilitation.

(x) **HRD & Research for Road Safety:** The Government will encourage increased activity in programmes of road safety research by identifying priority areas, funding research in those areas adequately and establishing centres of excellence in research and academic institutions. The Government will facilitate dissemination of the result of research and identified examples of good practices through publication, training, conferences, workshops and websites.

(xi) **Strengthening Enabling Legal, Institutional and Financial Environment for Road Safety:** The Government will take appropriate measures to ensure that the required legal, institutional and financial environment for road safety are further strengthened and a mechanism for effective coordination of various stakeholders is put in place. The reforms in these areas would provide for the active and extensive participation of the community at large, of the private sector, academia and NGOs.

III. Implementation Strategy: The Government has decided to establish a dedicated agency viz. a National Road Safety Board to oversee the issues related to road safety and evolve effective strategies for implementation of the Road Safety Policy. The Government has also decided to establish a National Road Safety Fund to finance road activities through the allocation of a certain percentage of the cess on gasoline and diesel.

14.2 The National Road Safety and Traffic Management Act, 2007 which was formulated/drafted by the Committee on Road Safety and Traffic Management duly constituted by the Ministry of Shipping, Road Transport & Highways, Department of Road Transport & Highways, Govt. of India vide Office Memorandum No. RT-25011/1/2005-RS dated 23rd November, 2005, under the Chairmanship of Shri S. Sundar, Fellow TERI (Former Secretary, MOST) with other fifteen prominent members may be seen at www.morth.nic.in under road safety cell.

14.3 Constitution of State Level Road Safety Council & District Level Road Safety Committee: Under the guidelines of the **National Road Safety Council** duly constituted under the chairmanship of Hon'ble Union Minister of Road Transport & Highways, GOI, a State level/District level Road Safety Council/Committee under The Chairmanships of Minister/Advisor in-Charge (Transport), Manipur and Deputy Commissioners/District Magistrates respectively with other members drawn from Line Departments/Offices has/have already been constituted vide Secretariat Transport Department Notification No. 13/2/2004-T(MV) dated 22nd November, 2006 with the following terms of reference :-

2(i) To advise on all matters pertaining to planning and coordination of policies, practice, standards of safety in the road transport sector.

(ii) To formulate & recommend road safety programme for implementation by State Road Safety Organizations as also other State agencies in charge of road transportation.

(iii) To suggest areas for research & development of improved safety aspects in the road transport sector including maintenance of statistics off road accidents and their analysis.

3. The Council will hold its meeting at least once a year

4. The Council shall decide the procedure & methodology to be adopted for its functioning.

14.4 Road Accident Statistics during the last 5 (five) years :- Source: CID/Crime Branch, Manipur

Sl. No.	Year	No. of Accidents	Remarks
(1)	(2)	(3)	(4)
1	2008	573	The rate of accident is increasing every year in the State of Manipur during the last 5 years.
2	2009	578	
3	2010	602	
4	2011	692	
5	2012	771	

Average No. of Accidents occurred along NHs/SHs/ODRs/IVRs during the last 5 years:

Sl. No	Type of Road	No. of Accidents	No. of Deaths	No. of Fatal Injuries	No. of Minor Injuries	Remarks
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	National Highways	355.6	84.4	325.4	358.8	Accidents occurred along the NHs are comparatively found highest than SHs/ODRS/IVRs
2	State Highways	153.6	36.8	185.4	109.6	
3	Other District Roads/IVRs	134.0	28.0	108.6	121.0	

Average No. of Accidents occurred vehicle-wise during the last 5 years:

Sl.No	Type of Vehicles	No. of Accidents	No. of Deaths	No. of Fatal Injuries	No. of Minor Injuries	Remarks
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Trucks	142.0	55.6	136.4	110.8	Maximum no. of accidents are occurred with Cars/Jeeps/Taxis/Two Wheelers (personalised vehicles/intermediate public transport vehicles) & whereas no. of deaths & fatal injuries are highest with Trucks & LMVs/IPT vehicles respectively.
2	Buses	50.0	17.4	86.0	91.2	
3	Mini Buses	8.6	3.0	13.2	4.2	
4	Car/Jeeps/Taxis	164.2	21.8	156.6	115.4	
5	Three Wheelers	43.6	4.8	44.4	95.4	
6	Two Wheelers	157.8	25.6	128.2	122.6	
7	Other Heavy Vehicles	34.4	5	26	35.2	
8	(Vehicles not known/Hit & Run Cases)	6.7	2.2	4.2	6.0	
9	Others	36.2	13.8	24.8	38.6	
Total						

14.5 Major Issues and Challenges in the State: Road Safety Activities: Steps to Strengthen Road Safety: The main thrust of accident prevention and control across the world has been on 4 Es, vis. (i) Education, (ii) Enforcement, (iii) Engineering and (iv) Environment & Emergency care of road accident victims. Although road safety is the primary responsibility of State Governments in India, the GOI has been focusing on all these four approaches in its policies and programmes. The State Government shall execute/implement the policies framed by the MORTH, GOI from time to time in order to curb/contain road accidents.

14.6 Status: Education: Central-State: Awareness is generated through various Road Safety Campaigns utilizing audio-visual and other media through NGOs. The MORTH, GOI is undertaking various publicity measures through DAVP and professional agencies in the form of telecasting/broadcasting of T.V. spots/ Radio spots, display of cinema slides, distribution of posters, books on road safety signals & signs, organizing road safety week, Seminars, Workshops & Exhibitions.

14.7 Enforcement: This is being done by the State Governments under the provisions of M.V.Act'1988 and CMV. Rules '1989. The enforcement measures includes inspections at the time of licensing/issue of permits and periodical fitness verification of the vehicles for commercial use besides checking /impounding /imposition of fines/penalties imposed by the Enforcement Wing of Transport Department & Police/Traffic Police & during the conduct of mobile courts.

14.8 Engineering: Specifications/designs are constantly under review by the Roads Wing of the Ministry. It is ensured that road safety is an integral part of road design at planning stage.

Various steps to enhance road safety such as road furniture, road markings/ road signs, introduction of Highway Traffic Management system, enhancement of discipline among the contractors during construction, road safety audit on selected stretches, are being undertaken by the National Highway Authority of India (NHAI). The Indian Road Congress is responsible to formulate standards, Codes of Practice, Guidelines and Specifications for the design, construction, operation and maintenance of roads and bridges in the country and to suggest improved methods of administration, planning, operation, safety, maintenance, policy issues related to roads.

14.9 Environment and Emergency Care of Road Accident Victims: It is an accepted strategy of trauma care that if basic life support, first aid and replacement of fluids leading to initial stabilization can be arranged within first hour of the injury called “Golden Hour”, lives of many accident victims can be saved. The Ministry of Health & Family Welfare, GOI, has been implementing a Scheme “establishment of an integrated network of Trauma Centres” along the Golden Quadrilateral, North- South and East- West Corridors of the National Highways by up-grading the trauma care facilities in 140 identified State Govt. Hospitals at a total outlay of Rs.732.75 crores during the 11th five year plan. This trauma care network provides three categories of trauma care centres, ie, Level-I, Level-II and Level-III. Level-I would provide the highest level of definitive and comprehensive care of patients with complex injuries. The Level-II would be available at 333km & whereas Level-III would be available every 100-150 km. The present Scheme covers entire Golden Quadrilateral, North-South and East- West corridors.

14.10 Status: This Scheme needs to expand for covering the North East Region States where the Golden Quadrilateral did not connect the Road Networking and therefore, the Ministry of Road Transport & Highways, GOI shall be moved through the State Medical Dept.

14.11 Setting up Model Inspection and Certification Centres for Vehicles: Necessary steps will be taken up for setting up during the 12th Plan on PPP model as intended by the MORTH, GOI.

14.12 Setting up of Training Institutes on Driving & Research:

Till date, the State Govt. has granted licence to 2 privately run Driving Training Schools namely Driving Training School, Sagolband Ingudam Leikai, Imphal West & another College for Automobile Technology and Driving techniques, Thangmeiband, Imphal West.

14.13 National Highway Accident Relief Service Scheme (NHARSS): The Transport Department, Manipur is having a fleet of 3 cranes (one 15 ton/2002-03, 2 ten ton/2008-09-10) released by the Ministry of Road Transport & Highways under the National Highway Accident Relief Service Scheme (NHARSS). More hilly terrain worthy Cranes of 10 ton capacity are expected from the MORTH, GOI during the 12th five year plan period. These cranes are presently manned by one maintenance mechanic & one crane operator under the contract engagement which is extended from time to time. Steps have been taken up for additional engagement of 2 crane operators & 3 helpers under contract for which recruitment rules are to be framed as per the directive of the Finance Department, Govt. of Manipur.

CHAPTER-XV

DISASTER MANAGEMENT: 15.1 Hazard :- It may be anything having intrinsic potential in nature to create Disaster, the following aspects may lead to Disaster :-

- (a). Trigger Mechanism Process and Safety Control Systems failures.
- (b). Technical errors (c) Human errors (d) Natural calamities and
- (e). Terrorist attacks and sabotages.

15.2 Consequences:- Pool Fire, Jet Fire, Flash/Cloud Fire, Vapour cloud explosion, High Pressure rupture, Bleve and release of toxic gases/liquid.

15.3 Chemical Disaster “ its impact: (i) living organisations (human/ life-stocks/plants which may further lead to death, injury, disease & disability) (ii) Environment (soils/ water body/ atmosphere which may further lead to pollution). These impacts may be immediate, short-term or long-term.

15.4 Disaster Management: Concept & Planning: Response/Relief/ recovery & Reconstruction.

Risk = Probability of Occurrence x Likely Extent of Damage

15.5 Strategies designed :-

- # To create/increase public awareness of possible hazards within a community.
- # To stimulate the development of Co-op. Plans to response to any emergency that might occur.
- # To encourage accidents prevention.

15.6 Road Transport Safety Initiative :- National Safety Council of India(NSCI) taking the lead realising that transportation of Haz Mat cannot be effectively address without considering basic road transport safety issue, formulated a road transport safety (RTS) targeting all Industrial Goods, Hazardous and Non Hazardous.

15.7 Achievements of the Road Transport Safety initiative: Workshops, seminars & training courses were organised at National & Local levels. The following issues may be considered for laying the foundation for future work:-

#Awareness. * Crisis groups * Testing of emergency plans * Capacity building ,

#Issues identified: Trans-Hazmat/community awareness/development of integrated off-site emergency plans/strengthening the capabilities of public emergency response services/development of a Haz Mat emergency medical response system.

15.8 Policies : (i) **Route planning an application of GIS (Geographical Information System and GPS (Global Positioning System))-**Vehicles transporting Haz Mat/ Haz Chem. from the manufacturing units to the storage sites/retailers/consumers may be located with the application of GIS/GPS in case of danger/disaster and emergency response. All the vehicles transporting Haz Chem. should display an information panel on the rear indicating Haz Chem. No., Name of Haz Chem. with specific chemical/physical properties, Name of the manufacturer/consignee with address/contact nos, Tel nos. of nearest Police Stations/Fire Brigades along with Dos/Don'ts.

(ii) **Special/Refresher Course for drivers indulging in transportation of Haz cam & Haz mat:** The drivers should be trained in the driving training schools so established in the State. Necessary instructions/directives shall be issued by the Transport Department, Manipur.

CHAPTER-XVI

OTHER MODES OF TRANSPORT: 16.1 RAILWAYS:

Railway Projects: Construction of Jiri-Tupul-Imphal Railway Line :

Background: The Jiribam- Tupul Railway Line Project (original length : 98 km, shortened to 84 km due to realignment of railway line over Barak river) was sanctioned in the year 2004 with an estimated cost of Rs. 727 crores which has been revised to Rs. 3056 crores as on 31/3/2013 & further projected the anticipated cost to Rs. 4500 crores) and the Project was declared as a National Project in Feb' 2005.

Salient Features: Phase-1: Jiribam –Tupul: Length: 84 km.

Tentative Target of Completion: March' 2015 (revised from March' 2014).

No. of Tunnels: 34 (39.4 km). Longest Tunnel: T-3 (4.93km near Kaimai). Major Bridges: 7

Highest Pier: 141 m (P3 & P4 of Irang Bridge). **Minor Bridges:** 107.**No. of Stations:** 8.

Progress of Works: Overall progress between Jiribam- Tupul as on 31st March' 2013 is about 40 % (financial)

Works in First Block section i.e jiribam- Dholakhal (12.5 km) have been completed and tested by Engine rolling on 22/03/2012.

Phase-2: Tupu- Imphal: Length: 27 km. This Project was approved in principle in Jan' 2009 & detailed estimates of Rs. 1396.65 crores was sanctioned by the Railway Board on 8th March '2013.

Tentative Target of Completion: Approximately 4 years from the date of land acquisition and subject to availability of fund.

No. of Tunnels: 12 (14.04 km). **Longest Tunnel:** T-12 (8.760km). **Major Bridges:** 3. **Minor Bridges:** 11. **No. of Stations:**2.

Major Impediments as highlighted by the NF Railway (Construction) leading to delayed in achieving the Target date of completion are Severed Militancy, Law & Order, Economic Blockades, Frequent Bundhs, Frequent Disruptions by Locals, Poor condition of NH/37, Ban on Working of non- Manipuries, Shortage of HSD/ Ration during Economic Blockades.

Vision: Once the Jiri- Tupul- Imphal Railway Project is completed & commissioned, the bottlenecks being encountered in transportation & induction of essential commodities including food grains, petroleum products, HSD, medicines & life saving drugs through NHs (37 & 02) due to bad condition of roads coupled with frequent launching of prolonged economic blockades/bundhs, could be redressed rather than promotion of inter state passenger traffic.

Policies: (i) To redress the major impediments being faced/encountered by the Railway as far as practicable.

(ii) To expedite early completion of repairing & strengthening of NH/37 which is carrying out by the BRO.

(iii) To provide additional/dedicated security at the newly opened work/camp sites in addition to the present strength of security available /deployed for the Jiri- Tupul- Imphal Railway Project (about 3 battalions) in order to maintain Law & Order.

(iv) To expedite early repairing and strengthening the Uchathal- Leisabethal public road (7.5 km) which is being taken up by the PWD.

(v) To expedite early repairing & strengthening of Noney- Marangching inter village road and extension upto Haochong (25 km) through PWD.

(vi) To expedite proper repairing & strengthening of 0-4 km Khongsang – Tamenglong road with the Ministry of Defence for sanction under GS (General Staff).

(vii) To complete/finalise the formalities for deputation of 30 (thirty) JE/SO (civil) from the State which may be drawn from PWD, IFCD, PHED etc.

(viii) To ensure un-interrupted supply of HSD to nominated depots to cater for Railway project's requirement.

(ix) To expedite the remaining land acquisition process through Revenue Dept/ DCs concerned.

(x) To expedite the formalities for setting up/opening of 3 (three) Police Stations at Kaimai, Khongsang & Awangkhum in order to maintain law & order in the vicinity of railway work /camp sites so as to avoid unwanted incidents & to build up confidence amongst the workers with safe working environment.

Rail Fed Oil Depot: Land Acquisition Process :

a) Agricultural land measuring 35.165 acres located at Malom Tuliha was acquired by the Govt. of Manipur and handed over to Indian Oil Corporation (IOC) for establishment of Rail Fed Oil Depot at Malom. The site for establishment of Rail Fed Oil Depot was so planned/ selected considering the location of Zero Point (Take off point in Railway Terminology) would be within 500 meters of the alignment of the Railway Line (Imphal Station at Malom).

b) The IOC also proposed for handing over of additional land measuring 8 acres of land contiguous to the above site which was earlier acquired for AOD meant for establishment of Gas Bottling Plant which was later shifted to Awang Sekmai. The process of handing over of the said land besides payment of land premium by the IOC to the State Govt. are not yet finalised due to pending of Court Litigation in the matter.

Source : DC(IW)/IOC

2) Development of Infrastructures.

a) **Construction of Boundary Wall :** Completed

b) **Land Development :** Completed

c) **Construction of Building :** Construction of Office Building is already commenced

Source : SLC(IOC)/DM(IOC)

Strategies/Policies: The existing Oil Depot (IOC) presently located at Sangakphm, Chingmeirong adjacent to NH/39 (NH/2) stretch which is considerably a great concern of public safety being a potential hazard /threat to the safety of the nearby inhabitants / workers/road users / and its neighbourhoods under the circumstances of sabotage/fire, would be shifted to the proposed site once the Rail Fed Oil Depot is fully established at Malom and commissioned with un-interrupted supply of petroleum products with enhancement of storage capacity (buffer stock).

Railway Projects for International Connectivity: Rites had, in 2005, carried out a study on possibility of railway connectivity with Myanmar. A fresh study is needed to examine the possibility of establishing Rail connectivity with Myanmar from Moreh (Manipur) to Kalay (Myanmar). The matter was highlighted under para (2) (v) Transport Connectivity : Railways: of the issues taken up in the Inter Meeting on Myanmar chaired by the Foreign Secretary, GOI (15th Nov' 2011) for expeditious implementation of the decisions taken during the visit of President of Myanmar to India in Oct' 2011 and the Ministry of Railways was entrusted to expedite the matter.

Proposed Indian- Myanmar Rail Link (Kalay- Tamu) : Preliminary survey was conducted by the RITES Ltd during 2004-2005, it is reported under the scope of their study that the length of the following new railway lines are indicated below:

(i) **Jiribam- Moreh** : 219 Km (which may be reduced to (219-14)km= 215 Km (due to reduction of Jiri- Tupul new railway line from 98Km to 84 Km).

(ii) **Tamu Kalay** : 127.4 Km.

(iii) **Kalay- Mandalay**: 513Km.

Anticipated Construction Cost of the Projects:

(i) Tamu to Kalay: 97.68 mil usd (new line).

(ii) Kalay to Mandalay: 162 mil usd (rehabilitation)

Freight Demand Forecast : 2.48 mil tons in 2027-28.

16.2 CIVIL AVIATION: Imphal Airport: It is the second largest Airport in the NE-Region with postal air cargo services, six days a week and night landing facility. Imphal is well connected with daily flights to Guwahati, Kolkata, Bangalore and Delhi and other destinations in and outside NE-Region. Indigo, Indian Airlines, Jetlite offers frequent flights ranging from 4 to 6 days a week. New State of the art Terminal Building with cold storage facilities is in pipeline which will facilitate marketing of our produces and products.

Expansion of Imphal Airport: The earlier area of land occupied by the Imphal Airport/AAI is 462 acres, out of which 245 acres belong to Ministry of Defence, GOI, yet to be transferred to AAI. The state Government handed over about 700 acres of land including 177.88 acres for extension of existing runways with 9000ft -12000ft to the AAI for the expansion and up-gradation of existing Imphal Airport upto the standard of an International Airport . A sum of Rs. 100 crores (approx) has been incurred being the cost of payment of compensation to the affected pattadars, including standing crops besides construction of roads affected by the expansion of Imphal Airport.

Rs. 420 Crores for Development of Imphal Airport: -

A sum of Rs. 420 crores is reportedly earmarked for development of Imphal Airport during the 12th Five Year Plan by NEC/ Ministry of DONER, Govt. of Indi

Chart showing detailed component-wise estimates is shown below for reference.

Sl No	Airport	Name of project/work	Funds in 12th FYP					Total	Remarks
			12-13	13-14	14-15	15-16	16-17		
1	Imphal	Upgrading the ATIS traffic Management system /c construction of New Control Tower cum Technical block.	10.00	10.00	5.00			25.00	
2		Upgrading of safety and security infrastructure in operational area.	10.00	10.00	10.00			30.00	
3		Construction of Hangar for HELICOPTER/A33	10.00	10.00				20.00	
4		Expansion of existing terminal building and enhancing passenger facilities and car park	10.00					10.00	
5		Construction of New Terminal	0.00	30.00	30.00	30.00	30.00	200.00	
6		Construction of parallel taxi track and apron works	0.00	10.00	20.00	20.00		50.00	
7		Construction of new apron and related parking bay	0.00	15.00	15.00	15.00	15.00	60.00	
8		Construction of new fire station, fire, ambulance and emergency medical centre /c safety equipments	5.00	5.00	5.00	5.00	5.00	25.00	
		TOTAL	30.00	30.00	15.00	0.00	0.00	420.00	

Construction of Boundary Walls : The works for construction of RCC boundary walls has already been commenced through Manipur Police Housing Corporation being Work Agency with the fund released by the AAI/ Ministry of Civil Aviation, Govt. of India.

Development of Infrastructure: Works for expansion of existing Terminal Building, besides development of other requisite infrastructures are also commenced and in good progress.

Scope of Imphal Airport: It is a long cherished dream of people of Manipur as well as the Govt. of Manipur to develop the Imphal Airport up to the standard of International Airport considering its location, area, Infrastructure being developed and the parameters/innovative having investment opportunities of South –Asian & South East Asian Countries being experienced/engaged/ envisaged with a far and wide vision. It is projected that Imphal Airport may be commissioned as an International Airport by July' 2013.

Strategies/Policies:

(i) To introduce additional flights in gradual manner in order to cope up ever increasing demand (Passenger Traffic Demand in the Imphal –Guwahati sector is tremendously increased due to near total collapse of passenger traffic movement along NH/39 connecting Imphal with Guwahati via Kohima & Dimapur resulting to non availability of air tickets due to short notice bookings coupled with fare hike/price escalation with random bookings).

(ii) To promote non-scheduled operators in the N.E. Region connecting with Imphal Airport.

(iii) To develop air connectivity amongst all capital cities of the N.E. Region.

(iv) To enhance Cargo Service because of the indispensable crisis leading to acute shortage of essential commodities including life saving drugs & oxygen cylinders in the State at the event of launching of frequent/prolonged economic blockades along the NH 39 & 37.

(v) To develop the Imphal Airport upto the standard of an International Airport.

Night Landing Facility at Imphal Airport: The facility is now availed in the Imphal Airport wef 14th Nov '2011 with an evening flight of Air India connecting Imphal – Delhi via Guwahati. A sum of Rs. 1605.55 lakhs was incurred from the State Plan for construction of approach roads to the 4 hill tops of Phunan Maring, Heibokching, Baruni & Chingphu, security barracks, installation of Solar Powered Obstruction Lamps, payment of Net Present Value for obtaining Forest Clearance & compensatory a forestation of an area of 4.8808 hectares.

Strategies/Policies: Further, the following works/facilities are still required to be improved /availed for which a huge amount of money may be incurred against State Ex-chequer :-

(i) To improve the Approach Roads t with black topping & dedicated drainage system with periodic maintenance.

(ii)To provide Electricity/Power transmission line to the above mentioned Hill Tops.

(iii)To connect Water Supply System to the above mentioned sites by laying of Pipes to be supported by Pumps/Gen. Sets, etc.

(iv) To move the AAI/ Ministry of Civil Aviation. GOI, for inviting/ influencing other Air Passenger Service Providers , like Indigo, Jetlite, Spicejet etc to participate in providing night landings at Imphal Airport so that the facility created/ developed could be utilised significantly in the interest of people of Manipur and rest of the country.

16.3 INTRODUCTION OF HELICOPTER SERVICE:

Background: The Ministry of Home Affairs, Govt. of India is assisting the State Governments of Arunachal Pradesh, Nagaland, Sikkim, Tripura and Mizoram (recently) in the form of subsidy (75% on fare structure) for Helicopter services in these States.

Proposal of the State of Manipur: Accordingly, the Transport Department, Government of Manipur submitted a proposal to the NEC for introduction of Helicopter Service during the 12th Plan initially in the following routes/sectors which may be further expanded for connecting the other remote districts like Churachandpur (Tipaimukh etc.) , Ukhrul (Jeshami etc) with Imphal in the 2nd phase.

(I). Imphal–Tamenglong-Jiribam-Tamenglong-Imphal (Thrice a week).

(II). Imphal-Moreh-Imphal (Daily basis).

16.4 INLAND WATER TRANSPORT (IWT): Inland Water Transport Projects: Loktak Inland Water Transport Project

Total project cost: Rs. 280.33 lakhs

Total fund released as on 31st March, 2007: Rs. 178.15 lakhs

The Ministry of Shipping, Govt. of India released a sum of Rs. 178.15 lakhs for implementation of Loktak Inland Water Transport Project during the year 2006-07. The same amount was authorised under CSS during 2009-2010 vide Finance Department O.M No. 2/1/2009-FB(6) dt. 24/11/2009.

The Loktak Development Authority (LDA) was appointed as Work Agency for construction of Jetties and Terminal buildings for providing Inland Water Transport in three designated routes connecting with economically villages/islands and having lack of public transport system as listed below: -

(i) Connecting Toupokpi village (Ningthoukhong and Khordak village via Karang, Thanga islands, and Komlakhong village): Total distance – 16.5 km.

(ii) Connecting Toupokpi village (Ningthoukhong and Mayang Imphal via Karang island): Total distance – 11.75 km.

(iii) Connecting Thanga island and Mayang Imphal via Karang island: Total distance – 11.45 km.

The work is under progress and once the Utilization Certificate (UC) for a sum of Rs. 178.15 lakhs is received from the LDA, the Ministry of Shipping, Govt. of India could be move for release of balance amount of Rs. 102.18 lakhs (being the second instalment of the ongoing project out of the total project cost of RS. 280.33 lakhs which was approved by the concerned Ministry).

16.5 Inland Water Transport (IWT) Wing, Manipur: An Inland Water Transport (IWT) Wing under the chairmanship of Director (Transport), Manipur has been constituted/established as per the directive of the Inland Waterways Authority of India, vide Secretariat, Transport Department order No. 13/1/2001-T(CSS) dt. 18/11/2010 with Addl. Secy (Tpt) as Member/ Secy and other 2(two) members drawn from the LDA, Manipur.

The Final Report on Identification of Potential Waterways in North-East India conducted by RITES and published in July, 2011 with specific reference to Manipur State has reported about the special features on Waterways in Manipur, Waterways/Routes in Loktak Lake, the possibility of exploration of Barak River for introduction of Inland Water Transport system and more significantly highlighted the proposal of the Transport Department, Govt. of Manipur for conduct of DPR study in Loktak Lake for opening of the following routes under the proposed 2nd Loktak Inland Water Transport Project :-

- (i) From Takmu to Sendra: For promotion of tourism*
- (ii) Toupokpi to Sendra via Ningthoukhong*
- (iii) Sendra to Komlakhong via Thanga*
- (iv) Komlakhong to Pheibakchao via Karang island*
- (v) Pheibakchao to Mayang Imphal via Karang island*
- (vi) Mayang Imphal to Toupokpi via Ningthoukhong*

Activities of Barak River Valley Development Board, Manipur: The Barak Valley Development Board is implementing W.D.P.S.C.A (Watershed Development Project in Shifting Cultivation Area) as a project Implementation Agency of Horticulture and soil Conservation Department, Govt. of Manipur. The nature of works are land development, horticulture crop plantation, afforestation, water source development for checking soil erosion and land degradation process for sustainable cultivation of the watershed areas. So far, no policy on regulation on motor boats plying on Barak River under Jiribam and Tiapaimukh A/c is framed.

Vision/Strategies/Policies on Inland Water Transport System in the State of Manipur :

- (i) It is envisaged to take up a second project of Loktak Inland Water Ways Transport System with preparation of DPR with the assistance of consultancy services of RITES besides completion of ongoing IWT project subject to release of fund by the Ministry of Shipping, Govt. of India.**
- (ii) To develop provision for parking lots, basic amenities, and ware housing and approach roads to be included in the DPR of the proposed 2nd project.**
- (iii) To obtain information on 50/100 seated multi-utility ferry models for induction under PPP model.**
- (iv) To formulate and draft a ferry Service Rule under the legal framework of Model Rules for Inland Vessels prepared by Working Group on Regulation of IWT Sector (May 2004) once the infrastructure develop are put in place.**
- (v) To consider for construction of Jetty at Pheibakchao besides development of Mukak Ching in addition to Takmu/Sendra for promotion of tourism, which may be feasible under the proposed 2nd project on Loktak Inland Water Transport System.**
- (vi) To incorporate the SE/IFCD(Flood Control Circle) & OSD/ Barak River Valley Development Board are incorporated as additional members of the Inland Water Transport Wing(IWTW), Manipur.**

CHAPTER-XVII

URBAN TRANSPORT: 17.1 Highlights of the Interim Report of the National Transport Development Policy Committee: Introduction: In the Draft Twelfth Plan Urban Transport is included in a more comprehensive chapter on Managing Urbanisation in the Twelfth Plan. The chapter as a whole does a commendable job in looking at the prospects of urbanisation in the long term over about 20 years and then embedding the Twelfth Plan policies and programmes within such a long term vision. The urban transport section also provides estimates for the proposed capital investment in urban transport for the Twelfth Plan as part of total requirement of capital expenditure over the next 20 years. This has been made possible in light of the urban infrastructure investment projections that were available from the high powered Expert Committee on Urban Infrastructure Investment. Similar projections and estimates in this area are also available in a McKinsey study on India's urbanisation. The comments below are based on the urban transport section of the Twelfth Plan Urbanisation chapter.

17.2 Pattern of Urban Transport in India: Urban transport in India consists of a multiple of modes including non-motorised transport (walking and bicycling), intermediate public transport (auto rickshaws, taxis, tempos, etc.), buses including those plying on BRT systems, company buses, private motorised modes (cars and two wheelers), suburban rail-based services and metros. The distribution of travel among these modes varies significantly across cities.

At present, there is inadequate understanding of or data on the patterns of use between these various transport modes. International experience suggests that multiple policy options need to be used simultaneously to increase mobility and reduce effectively the different externalities arising from urban road transportation. This is because most policy options are not mutually exclusive. In its present form the Twelfth Plan draft chapter little guidance on urban transport policy except for a number of recommendations made for the implementation.

17.3 The Need for a Comprehensive Approach: Thus urban transport strategy for the Twelfth Plan period and beyond should be based on a comprehensive approach. Such an approach should consist of:

(i) Consideration of accessibility of transport for all users in terms of cost, convenience and quality.

(ii) Minimisation of urban transport costs and experience for both the state and users, while improving the quality of access of urban transport services.

(iii) Empowering urban local governments to make decisions on urban transport in their respective cities.

(iv) Minimisation of full life-cycle costs in the choice between different urban transport systems and modes.

(v) Emphasis on improved safety and environmental emissions standards and designs in the operation of urban transport modes and systems.

(vi) Enhancement of technical capacity at all levels: central, state and local.

(vii) Full consideration of all public transport modes, including buses, taxi systems, shared vehicles, para transit modes, BRT and rail based systems and metros. All modes need to be made more efficient. The use of public transport should take account of all the various intermediate transport modes.

(viii) Use of fiscal regime at central, state and local levels to influence mode choice in accordance with the desired shares.

17.4 Emphasis on Public Transport: The chapter that public transport accounts for only 22 percent of urban transport in India (source not mentioned; hence needs to be verified). The key objective stated is to raise the share of public transport to 60 percent of all motorised trips from this current level of 22 percent by the end of the Twelfth Plan. This is a welcome objective, but it must be based on more sound data. It seems that estimates for public transport (P/T) use and walking and bicycling (W/B) are significantly underestimated. Because of prevailing low income levels, the use of W/B and P/T in India is much higher than in higher income countries. Thus the approach to fostering public transport must be better informed, and policies need to be designed to make public transport more efficient, accessible and convenient, so that the drift to private motorised modes is arrested.

Institutional Strengthening : The Twelfth Plan draft chapter proposes a number of institutional reforms to accomplish the objective of promoting better public transport. It is suggested that policy making capacity at the Central Government level can be strengthened through:

(i) Comprehensive legislation to deliver a carefully articulated mandate over urban transport,

(ii) Constitutional amendments to put urban transport on the concurrent list,

(iii) Establishment of a new Department of Urban Transport in the Ministry of Urban Development at both the Centre and in the State,

(iv) Formation of a National Urban Rail Transit Corporation,

(v) Creation of unified metropolitan transport authorities.

There is no doubt that the institutional framework and plan formulation, as also for the design of and implementation of projects, needs to be strengthened. At present multiple agencies are performing these tasks with no clear cut division of responsibilities amongst them. As these proposals stand, however, there is excessive emphasis in shifting urban transport responsibility to the central government. Instead there should be much greater emphasis on the empowerment of city governments and city level planning and implementation agencies for planning, coordination and implementation of transport services and projects. The State Governments should be responsible for laying down policies, administering laws, rules and regulations, organizing enforcement of laws and

standards and allotments of funds to cities on a pre-determined basis. It should assist cities with guidelines and manuals to plan and provide good urban transport. The existing Unified Metropolitan Transport Authorities (UMTAs) function more like bureaucratic type coordinating mechanisms. Large cities do need the establishments of UMTAs but they need to be structured as relatively autonomous unified planning and implementation authorities with their own powers, budgets and expertise. The Central Government should develop national policies to guide state and city level governments and agencies on best practices.

17.5 Emphasis on Mass Rapid Transit (MRT): Whereas the investments proposed in mass rapid transit in the Twelfth Plan draft chapter to about 18 percent of total estimated investments in the urban transport sector, there is perhaps excessive emphasis on the provision of metros and other rail based transit in large cities in the chapter. As observed in the chapter metro and rail based transit options constitute the most capital intensive segments of the urban transport options. In fact, in most countries the introduction of metro systems took place at much higher levels of per capita incomes than is the case at present in India. Even the richest cities in the world are cautious in committing to MRT in case they are not able to achieve the expected ridership, and find it difficult to get adequate funds for operation and maintenance at the required quality levels. Further, some studies find that under-or-over-ground systems running on electric power are not necessarily beneficial in terms of lifetime costs of energy and emissions. Thus, decisions to make large investments in metro systems should be taken with great caution extremely selectively. A good beginning has been made in the chapter to provide some criteria for the selection of cities where investments may be contemplated in metro systems. Estimates of minimum populations needed to sustain a metro system are perhaps too low at 2 million. A city should have a population of at least 5 million people, if not 10 million, to warrant a metro system given the current state of India's development, income and urbanisation level. There are few cities even in developed countries that are able to afford metro systems at such population levels of 2 million. This is particularly important in view of the severe resource constraints being faced by the country at the present time and in the foreseeable future. In general, all urban transport costs, including that of metros should be met by the cities themselves, through a combination of user charges and fiscal imposts. This could itself form a good guiding principles for the selection of cities where metro systems to be initiated. Where subsidies are needed they should be cross-subsidies within the city. (The central budgetary requirements for these projects are placed at RS. 75,000 crore for the Twelfth Plan, which is much in excess of RS. 55,000 crore that is provided for mass transit in another table in the same chapter.

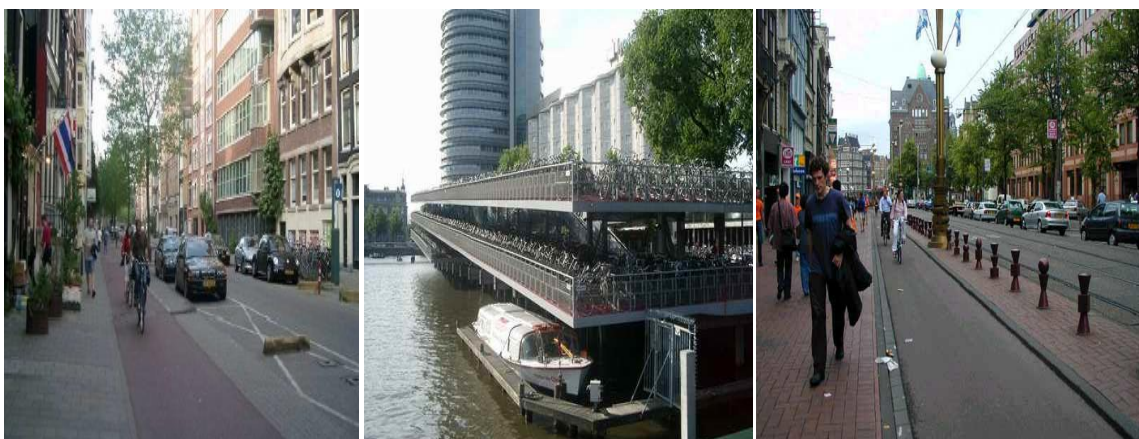
17.6 Buses and Bus Rapid Transit: Despite the fact that buses carry the large majority of public transport users in Indian cities, there is scant mention of buses and BRT systems in the Twelfth Plan draft chapter, either in terms of policies or in terms of resources required. Apart from the provision of metro and rail based urban transport in just few cities over the next 20 years, the bulk of urban transport would be based on reserved lanes for buses (segregated, as in BRT corridors, or non segregated) and other bus operations. The investments costs related to bus transport are a small fraction of those for rail based systems. The Twelfth Plan should therefore give much greater importance to this mode. It should propose a much closer examination of urban transport options in the interests of making more cost effective and efficient choices for urban transport in our cities.

Much more attention should be given to development of technology-based optimization of city wide bus operations with concepts of bus platooning, hybrid buses, origin-destination routes, etc. Operated by professional public transit companies with top notch internal expertise. There is not even one such operator in India today.



17.7 Demand Management: With rising incomes there has been an explosion of private ownership of motorised two wheelers and cars over the last 20 years. It must be recognised that this trend of high growth in ownership of private motorised transport modes will continue in the foreseeable future. It is therefore of the utmost importance that the Twelfth Plan emphasises the adoption of demand management policies in cities which would include higher taxes on all private motorised transport modes (not just on luxury cars), much higher parking charges, especially in central cities and other business centres, charging for all parking in all public spaces etc. The objective of increasing the share of public transport in the Twelfth Plan period cannot be achieved without very significant demand management practices of the kind indicated.

17.8 Non Motorised Transport: As already noted, a very large proportion of all trips are made by walking or by bicycle in all our cities including the larger ones. Most of this is done out of necessity despite the inadequacy of facilities that allow safe walking and bicycling. Thus, unlike in cities in developed countries, there is little need to encourage non-motorised transport in our cities. However, in order to ensure that walking and cycling do not decline from their current modes shares it is essential to provide roads and other facilities that are designed to not impede the use of these modes.



The Twelfth Plan draft chapter is proposing the allocation of significant funds for urban roads. Hence this is an opportune time to initiate a programme for designing and enforcing policies and standards that make it mandatory to provide pedestrian footpaths and cycle tracks in all areas of cities. This will need earmarked funding along with the enforcement of design standards, possibly through the Jawaharlal Nehru National Urban Renewal Mission (JNNURM). Targets have to be set and laws enacted, as many countries are already doing for the provision of these facilities. For example, no renovation of arterial roads or new roads projects should be approved without ensuring that universal design guidelines (including facilities for the disabled) have been followed for accompanying paths and bicycle lanes. For existing urban roads, targets can be laid down for the renovation, according to these guidelines, of say, 5-7 percent all urban roads every year. Some urban arterial roads carry heavy traffic. To ease the congestion on these roads and improve mobility, bypasses are being planned for NHs under the NHDP to cater to long haul traffic. It would be advisable that the planning for such by passes is the product of coordination between the implementing agencies of the central Ministry of Roads and Ministry of Urban Development, State Governments and the local city authorities. This would ensure long term functioning of the bypass and healthy development of the urban areas.

17.9 Capacity Building for Decision Making: As urbanisation and the challenges posed by the changing needs and patterns of urban transport emerge, much more emphasis will need to be laid on the development of technical and decision making capacities at all levels. The draft chapter has done well emphasise investment in capacity building for urban transport but the thrust of the proposal is on the building of central-level capacities and is skewed towards metro and rail based transit. In view of the complexity of choices made by users in different cities and differing income levels, capacity building needs to be much more widespread at the state and city levels. The role of the Centre should mainly be an advisory and technical nature and as a possible source of funds which can be accessed by states and cities under certain prescribed criteria. In this context, the draft Twelfth Plan chapter errs on the side of excessive centralisation in both decisions making and funding. Given that we already have more 50 cities with populations in excess of one million, which will number at least 70 by 2020, the provision of urban transport and it's financing and management will become increasingly complex. Thus it will be different to take such decisions at the central level and much of the decision making will have to be done at the city or local authority level. The Twelfth Plan should aim to provide resources for the development of such technical capacities and institution at city level, possibly under the JNNURM.

17.10 Capacity Building for Implementation: If all the proposal are to be carried out it will be the utmost importance to upgrade all our delivery agencies concerned with urban transport, including the PWD on the one hand and traffic managers like the police on the other. Engineers need to be educated on the modern concepts in roads design in urban areas for traffic calming, narrower roads, less wide but more arteries and details of the new technologies. Police officials need to develop professional cadres for traffic control, etc. Responsibility for planning facilities should be taken away from these organisations. PWD should only be responsible for construction and maintenance, and not for deciding the kinds of roads built. Police should be responsible for law enforcement according to the rules laid down and trained in modern enforcement techniques.

They should not be planning traffic movement, traffic signal operations etc. Planning and design responsibilities should be with professional transportation planning organisation of the city.

17.11 Capacity Building in Educational Institutions: The agenda for capacity building at the central, state and city levels cannot be fulfilled unless there is widespread introduction of courses and programmes on urban management, transport planning, transport engineering, information technology for urban transport, etc. in a host of technical and management institutions. Similarly there is need for much greater fund allocation for research and development activities in technical institutions like the IITs and regional engineering colleges. Massive expansion has taken place in the information technology industry in India over the last two decades and it has been possible to produce the large numbers of technical graduates demanded by the industry. Thus the Twelfth Plan should make specific for the development of Masters Type programmes, and other courses on urban transport in at least 25 years institutions in the country.

CHAPTER-XVIII

Introduction (Imphal City) : Imphal being the Capital City of Manipur is having been sustaining the setbacks of Rapid Urbanization, Urban Sprawl, Economic Growth, Political Activities, Administrative Measures and Commercial Activities of the State. The City has a unique feature of topographical location, being surrounded by other Districts having connected by Radial Roads of different classifications like National Highways, State Highways, other District Roads and other major Corridors etc.

18.1 Characteristics of Imphal City:

Imphal City was an unplanned City.

Imphal City is one of the most traffic congested city in the N.E Region.

Lack of proper Land Use Planning in the past, coupled with high rate of Urban Migration resulting in Urban Sprawl.

Lack of basic Urban Transport Infrastructures/Parking Lots.

Most of the commercial activities/hubs of the State besides Administrative Establishments, Educational Institutions, Banking/Insurance Business, Shopping Areas and Health Care Centres, etc are highly concentrated in the Imphal City resulting to heavy flow of traffic towards the City for engagement in business activities, education, health care, works, social gatherings , shopping and entertainment, etc.

Travel Demand is more heavier than Supply which is being experienced in almost all the major corridors/important roads connecting Imphal City which are seen chocked with mixed traffic flow during peak hours.

Imphal City Traffic is overburdened/overstressed due to adoption of on-road parking system due to lack of Parking Lots like Multi Level Car Parking and on the other hand having transit passage for Highway Bound Commercial Vehicles due to lack of Urban Bye-Pass respectively.

Lack of adequate Traffic Signal System, Inter modality, Passenger Information System & Intelligent Transport System (ITS) etc.

Lack of compatible/reliable/sustainable Public Transport resulting to rapid growth of personalized vehicles coupled with phasing out of old/polluted buses with introduction of Intermediate Public Transport vehicles mostly diesel driven A/Rs (six seater) & Maxi Cabs (upto 12 seating capacity) operating under the Contract Carriage Permits(Temp).

Lack of Secondary Corridors or Ring Roads to facilitate City Traffic to by-pass/divert from the City Centre.

About 60-75% of the entire vehicle population (2 lakhs plus on 31/3/2013) are either traversing Imphal City or being kept and operated in the City Roads.

The Manipur State Road Transport Corporation (MSRTC) was liquidated in the year 2003 by a Government Decision with the prior approval of the Ministry of Road Transport & Highways, Govt. of India & thereafter the entire Nationalized/Non-Nationalized routes including Inter State Routes had been privatized.

Operation of Public Transport /Intermediate Public Transport system is under the exclusive management of Private Operators which is defined as a characteristic model with lack of healthy competition besides compromising public safety & comforts, etc.

Impacts: Extensive growth of Urban Sprawl due to Rapid Urbanization coupled with lack of Proper Land Use Pattern resulting to heavy Traffic Congestion in the City Centre and Down Town Areas during peak hours thereby increasing travel time enormously and also caused fatal road accidents and environmental hazards.

18.2 Main Cause of Traffic Congestions:

Lack of Traffic sense among the road users.

Lack of sense of lane driving (fast/slow/non-motorized lanes/side walks).

Lack of over-head foot bridges, sub-ways, zebra crossings at important junctions for facilitating safe movement of pedestrians.

Lack of off-road parking lots like multi level car parking.

Rapid rise in vehicular population @ 8000 vehicles per year (app) .

Lack of sufficient carriage-width/ road length/networking to sustain the ever increasing Traffic Load.

Present system of on-road parking in & around Imphal City Centre.

Maximum occupation of road space by the shopkeepers/business establishments, financial institutions/banks, schools etc. utilising the road space in front of their establishments during working hours (since early morning till sunset) leaving little space/time for the public utility.

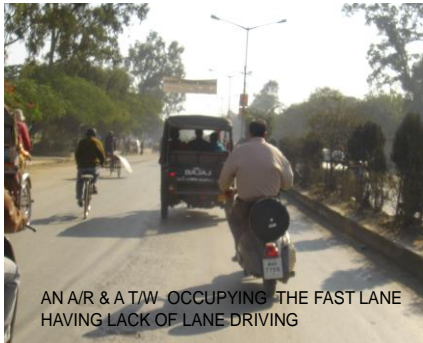
Delay in completion of developmental projects being taken up in Imphal city areas.

18.3 Secondary causes of Traffic Congestions :

Un-authorized occupation of foot paths /side walks by vendors, auto workshops, kiosks and shop keepers.

Random throwing of garbage and delay in clearance reduces Carrying Capacity and caused Bottlenecks.

Random dumping of construction materials along the roadsides and public places.



AN A/R & A T/W OCCUPYING THE FAST LANE HAVING LACK OF LANE DRIVING



EVENING TRAFFIC FLOW IN IMPHAL CITY



HOW PEDESTRIANS ARE CROSSING THE ROADS



MIXED TRAFFIC FLOW IN IMPHAL CITY



KEISHAMPAT BUS BAY-COMMUTERS TRYING TO TAKE THEIR BUSES



HAPHAZARD PARKING ALONG KANGLAPARK/NH-39

CHAPTER-XIX

TRAFFIC CONTROL/MANAGEMENT MEASURES, TRAVEL DEMAND MANAGEMENT, STANDARD TYPE OF SURVEYS :

19.1 Zebra Crossing : This facility is to be activated as & when the traffic flow across the zebra crossing is regulated by means of electronic traffic signal device/system or traffic police personnel posted at the site of zebra crossing to ensure safety of the pedestrians.



19.2 Rotary Traffic Island: As per the Road Congress Specifications, the Rotary Traffic Island is defined as a Traffic Regulator so designed/developed to ensure free movement of traffic in the clockwise direction free from installation of electronic traffic signal device/system or deployment of traffic police. Personnel.

19.3 Installation of LED Based Traffic Signal System.

8 (eight) nos of LED based Traffic Signal System have been installed & functioning at the following Traffic junctions: -

(a) Khoyathong junction (b) Noth AOC junction (c) Keishampat junction (d) Raj Bhavan round about (e) GPO junction (f) Western Gate of Kangla junction (g) Kwakeithel junction & (h) Singjamei Traffic junction.

19.4 Concept of Parking Lots Established by Private Parties or under PPP (Public Private Partnership) Model:

It is high time to encourage the concept of establishment of parking lots by the private parties on their own plot of land having proximity/accessibility to the major corridors/arteries connecting Imphal City Centre within a short radius or under PPP model wherein land may be acquired by the Government and develop/establish the infrastructure by the private partner/party under the Built- Own- Operate- Transfer(BOOT). Higher Parking fees shall be fixed by the Government/ Local Body to be charged by the management. Hence, a source of income generation which shall be shared in between and contribution of service to the public who need to park their vehicles near city centres or Central Business Districts (CBDs) or Down Town Areas.

19.5 Role of TRPC(IW/IE):

A Traffic Regulation & Parking Committee (IW/IE), Manipur is constituted under the Chairmanship of Administrative Secretary(Transport) & members drawn from Transport, PWD, District Magistrates (IW/IE), District Police Authorities (IW/IE), Town Planning Deptt, E/O, IMC, & E/Os, Jilla Parishads (IW/IE) etc being a recommending body for formulation/planning of Traffic Regulations/Management besides allotment of Parking Lots.

19.6 Concept of Trip Generation (Travel Demand):

#Person Trip:

#Origin- Destination.

#Trip Purpose.

#Mode of Transport.

#These activities may also be defined as

#Trip generation: Travel Demand,

#Trip Assignment: Which Route to Take.

#Split Mode : What Type of Transport.

19.7 Demand- Supply : # As such travel demand of a person cannot be denied because we need to go/travel for work, education, health care, business activities, shopping, physical fitness/games & sports , social gatherings, religious purposes and entertainment etc. 60

Subsequently, the provision/mode of urban transport system is depending on the type/class of the city.

In other sense, it is purely the concept of Demand & Supply.

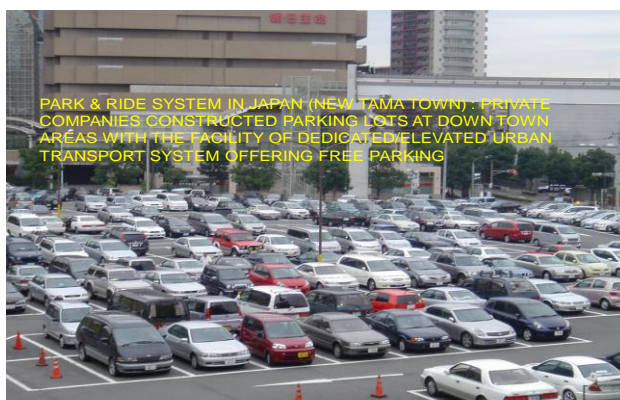
But it is a fact that in a developing /growing city, the demand is always found more heavier than the supply and subsequently resulting to traffic congestion , safety concerns, deterioration of air quality & increase in travel time.

Hence, in developed countries, a new concept commonly known as TDM (Travel Demand Management)has been introduced in order cut down the demand through legislative/administrative measures, availing more facilities while containing the supply.

19.8 Travel Demand Management (TDM) : Primary Objective: To reduce/elevate/solve traffic congestion in the cities.

19.9 Secondary Objectives: # To reduce environmental load. # To formulate travel demand adjustment measures through critical analysis /evaluation of the present status demand/supply of a particular city under case study with anticipated promotion of urban growth with projected travel demand.

To make strategies for ensuring public transportation convenience improvement measures like: **Public Transport Priority System(PTPS), Park & Ride system License to obtain before buying a Car, Road Pricing (levy of toll tax), Levy of Extra Tax on Gasoline, Imposition of heavy motor vehicle taxes, Hike in Parking Fees in City Centres, No Your Car Day, and Promotion of Bi-cycles & walk etc.**



19.10. STRADA(Systematic Travel Demand Analysis): It is a powerful software developed by the Japan International Co-operation Agency(JICA) and it is extensively used for optimum derivation in decision making for selection of various options available for developmental projects of Urban Transport Infrastructure besides systematic strategies of Land Use Planning, considering the Cost- Benefit Ratio of the proposed project.

19.11 Working Principle: Real time traffic congestion along a Link between two Nodes may be critically evaluated/analysed with the application of STRADA, wherein pre-determined cost of construction of the existing carriage way/road section, its capacity etc. (where real time maximum congestion is occurring) are set while determining/deriving the optimum options like whether there is any scope for widening the existing road (or already saturated) or as to whether it is feasible to construct a new corridor or a fly over/grade separator or to re-distribute the commercial hubs/activities with options available in the existing land use pattern with critical evaluation of cost- benefit ration of the proposed projects.

19.12 Urban Planning Vs Urban Transportation Planning: # Both the studies are inseparable & just like the two faces of a coin. Hence, while making a Master Plan for development of a City or a residential complex in the neighbourhood, the Urban Transportation Planning is to be incorporated with better /precise land use pattern.

19.13 Concept of Volume Capacity Ratio: Volume is the real time traffic volume at a particular section of the carriage way at a particular point of time and whereas the Capacity is the designed traffic load of a particular section of the carriageway. The capacity is usually defined in terms of **Passenger Car Unit (PCU)**. If the Volume Capacity Ratio of a carriage way exceeds 2 or the maximum vehicular speed is less than 20 kmph, then the traffic congestion level is alarming. However, the data on Volume Capacity Ratio of most of the major corridors/arterial roads connecting Imphal City Centre is not readily available.

19.14 Necessity for Investigation: # Systematic investigation on the integrated urban transport & land use for the urban master plan.

Issues of urban transport.

Systematic investigation on the integrated urban transport for the city making urban transportation planning.

#Local area plan.

Bicycle plan.

Parking lot plan.

19.15 Other Investigations: # Investigation for urban mass transit system.

Investigation for metropolies.

Investigation for Trunk Roads.

Investigation for road side environment.

Investigation for regional expressway.

19.16 Different types of Surveys Under Actual Situation of Urban Transport:

Regular observation of Traffic Volume (every day/every hour).

Investigation for the condition of Urban Transport (O-D surveys).

- # Person Trip Survey.
- # Motor Vehicle Survey.
- # Goods Flow Survey.

62

19.17 Traffic Volume Observation:

- # Traffic Volume Characteristics:
- # Unit Time (1hr, 15 mnts, 5 mnts).
- Typical Pattern (daily, weekly, months, yearly with commuter trip/tourism trip).
- # Purpose: Identification of Volume & Variation in Characteristics.
- # Evaluation of Accident Rates.
- # Planning new Facilities & Traffic Control Scheme.
- # Evaluation of a Plan or a Scheme before and after implementation & economic considerations.

19.18 Traffic Count Measures: # Selection of Stations, Streets, Intersections or Entrances/Exits of Facilities should be chosen according to the survey purpose.

Counting Techniques: (Method): Manual or Machine (permanent).

Vehicle : Size: like large, ordinary, small, mini, three wheelers & two wheelers etc.

Type: PT(Passenger) IPT(passenger), Goods, personalised vehicles (car/two wheelers & special purpose vehicles).

19.19 Counting Duration: 24 hrs count, 16 hrs count, 12 hrs count & peak period count.

19.20 Traffic Speed Survey:

Travel Speed Survey: Average speed of a specific vehicle travelling from one point to another over a specific route under the existing traffic condition.

Spot Speed Survey: Speed of an individual vehicle passing a given point (spot) on a street.

19.21 Purpose of Traffic Speed Survey: # Recognition of present level of service & analysis of bottlenecks.

Planning & evaluation of Traffic Control System.

Providing link data for traffic assignment.

Economic evaluation.

19.22 Purpose of Spot Speed Survey: # Recognition of present speed distribution.

Planning of traffic regulation schemes.

Analysis of accidents.

Design speed determination for geometric design.

63

19.23 Methods of Survey: Travel Speed Survey: Test car or license plate technique.

Spot Speed Survey: Measurement of time required for a vehicle to traverse a measured course.

Time is measured by manual, electro- mechanical or electrical means.

Usually 50 to 100 vehicles are selected to be measured as a sample of traffic stream.

19.24 Presentation & Analysis: # Traffic flow diagram showing traffic volume on a street or an intersection

Variation of traffic volume showing hourly, daily, monthly, yearly & seasonal traffic variation.

Ratio of peak period to daily traffic.

Ratio of different types of vehicles.

19.25 Advanced Origin Destination (O-D) Survey: # Applied survey for small cities based on person trip survey.

Simplification of transportation mode in survey and analysis procedure between modes wherein automobile is dominant in terms of transportation in small cities like Imphal.

19.26 Person Trip Survey: # Recognition of trip behaviours of residents in a given urban region on a special day.

Location of departure & destination.

Time of departure & arrival.

Purpose of Trips.

Attribution of residents.

19.27 Survey of Vehicles: (Road Traffic Census): # Recognition of trip behaviours of motor vehicles.

Location of departure & destination.

Time of departure & arrival.

Purpose of trips.

Number of passengers.

It is therefore, the following studies/surveys are recommended as far as practicable for assessment & evaluation of present Traffic Scenario and forecasting of future travel demand of the Imphal City:-

- (i) Advanced Origin- Destination (O-D) Survey.
- (ii) Person Trip Survey.
- (iii) Vehicle Count Survey (Road Traffic Census).
- (iv) Traffic Volume Observation Survey.
- (iv) Traffic Speed Survey.
- (v) Peak Hour Peak Direction Trips (PHPDT) studies.
- (vi) Split mode studies.
- (vii) Per capita travel demand studies.
- (viii) Goods Flow Survey.

CHAPTER-XX

Present Issues of Urban Transport & its Challenges:

20.1 Role of Intermediate Public Transport (IPT) in Urban Transport Sector: : During the past 5 years, the entire scenario of Urban Transport System has turned into a dramatic change with introduction of a large fleet of Intermediate Public Transport Vehicles mostly diesel driven A/Rs (3000 plus) under the category of Motor Cabs & about 300 Tata Magics (Maxi Cabs) under the Contract Carriage Permits & under the administrative management of different private operators which are the parent Tpt Societies/ Assns and other newly floated/formed groups who are registered as Co-operative Societies/Associations with the offices of the Registrar Co-operative Societies/ Dy. Labour Commissioner in the case of Trade Unions. It is broadly considered that the present practice/phenomenon is basically evolved due to lack of sustainable/reliable/comfortable/affordable/ City Bus Service in the Urban Transport Sector. The City Bus Services involving Metadors, Mitshubishi Canters, 407/409 Tata md /mini Buses etc. which were earlier operating in the designated city routes like Route No 1, 2, 3, 4,5, 6, 7 & 8 etc connecting Imphal City Centre with adjoining important towns/small towns/villages namely Nambol, Lilong, Samurou/Thongkhong Luxmi Bazar, Irilbung, Top- Khongnagkhong, Lamlong Bazar, Sekmai , Phumlou, Manipur Spining Mill, Lamsang Bazar, Phayeng/Kangchup & Keithelmanbi etc were withdrawn from the fleets by the concerned owners/ Tpt Societies and now vanished from the roads. The impacts are having indulged in monopolistic nature in providing Public Transport with lack of healthy competition among the passenger service providers, and compromising with traffic congestion/ safety aspects, environmental impacts & passenger comforts.

In between, there were a time where Imphal City Centre was flooded with auctioned/rebuilt/polluted & diesel driven Jeep Taxis rendering Intermediate Public Transport Services connecting Imphal City with the adjoining towns/small towns/villages, residential pockets/complex of the neighbourhoods like operation of Gypneys in the capital city Manila of Philippines but the same were also vanished with the introduction/replacement of brand new Tata Magics & Mega Diesels.

20.2 Major Issues: (i) Traffic Congestion & safety aspects. (ii) Environmental impacts due to severed air & noise pollution with deterioration of air quality. (iii) Parking Problems.

20.3 Remedies/Policies: (i) It is considered necessary to restrict grant of additional Contract Carriage Permits in respect of Mega Diesels/Tata Magics in the existing routes as well as in the case of new proposals rather encourage in introduction of Last Mile Connectivity Service at designated points beyond which Public Transport (buses) cannot access & Feeder Service to the Public Transport System operating along the major corridors/arteries connecting Imphal City Centre while discouraging floating/forming of fresh/new Transport Societies/Assns in the name of un-employed- educated persons and travel demand of a particular residential pocket/ neighbourhood.

(ii) To restrict the grant of No Objection Certificates (NOCs) in favour of the fresh/newly formed/floated Transport Associations making way for getting registration of their proposed Tpt Societies/Assns in the offices of the DCOs/ARCs/Dy. Labour Commissioner.

(iii) To conduct advanced Origin – Destination (O-D) survey besides Peak Hour Peak Direction Trips/ Person Trip Studies so as to enable to evaluate/analyse the present transport demand & forecasting of future per capita travel demand for projection of quantum of supply.

(iv) To streamline / strengthen the present system of checking of vehicles / booking of motor vehicle offences with imposition of penalties and modalities for issuance of pollution under control certificates (PUCs) with maintenance of proper records /monitoring of unfit vehicles which are found un-worthy for getting PUCs.

(v) To encourage phasing out of noisy/polluted diesel driven Mega Diesels out of the city centre with replacement/induction of more environment friendly IPT vehicles.

(vi) To encourage bi-cycles & walk with the development of dedicated side walks & bi-cycle lanes and provisions for Right of Way for physically challenged persons specifically in the airports, railway stations, bus terminals, city bus stands/stops and other public utility places.

(vii) To identify proper places/sites for declaration of idle parking in the down town areas in order to reduce congestion in the city centres.

(viii) To streamline the appointment of Time Keepers who shall wear uniforms to be supplied by the concd. Passenger Service Providers and post them in proper place for ensuring effective control over the allotment /assignment of pre-determined Time Slot for

each & every IPT vehicles under the fleet which are approaching to the designated parking slot from the place of idle parking on rotation. 66

(ix) To educate the drivers /owners of IPT vehicles on road safety aspects, environmental hazards resulting out of the vehicular smoke emissions/noise, importance of Insurance coverage in the case of road accidents involving their vehicles/ its liabilities, duty to produce relevant documents of the vehicles on demand made by a police officer in uniform or a person duly authorised in this regard, duty to obey traffic signs and using of mobile phones while driving being an offence etc.

(x) To encourage the drivers/owners/passenger service providers to create healthy competition amongst the passenger service providers, to avoid factional disputes, to maintain permit conditions strictly, to behave properly with the passengers/commuters, to ensure safety of the children/aged persons/physically challenged persons while boarding/alighting the passenger vehicles, not to overload the passengers(overloading is a punishable offence) and to wash/clean /maintain the vehicles properly for the safety/convenience /comfort of the passengers/commuters.

20.4 Area of Operation of City Bus Services: The area of City Bus Services is defined as within the radius of 20 kms of the particular city as published vide Manipur Gazette Extraordinary No. 250, Thursday, October 16, 2008 under the Transport Department Notification No. 1/Revision/fare/Freight/2008-T(MV) dated 16th Oct' 2008.

20.5 Revival of City Bus Service: Operation of JnNURM Buses in Imphal City: 14 semi low floor buses released by the Ministry of Urban Development, Govt. of India under JnNURM (1st phase) under Bus Rapid Transport System (BRTS) along 3(three) designated Major Corridors namely : route no. 1, Manipur University to Koirengei (BSF) via Imphal City Centre; Malom to Chairenthong (Khurai) via Imphal & DC/IW (Lamphel) to DC/Imphal East (Porompat) are operating wef June' 2012 under the administrative management of Unified Metropolitan Transport Authority (UMTA). The UMTA decided to operate the above buses under the PPP model (net cost) & NITs were floated 3 times with modification of certain terms & conditions/parameters including the amount of security deposit & financial norms. However, only one bidder has responded & therefore negotiations are being carried out for settling the issue.

20.6 Preparation of 2nd DPR & Engagement of Consultant: Meanwhile, the UMTA has decided to engage the Urban Mass Transit Company Limited (UMTCL) as Consultant for preparation of 2nd DPR incorporating various norms/components as per the Ministry's guidelines like framing of Advertisement policy, Route rationalization & Parking policy, Institutional Mechanism of periodic revision of fares, besides Reforms as defined as PIS (Passenger Information System), Installation of CCTV Camera, Introduction of National Common Mobility Card, Setting up of Traffic Information Management Control Centre (TIMCC), Dedicated Urban Transport Fund (UTF), Transit Oriented Development (TOD) policy, & Waive of/ reimbursement of taxes etc.

20.7 Strategy/Policies of the UMTA: (i) The issue of outsourcing of operation /maintenance of the fleet of 14 semi low buses under the PPP model (net cost model) is not yet finalised due to lack of availability of competitive bidders in the State.

67

(ii) The issue of proposed extension of existing routes with increase in frequency (minimising the headway in order to cope up with the per capita travel demand in the assigned / proposed route sectors), opening of more routes, etc are not yet finalised pending to release of balance buses under the 2nd DPR by the Ministry of Urban Development.

20.8 Proposed Introduction of Ring & Radial City Bus Services: It has been envisaged to introduce Ring & Radial City Bus Services around the periphery of Greater Imphal Areas/ Down Town Areas traversing with Imphal City Centre from the point of proposed construction of City Bus Terminals once the development of Urban Transport Infrastructure like Inner& Outer Ring Roads & construction of 10 numbers of CBTs are completed during the 12th five year plan.

20.9 Proposed Development/Enhancement of Urban Transport infrastructure:

Construction of 10 numbers of City Bus Terminals (with the facility of Park & Ride system) with an estimated cost of 1 crore each for introduction of radial and ring road city bus services in Imphal and greater Imphal Areas connecting with Imphal City Centre during the 12th five year plan. This concept of the proposed I project has been considered by the Planning Commission of India through DONER/NEC with a directive to examine the scope of taking up this project under the PPP model.. Steps are being taken up by the Transport Dept. for identification and site selection with constitution of a Site Selection Committee under the Chairmanship of Hon'ble Minister(Tpt), Manipur for acquiring minimum 2 acres of land per a CB during the year 2013-2014 .

Construction of 2 nos. of Multi Level Car Parking having capacity for 1000 cars each, one on the northern side and another in the southern side of Imphal City Centre has been contemplated during 12th Five year plan under PPP model.

Need for an Urban Transport Policy: The lack of a sustainable Urban Transport system in the State is being characterized with the ever increasing number of personalized vehicles (about 80% of total vehicular population of the State is found as personalized vehicles), it is therefore felt imperative that a sustainable Urban Transport Policy shall have to be put in place which will certainly encourage healthy competition among the passenger transport service providers (pvt. Operators), and could streamline in containing Traffic Congestion, environmental impacts resulting out of vehicular / noise pollutions, road safety, comfort, reliability, sustainability, while integrating land use & urban transport planning.

Freight traffic: As economic activities in cities expand with growing of city population, a substantial amount of freight traffic would be generated. The timely & smooth movement of such freight is crucial to the well being of the people and the viability of the economic

activities which are undertaken. However, with limited capacity of transport system, it is essential that freight traffic and passenger traffic are so staggered as to make optimum use of the transport infrastructure. Therefore, it is high time to plan the use off-peak passenger travel times to move freight.

68

Another concept is to construct Inter State Truck Terminals (ISTTS) through private finance under the PPP model.

VISION: # To recognize that people occupy centre- stage in our cities and all plans would be for their common benefit and well being.

To make our cities the most liveable in the country and enable them to become the “energies of economic growth” of the State.

To allow our cities to evolve into an urban form that is best suited for unique geography of their locations and is best placed to support the main social and economic activities that take place in the city.

OBJECTIVES: The objective of this policy is to ensure safe, affordable, quick, comfortable, reliable and sustainable access for the growing number of city residents to jobs, education, recreation and such other needs within our cities: # Encouraging integrated land use and transport planning in all cities so that travel distances are minimized.

#Improving access of business to markets and various factors of production.

Formulating a more equitable allocation of road space with people, rather than vehicles, as its main focus.

Promotion of walks & bi cycles with creation/segregation of side walks & bi-cycle lanes.

Promotion of non- motorized mode of transport.

Encourage better use of public transport and non- motorized modes.

Enabling the establishment of quality focused multi-modal public transport systems which are well integrated, providing seamless travel across modes.

Establishing institutional mechanisms for enhanced coordination in planning and management of transport system users.

Introduction of Intelligent Transport System (ITS) for traffic management.

Addressing concerns of road safety & trauma response with reduction of pollution levels.

#Capacity Building: (Institutional & Manpower)

#Association of private sectors under the PPP model.

69

CONCLUSION: The National Transport Policy being formulated/drafted by the duly constituted National Transport Policy Development Policy Committee is not yet finalised, however, sincere attempt has been made to incorporate the concepts/visions/strategies/approaches/ recommendations of the Interim Report of the National Transport Development Policy Committee (NTPDC) with specific reference to North East Region while drafting/formulating the State Transport Policy, Manipur besides taking references with the National Urban Transport Policy published by the Ministry of Urban Development, GOI & National Road Safety Policy framed by the Sunder Committee so that the State Transport Policy, Manipur is framed within the logical scope/frameworks of the up-coming National Transport Policy, National Urban Transport Policy & National Road Safety Policy.

70

