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1. GOALS AND OBJECTIVES OF THE POLICY

1.1 INTRODUCTION

Over the last 10 years, the population of Dhaka has more than doubled. This growth has exceeded the demand for services in all sectors of society and the quality of life has been deteriorating. The city is now facing a crisis point when even small increases in activities and minor events cause wide-spread confusion, time wastages and potential danger to the people of the city. The Government is committed to providing better living conditions for the populace and one of the main sectors in which action will be taken is in urban transport.

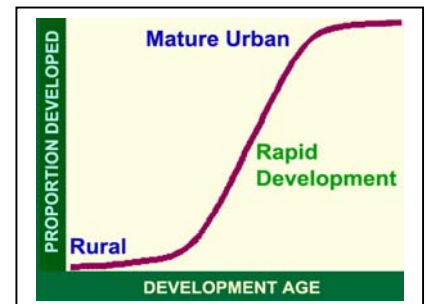


A policy for land transport¹ at the national level has already been drafted and approval given by the government in April 2004. Some sections of this National Policy document refer to the transport situation in Dhaka and these preliminary ideas have been taken into account when drafting the Urban Policy contained herein. There is a need now to look ahead with a wider vision and to plan for the future with a co-ordinated approach to transport and land uses so as to maximise resources and minimise the adverse impacts on the people and the environment.

In order to achieve these objectives, the Government has commissioned a long-term transportation planning study² for the greater Dhaka area. This study provided the basis for this Urban Transport Policy Document and the statements contained herein result from the findings of the study.

1.2 THE VISION FOR THE FUTURE

At present, the population of the urban area referred to as “Greater Dhaka” is of the order of 12 million people. Considering in-migration and natural growth, the population in 20 years will more than double to reach over 35 million people. Substantial new infrastructure will be required to serve this population, not only in the transport sector but also in terms of water supply, power, sewerage, housing and education. In addition to provision of new services, there will be a need for large expansion of the developed land area that will require foresight in planning and careful control of land.



The economy will expand modestly in the coming years. However, the fact remains that the majority of the people of Dhaka will have very limited income. The development must recognise this and must provide a city and a transportation system, which will be responsive to the population and to their changing needs. At the same time the city must be modernised with high quality features suitable for the century in which we live and reflecting the status of the nation's capital.

Being modern, clean and organised need not be expensive in itself. Systems will be put in place, which take account of individual needs and also the collective needs of others. Living, working and enjoying leisure together means the need to create an environment in which these

¹ National Land Transport Policy, Ministry of Communications, April 2004

² The Strategic Transport Plan for Dhaka undertaken by Consultants under the control and guidance of Dhaka Transport Co-ordination Board.

activities can take place in an ordered society without too many restrictions on the individual.

There will have to be more order in the way the systems in the city are developed, managed and operated. There needs to be a gradual move away from the self-motivated introspective way of life to one which has increased respect for others. No longer can the individual be free to do whatever he or she wishes. The future development will be one of control of individual rights and a respect for each other's rights. Control will be introduced into the transportation system in order to achieve efficiency.

In the past the built-up area has become more and more densely populated. This has happened as existing one-storey and two-storey buildings are pulled down and are replaced by multi-occupancy buildings of 6 storeys or higher. This trend is expected to continue in the years to come. At the same time, the built-up area is expected to expand greatly outside the current boundaries in order to accommodate the need for land for housing and employment. There will be a need for additional protection of these new areas from the incursion of flood waters by constructing a flood protection barrier to the east and north of the city. The land to the east is an area where future planned development will be concentrated in the near future. In addition to this eastern area, new highways will be built into the northern areas in order to organise and prepare for development north of the city and west of the International Airport.



There will be a definite policy to encourage the creation of satellite cities on the periphery of Dhaka in order to diffuse some of the development pressure away from the existing built-up area. Each of these cities, initially based on Export Processing Zones (EPZs) will move toward become self-sustaining with the creation of job opportunities to suit the population who settle there. Each satellite city will have its own schools and leisure facilities. The satellite cities will be connected to the central city with a modern mass rapid transit system serving longer distance travel in Greater Dhaka area. The mass rapid transit system will be designed according to the capacity required and will provide convenient service and rapid connections via air-conditioned all-seater coaches.

The majority of people will continue to choose public transport as their primary mode of travel. The city will develop a completely new modern and efficient bus rapid transit system and will gradually supersede the existing out of date fleet with new vehicles suitable for the image of one of the world's Mega cities. There will be an hierarchy of public transport systems created in which each vehicle type will be given a definite and specific role to play. Modern, high capacity buses will carry large volumes through the main corridors; smaller mini-buses will serve the more congested areas; rickshaws and baby taxis will act as feeder services linking neighbourhoods with the main transit lines. As the population expands into new areas, the mass rapid transit system will be extended so as to anticipate the development and serve the new growth areas.



The role and services of river transport will be integrated with the overall city-wide transport system by creating closer and properly designed linkages between river transport and land transport. This will be achieved by re-designing the ferry terminals, providing seamless interfaces between river and land-based transport and by linking the fare structures to allow through ticketing of travel.

There will be a co-ordinated and area-wide program of highway and street building, commencing immediately and spreading over the next 20 years. The main arterial highways will be integrated into a linked system serving the demand for travel by cars, buses and commercial vehicles. Local streets will be developed to serve localised travel and to ensure that neighbourhood travel and public transport feeder services can operate efficiently, safely and in comfort. In general terms, the main arterial highways will be developed without provision for rickshaw movements. Instead the rickshaws will operate as neighbourhood transport and at the same time, they will be provided with properly designed and located waiting areas so as to enhance the linkages between main corridor transit and localised feeder services.



The overall design of the transport systems both public and private transport will be re-planned and re-constructed with the object of safety in mind. Injuries, deaths and property damage from road, rail and water-borne disasters are a hugely expensive aspect of modern day life in the city. The new plans for all forms of transport will address this issue and will specifically look at the pedestrian systems and rules. There is a need to re-focus the priorities between people and vehicles and the new plans will emphasise priority preferences for the pedestrian. There will be new and more stringent rules enacted and a new force of traffic wardens will monitor and enforce the regulations to ensure that vehicles give preference to pedestrians.

1.3 THE MEANS TO GUIDE DEVELOPMENT

The implementation of the selected strategy will require a firm and consistent control mechanism. This will be achieved by placing the overall management of the development in the hands of a unified authority, which will be made responsible for overall control of land use and transportation planning – but only at a strategic level. The detailed implementation of plans and projects will continue to be the responsibility of the line agencies and the municipal authorities. The new strategic agency will assume responsibility for the land use planning and transportation systems planning for the metropolitan region of Dhaka. This new agency – referred to as The Dhaka Metropolitan Regional Authority [or by its acronym “DAMERA”] – will



- a) monitor the development of the strategic transportation systems and
- b) will receive and approve applications for major land and transportation systems development.

All of these developments will need to be in accordance with the preferred strategy and general guidelines provided in the Strategic Transport Plan. DAMERA will also establish detailed policy guidelines and will monitor the implementation of these guidelines by the organisations responsible.

1.4 OBJECTIVES OF THE FINISHED PLAN

In order to guide the development of the future Mega city, there will be a set of clearly defined objectives. The adherence to the policies contained within this statement will ensure that the long term vision is not lost in the minutiae of day by day implementation. The following will be the guiding objectives:-

- *The provision of a safe and reliable public transport system including both bus and mass rapid transit services at prices which are affordable by all sections of the community.*
- *Provision of highway and street infrastructure to serve the different functions required by different users.*
- *Integration of different modes of transport by linking routes and services and by developing a common ticketing system.*
- *Enhancing the transport systems so as to encourage economic growth in order to make the competitive position of Dhaka and Bangladesh stronger in a world market.*
- *Acknowledging the needs of special sections of the community especially the needs of children, the aged and infirm and women.*
- *Revision of laws and regulations so as to encourage the involvement of the private sector in the design, construction and operations with Government control in the planning of land uses and transportation systems.*
- *Revisions to the systems of licensing and testing for both drivers and vehicles in order to improve the quality of both and to eliminate non-licensed vehicles and drivers.*
- *The creation of a 'Pedestrian First Priority' system to enhance the provisions for pedestrians and to increase the safety of vulnerable road users.*
- *Creation of environmental pollution control standards with special emphasis on noise and emissions from vehicles.*
- *A careful re-planning and re-construction of all city roads using up to date traffic management techniques so as to ensure that the maximum capacity from existing and future highways is realised consistent with a sound safety policy.*

1.5 PUBLIC RESPONSE

The following sections of the Urban Policy Document provide more detailed information on 15 important issues that have been identified for further study and enactment by the relevant agencies. These policies are intended to benefit the whole of Dhaka and the Government wishes to have the public be active in making comments on these issues so that the Government can truly prepare for the future expansion with the full backing of the people of Dhaka.



2. KEY POLICY ISSUES

GENERAL INTRODUCTION

The transportation systems in Metropolitan Dhaka are not only below standard compared with other capital cities but they have reached a crisis point that requires immediate attention. A concerted effort is needed from all concerned to resolve the city's transportation problem. The Government has used a loan from the World Bank to undertake a study of these problems and the Consultants³ responsible for the work have identified 14 key issues relating to the transportation system. Each of these key issues are described in this section of the Policy Document and all are considered later both individually and collectively so that policies can be identified and the processes put in place to remove the concerns, which are expressed.

ISSUE 1. SAFETY

The high frequency of deaths, injuries and property damage especially on roads leading to an associated loss of productivity results in a large burden on the economy and a traumatic effect on the victims and their families. It is estimated that some 3% of the Gross National Product is lost due to these occurrences. A staggering figure of US\$700 million.

The high rate of collisions and injuries is caused by many factors including badly designed and maintained roads; poor driving capabilities; defective vehicles; lack of public awareness; lack of proper traffic management; minimal enforcement; frequent overloading of motor launches; and many other causes. Legislation is not appropriate and the enforcement of the law virtually non-existent.

Improvements in the situation will not occur easily; nor will they take place overnight. The mindset of the people has to change before there can be major improvements in the operating conditions. Much can be accomplished with changes in licensing and vehicle checking. But the real improvements will result only when the people themselves decide that "enough is enough" and they adopt a different, more responsible attitude. Policies will be written to alleviate the situation but public awareness and responsibilities are the key issues here.



ISSUE 2. PEDESTRIANS

Pedestrians are the most vulnerable of all road users and require special facilities for their protection. The absence of a clearly defined system makes travel by this mode of travel unpleasant and hazardous. Some of the important factors which need to be addressed are; the lack of pedestrian first priority policy; the absence of continuous footpaths on both the main routes and the neighbourhood streets; poorly designed badly located and ill-advertised pedestrian crossings; encroachment on the footpath from



³ The study was undertaken by The Louis Berger Group, Inc from The United States and Bangladesh Consultants Ltd from Dhaka.

traders and equipment and the absence of facilities for the movement of disabled persons, all contribute to a dangerous situation.

ISSUE 3. PUBLIC TRANSPORT

Aside from walking and cycling, public transport⁴ is the only means of travel for the majority of the city dwellers. The relatively high cost places these modes out of the reach of many lower paid workers. The poor service provided makes these modes unpleasant to use. The systems compete with each other for the patronage of the traveling public mostly with inferior and out of date equipment and on roads which are badly surfaced causing additional wear and tear on the vehicles. Bus stops are badly located and routes are not advertised leading to confusion on the part of the users. Waiting areas for rickshaws and Baby Taxis are not properly located or designed leading to these vehicles standing on the traffic lanes. The interfaces between different sub-modes are poorly designed with buses, rickshaws and baby taxis stopping in the same areas causing congestion and disorder.



Bus and ferry terminals and rail stations are in poor repair although moves are in place to improve some of these. There are virtually no public transport priority measures in existence and public transport has to fight with other modes for road space. All of these adverse conditions have a major impact on public transport services making it inefficient, uncomfortable and unreliable.

The proliferation of many owners operating single vehicles rather than larger companies or co-operatives operating fleets is an impediment to an organized and passenger-orientated system.

ISSUE 4. NON-MOTORIZED TRANSPORT

The non-motorized transport (NMT) mode (primarily the rickshaw) has played a definite role in the overall public transport system in Dhaka for many years. However, there is a lack of control on their numbers and operations leading to inefficiencies and danger. There is a lack of encouragement from the authorities to this mode of travel and the fact that many smaller streets are in poor condition is a detriment to their use within neighbourhood areas. Bicycles also face hazardous conditions and there are virtually no provisions for their operations. Dangerous conditions exist due to the intermingling of widely different speeds when rickshaws and motorized transport move on the same routes. It has been said that there are too many rickshaws in the city. Estimates of up to 600,000 have been posed against a figure of some 89,000 official licenses. In addition to these operational difficulties, the rickshaw vehicle itself needs to have a design overhaul in order to improve the operations and reduce the effort required to move it.



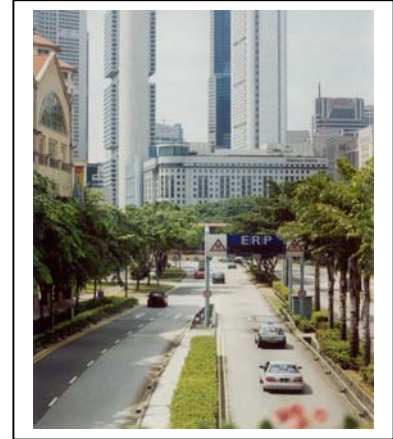
ISSUE 5. TRAVEL DEMAND MANAGEMENT

At present, automobile ownership and usage is low due to lack of available income. In the longer term and as the economy expands, the automobile ownership will increase although macro-economic forecasts show that this increase will not be rapid nor large. Nevertheless, there is the opportunity now to plan for this inevitable

⁴ In the context of the Strategic Transport Plan, "Public Transport" includes bus, rail, waterways, taxis, auto-rickshaws, rickshaws and tempos.

increase in order to protect the environment and improve the quality of life in the city.

There is a need to rationalize and balance the use of automobiles in the city compared with the use of other more efficient forms of transport. In general, the automobile stock is of a much higher quality than the public transport fleet. This is understandable since automobiles are maintained by individuals who have a higher income and automobiles are personal transport. However, there is a lack of proper administration of vehicle licensing with fake licenses being issued at will. The issue of fake driving licenses to individuals is even more prevalent and more worrisome. Although a written test is a pre-requisite of having a license granted, there are still illiterate drivers on the city streets. Also of great concern is the lack of control over the granting of vehicle roadworthiness certificates. Third party insurance is compulsory although many insurance companies do not take part in the schemes.

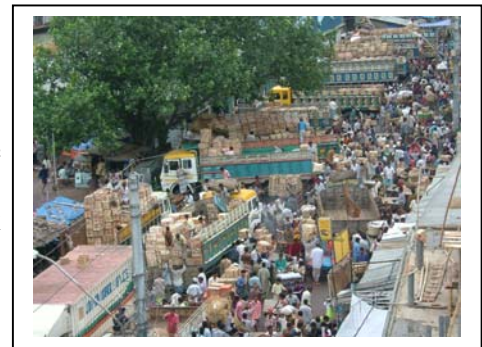


The situation is not solely restricted to automobiles as rickshaws are notoriously in breach of the driver and vehicle licensing requirements.

Travel demand management measures can be used in order to create a balance between supply and demand of the different systems (public and private) and also to keep the demand at a level which can be better served. The measures will be used to reduce usage by some modes and move travel from inefficient modes (such as automobiles) to more efficient modes (such as buses).

ISSUE 6. URBAN FREIGHT TRANSPORT

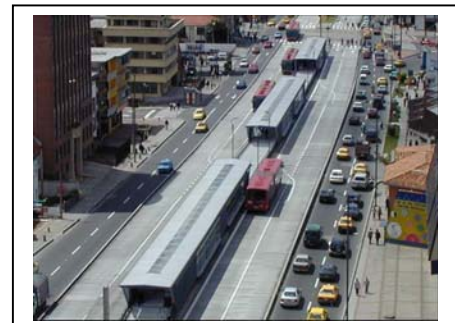
Urban freight transport is a crucial element of the transportation system and the economy as a whole. Unfortunately, the sector is not given much emphasis in the planning approach. Truck bans exist currently on the city roads and this results in lower perceptions of their activities. The unplanned growth of the truck terminals and the wholesale markets cause congestion following the break-bulk operations which take place here. For this reason, DCC has been contemplating the removal of these terminals to fringe areas of the city. The issue needs to be carefully addressed.



ISSUE 7. MASS TRANSIT

As the Dhaka metropolitan area grows to its future targeted population of over 35 millions, there will be increased demand for public transport service. An efficient mass rapid transit system which the general public can afford to use will be required to transport people to work and in their leisure pursuits.

The existing bus system, as described in Issue 3 above, can not be expected to provide this mass rapid transit system. What will be needed is a modern, clean, efficient system which will create a high level of service covering the whole metropolitan area and reaching out to the new communities in an integrated manner. The technology will evolve over time as the demand increases. However, in developing any mass transit system, many important factors which are to be taken into account are common to all systems.



There is a lack of experience of mass rapid transit system planning and operation in the country and the system planning will require advice and assistance from outside agencies. There is a complete

lack of discipline on the arterial roads hindering efficient bus systems and all vehicle types are free to use virtually all links although some measures are being taken to restrict rickshaws from some highways. If rail systems are to be used for the mass rapid transit system, then the technology will need to be imported including cars, operating and control systems and knowledge of how the systems should be managed.

If buses are to be used as the rapid transit system, then the absence of vehicle priority lanes and the organization of arterials and other roads will need to be completely reviewed and re-designed. There are many small bus companies (sometimes with just one unit) and too few larger operators or co-operatives with limited capabilities making the creation of a new system from the existing systems difficult to implement. It is likely that a new company will be needed to operate the new system.

ISSUE 8. SYSTEM INTEGRATION

The greatest efficiencies in operating transportation systems are achieved when the sub-modes act together. In Dhaka, the existing modes and sub-modes act independently of each other and often are in competition. Whilst competition per se is not bad, the idea of allowing the sub-modes to benefit mutually from each other is to be encouraged. This is particularly so in Dhaka where financial resources are so limited. In the present systems, the passengers suffer due to the lack of inter-connection of modes and poor scheduling.



The systems should be planned so that all modes of transport are integrated. People frequently travel on more than one mode (river to rickshaw, or walk to bus for example). At present, individual bus operators issue their own tickets, run their own schedules and stop when they feel like it. There are also the disturbing reports of the practice with some operators of refusing to pick up some passengers (women for example) due to prejudices of the individual operators or drivers. The new systems will need to use whatever resources they have available in order to enhance the existing services and to provide for increasing demand in the future.

ISSUE 9. TRAFFIC MANAGEMENT

The management of the existing road space is badly conceived. There is virtually no control over which vehicles use which roads. Lane discipline does not exist and there is haphazard parking and stopping on the running lanes. There is lack of development coordination between the concerned agencies and overlapping of functions among them. Together, this breakdown in communications and operational service has caused a substantial loss in available capacity. It is estimated that up to 50% of the capacity of the arterial system is wasted due to poor operating conditions. Proper traffic management measures can be put in place to re-establish this lost capacity.



Measures which contribute to this lack of capacity include poorly controlled frontage development with storage of materials on the footpaths and road lanes. There is widespread encroachment onto the highways and footpaths by street hawkers encouraging people to stop on the highway to buy produce and other goods.

One of the most critical aspects of this operational inefficiency is the lack of a proper functional classification of highways in the city. Steps have been taken to make this classification but the results are confusing and the implementation is lacking. There is almost complete absence of the enforcement of traffic rules. The Police have a huge task in taking control of the violations which take place constantly and this enforcement is not helped by the reportedly widespread corruption which is prevalent in the force. There are inadequate designs for traffic signaling systems at inter-sections, poor signing and pedestrians crossings suffer from low visibility. An up-to-date traffic data base is missing and there is a need for trained man-power to manage this important source of information.

ISSUE 10. PARKING

The haphazard parking of vehicles (both motorized and non-motorized) causes substantial loss of road capacity. The parking on the running lanes creates adverse environmental impacts and a dangerous situation for pedestrian traffic due to obstructed visibility. Provision of valuable road space for the parking of vehicles is a very inefficient use of space especially where there is limited road capacity available. Over the years people have become accustomed to stopping where they choose and leaving the vehicle without thought to the consequences of poor parking. The future city can no longer accept this behaviour.

There is a draft parking policy available but it has never been implemented. In part, this is due to the lack of a clear directive as to who is responsible for the implementation. The policy needs to be reviewed and revised and put into practice. The stock of parking spaces available is currently unknown. The present study will provide some information to allow the policy to be revised. But a more detailed study of parking supply and demand is needed with the objective of identifying permanent and temporary parking areas for cars, taxis, bicycles, rickshaws and other vehicles. A differentiation between long-term and short-term spaces is needed and some of the major building complexes should be required to provide operational parking spaces. It seems clear that the law has inadequate provisions to penalize violators of the parking policy once written. It is also evident that the Police force would find parking enforcement duties to be too onerous given their current workload on other law enforcement and a separate parking force (possibly from the private sector) will be required.

ISSUE 11. ENVIRONMENT

Air and noise pollution particularly in the urban areas is a major cause of concern not only from the point of view of smell and nuisance but specifically regarding its ill-effects on health. It is also detrimental to the quality of life of the city dwellers. Major strides have been made with the introduction of the mandatory use of CNG fuel for baby taxis. It is likely that this action will extend to other vehicles.

From the point of view of the transport sector, the exhaust emission challenge can be addressed by looking into fuel technology, vehicle technology and planning interventions. The introduction of CNG is a successful example of the first action. Planning interventions are addressed in the traffic management issue (see Issue 9 above). The vehicle technology issue is one which is perhaps the most critical and which could be improved giving the most dramatic results. The



lack of motor vehicle emission standards is a critical issue which needs to be resolved. There is ineffective control of worn out vehicles coupled with an ineffective system of roadworthiness testing. This is one area in which examples from other countries can be usefully transferred into Dhaka conditions and the private sector can play a significant role.

In addition, there is a need to enforce a rule requiring that all major projects whether commercial, residential or transportation should be subject to an Environmental Impact Assessment.

ISSUE 12. TRANSPORT AND LAND USE PLANNING

For many years, transportation and land use planners have known about the interaction between the two disciplines. Land Use development results in a demand for transportation and the provision of transportation linkages encourages land use to take place in a planned way. In Dhaka, and in spite of there being a Structure Plan adopted by the government⁵, there is a lack of guidance on city planning. Most importantly, the control on planning development is not exercised. Planning applications are not processed correctly and there is little or no evidence of Traffic Impact Assessments being made for new developments.

The lack of integration between land use planning and transportation planning results in uncontrolled and unplanned development, non-compliance and a poor mix of land uses leading to inefficiencies in the transportation system. The results are larger distances between linked land uses such as between residential and work places and the need to provide long haul transportation systems and other infrastructure to serve the land use developments. For shorter distances, where vehicular transportation is not required, local plans should investigate improvement of non-motorized transport and pedestrian facilities.

ISSUE 13. SOCIAL AND POLITICAL ASPECTS

The social impact due to the implementation of any project particularly those encompassing the development of a transportation system can not be ignored. This is particularly true if the project has an element of land acquisition in turn resulting in resettlement of the project affected persons. On the other hand, the government has an obligation to provide the services (including transportation systems) which are required by its citizens. This obligation extends to all persons equally as well as the need to acknowledge the special needs of workers, women, the young, the aged and the disabled.

The frequent political intervention in the development and operation of transportation systems is a serious impediment in bringing proper order and discipline in the city. The higher income groups of society are able to afford the fares on most public transport systems. It is an unfortunate fact that the inequality in this situation affects the poor and needy. There is evidence of increasing crime on transportation services. There is a lack of a system of transparent government subsidies for the poor and infirm. In addition, there is a lack of equitable treatment resulting in the middle and high income areas benefiting more from investments. There is also a need to consider how proper transportation service can be provided to some sections

⁵ *The Dhaka Metropolitan Development Plan, published by RAJUK in 1998.*

of the public so as to decrease insecurity and eliminate the harassment of women on public transport.

ISSUE 14. INSTITUTIONAL AND FINANCIAL

The successful implementation of projects and innovative concepts resulting from the Strategic Transport Plan for Metropolitan Dhaka will depend heavily upon the application of effective enforcement and maintenance measures and a high standard of administration. All these aspects will need infrastructure investments and considerable institutional development through training and the provision of increased resources.

There is need to identify those institutions, which will be responsible for the implementation of the proposed infrastructure investments. At present the functions are split between agencies with overlapping responsibilities making coordination and actions confusing and inefficient. The allocation of responsibilities and resources among the different modes of transport and for institutional development of various agencies involved is also not well defined and requires rationalisation.

In order to finance the implementation of recommended projects required for the development of Metropolitan Dhaka, there are a range of possible options including creating a user charges system and providing equitable subsidies in the right manner and at as low a level as possible. There is a need to encourage loan financing from major international agencies. The private sector will also need to play a vital role in the promotion of Private Public Partnerships in order to fix project implementation in a firm manner.

ISSUE 15. PRIVATIZATION, DEREGULATION AND SUBSIDIES

The participation of private organizations in the transportation sector is not well organized and is limited to the operation of buses, trucks, taxis, auto-rickshaws, rickshaws and tempos. Although the private sector is deeply involved in the provision of bus services, in-depth management and development of transportation systems is noticeably lacking. The current scene in term of bus transport is one in which large numbers of small operators run stage carriage services with little control and monitoring. There is also a mismatch between who is allowed to obtain subsidies and on what basis although the National Land Transport Policy has clarified this by stating that all sectors may participate provided the evaluation is transparent.

The legislative background needs to be completely reviewed in order to create a climate in which private sector investment may flourish. The area in which the private sector can become deeply involved will require careful definition and an open system of competitive bidding for projects will need to be introduced.

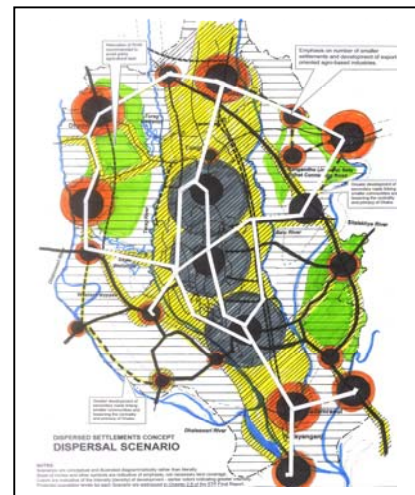
3. INTEGRATING THE PLANNING OF LAND USE AND TRANSPORTATION

3.1 INTRODUCTION

The integration of transportation planning and land use planning in the context of the development of metropolitan Dhaka is critical. The only realistic approach for the successful control of growth of development involves an active commitment to policies involving transportation and land use planning. It is essential to recognize that the size, growth rate and distribution of the density of metropolitan Dhaka have a crucial impact on the dependence on transit. Policies for increases in density around transit nodes and along transit corridors can achieve reductions in congestion and pollution and can maximise the transportation infrastructure. Unfortunately, the pro-active commitment to such policies and the recognition of the importance of the integration of land use and transportation planning has been lacking in the Dhaka area. One of the purposes of this policy document is to address this issue and recommend policies to rectify this omission.

3.2 THE LAND USE / TRANSPORTATION PLANNING PROCESS

Land use planning and transportation planning interact between themselves to determine development patterns. The two are so interconnected that they need to be considered simultaneously. Old Dhaka developed before the motor car as a complex network of pedestrian orientated passageways reflecting the predominant means of transport at the time. The new town areas (Ramna for example), reflect the land use planning principles of their time evolved on the basis of vehicular transport. In Dhaka as elsewhere, the public sector plays a vital role in transportation, particularly with regard to regulating the system. The most significant changes in land use patterns over the last few decades have resulted from major changes in the densities of residential areas causing changes in the characteristics of transportation. Clearly, there needs to be an integration of the two aspects.



***Policy 1:** To achieve integration between transportation and land use development, the government intends to create a unified authority that will be responsible for the planning of both land use and transportation systems. Whereas the two functions are currently separated,⁶ the new metropolitan authority will have responsibility for both functions. The policy therefore, will be drawn to place the Dhaka Metropolitan Regional Authority (DAMERA) at the centre of strategic planning for the next 20 years and beyond.*

***Policy 2:** The formulation of the most efficient plan and the creation of a new authority will not be enough on its own for successful implementation. What is most essentially needed is the political will and determination of the Government supported by the people's commitment to achieve the objective. The Government will create systems such that the climate will be amenable to encourage the public to participate in the policy drafting and comment on this Policy Document.*

⁶ RAJUK developed and is responsible for the Structure Plan. DTCB developed and controls the Strategic Transportation Plan.

3.3 ACCESSIBILITY FOR ALL

Dhaka has a mixed pattern of land use. This has developed organically to enable people to minimize their journey times by walking, cycling or traveling by rickshaw between their residences and their places of work. Motorized vehicles have played a minor role in providing commuter services. Central Business Districts (CBD) are presently located in a few main areas namely: Old Dhaka, Motijheel, Badamtali, Karwan Bazaar, Mohakhali, Sowarighat and Banani/Gulshan with the main concentration of the CBD still at Motijheel. Manufacturing activity is spread geographically not only in the peripheral zone but also in the immediate and inner zones (garment industries). The workers follow the employment locations living in nearby temporary shelter housing and creating slum areas.



Policy 3: The Government acknowledges these mixed use areas and will endeavour to serve the needs of all the people with the most appropriate transport means. All housing and employment areas will be served with roads and streets suitable for the appropriate form of transport, be it walking or automobile and all other modes in between these two. There will be no discrimination between modes in terms of accessibility and the Government will serve low income workers who walk to work with the same degree of importance as it does high income families who drive. Accessibility is for all and the policy will manifest itself in the financial aspects of the development plan.

The future plan for metropolitan Dhaka contemplates scenarios in which there will be a densification of growth in the central spine together with an active program to divert growth away from the existing city areas to satellite communities.

Policy 4: The Government will provide high quality transport systems to encourage and serve the preferred land use development as recommended in the STP report and will strengthen the process of land use control and planning permissions to make this happen.

3.4 EFFICIENCIES IN THE SYSTEM

The importance of an integrated land use and transport planning approach will need to be encouraged to ensure the orderly growth of the modern city. The highest density development will be concentrated around transport nodes such as mass transit stations and economic activity zones such as Export Processing Zones (EPZs).

Policy 5: In order to articulate the inter-action between the land use and the transport systems, the Government will empower DAMERA to develop new policies and guidelines based on the recommendations of the Strategic Transport Plan and the Government will enact such laws and controls that will encourage the development in accordance with the Preferred Strategy of the Strategic Transport Plan.

4. DEVELOPING AN INTEGRATED TRANSPORTATION SYSTEM

4.1 INTRODUCTION

Because of its comparative advantages in terms of speed, flexibility and accessibility, road transport has emerged as the most popular mode of transportation in Bangladesh. The Dhaka Metropolitan area is no exception to this trend. As a result inland water transport and the railways have been facing marginalization with respect to the carriage of passengers and goods for many years. As a result, the approaches to transportation system development followed in the past decades need to be reviewed to create a balanced and multimodal transport system in Dhaka. Although there have been a number of transportation studies in recent years, no serious effort has been made for the functional integration of different modes of transport. However, it is well known that without effective integration of transportation systems, economic benefit, convenience and comfort from transportation services can not be derived. Dhaka is one of the least motorized cities in the world with a figure of approximately 30 motorized vehicles per 1,000 population.

4.2 The Need for Integration between Modes

The main challenge in Dhaka area is to identify and link together the most appropriate modes for any journey. With automobile usage limited to 8% of the population, the vast proportion of trips are by public transport modes. Unfortunately the existing modes and sub-modes (bus-water-rail-NMT) are acting independently of each other. As a result the passengers suffer due to the lack of inter-connection and scheduling and freight traffic faces delays and increased costs particularly when it is carried by waterways from outstations for destinations inside the city. There is an urgent need for integration between modes for economic reasons and for convenience and comfort of the passengers.



***Policy 6:** The Government will implement a policy that removes the inefficient competition between modes in order to encourage the selection of the most efficient mode or series of modes for each journey and integrate the modes. This will be achieved by identifying the correct blend of modes, integrating the most efficient and putting in place, publicity campaigns to advertise these interactions between modes.*

4.3 MINIMIZING TRANSFER TIMES

The present deficiencies in the inter-modal integration of the transport system are economically unsustainable in the long run. The current systems are time consuming to travel by more than one mode. Integration of the physical infrastructure development and the institutional coordination between the various agencies⁷ involved is needed to minimize transfer times of travel of passengers and freight traffic. In addition, the national transport system is not integrated with the city-wide system resulting in delays and mismanagement of handling of traffic. Dhaka International Airport has few direct bus connections and a long walk to the rail station. This problem of

⁷ In parallel with this Policy Document, the Strategic Transportation Plan is providing a report on changes and strengthening of agencies in the city, which will be charged with implementing the policies and the planning strategy.

interfacing between the modes has been addressed under the Strategic Transport Plan by providing physical facilities and encouraging development at traffic generating centers like transit stations, bus and truck terminals, railway stations, inland river ports and the airports.

Policy 7: The Government will make a thorough investigation of the current mode routes and services and will provide funds to ensure that connections are made efficiently and safely. This will be achieved by creating properly designed walking routes and cycling pathways between each of the separate modes. In addition, the physical planning of services (for example road-based bus/NMT systems and river-based ferry services) will be made such that there is minimal separation between the stops.

4.4 INTEGRATED TICKETING

The physical integration of various modes and sub-modes of transport will not be enough on its own to bring the necessary efficiency and convenience to the systems. There is a need to introduce some form of easier fare payment. This will not be easy due to the diverse nature of the existing public transport services.

Policy 8: An innovative but easily understandable mechanism will be developed for the integration of fares between modes and the provision of a common ticketing system to allow free movement between different modes.

Policy 9: The Government will encourage the private sector to develop a common ticketing system and to implement the interfaces between modes. The new unitary authority DAMERA will provide the details to allow this to take place and will coordinate the development of the system with the private sector operators.

5. PROVIDING AN AFFORDABLE PUBLIC TRANSPORT SYSTEM

5.1 INTRODUCTION

Meeting the demand for transportation systems in the city immediately and in the future will rely heavily on public transport. The demand and usage for automobiles will increase from its present low figure as available income increases but the base numbers of vehicular demand will remain comparatively low. The multi-faceted approach for the development of the transportation system in metropolitan Dhaka has been defined under the Strategic Transport Plan. This study has recommended a bus-based rapid transit system as the backbone of the service running with priorities on the primary roads together with a series of secondary systems in the neighbourhoods and serving as feeders to the main rapid transit lines.

The main feature of the systems to be put in place is that they are to be built to serve the people of the city. In the main, the residents are poor and poverty alleviation is a national goal of the utmost importance. In terms of transport, this goal translates into making the systems affordable to the majority of those wishing to use it.

5.2 SETTING FARE STRUCTURES

The Government of Bangladesh has recently approved a National Land Transport Policy, which states that the transport users should pay for the costs of services. To a very great extent, the provision of public transport services is in the hands of the private sector. Private operators with a few notable exceptions control stage carriage bus services, rickshaws, baby taxis and river ferry services. As a result it can be said that public transport users do already pay for the cost of the services. If they do not, the operator will go out of business. In the future, as new and more modern systems are introduced, there will be more central control, albeit by larger private operators with the probability of higher fares. There is a need to protect the public by regulating tariffs for passengers in road, rail and river transport.



***Policy 10:** The Government will identify a reasonable fare structure in consultation with the operators and with the agreement of the unitary authority DAMRA. The fare structure will take account of the length of trip and the type of service provided.*

***Policy 11:** Where Public-Private Partnerships are concerned, the Government will provide Concession Agreements with adequate provision for profit whilst at the same time ensuring an equitable fare structure for the passengers.*

***Policy 12:** In order to create a sustainable system, the fare structures will be based on the fact that fares have to be revised periodically to adjust for justifiable cost increases, they must recover operating cost and, as far as possible, they should meet asset replacement cost.*

5.3 FINANCIAL CONSTRAINTS

Acknowledging the need for investment in the future systems, there needs to be a realistic acceptance that there is a limitation upon financial resources. The preferred strategy issued by the Strategic Transport Plan shows that there are heavy restrictions on the types of rapid transit systems which can be afforded. These constraints have led to the conclusion that for the foreseeable future, the rapid transit system will be largely bus-based running on improved arterial highways.

The new bus rapid transit system will require investment in infrastructure to improve the existing highways, provide stations and fare collection gates and equipment and provide new buses and operating controls. All of this will require the fare structures to be set accordingly. At the same time, the metropolitan authority will need to recognize the balance which needs to be placed in providing a service to the community and making that service sustainable.

Policy 13: The Government, via the unitary authority DAMERA, will establish a new bus rapid transit operating organization, which will be suitable to attract a Public Private Partnership organization governed by a Concession Agreement and allowing an operator to Build Operate and Transfer a new high capacity rapid transit systems for the needs of metropolitan Dhaka. The Concession Agreement will specify the conditions applying to the setting and adjustment of fares and to the level and distribution of profits accruing from the operation.

5.4 SUBSIDIZING THE POOR AND NEEDY

One main goal of the Government is to reduce poverty over a period of time in a planned manner. In order to achieve this objective, the Government has recently developed a plan call "Poverty Reduction Strategic Plan" (PRSP). As a result, all development plans and policies including those of the transport sector must address this priority aspect of the country. In the case of the Strategic Transport Plan, the in-depth needs of the urban poor were not identified or described. There will be a need for a separate Poverty Impact Assessment resulting from the adoption of the proposed strategy. The future public transport systems will require substantial investments and the fares levels will be set accordingly. This may place a heavy burden on some sectors of the population. As a follow up action of the PRSP, the National Land Transport Policy has provided statements whereby subsidies for transport services can be shared by the private sector provided the claims for subsidies are transparent and fair. Both the private and public sectors can bid for subsidies but they will be expected to participate under the same conditions.

Policy 14: The Government will investigate means whereby subsidies can be allocated to the poor and needy in order to make the transportation system affordable to all.

Policy 15: Where Public Private Partnerships are involved, the Concession Agreement will specify the conditions applying to the payments of subsidies such that the private operator is not required to subsidize those who benefit

from other Government policies such as preferential rates for children and pensioners. The agreement will be written such that other agencies will be required to compensate the operator for supplying fare-free transport.

6. EFFICIENT OPERATIONS OF URBAN FREIGHT SYSTEMS

6.1 INTRODUCTION

Freight transport is sometime neglected in the planning and development of urban transport in which the emphasis focuses on passenger transport. Goods transport in low-income cities like Dhaka can be an important employer of the poor via labouring jobs, hauling goods on hand carts or rickshaws. Efficient goods transport also affects the poor through its indirect impact on the prices of essential goods. In order to avoid congestion on the roads, the freight traffic, particularly trucks are restricted from moving in the city during the daytime. As the efficient movement of goods has an economic impact particularly on the prices of the consumable commodities needed by the city dwellers, it is necessary to ensure the efficient handling of goods in the metropolitan area.

6.2 URBAN FREIGHT MOVEMENT

The freight industry comprises two main segments, which complement each other. These are; the mechanized freight vehicles primarily trucks and the non-mechanized vehicles like rickshaws and "Thela Gari". Throughout the city there is an abundance of non-motorized vehicle stands which consume valuable road space and contribute to congestion, accidents and a general lack of orderliness on the road.

The freight industry is also very fragmented and trucks have a low use rate with large trucks achieving about 70 km/day operating for about 4 hours. The utilization rate drops below this level for smaller trucks. There are restrictions on truck movement through the city between 07.00 and 09.00 hours in the morning and between 16.00 to 18.00 hours in the afternoon. These bans are placed in order to reduce congestion.

At the same time the truck operations within the city is still not an organized trade. The business is conducted by face-to-face contact leading to inefficiencies and time wastage. In order to improve the movement of goods and utilization of freight vehicles there is a need to introduce a communication system for truck operators to enable vehicles to be parked at off-road depots and called into service when needed.

Policy 16: The Government will encourage private operators to introduce a communication system between them and truck drivers so that the operations can be made more efficient.

Policy 17: The Government will encourage small truck operators to organize themselves into larger groups or co-operatives so as to operate freight industry more efficiently.

Policy 18: The Government will promote more efficient types of multi-axle trucks for efficient movement of freight traffic and thus also to ensure less damage to the city roads due to the movement of trucks.

6.3 IMPROVEMENT OF TRUCK TERMINAL

In Dhaka there are six operating truck terminals. These are located at Tejgaon; Amin Bazaar; Pagla; Dayaganj; Mohammadpur and Gabtali. These terminals are in operation with the knowledge of DCC although (except for Amin Bazaar) they are not yet formally recognized and granted official status. These locations were not determined following a comprehensive traffic management scheme for adjacent areas. This lack of planning results in confusion and conflict with surrounding land uses and between local and longer-distance movements. The suitability of these terminals has been considered within the Strategic Transport Plan. While the need of these terminals is not questioned, their development as spontaneous actions, means that they will be need to be re-organized and developed.

Policy 19: The Government will enact regulations and rules for establishing the formal status of these and other terminals and will initiate actions for their development in a planned manner.

6.4 USE OF WATERWAYS FOR MOVEMENT OF GOODS

Dhaka is endowed with pleasant characteristics because of its numerous canals and khals criss-crossing the city, thus creating naturally attractive environmental feature. Despite this fact, the city is now left with just a few navigable water bodies such as Dhanmondi, Banani and Gulshan lakes, and the Begunbari khal up to Rampura inside the city. The situation has arisen due to indiscriminate infill of lakes and khals dating baack to partition in 1947. These lakes and the Begunbari khal do not carry any significant traffic neither passengers nor cargo.

However, the city is surrounded by a circular waterway system consisting of the Buriganga, the Balu, the Turag, the Tongi and the Sitalakhya rivers. These waterways carry a sizeable amount of freight traffic from the adjoining areas bound for Dhaka. The BIWTA under its scheme called "The Development of the Circular Waterways of Dhaka", is improving the navigability of the rivers and is also building landing stations along the waterways. It is expected that after the improvement of the circular waterways, freight will move more conveniently through the waterway system. Under the STP, these landing stations will be integrated with the land transport system of the city so that the freight from the waterways can also move into the city by trucks.

Policy 20: The Government will integrate the inland waterways with the city land transport system so that the movement of freight traffic from motor launches landing stations into the city will be made more efficient.

7. BALANCING PUBLIC AND PRIVATE TRANSPORT SYSTEM

7.1 INTRODUCTION

Dhaka is one of the least motorized cities in the region with approximately 30 motorized vehicles per 1,000 residents. Only 18% of journeys are made by automobiles and about 34% of people travel by buses⁸. A large proportion of journeys are made by rickshaw constituting some 36% of all journeys. How these proportions will change over the coming years is a matter of speculation. However, if all other city growth examples are to be followed, there will be increases in the ownership and usage of automobiles although forecasts from the STP study shows this growth as being very modest in Dhaka. The use of motorized traffic is still in its infancy in Dhaka and there are a large number of ways in which to plan for the future increases. The existing city has considerable physical constraints in relation to the geometry of roads. Future areas will be planned differently with wider cross-sections. As a result of these differences, it is likely that there will need to be a control of automobile access to the older parts of the existing city and a less controlled policy in the newly planned areas. This may cause polarization of functions and development and the balance to be struck will be carefully monitored.

7.2 THE INCREASE IN AUTOMOBILE OWNERSHIPS AND USAGE

Although automobile ownership and use will rise, the predictions of income are such that there will not be a sudden nor a dramatic increase in Dhaka. In fact, there needs to be control on the permitted use of automobiles. The recommendations of the Strategic Transportation Plan relate to providing a reduction of automobile access in favor of increased public transport access to sensitive areas. There are good examples from outside Dhaka⁹ as to how other cities have controlled the use of different transportation modes in different circumstances. But one particular aspect is common to almost all them. This is the development of a public transport system which has precedence over automobile access.



***Policy 21:** The Government will identify those areas of the city and the expanded development where there will be a policy of emphasizing public transport access over private vehicle access in order to preserve the built environment and the character of these historic and commercial areas. There will be no automatic right to enter such areas and control mechanisms will be developed either financial or physical to enact these controls.*

⁸ This information is provided from recent surveys undertaken by the Strategic Transport Plan for Dhaka.

⁹ In Singapore, an Electronic Pricing System is used to control the access by cars to the central area whilst simultaneously, the Government has developed a subsidized public transport system. Similarly the European Union has initiated an action program, which will among others, develop a high quality public transport system in preference to the unrestricted use of automobiles. The United Kingdom government in a recently published white paper called "A New Deal For Transport", has stated "We will safeguard our environment and develop an integrated transport policy to fight congestion and pollution"; and "The convenience of the car is eroded by congestion and driving itself is increasingly stressful"; and "we shall make public transport available for all and ensure that services are properly regulated in the public interest". Furthermore the city of London has recently implemented a 'congestion pricing scheme' which has had a dramatic effect on the penetration into the busiest parts of the capital.

7.3 ASPECTS OF ACCESS CONTROL

In the experience of other nations, it has become obvious that congestion on the roads can not be resolved by providing more road space. New roads simply beget more traffic. Instead, maximum use should be made of the existing infrastructure before new roads are contemplated. In moving towards areas of vehicle restrictions and the management of demand a number of measures will be necessary in order to reduce congestion and pollution in the city.

***Policy 22:** The Government will encourage the designation of some areas and streets as “motorized-free zones”. These areas may be designated for specific times or days and the built environment will be developed and improved to encourage walking and NMT service.*

***Policy 23:** For the more distant future, the Government will investigate the potential for the introduction of a Congestion Pricing System for specific areas of the metropolitan area in order to control vehicle traffic at specific hours of the day. At the same time a parallel public awareness program will be introduced to inform the public that revenues will be re-invested in the public transport system.*

7.4 THE NEED FOR CONTROL ON PARKING

One of the most important ways to control access to specific areas by some vehicles is to control the amount and type of parking spaces available. Clearly, if there are no parking spaces, then vehicle can not stop. This is an extreme case and a balance has to be struck. The need for a parking policy is clear and some attempts have been made in the past¹⁰.

In order to favour public transport and discourage automobiles, many countries have amended their planning rules. Originally it was mandatory for building complexes to provide parking to accommodate vehicles belonging to the residents and clients occupying those complexes. The amended rules limit the parking spaces in the buildings, meaning some clients will switch to public transport. As a result congestion on the road and consequent pollution level is reduced.



***Policy 24:** The Government will review previous parking policies as drafted and will either amend or approve the required policy. The policy will ensure that the correct balance is struck between long-term and short-term space provision and will enforce the restrictions and parking areas clearly.*

***Policy 25:** Parking control will become the responsibility of the municipalities who will administer it through a central parking control office. The office will retain its own staff and will employ parking wardens to monitor space usage and issue tickets to violators. It is preferred that this aspect be undertaken by the private sector and the Government will enact such rules as will make this possible.*

¹⁰ DUTP-II prepared a number of parking schemes for the critical areas of the city. These schemes were neither approved nor implemented by the relevant authorities. In November 2002, DTCC prepared a draft parking policy and submitted it to the DCC for action.

8. THE ROLE OF NON-MOTORIZED TRANSPORT AND PARA-TRANSIT

8.1 INTRODUCTION

Non-motorized transport plays an important role in the transportation system of Dhaka city. The use of rickshaws has a long history and, although the origins are not precisely known, it is possible that they began operating in the late 1940s, gradually replacing the horse driven cart. At present the rickshaw is the primary travel mode in the city¹¹. There is a maximum level of 89,000 licensed rickshaws set by the City Corporation. The exact number actually operating is not known but it is estimated that about 400,000 to 600,000 rickshaws ply for hire in the city. In addition to rickshaws, there are at least six other types of non-motorized transport operating in Dhaka. These are bicycles; flat-topped rickshaws; handcarts (known locally as “thela garis”); hand trolleys; bullock carts and horse-drawn carriages

8.2 ROLE OF RICKSHAWS

Because of inadequate and disorganized public bus transport service, the Rickshaw has filled the vacuum created and has become a popular transport among the middle and lower middle class population. Previous studies showed that the cost of trips by rickshaws is significantly cheaper than the auto-rickshaw (baby taxi), but considerably more expensive than buses and tempos. However, the cycle rickshaws’ range is limited with 90% of journeys within 4 km of the origin. For longer journeys, the auto-rickshaw is preferred. Interestingly, at times of flooding, most of the motorized vehicles become ineffective and a large number of the city dwellers depend on rickshaws and small boats (dingis) for transport. It is clear that the rickshaw has a definite role to play in the city’s transport system. However, their slow speed is not compatible with the faster moving motorised traffic that moves in the main arterials. In order to develop an efficient transport system for all, it is important to separate motorized and NMT on the main arterials. Instead, the rickshaw will be encouraged to serve neighbourhood areas and to provide more formalised feeder service to the main line rapid transit system.



***Policy 26:** Recognizing the continued need for the rickshaw in the city transportation system, the Government will support studies for the re-design of existing rickshaws so that less effort is required for their operation and to ensure that improved safety standards can be introduced.*

***Policy 27:** Non-motorized transport will be prevented from operating on many sections of arterial highways and especially at intersections between arterials and the National Highways. Rickshaws will be encouraged and assisted to ply on the lanes and narrow roads to serve local neighborhood demands and to provide feeder services from the neighborhoods to the main line rapid transit stops.*

***Policy 28:** The Government will design and encourage a program of training and an awareness campaign for the rickshaw pullers in order to improve their knowledge of traffic rules and road behaviour.*

***Policy 29:** The Government will launch a stringent program of investigation into the present system of licensing of Rickshaw pullers in order to prevent non-approved pullers from operating vehicles.*

¹¹ Recent surveys by the Strategic Transport Planning Study show a total of 36% of all journeys are taken by rickshaw.

Policy 30: The Government will launch a stringent program of investigation into the present system of licensing of the rickshaws themselves in order to prevent non-approved vehicles from operating with a view to increasing the quality of the fleet and reducing the number of badly maintained vehicles.

8.3 PROVISION FOR BICYCLES

In the 1950s and earlier, the bicycle was a major component of the city's transport system particularly among students, teachers and the younger generation of middle class people. With the increase of traffic flows and more dense development the danger to cyclists from motorized vehicles has increased. Reluctance has grown to the use of bicycles for status reasons and women find them difficult to manage in traditional dress. Significantly, there have been no provisions made on highways or smaller roads for bicycle paths or crossings thereby increasing the danger to these vulnerable road users.

In many cities of the world (such as Amsterdam, Tokyo, Copenhagen, and in many cities in China and Vietnam) the bicycle is a major component of the urban transport system. The bicycle has many advantages over other modes of transport and also has a proven medical advantage in the exercise provided. It is also one of the cheapest forms of urban transport – only one quarter the cost of bus travel per passenger/km, and one-tenth the cost of rickshaw travel. Bicycles take very little road space, are pollution free and are affordable to much of the population. There could also be a positive impact on the domestic economy by encouraging the manufacture of bicycles by local industries.

Policy 31: Bicycles will be recognized as a mode of transport and separate lanes and crossings will be provided within the city in order to make bicycle journeys safe and pleasant.

Policy 32: The Government will support local industries in the manufacture of bicycles so that new developments can make bicycle purchase affordable to the poorer sections of the society.

8.4 ROLE OF BABY-TAXIS (AUTO-RICKSHAWS)

In the recent past the two-stroke baby taxis (auto-rickshaws) were a major source of polluting in the city. The Government has withdrawn them from the city roads and replaced them by CNG operated four stroke baby taxis. These vehicles are better than the earlier ones from the environmental point of view. There is a bigger version of the baby taxi (Tempo) also a three wheeler capable of carrying 9-12 passengers.

On the major arterial roads and after the withdrawal of rickshaws, the baby taxis create problems due to their uncontrolled and reckless operation. In order to develop an efficient, comfortable and financially viable bus service, the role and operation of the baby taxis should be reviewed. In the short term for the next ten years, the Baby Taxis will be gradually restricted in the same way as rickshaws. They will be encouraged to serve neighbourhood movements and also serve as a feeder service to the rapid transit and bus services.

Policy 33: The Government will undertake a review of the Motor Vehicle Act and will revise it to change the method of licensing and fitness testing of baby taxis and tempos so that both drivers and vehicles will require to pass Government prescribed regulations before being permitted to operate.

8.5 ROLE OF MOTORCYCLES

Motorcycles serve well the needs of transporting the younger generation. This mode was very popular in the 1960s to 1980s but lack of road safety has diminished its use. In nearby India motorcycles are a very common mode used by both men and women in all the major Indian cities. In Bangladesh, women use motorcycles in rural areas as a requirement of job conditions, by NGOs and donor agencies. The use of motorcycles should be encouraged particularly as a means of travel for the middle-income earners.

9. IMPROVING SAFETY FOR ALL PERSONS IN THE CITY

9.1 INTRODUCTION

With the expansion of urbanization and the associated growth in motorized travel there has been a dramatic growth in traffic accidents. The accident record in Dhaka shows an erratic trend. The total numbers of accident quoted in the last seven years were in 1996 (1,270 accidents), in 1997 (1,378), in 1998 (1,556), in 1999 (1,079), in 2000 (946), in 2001 (729) and in 2002 (905) respectively. There is doubt cast upon the validity of this information and the source. However, in the last two numbers i.e. for 2001 and 2002, the types of accident are:- Fatal (368), Serious (529) and Minor (373) totalling 1270 in 2000 and Fatal (413), Serious (222) and Minor (48) totalling 905 in 2001. Thus it is seen that while the total number of accidents have reportedly reduced during the period the fatal and serious accidents have hardly changed (897 and 857). Experience shows that the accident risk endangers both pedestrians and NMT passengers who are together the most vulnerable road users. The urban poor who mostly travel on foot face higher risks than the rest of society. It is essential to take appropriate measures to address this problem in order to improve the situation.

9.2 PEDESTRIAN FIRST

In the absence of a clearly defined system of pedestrian priority together with the lack of good facilities for walking, pedestrians are forced to walk on the road and are therefore subjected to unnecessarily high risks of accidents. There are many factors contributing to this situation including absence of continuous footpaths; badly designed pedestrian routes and crossings; low visibility of crossings; encroachment on the footpath; absence of arrangements for the easy movement of disabled persons; lack of pedestrian education and driver awareness of the rules of the road; lack of recognition that transit passengers are also pedestrians at both the beginning and the end of their trips; lack of co-ordination between different agencies before undertaking development works on the roads. In order to address these problems, a "Pedestrian First Policy" is needed to encourage walk trips and safeguard pedestrians.



***Policy 34:** The Government will enact a Pedestrian First Policy to ensure the construction of properly designed and continuous footpaths with well-defined and maintained pedestrian routes in the city, the provision of pedestrian crossing facilities giving the pedestrian priority over all other traffic and the prohibition of unauthorised encroachment on the footpath by street vendors and others.*

***Policy 35:** The Government will support the launching of a comprehensive city-wide awareness program as a part of the implementation of a road safety campaign with special emphasis targeted at children, women and disabled persons.*

***Policy 36:** The Government will identify and promote some areas of the city as auto-free zones and provide the necessary facilities to make them pedestrian friendly so that walking becomes a favoured mode of travel.*

9.3 THE NEED FOR VEHICLE LICENSING CONTROL

The present annual growth of motorized vehicles in the city is about 7.6%. With the increase of economic activity the ownership and use of motor vehicles will experience a modest increase. This will change the mode of travel and will further alter the land use pattern to a more dispersed structure. The Government policy is to allow the import of used vehicles from abroad. However these vehicles are not always tested rigorously before they are allowed to operate in the city. One of the main causes of crashes on the roads is the poor quality of vehicles themselves. A stringent testing program is required in order to ensure that only vehicles which have passed a roadworthiness test can operate. Once vehicles have been tested they should be entered into a data base which is then maintained and accessible to relevant agencies.

In the absence of a properly maintained database, the authorities in Dhaka face another special problem in respect of the assessment of actual number of registered motor vehicles and the identification of ownership of these vehicles. As a result the law enforcing authority finds it difficult to locate and penalize the owners and drivers of the vehicles which violate the traffic rules.

Policy 37: The Government will revise the present system of vehicle registration in order to eliminate the possibility of vehicles which are non-roadworthy obtaining a certificate to operate. The vehicle testing program will include test of brakes, steering, tires, windscreens and lights.

Policy 38: The Government will encourage the private sector to establish trained technicians to undertake the vehicle testing program under license from the BRTA.

Policy 39: The Government will provide the funds and other measures which will be needed to establish and maintain an up to date data base of both vehicles and drivers. The data base will be managed by BRTA but will be accessible to law enforcing agencies and safety engineers.

9.4 THE NEED FOR DRIVER LICENSING CONTROL

Road crashes are a major cause of loss of life and property and the major factor in such crashes is the driver. Researchers estimate that 85% of all causative factors of accidents involve the drivers. The training, education and medical fitness of the drivers are necessary elements and should be evaluated before issuing any license to a driver. These controls are seriously lacking in Dhaka. It is said, that 90% of drivers in Dhaka are holding fake driving licenses.

Policy 40: The Government will review the existing system of issuance of driving licenses in order to amend it in favour of an improved and modern system.

Policy 41: The Government will ensure that the drivers are trained, skilful, aware of traffic rules and medically fit to obtain a driving license. The private sector will be encouraged to establish modern driving schools to train drivers in the rules of the road and the control of his vehicle.

9.5 THE RE-PLANNING OF STATIONS, STOPS AND TERMINALS

Bus stations, ferry terminals and stops have been haphazardly established and are unsuitable to a modern city with a growing future demand. Due to improperly planned bus routes and poorly located bus stops, buses stop and load/unload passengers on the road close to the inter-sections, causing unnecessary congestion and a serious risk of accidents to the passengers.

Policy 42: The Government will build upon the public transport plan established under STP in order to re-plan and re-site the locations of bus stations, stops, rail stations and ferry terminals.

9.6 ON-BOARD MONITORING AND CONTROL

Fare evasion and petty crime as well as harassment of passengers, particularly of women is prevalent on Dhaka city transportation systems. In spite of all out effort by the authorities these practices continue and grow. In order to avoid this situation and create some sort of deterrent to the defaulters and law evaders, frequent on board checking and monitoring of vehicles, trains and vessels needs to be initiated.

Policy 43: The Government will establish a proper method to ensure that public transport operators provide the proper protection for their passengers and to ensure quality compliance with rules and regulations of the Motor Vehicles Act by the owners and drivers of the vehicles and vessels.

10. IMPROVING AND PRESERVING THE ENVIRONMENT

10.1 INTRODUCTION

Environmental degradation, which also degrades the quality of life, has been a great concern all over the world particularly in urban areas. The European Commission in its new Transport Policy White Paper¹² has proposed a strategy designed to break the link between constant transport growth and economic growth in order to reduce the pressure on the environment and to prevent congestion. This strategy has provided food for thought for the Dhaka policy where economic growth is considered synonymous with the growth of transport.

The environmental condition of Dhaka has been very bad for many years and the city is rated as one of the most polluted cities in the world. The environment improved a little after the withdrawal of the lead-burning two-stroke baby taxis. But it has been observed that the city could not sustain that small improvement for long. It has been reported that airborne pollution in Dhaka has reverted to the earlier position because of the influx of diesel-burning buses. Counter measures are required in order to create and then sustain a good quality environment. It is expected that the Air Quality Management Project¹³ being implemented by the Department of Environment will provide an action program for improvement of the air quality of Dhaka city.

10.2 PROTECTING AND ENHANCING THE BUILT ENVIRONMENT

Although the total number of vehicles in Dhaka is small relative to the population, the city suffers from high levels of ambient air pollution due to vehicular emissions. About 1,000 MT of pollutants are pumped into the environment every day in Dhaka, of which 70% comes from vehicles. Other polluters are industrial units, garbage burning and other biomass burning by the slum dwellers and the burning of coal and wood by the large number of brick works in and around the city. There is indiscriminate throwing of plastic bags and other garbage in drains making them clogged. This, in turn results in flooding and traffic congestion.

In order to protect and enhance the quality of environment of Dhaka city, various interventions relating to the planning, vehicle quality control, use of alternative fuels and avoidance of leaded fuels are needed. In terms of planning intervention spatial planning, road and inter-section planning and demand management all contribute to improvements in exhaust emissions. Within the context of spatial planning, a land use plan has been prepared under the present STP study in which a transportation plan has been linked to land use with the objective of creating more efficient travel patterns and hence reducing environmental impacts. In the same study, new road links and the re-organization of existing ones together with improvements to inter-sections, linkages with other transport modes, development of more energy efficient public rapid transport systems and the minimising of travel needs are part of the recommended plan.

Policy 44: In pursuance of the Environmental Conservation Act 1995 and Rules 1997 and as a follow up action of the Air Quality Management Project, the Government will undertake to coordinate the findings and put in place the necessary measures to enhance and protect the quality of the environment in metropolitan Dhaka.

10.3 REDUCING POLLUTION FROM NOISE

Dhaka city is seriously affected by noise pollution. One of the main sources of noise is the indiscriminate blowing of horns by vehicle drivers. Before the withdrawal of two-stroke auto-rickshaws, these were also a source of noise pollution. Other noise generating sources include motorbikes, concrete mixing and other construction activities. The noise created from horns particularly hydraulic horns used by heavy vehicles and buses is not only medically harmful but is detrimental to the quality of life of the city residents. This is in spite of the existence of Clause 39 of the Motor Vehicles Act, which prohibits the use of such horns. The fines are low (Tk100) and are seldom, if ever, enforced.

¹² White Paper, European Transport Policy for 2010; "Time to Decide".

¹³ Air Quality Management Project of the Department of the Environment.

***Policy 45:** The ban on the use of hydraulic horns by vehicles within metropolitan Dhaka will continue and will be further strengthened and fines will be increased for violations. The indiscriminate use of horns particularly near clinics and hospitals and after 23.00 will be prohibited. The necessary rules will be established by DoE and powers will be given to police to enforce the bans and prosecute violators. The vehicle operators will be requested to cooperate and comply with the restrictions.*

10.4 REDUCING POLLUTION FROM VEHICLE EXHAUSTS

The diverse mixture of traffic coupled with poor traffic management systems, poor maintenance of most commercial vehicles and lack of proper monitoring and enforcement of existing laws, rules and regulations are the main causes of environmental pollution in the city. Motor vehicles contribute about 55% of SO₂, 70% of NO₂ and 60% of CO of the total from the emission exhausts.¹⁴ As a result different lung related diseases and headaches, nausea, irritation of eyes have become wide-spread. The Environmental Conservation Act 1995 and Rules 1997 have not been effective in combating the environment-related problem of the city. The Department of Environment is implementing the Air Quality Management Project for Dhaka. It is expected that the findings and recommendations of this project will direct the setting up of the vehicle emission standards for the city. Meanwhile the Government has approved some national policies¹⁵ to introduce mandatory emission testing as part of the vehicles fitness test, encourage the use of CNG by vehicles, import vehicles capable of CNG propulsion, encourage the conversion of existing petrol driven vehicles to CNG and fix price differentials between CNG and petrol driven vehicles.



The implementation of the above mentioned policies has been started in a modest way. Two-stroke baby taxis have now been withdrawn from Dhaka city. Conversion of petrol engines into CNG is being introduced in a few newly established conversion workshops. A few CNG operated buses have started operation in the city. Recently the Government has set up a committee to formulate an action program for the implementation of the Land Transport Policies which include the above mentioned environment related policies. It is therefore, expected that there will be gradual implementation of these policies.

***Policy 46:** In the light of the recommendations from the Air Quality Management Project, the Government will review the existing environmental rules and regulations and will bring in new standards so as to reduce pollution from vehicle exhausts.*

***Policy 47:** The annual certificate given to prove the roadworthiness of all vehicles wishing to operate will include test of exhaust emissions. The testing station will assess the exhaust emission and if the vehicle is found to have emissions which exceed the standards, the test certificate will not be issued and the vehicle prevented from operating within metropolitan Dhaka.*

10.5 IMPLEMENTING AN ENVIRONMENTAL PROJECT CONTROL

At present, provisions do not exist in the scope of infrastructure project design for the proper assessment of impacts on the environment. This is particularly true in projects relating to road construction and maintenance and the construction of residential and commercial complexes. The lack of such adequate environmental-related provisions creates adverse effects on the environment. Degradation of the environment due to these factors reduces the quality of life of the people and it has become imperative to enforce more stringent environmental control on the projects.

¹⁴ The CPD Policy brief on "Transport and Infrastructure".

¹⁵ The National Land Transport Policy adopted in April 2004.

Policy 48: All projects in metropolitan Dhaka above a threshold established in consultation with the Department of the Environment, will be subjected to an Environment Impact Assessment [EIA] before they are approved for implementation.

11. PROVIDING TRANSPORT FOR THE POOR AND NEEDY

11.1 INTRODUCTION

It has already been stated that a large number of the journeys in Dhaka is by walking. This is due to the fact that the majority of people in the city are poor and are not able to pay for transportation. Many of the people who walk to work are landless migrants from the rural areas. These people come to the city for work but most of them are unskilled and illiterate. As a result they live below the poverty level which is estimated to constitute about 50% of the total population of the city.

The development of the most appropriate transportation system is, by and large, dependent upon the prevalent socio-economic situation in the city. The inability to invest adequately in transportation systems is a major barrier to growth and this barrier becomes stronger when there is limited elasticity in the fare system due to economic situation. The wide stratifications of the population according to economic levels creates conflicting demands for the transport system. For example, the pulling of rickshaws provides a livelihood to many but creates traffic congestion. Many such examples of conflicting demands can be given. This situation becomes more complicated when there is under-employment. The situation then gives rise to hawkers stalls, way side garages all of which are in the “black” economy. Under such circumstances, the provision of transport facilities for the poor and needy is a challenging job.



11.2 PROVIDING PROPERLY DESIGNED PEDESTRIAN-WAYS

Dhaka city has few designated pedestrian routes and those that do exist are not continuous. Previously (see Chapter 9 of this Policy Document), it has been recommended that the government should adopt “Pedestrian First Policy” and under it all necessary facilities should be provided for the pedestrians. It must be appreciated that the provision of pedestrian routes alone will not suffice. In a well-planned city properly designed pedestrian ways must be integrated closely with other transportation elements so that walking becomes a recognized mode and becomes a pleasure and a place for brief social gatherings for the city dwellers.

Policy 49: The Government will amend the construction standards for the city roads and will include provisions in their design for properly planned footpaths particularly on the primary and the secondary roads and in the denser urban centres.

11.3 ENSURING PROVISION FOR THE DISABLED

At present, disabled persons find it very difficult to move in Dhaka because of the lack of facilities suitable for them. Except in a few good hotels, practically no disabled facility exists either on the roads or in other places like bus stations and terminals, bus stops, rail stations, motor launch landing stations and in the vehicles and launches themselves.

The city footpaths are not continuous, there are frequent changes of levels and their surface is not smooth and even. These conditions result in the creation of difficulties for disabled persons to move along the roads. The counters and platforms of the terminals and stations do not provide proper facilities such as low counters, ramps, special toilet facilities for disabled persons. In addition public transport such as buses, trains and motor launches do not provide any special seating arrangements inside and any facility to ride on the vehicles and motor boats. These deficiencies in the city transport system create impediments for the disabled and should be removed on a priority basis.

Policy 50: All the city roads will be re-planned to contain continuous footpaths and, where it is feasible and necessary, the footpaths will be provided with built-in ramps so that disabled persons can move conveniently.

Policy 51: The bus stations, terminals, railway stations and motor launch landing stations will be re-planned to provide proper facilities for disabled persons so that they do not encounter any impedance to movement.

Policy 52: Public transport of all kinds will be re-planned and re-designed or adapted so as to provide some facilities in the vehicles so that disabled persons can access the vehicles and ride on them in comfort.

11.4 PROVIDING TRANSPORT FOR CHILDREN

At present, neither public transport vehicles nor the roads of the city provide any special facilities for children. The city roads do not have bicycle routes and lack continuous footpaths. As a result children can neither go to schools on foot and by bicycles nor by buses since bus routes are not now generally designed that way. As a result parents send their children by private automobiles or by rickshaws or accompany them to schools on foot. This situation not only creates unnecessary journeys back and forth but also creates congestion on the roads and particularly near schools and colleges.

Policy 53: The Government will encourage school authorities to arrange owner-operated transport facilities for children and students and, in the future, will relocate these institutions, where possible, close to rapid transit and feeder routes.

Policy 54: The Government will ensure safety and security on the roads so that children can walk and bicycle to schools without fear.

11.5 MANAGING THE FARE STRUCTURES

Section 5 of this policy document has addressed the issue of affordable transport an issue of particular concern to the Government. In particular Policy 14 is relevant and is repeated here.

Policy 14: The Government will investigate means whereby subsidies can be allocated to the poor and needy in order to make the transportation system affordable to all.

12. PROTECTING THE RIGHTS OF INDIVIDUALS

12.1 INTRODUCTION

Every citizen of the country, rich and poor alike share basic rights provided under the provision of “Fundamental Human Rights” and the “Constitution” of the country. Under the Constitution the “*fundamental human rights and freedom, equality and justice, political, economic and social, will be secured for all citizens.*”¹⁶ While the rich have the right to ride in their private automobiles, the poor have an equal right to claim uninterrupted and safe movement in the city.

Bangladesh is considered to be one of the least developed countries of the world, with about 50% of the population living below the poverty line. Over 50% of the population are landless. The country is heavily dependent upon foreign aid for its development program. Under these circumstances, it is very difficult for the Government to mobilize adequate resources to meet the demand of all of the people. In order to maximise the benefit from the investment of scarce resources in the development of transportation systems the Government has opted to emphasize the development of an affordable public transport system which will serve the needs of the people including the majority groups which are the poor and the middle class.

12.2 MAKING SUITABLE PROVISIONS FOR THE POOR

It has already been stated that under the urban transportation policy, the Government will promote a public rapid transport system to meet the requirements of all the people. In addition, as the majority of the people are poor and many walk to their work, the requisite facilities such as footpaths and safe crossings will also be built. The low incomes force the poor to live close to their work place, often in unsanitary conditions. The future public transport system will be so designed that it will serve the needs of the poor and will afford them increasing opportunities for work.

In order to make public transport affordable to all people, the Government has decided to provide subsidies to public transportation services including both the public and the private sectors provided that a fair and transparent assessment of the need has been showed. It should be mentioned that a large number of poor people, the majority of whom are landless migrants from the rural areas earn their livelihood by driving rickshaws. Thus the complete withdrawal of this mode of transport will seriously affect these poorer people by depriving them from earning their livelihood. The Government has already decided to investigate designs for the rickshaw in order to modernize it .

Policy 55: The Government will provide subsidies to the poor for the use of public transport system after necessary assessment and appraisal. Amongst others, one of the existing systems (Vulnerable Group Feeding) will be examined to evolve a method of subsidy to benefit the poor.

12.3 MAKING SUITABLE PROVISIONS FOR WOMEN

According to some statistics, women are estimated to account for 70% of those living in poverty worldwide (UNDP-1995). The growing literature on women and transport has clearly shown that they tend to have different needs deriving from the multiple tasks they must perform in their households and in their communities. Low-income women tend also to be dramatically less mobile than men in the same socio-economic groups. Efforts to increase the mobility of poor women may face stiff resistance from those who feel threatened or offended by such direct empowerment of women. However, it has been pointed out that sexual harassment of women in the street and on public transport in Dhaka is rampant. This is reportedly particularly prevalent with female garment workers and illiterate women. All these proven facts make urban transport planning a difficult assignment. However, the efforts to promote meaningful public



¹⁶ Preamble to the Constitution of the People's Republic of Bangladesh.

transport require special attention to allow the voices of women to be heard.

Policy 56: As the main mode of transport for women is walking, the Government will enhance the safety and security of women in the street acting on a priority basis by strengthening law enforcement measures.

Policy 57: The Government will review the existing provisions for women in public transport in order to improve it and respond positively to the demand of women's special needs such as security and safety in transportation systems.

12.4 MAKING SUITABLE PROVISION FOR CHILDREN

Children are entitled to special treatment, as they are the future of the nation. The quality of future leadership and the country's well-being and prosperity are dependent on the proper up-keep of children. The children's rights have been taken care of to some extent in Chapter 11 of this policy paper by providing some physical facilities on the road and in the public transport. In order to safeguard their financial position, they should be given some fare reductions while travelling on the public transport system. Moreover, the Government should also provide adequate security measures on the roads and in transport so that unaccompanied children can go to school safely.

Policy 58: The Government will examine measures being given to children in other developing countries in the Asian region and will introduce a system to provide fare reductions to children for travel on public transportation systems.

12.5 MAKING SUITABLE PROVISIONS FOR THE SICK AND DISABLED

Similarly to children, some physical facilities will be provided in the public transport system and on the roads for disabled persons as per provision outlined in Chapter 11 of this policy paper. On humanitarian grounds, and on physical and medical considerations, the sick and disabled are also entitled to special treatment. They should not be subjected to noise and pollution, which is injurious to the health of the people in general and the sick and disabled in particular. Society has the obligation to provide such services as are suitable for these people. However, for a poor country like Bangladesh, the question of affordability on the part of the society to provide such services arises. In order to resolve this issue, society should attempt to provide such facilities as it can afford for the sick and disabled. However, enhancement of the facilitations for the sick and disabled will continue with the economic progress of the country.

Policy 59: The Government will examine the provisions being made and the practices which are in use for the sick and disabled in other Asian countries and will adopt and adapt those practices which are considered appropriate for Bangladesh.

13. INVOLVING THE PRIVATE SECTOR

13.1 INTRODUCTION

Bangladesh as a whole is experiencing modest economic growth. This will continue for some time but the growth is at a level which hardly is able to sustain the present needs. There is a large expansion in population which exacerbates the situation making major expansion difficult to achieve.

The limited amounts of money available for expansion affect all sectors not only transport infrastructure. There are also heavy demands in the service sector where the lack of clean water supply, sewerage and solid waste treatment create hazardous living conditions especially for the poorer sections of the community. In this financially restrictive climate it is necessary for the Government to take careful stock of where it should place its investment. Apart from the Treasury itself, funding for the transportation sector in the recent past has come from large and small donations and loans from a number of international and bi-lateral aide agencies. The Government will continue its program of attracting funding from these sources. Nevertheless, the likelihood of exceeding the contributions provided in the past years is limited. It has been estimated that from the Government and aid agency sources, the likely expenditure on the transportation sector within metropolitan Dhaka over the next 20 years will be of the order of US\$2,000 million [US\$2 billions].

Policy 60: Whereas the sum of money available for the development of the transportation sector will allow considerable improvements to be made, the Government is intent on supplementing this sum by attracting other sources of funds and will actively involve the private sector in the infrastructure development and operations.

13.2 FINANCIAL ADVANTAGES OF INVOLVING THE PRIVATE SECTOR

At present the private sector is already involved with the provision and management of transportation systems. Primarily this takes the form of public transport in which private operators own and control the majority of trucks, buses, taxis, baby taxis, ferries and rickshaws. It is anticipated that this private operation will continue and in fact will expand. There will be a need for more control on operations and this will take the form of merging the many single unit operators into cooperatives.

There are two primary advantages gained by involving the private sector in the provision of infrastructure and operations. Firstly, the provision of new capital into the system can either increase the building program allowing more projects to be implemented with the new financing or the Government's own contributions can be reduced allowing it to be used on other sectors which may not be suitable for private investment. Secondly, the private sector has a reputation for managing systems and organisations in a more profitable way than the public sector.

Policy 61: In addition to augmenting the available budget for provision and management of transportation infrastructure, the Government will actively enter into a dialogue with the private sector and will create a regular co-ordination forum to inform the private sector of upcoming projects and discuss openly where possible cooperation can be mutually beneficial.

13.3 PUBLIC PRIVATE PARTNERSHIPS

Under normal circumstances infrastructure is owned by the Government. Partially this is to protect sensitive areas such as airports or major expressways. When involving the private sector therefore, the Government needs to protect its long term interests even though in the early years the facility is sometimes perceived as being "owned" by the private developer. To combat any doubts about ownership, the normal way for the private sector to become involved with provision of infrastructure is to create some form of partnership between the public sector and the private sector. These Public-Private-Partnerships [PPP s] can take many forms and each is specific to the project, the companies and the country.

Probably the most common form of PPP is the BOT system in which a private investor Builds the scheme, he then Operates it for a number of years and, after the agreed term, he Transfers it back into Government ownership. The agreement between the Government and the developer will be governed by a legal contract normally referred to as a Concession Agreement. In this Concession Agreement, all the

terms and conditions will be spelled out to protect and encourage both parties. Typical agreements will be for Toll Highways, Public Transport provision¹⁷ including rail and ferry operations.

Policy 62: Although each scheme will differ according to its function and cost, the Government will begin the process of preparing the way to PPP schemes by drafting a typical Concession Agreement for use in negotiations.

13.4 DE-REGULATION OF SERVICES

The de-regulation of bus services is already happening in Dhaka with the first franchised route being opened up between Uttara and Azimpur and the franchise being awarded to operate the route for 7 years. Further such services will be developed and the ultimate objective will be to create an overall system which will be more passenger-friendly and will afford the private sector opportunities to participate in profit making enterprises.



The recently completed Strategic Transport Planning Study, which provides the basis for this policy document, has recommended the construction of a mass rapid transit system based on high quality buses running in special lanes. This is a clear candidate for private sector participation with the Government.

Policy 63: The Government will continue the process of preparing more routes for franchising and will provide an open and transparent bidding procedure to create fare competition within the bidding procedures.

Policy 64: The Government will begin the process of developing a Bus Rapid Transit System in order to provide a modern high quality fast bus system available for all the people of metropolitan Dhaka and at an affordable fare structure and will involve the private sector in this venture.

13.5 THE NEED FOR LEGISLATIVE CHANGES

There is a need to ensure that the current legislative conditions are suitable for the encouragement of private sector investment. There will need to be an independent review of current laws to ensure fairness on behalf of the private investor and protection for the Government.

Policy 65: The Government will initiate a comprehensive review of the existing laws and regulations as they apply to private sector investments and will amend the laws such that they provide equitable ways to enter into contracts between the parties.

¹⁷ The recent bus route franchising scheme is a form of such agreements with terms of operations covered and control of income by fixing fare levels.

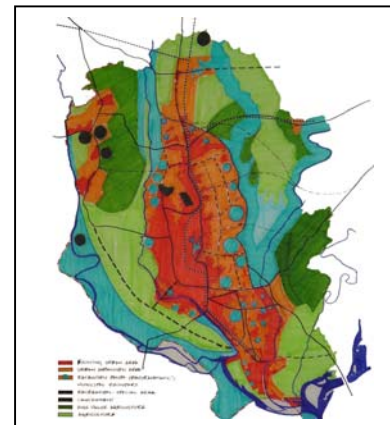
14. INSTITUTIONAL CHANGES

14.1 INTRODUCTION

This particular section of the Draft Urban Transportation Policy is cross-referenced to the STP report on Institutional Strengthening and Capacity Building. The reader is referred to that document for further clarification of the recommendations. This section simply provides a link between policies and the agencies which will be responsible for carrying out the development of metropolitan Dhaka for the next 20 years.

14.2 A METROPOLITAN AUTHORITY

At present the land use planning functions are separated from the transportation planning functions. Whereas RAJUK has developed the Structure Plan and is responsible for its implementation, the transportation functions are divided among BRTA, DTCB, DCC and the Police. The planning control function which should be part of the overall planning process is ostensibly being looked after by RAJUK but there is little evidence that this function is being exercised. The lack of a close relationship between land use planning and transportation planning is evidenced by the somewhat haphazard types of development which do take place often out of accordance with the Structure Plan. This leads to poorly served developments since the transportation infrastructure is not available when the development is opened. The situation is made worse when uncontrolled development is allowed to happen, seemingly without the will and ability to control it.



Policy 66: The Government will form a unified authority responsible for strategic planning in the area of metropolitan Dhaka. This new body (referred to here as Dhaka Metropolitan Regional Authority or DAMERA¹⁸) will take on board the functions of both land use planning and transportation planning in order to integrate the two planning functions under a single authority. DAMERA will be responsible for maintaining the STP work and for updating and monitoring the Structure Plan. DAMERA will also be responsible for the granting or refusing of planning permissions in accordance with the STP and Structure Plan findings.

14.3 IMPLEMENTATION AND PROJECT CONTROL

The Structure Plan and Strategic Transport Plan has identified the land use development and the associated transportation links designed to serve and encourage this development. DAMERA will be responsible for deciding priorities for project development and will set the projects within a phased program over the next 20 years. In order to carry out these duties there will be a need to channel the development money through the new establishment with approval of major expenditure from an appropriate source.

DAMERA may undertake feasibility studies of the identified projects and it may write tender documents and evaluate tenders. However it will not be responsible for carrying out construction works nor for supervision. DAMERA will retain a monitoring role to ensure that the project is being constructed and operated in accordance with the Structure Plan and STP. Implementation will remain with the line agencies as at present.

¹⁸ It is considered that the most logical way to proceed towards the creation of DAMERA is to use the Strategic Transport Plan as a means of coordinating the future development of the land use transportation process. This will mean that DTCB will be strengthened and its mandate revised so that it will be able to assume these new responsibilities. This aspect is covered in more detail in the STP Institutional Strengthening Report.

Policy 67: The Government will clarify the roles of all agencies in the development of Metropolitan Dhaka. The Government will write a mandate for DAMERA specifying the powers and the establishment and allocating such funds as are necessary for them to carry out the duties assigned.

14.4 THE ROLE OF CITIES AND MUNICIPALITIES

The roles of the cities and municipalities will be largely unchanged. Their functions will still be to provide essential services for the population including in the transport sector – public transport, traffic management signal systems, parking control and management and street lighting. The development of transport systems and infrastructure within the municipalities will be in accordance with the Structure Plan and the STP and the strategic level projects will be coordinated by DAMERA. The municipalities will implement projects within their jurisdiction which are designed to compliment the overall structure plan for DAMERA area.

Policy 68: The Government will strengthen the capabilities of the municipalities so that they can perform the functions allocated to them. This strengthening will take the form of personnel training, equipment provision and other relevant issues.

14.5 THE ROLE OF OTHER AGENCIES

The main infrastructure provided within the DAMERA area planning will be coordinated and prioritized by the unitary authority. The actual implementation and supervision of construction will be the responsibilities of the line agencies such as DCC, RAJUK, LGED and RHD as at present. As far as possible the responsibilities will not change but the planning control will be switched to DAMERA.

Policy 69: The Government will strengthen the capabilities of the line agencies so that they can perform the functions allocated to them. This strengthening will take the form of personnel training, equipment provision and other relevant issues.

15. THE WAY FORWARD

The Draft Urban Transport Policy contained in this document provides the Government with the basis for future action. This action should be aimed at the resolution of the conflicts and the poor service that exists in urban transportation systems in Bangladesh. In order to move this Draft Urban Transport Policy forwards toward a conclusion, the following steps should be taken:-

Draft Urban Transport Policy Review. The document should be circulated to a wide audience and comments transmitted to the Consultants for consideration. It is recommended that the first group of critiques should be from informed citizens and groups before the document is circulated to the general public. Probably the most efficient way to bring this knowledge to the wider audience is for the Consultants to present it to the newly formed Steering Committee possibly augmented by senior representatives of the relevant government agencies. The objective of this peer review would be to provide the Consultants with sufficient professional comments for a first amendment to the document. It is suggested that this review should be completed within 20 days.

Revised Draft Urban Transport Policy Document. Taking into account the views and comments from the Steering Committee, the Consultants should revise the document and prepare a Preliminary Urban Transport Policy document. Dependent upon the extent of the suggested revisions, the Consultants would need say, 10 days to amend and re-issue the document.

Public Consultation. Using the revised Preliminary Urban Transport Policy document as a base, the Government should undertake a controlled public consultation campaign. The objective of this campaign would be to obtain opinions from a widely-based "lay" group. The campaign should be carefully planned and the results targeted. The Consultants could be made responsible to receive these comments and summarise them for review by the Steering Committee.

Following instructions from the Steering Committee, the consultants would then prepare the Final Draft Urban Transport Policy for submittal to the Government in accordance with their contract.

The Final Draft will then be sent by DTCB to the line ministry (in this case the Ministry of Communications) for approval. It is considered that due to the importance of the policy document, the MoC would constitute a Ministerial Committee for the appraisal and review of the document.

The Ministry of Communications should then prepare a draft summary on the policy and submit this summary together with the document to other line Ministries including the Ministry of Law. These line ministries should vet the document before it is to be submitted to the Cabinet.

The summary and document as revised by the line ministries should be submitted to the Cabinet for approval.

Approval may be granted or further modification made as required.