DETERMINATION OF URBAN TRANSPORT POLICY IN INDONESIA

Sutanto Soehodho
Transport Research Group
Department of Civil Engineering
University of Indonesia
Depok 16424, Indonesia
Tel. 62-21-7270029
Fax. 62-21-7270028
E-mail : tanto@eng.ui.ac.id

ABSTRACT

This paper deals with determination of various policy statements to be implemented in the Indonesian transport sector as results of studies in which the author undertook under the World Bank Scheme. The author was also appointed by government through National Agency for Planning and Development to take a lead in formulating and evaluating the target. Not all policy statements are conclusive or derived yet in the government's acts, however, they do pave the policy direction. Although public transport is of prime interest to rescue urban trips it involves other elements in the planning of urban transport system. So comprehensive determination of urban transport policy is apparently crucial to include those elements. Furthermore, each suggested policy is to be implemented in different sizes of cities to comprehend the applicability and impact as well as to anticipate the issues of decentralisation. The policy statements would eventually cover the following; Institutional Framework, Land Law, Central and Local Government Funding, Role of Private Sector, Integrated Land Use and Transport Planning, Travel Demand Management, Traffic Management, Infrastructures, Public Transport, Safety, and Environmental Management and Pollution Control.

1. INTRODUCTION

The urban population of Indonesia is growing very rapidly. This, together with rapid motorization, has led to dispersed settlement patterns, high demand for travel, severe and growing congestion and associated problems of safety and pollution. An integrated approach to land use and transport planning is required to ensure that future growth is directed in ways that will limit the demand for transport. At present, although each area has to produce a land use plan, there is no requirement to produce a transport plan or to ensure that it is consistent with land use objectives.

Private car ownership levels are still low and most people depend on public transport. The public transport operators are currently facing severe financial problems as the costs of spare-parts and fuel have risen, while the Government is unwilling to permit fare increases. Short-term measures to handle the current crisis, together with longer-term policies to promote an efficient public transport sector, are needed.

Aside from common transport problems evolve, it seems time to the country in the era of reform to

reinvent the government. To some extent in transport sector the Government is pursuing a policy of decentralisation which will increase local authorities' responsibilities for dealing with land use and transportation policy matters. The formal division of responsibilities between the various local authorities and central government agencies will have to be rationalised. Central government's influence on local policy will increasingly be exercised through financial controls and the use of guidelines.

This paper provides various policy statements to be implemented in the Indonesia transport sector as a result of studies in which the author undertook under the World Bank Scheme. The author was also appointed by government through National Agency for Planning and Development to take a lead in formulating and evaluating the target. Not all policy statements are conclusive or derived yet in the government's acts, however, they do pave the policy direction.

2. INSTITUTIONAL FRAMEWORK

Context: It is realised that to implement any transport policy requires a firm institutional framework that would be able to transform any policy into certain action program. Any consequent budget need also be determined within the capacity and resource knowledge of the related institution, it is then the focus of policy development to provide sound institutional framework through the following policy direction.

General Policy Direction: The implementation of decentralisation, started with Constitution 5/1974, will be continued to enhance the role of local government. The institutional framework for urban land use and transport planning will need to be rationalised.

Suggested Policies
The respective planning roles of Government Agency for Land Transport (DLLAJ), Directorate General of Road Development (Dinas Bina Marga), Government Agency for Land Use Development (Dinas Tata Kota) and Local Government Agency for Development (Bappeda Tk II) will be rationalised.

- Bappeda will be responsible for land use and transportation planning
- DLLAJ and Bina Marga will focus on implementation or micro planning, within the context of the city plan prepared by Bappeda.
- Local II DLLAJ will concentrate on its transportation role and cease to be involved in revenue collection.
- Tata Kota would be involved only in licensing and regulation.
- Central Bina Marga will retain responsibility for planning of national and provincial roads within city boundaries, subject to review and agreement by Bappeda.

Conurbation coordination committees for land use and transport planning will be set up, with representation from the cities and surrounding areas, to plan for and control urban expansion into the surrounding areas. *Bappeda TK I at provincial planning level could facilitate and coordinate inter regional government spatial planning.*

3. LAND LAW

Context: Land acquisition is recognised as one of the essential problems encountered in the provision of transport infrastructures. Especially in the urban areas such provision is extremely difficult due to limited space and strict urban spatial plan determined by local government. So it is of crucial point to strengthen the law to eliminate any uncertainty in the practice of land acquisition.

General Policy Direction: The Government will clarify the law on land ownership and compulsory

purchase in order to facilitate the process of land acquisition for transport system development.

Suggested Policies

- The government will amend legislation to make land ownership and rights transparent and will accelerate the process of land titling. *Uncertainties about the types and ownership of land are a major cause of problems in land acquisition.*
- The government will review and revise powers for compulsory land acquisition in order to clarify the law and to accelerate the process when necessary. *There are uncertainties as to the government's legal rights for compulsory acquisition. The existing law (PP55) allows landowners to reject compensation offers and ask for reviews first by the governor and then by the President. One possibility would be for that process to continue but for compulsory purchase to be allowed in the meantime.*

4. CENTRAL AND LOCAL GOVERNMENT FUNDING

Context: Decentralisation has become an issue in the era of reform. This approach has brought big influence to the would-be autonomous local governments in funding the transport systems. It becomes exceptionally weak point to some extent, since not all regions have sufficient funds or resources to support their local transport systems.

General Policy Direction: The financial arrangements between central and local government will be revised to provide central government with the means to ensure that national policy is implemented at local level. *This is essential to ensure that local governments have both the incentive and the finances to fulfil their role in urban transport.*

Suggested Policies

- Central government funding of local government projects will depend upon and be related to the existence of an acceptable current Transport Plan. *Without an acceptable Transport Plan, funds may be directed in an inefficient manner.*
- Five-year rolling budgets will be prepared each year for multi-sectoral transport expenditure in each city within guidelines set by central government. These will also be a requirement for central funding. *To assist with multi-year planning it is useful to be able to look ahead to future requirements.*

5. ROLE OF THE PRIVATE SECTOR

Context: Government continues to lose their capacity to catch up with the growing needs of transport systems. The unlucky situation of economic crisis made the situation worse off and would require rescue either from local or international funding schemes. It is then the time for the government to invite private sectors in taking the role as much as possible in the context of transport undertakings, and maintain their sustainability.

General Policy Direction: Private sector participation in the provision of urban infrastructure and services will continue to be encouraged. *The private sector will normally be more efficient than Government, and can be a useful source of additional funds.*

6. INTEGRATED LAND USE AND TRANSPORT PLANNING

Context: It is well indicated that a hump of inconsistencies evolved between the long term of transport systems and socio-economic activity developments. These inconsistencies have created serious urban transport problems and in turn back to restrain the national economic growth and its pertinent activities. Learning from such experiences it is crucial to establish a policy statement of integrated land-use and transport planning as a macro policy to relieve the inconsistencies.

General Policy Direction: Land use planning will be carried out in conjunction with transportation planning to ensure that the transport plan is consistent with and reinforces the objectives of the land use plan. *The planning process will promote compact development patterns, reduce the need to travel and promote public transport, walking and other non-motorised travel.*

6.1. Land Use Planning

Context: Motorization encourages dispersed settlement patterns. This both increases travel distances and undermines the market base for public transport, which is more efficient with high population densities. Land use planning can be used to encourage compact, mixed developments, which reduce the need for travel, and to guide development into corridors which can be efficiently served by public transport. Current land use plans are often poorly enforced and uncontrolled developments are a major cause of transport inefficiencies.

Objective: To promote land use patterns and densities that will encourage and accommodate an efficient city wide transport network.

Suggested Policy Direction: Promote spatial arrangements that reduce trip lengths and encourage and accommodate the use of public transport, walking and other non-motorised travel. Introduce improved planning controls to ensure that land use is in conformity with the plan.

Suggested Policies – Land Use Planning

Land Use Planning
Local governments will utilise planning and land use licensing to promote compact, mixed land use patterns to encourage an efficient city wide transport network. *The policy of guiding land use will require determination to control the private sector and foresight as to the most favourable physical directions to be followed. It is unlikely that major benefits will be available in the short term but this does not make the policy any less important.*

- Planning, licensing and enforcement will be used to encourage and regulate developments along existing or planned transport corridors. *Public transport can be provided more efficiently along major transport corridors. They can also be used to promote bus ways and other mass transit. The provision of public facilities, such as schools and health centres, can be used to encourage high- density developments.*
- Planning powers will be used to separate public facilities, such as schools, from sources of pollution, such as main roads. *Air and noise pollution decrease with distance from the source.*
- Easy access to public transport from homes, malls, government buildings and work places will be promoted. *Neighbourhood areas will be designed to accommodate micro and mini bus access. In business districts, fences which deter access between offices and facilities will be removed or have pedestrian access gates. Parking lots will not be placed between malls etc and public transport stops.*

Land Use Planning Powers and Development Controls

Land use legislation will be reviewed and improved systems of development control will be introduced. *Uncontrolled land use development is a major cause of current transport inefficiencies.*

- Local governments will be given powers to ensure that private developers play their part in creating an efficient urban transport system. *There is a tendency at present for development to create rather than solve traffic problems. This will be reversed.*
- Developers will be required to minimise generated vehicle trips by supplying neighbourhood facilities and to maximise ease of access to public transport. *Legislation will be introduced to specify minimum requirements for developments of different types and sizes.*
- Developers will be required to prepare transport impact studies, which incorporate traffic demand management measures. *Impact studies will examine the full range of transport options, seeking out the most efficient combination of modes.*

- Developer contribution schemes for transport impacts will be prepared and implemented for each city based on model versions to be provided by central government. *Appropriate developer contributions, varied according to the impacts on the transport system, can be a powerful tool in establishing suitable land uses as well as providing revenue for transport provision.*
- The government will review possibilities for social capture of private land value increases caused by transport improvements. *One of the alternatives is a tax on land value increases. The tax could be levied on sales or on an annual basis. This would require changes to law.*

6.2. Transport Planning

Regularly updated Transport Plans will be required as a component of Urban Spatial Plans. The plans (see below) will include measures for; travel demand management, traffic management, and infrastructure investment

- Transport plans will incorporate appropriate planning and engineering measures to reduce harmful impacts such as noise and air pollution.
- The government will set out guidelines for a comprehensive evaluation process, including external costs and impacts, for deciding the most suitable transport projects. *Costs such as pollution and congestion and environmental, social and employment effects need to be considered in a comprehensive evaluation process for a wide range of options. The AMDAL process is an essential part of this procedure.*
- The various technical and policy guidance systems used by central level agencies will be refined and made appropriate to cities of different sizes. *Central guidance will continue to be important to ensure consistency between cities.*
- Cross local agency transport units under Bappeda with staff seconded from other related agencies will be established, starting in the larger and continuing in the smaller cities. *Transport planning units are seen as an efficient way of providing effective co-operation between agencies.*
- Technical support to the 2nd local level planning units will be provided by 1st level local or provincial level or through the use of consultants. *Many countries use consultants to assist local authorities in specialised tasks such as transport planning.*

7. TRAVEL DEMAND MANAGEMENT

Context: Congestion causes considerable costs to society, estimated to be at least Rp 11 trillion annually (Rp.= Rupiah = Indonesian Currency). Increasing motorization will cause even worse congestion and pollution unless the government creates an environment that discourages private car use and encourages the use of public transport. One of the most effective ways of doing this is through raising the costs of private car usage through parking and other charges.

Objective: To manage and direct the growth in transport demand to limit the adverse effects of unconstrained traffic growth.

Suggested Policy Direction: Parking controls and charges will be used to reduce the attractiveness of using a private car. Local authorities will be permitted to impose charges on road use or entry to centre city areas. Cities will be required to produce a statement of their travel demand management proposals as part of the transport plan. As part of its general transport policy, the Government will adjust transport charges, including fuel prices, to efficient levels that more closely reflect full economic costs. The social impacts of price levels and changes will need to be addressed.

Suggested Policies – Travel Demand Management

Transport User Charges
Transport user charges will aim to cover the full cost of transport, including external costs. *External costs are those not borne directly by users. They apply in both urban and other areas. Certain of the costs can be raised from fuel charges. Others by means of parking and, possibly, area charges.*

- Taxes for vehicle ownership will be set to cover the costs of road and transport infrastructure supply. They will be varied by vehicle type to reflect the damage to the road caused by the vehicle. *Vehicle ownership taxes will not be used as a means for travel demand management since they do not directly affect the demand for private urban transport.*
- As part of its national user charges policy and to assist in the efficient control of traffic demand the government will increase the price of automotive fuel including diesel above that is necessary to cover its own costs and towards the necessity to recover the external costs of vehicle congestion and pollution. *If the price of fuel is below its economic cost, the demand for travel will be inefficiently high. To fully cover all costs would require the price of fuel to be increased to several times its present level. Even a partial increase in the fuel price would have some beneficial effects on traffic demand, however. The present subsidy on diesel fuel, in particular, increases demand for travel above optimum levels. It favours wealthier users of diesel using cars and sports utility vehicles more than lower income users of public transport. Due to the possible use of the even more polluting kerosene in diesel-engined vehicles, it will be necessary to phase out the diesel subsidy in line with the policy to increase on-street enforcement of motor vehicle exhausts.*

Congestion Charges

The government will evaluate and promote the use of charges to reduce the pressure on congested areas. *Experience elsewhere has shown that some form of financial control over the use of road space is essential if traffic congestion is to be limited. The government realises that there are possible social costs and will work to minimise these.*

- Local governments will be given powers to introduce limits on and/or charges for the use of specific roads or areas in congested periods. *Area charges or other means to control the use of particularly congested city streets may be a necessary additional means to control demand for private transport. It is probable that this policy will be mainly applicable in metropolitan cities. It could have local application elsewhere, however.*

Parking

The role of parking controls and charges in optimising urban transport use will be expanded. *Experience elsewhere has shown that the availability of parking spaces is one of the most efficient means to control use of the private car as long as it is properly enforced. Local governments will specify the places where parking is permitted, allowing for both the requirements of the local area and the likely effects on city traffic. The use of any other space will be controlled by parking attendants and enforced by the police. This applies particularly to sidewalks.*

- Local governments will be given powers to regulate the numbers of parking spaces in their cities, both public and private. *Parking controls are one of the more easily introduced forms of travel demand management and will be an essential part of the transport plan.*
- Local governments will be given powers to set the charges for parking spaces and to vary them by location and time of day in order to discourage the use of private cars in congested areas. *Parking charges control traffic demand, both in total and by location. They also contribute to city revenues.*
- Local governments will be given powers to impose taxes upon private parking spaces. *A new regulation will be necessary since the existing local tax law classifies the parking charge as a "retribution", which can only be charged for services provided by the local authority.*

Peak Hour Demand

The government will encourage voluntary action to reduce peak hour travel demand. *Even though travel in the peak hours is less marked in Indonesia than elsewhere, it still creates additional congestion and pollution burdens.*

- Schools, government and other offices will be encouraged to vary their starting and finishing work hours. *Several local authorities already do this.*
- Private car sharing will be promoted.
- Discounted fares for off-peak travel will be evaluated

Public Education

- To assist in the introduction of travel demand measures, the government will work with NGO's, Non Government Organisations, and advertising media to explain the costs and benefits of the proposals to each section of society. *In particular, they will show how the sums raised are being spent on decreasing the costs of public transport.*

8. TRAFFIC MANAGEMENT

Context: Traffic management is a means to ensure optimum use of the existing urban road infrastructures. In doing this, it can deliver high levels of benefits at low levels of costs. It is primarily a local government responsibility, but requires the involvement and cooperation of both local and national agencies. Skills at local level will need to be improved and central government needs to update the advice it provides on specific traffic management and road design practices.

Objective: To optimise the capacity of the existing transport system through the implementation of suitable traffic management technology and measures.

Suggested Policy Direction: Following a review of current traffic management measures, local governments will produce a traffic management plan. The Government will aim to strengthen the institutional basis for traffic management by improving the structure and functioning of 2nd level local DLLAJ and other relevant agencies. It will also improve the processes followed in planning, programming and budgeting for traffic management and infrastructure.

Suggested Policies – Traffic Management

Cities will be required to produce a review of their current traffic management measures and a plan for improvements, in order to make best use of the existing urban road system. *Optimising existing capacity is significantly less expensive than additions to that capacity*

The plan will include:

- Measures to increase intersection capacity through better management and, where appropriate, traffic control, physical expansion and signal co-ordination. *Limited capacity at junctions is one of the major causes of congestion.*
- The introduction of public transport priority measures, such as bus lanes and priority at junctions. *Reducing public transport journey times will benefit large numbers of passengers and improve the efficiency of bus operations.*
- Advanced technology where it is the most effective option and can be satisfactorily implemented, managed and maintained. *While advanced technologies, such as on-line area traffic control systems, incident detection systems, speed cameras, electronic road pricing etc, offer substantial benefits, operating and maintenance capability need to be assessed on a case by case basis.*
- Provision for the needs of pedestrians and non-motorised vehicles (NMV), to include consideration of the designation of specific NMV routes. Footpaths will be improved, properly maintained and kept free of obstructions. *Traffic conflict between fast moving motorised traffic, slow moving non-motorised vehicles and pedestrians is a major cause of congestion and accidents, particularly at junctions. If the full width of existing roads were available for travel purposes, congestion would be substantially reduced.*
- The introduction of a system of truck routes. *The routes should be designed to facilitate the movement of freight while reducing the congestion and traffic conflict caused by trucks*
- A review of the location, organisation and ownership of freight terminals. *Freight terminals should promote efficiency in cargo movement rather than the revenue needs of the cities. Where possible, their provision should be left to the private sector*
- Consideration of the effects of micro-measures on traffic in surrounding areas. *While schemes such as one way systems and U-turns may solve a problem at a specific location, they can cause*

the overall system to be less efficient through greater trip distances.

Institutional Strengthening and Human Resources

- The technical capacity of the 2nd level local government to manage traffic and optimise the use of road capacity will be increased. *City authorities will be encouraged to employ appropriately trained traffic management staff.*
- The numbers of the 2nd level local DLLAJ technical staff in training will be increased. *The large number of Indonesian cities requires more technically trained staff to permit improvement of the urban transport system.*
- Technically trained staff in the local offices (Kanwil) will be encouraged to move to work for city traffic management agencies. *The local offices are currently the bases for a high proportion of trained staff and it is likely that they would be better employed in the 2nd level local agencies.*
- Central government will provide explicit traffic management guidelines for the 2nd level local government. *Some city governments do not appear to see improving the transport system as part of their role*

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Enforcement

The traffic police will devote additional resources and attention to improving traffic flow. *The blockage of intersections in particular increases congestion and traffic delays.*

- The traffic police, and civilian officers as appropriate, will be given training to in enforcement activities that improve traffic flow efficiency. *While the traffic police do currently undertake traffic direction activities, this could be improved through focussing on suitable techniques.*
- Non-motorised vehicles available for hire will be licensed and regulated to ensure the safety of drivers and occupants. *This should not be seen as a source of local government revenue and charges if any will be set only to cover administrative costs.*

9. INFRASTRUCTURE

Context: There is a recognised shortage of road space in many Indonesian cities, particularly Jakarta. Recent estimates suggest that, in the absence of travel demand measures, as much as Rp 30 trillion may have to be spent on urban roads over the next 10 years. Travel demand management, traffic management and public transport policies to achieve more efficient use of infrastructure can reduce the pressure on road space. However, investment in new infrastructure will still be necessary to cope with long-term increases in demand. Urban road improvements need to support and complement public passenger transport improvement plans if maximum benefits are to be achieved.

Objective: To improve accessibility through the provision of additional urban infrastructure where justified, to minimise the social damage caused by new infrastructure and to ensure that existing and new infrastructure is properly maintained.

Suggested Policy Direction: The Government will promote and finance urban transport infrastructure investment as part of a co-ordinated approach to urban traffic problems that includes travel demand management and traffic management measures. Maintenance of the existing transport facilities will be improved. Public consultation procedures will be introduced to help minimise the social damage arising from new infrastructure.

Suggested Policies - Infrastructure

Network Planning

- The Government will ensure that urban transport infrastructure facilities are adequate to meet the demands placed on them.
- The Government will ensure that full use is made of existing facilities before undertaking costly new investments.
- Costs and benefits of a full range of potential investment strategies (e.g. public transport priority, mass transit, and general capacity enhancement) will be assessed. *A better transport system will*

result from consideration of a wider range of options.

Road Planning

Long-term road network demand assessments will be made taking into account travel demand measures and will be included in the city Transport Plans. *These plans will be regularly updated, taking into account forecast changes in land use, population and motorization. Budgetary allocations from central government would be dependent on the existence of a satisfactory plan.*

- A road hierarchy review will be carried out for each city, to identify shortcomings in the functional road network. *It would be appropriate to require such a road hierarchy study as an input to the overall Transport Plan.*
- Where new roads are constructed and where existing roads are widened, consideration will be given to incorporating public transport corridors/lanes. *This may be comparatively cheap to allow for at time of construction, but expensive to retro-fit (e.g. location of bridge piles, abutments, etc)*

Mass Transit

Mass transit systems will be considered in large cities where there is heavy concentration of demand on specific corridors. A range of options will be considered:

- more intensive use of existing railway lines;
- bus ways;
- elevated and at grade light rail systems; and
- full metro.

All options need to be considered before the best solution can be selected.

- The Government will introduce legislation to permit private participation in the construction of mass transit systems and to provide capital subsidies where necessary.

Footpaths

- Footpaths will be provided on all new major roads, other than segregated high-speed roads. Wherever practical, existing roads with significant pedestrian flows will have footpaths added.
- Footpath construction standards will be reviewed in order to ensure that they are actually fit to use. *The currently used footpath design has high elevation to control flooding with resulting large vertical variations to allow vehicle access to drive ways. This design will be reconsidered since it deters pedestrian use.*

Funding

- The government will examine the possibility of requiring the executing agency, rather than the local government, to pay for land needed for transport improvements. *It is essential to deal immediately with the ongoing problem caused by shortage of funds for land purchase at local level. In the long term, revised central/local financial arrangements might allow the policy to be reversed.*
- The government will review procedures governing the source of funds for grade separation between road and rail and will ensure that the funds for economically viable projects are available. *There is no known legislation which determines who will pay for grade separation. Since it is normally the road that will be moved, funds have normally to be found from the road transportation budget. This is reasonable, as long as the funds are made available.*
- Ownership of all roads (national, provincial and local) will be updated to assist in budgetary procedures. *This is necessary to allow National Agency for Planning and Development (Bappenas) to charge for proposed works correctly.*

Private Sector Participation

- The government will review legislation regarding allowed private sector participation in rail based transit. *Existing legislation (Act 13/1992) states that all railways are to be provided by the government and operated by a state owned enterprise, although the private sector can enter partnership with the state for operations.*
- The private sector will be encouraged to provide and maintain local roads in new neighbourhood and housing estate developments.

Maintenance

- The Government will ensure that adequate resources are made available for the maintenance of roads and other transport facilities. *Maintenance levels of roads have recently deteriorated. Similarly maintenance of traffic and transport facilities are currently limited. Improved maintenance would reduce congestion and improve safety.*
- The maintenance system will be survey rather than time based. *Maintenance based on constant intervals can lead to unnecessary expenditure.*

Social

- Transport infrastructure investments will be designed to minimise social damage, in particular severance and noise and air pollution. *Considerable reductions in impact can be made through careful planning and design*.
- The Government will introduce procedures to inform and consult the public about major infrastructure proposals.
- Local inhabitants will be informed about construction works that will affect them. The rationale and benefits of the works will be explained. *Construction works cause disturbances and can also be seen as having detrimental effects on livelihoods and/or the environment. Anti-social effects can be minimised by explaining when and why the works are to take place.*
- Formal procedures will be introduced to allow affected groups to comment on proposed investments. *Social consent is more likely to be obtained if the affected groups have an opportunity to be heard and believe that their views are taken into account.*

10. PUBLIC TRANSPORT

Context: For both social and economic reasons, public transport is needed to serve the lower income groups. It should also provide a viable alternative to the private motor vehicle for higher income groups. Although, in the future, rail mass transit may play a significant role in metropolitan cities, bus is, and will continue to be, the principal means of urban public transport. Most public transport services are, and will continue to be, provided by the private sector and have, until recently, operated without subsidies. The present licensing system is quantitative and specifies the routes and the number of buses to serve them, but not quality of service. It also restricts market entry and competition. Maximum fare levels are set by Government and have not been allowed to rise in line with cost increases. Consequently, operators are coming under increasing financial pressure, resulting in reduced vehicle availability.

Objective: To encourage the provision of cost effective and efficient urban public transport services, so as to provide a viable alternative to private transport and provide customers with safe, reliable and attractive services appropriate to their circumstances.

Suggested Policy Direction: The Government will promote the development of a more efficient and effective public transport system, designed to meet the needs of a wide range of users. It will: (i) encourage increased competition; (ii) liberalise public transport regulations; (iii) reduce controls on maximum fare levels; (iv) define and, where necessary, provide funding for essential services required for social and economic reasons; (v) introduce open, transparent and contestable funding arrangements, which rely where possible on open bidding.

Suggested Policies – Public Transport

Regulations and Licensing

- The Government will consider the creation of public transportation boards to control the franchising of routes and the licensing of all public transport operators.
- The government will use regulation and licensing to promote an efficient transport system that

minimises travel costs and time for the city as a whole.

- Local government will define a basic bus network of routes needed for social reasons, and specify service levels and fares. Franchises for these routes will be put out to tender. The government may provide operating subsidies for unprofitable routes. *This will meet the Government's social obligations to provide transport for the lower income groups while limiting their financial commitments and retaining incentives for the operators to run the services efficiently.*
- The Government will promote efficiency and innovation in non-basic services through relaxation of licensing and fare restrictions. *Controls on route licensing, licensing of vehicles to specific routes, protection from competition, and maximum fare levels could be reduced or eliminated. Operators will be free to design and operate services, subject to minimum quality standards. This will increase the variety of services, increasing the attractiveness of public transport to higher income groups, and allow the operators to introduce more cost-effective organisational structures and management arrangements.*
- The location and organisation of public transport terminals will be reviewed, based on passenger travel patterns rather than on regulated route design. *Reduced regulatory control of bus services is likely to lead to new and more direct routes better serving passenger origins and destinations, rather than focusing on the locations of existing terminals. DLLAJ should continue to manage terminals, but local budget office (Dispenda) should become responsible for revenue collection.*

Government Operations
The Government will separate its planning, policy and funding responsibilities from its operating activities. Government Bus Companies, namely *Damri and PPD, will operate at an 'arms length' relationship to Government, and will be treated by Government in the same way as any other operator.*

Driver Behaviour
The Government will encourage improved on-road driver behaviour through appropriate education, enforcement and penalty regimes. *To improve on-road behaviour, traffic regulations will be enforced and penalties will be applied to drivers and owners alike.*

12. SAFETY

Context: Transport accidents in urban areas tend to be less severe than on inter-urban roads due to slower speeds in cities. Nevertheless, transport accidents in urban areas impose significant social costs, estimated at Rp 3 trillion in 1997. The accidents are caused primarily by personal misjudgement, exacerbated by inadequate transport provision, improperly controlled competitive instincts and poorly maintained vehicles. Research into the causes of accidents is impeded by the poor quality of accident records. The National Police do have an accident report form but it is possibly too detailed and is not properly distributed or analysed. Improving safety requires action at both national and local level.

Objective: To reduce the number and severity of transport accidents.

Suggested Policy Direction: To decrease the number of accidents will require action on several fronts, including more effective law enforcement, vehicle safety inspections, engineering and traffic management measures to reduce traffic conflict, research into the principal causes of accidents and education of both drivers and other road users.

Suggested Policies - Safety

Road Safety
Road safety will be enhanced through improved engineering, education and enforcement.

- Traffic calming measures will be incorporated in local neighbourhoods where appropriate but will use the latest concepts in order to minimise vehicle damage. Where possible the measures will be

included in the road design. *At present traffic calming is often taken to be the responsibility of Dinas Cipta Karya and not Dinas Bina Marga. This can cause inefficiencies and will be reconsidered.*

- In order to increase the safety of motorised and other road users, traffic signs will be standardised and installed so that they can be clearly seen. *Proper traffic signs warn vehicles of possible danger and decrease accidents.*
- Existing regulations regarding the fitting and wearing of seat belts will be implemented and enforced. *If vehicles already have seat belts, there is no reason to postpone the implementation of seat belt wearing regulations due to Economic Crisis.*
- Annual vehicle safety inspections will be introduced.
- Public transport safety will be enhanced by a reduction in overcrowding and enforcement of good operating practices, including driver behaviour and licensing. *Public transport appears to have a particularly poor safety record.*
- The central government will increase transport safety education, through schools and publicity campaigns. *Existing campaigns would benefit from being included in a comprehensive strategy. The teaching of road safety procedures at elementary school will be continued and where possible enhanced.*

The Role of the Traffic Police

The Traffic Police will redirect their activities and resources to give higher priority to transport safety. *At present, enforcement appears to be related more to administrative and revenue aspects.*

- The accident recording system will be reviewed and enhanced. *The present form is overly complicated with the result that it is frequently not properly filled in.*
- Accident reporting will be reviewed and enhanced. *The Police could provide data on a more localised basis, both by area and specific location (accident black spots).*
- The Traffic Police will follow up traffic victims. *At present only deaths at the time of the accident are recorded.*

12. ENVIRONMENTAL MANAGEMENT AND POLLUTION CONTROL

Context: Motor vehicles are a major contributor to air, noise and water pollution. The costs of pollution in urban areas are estimated to be Rp 20 bn p.a. Air and water pollution cause unnecessary deaths and illnesses. Noise pollution causes illness and inconvenience. Diesel fumes from poorly maintained engines are a major source of pollution, as are two stroke motor cycles. Of particular importance to the well being of the nation is the adverse effect of poisoning from leaded petrol on child IQ.

Objective: To reduce, as far as is reasonably practicable, the impact of urban transport on air, noise and water quality and on the health and lifestyle of the urban population of Indonesia.

Suggested Policy Direction: The Government will develop a comprehensive strategy to reduce emissions from motor vehicles, including more stringent standards for vehicle emissions, vehicle inspections and the introduction of less polluting fuels.

Suggested Policies - Pollution

Vehicle Operating Standards

The government will ensure that pollution from existing poorly maintained vehicles will be minimised. *The most immediate and least costly effects of pollution control will be from improving current maintenance standards.*

- Amend the relevant legislation (KEP-35/MENLH/10/1993) to include a limit on smoke from motorcycles and other petrol-engined vehicles. *The current legislation includes smoke emission limits only on diesel-engined vehicles.*
- Review existing procedures in order to extend testing requirements to cover all polluting vehicles.

At present only public transport vehicles are required to undergo periodic testing. A review of offending vehicles might indicate the need for a phased extension and/or to include other vehicles at particular stages of their life.

- Review existing noise pollution standards (KEP-48&49/1996) and assess the benefits of imposing design and/or operating standards by vehicle type. *Existing standards are based on the location not the vehicle. To control the noise from the latter would require additional legislation.*

New Vehicle Standards

The government will ensure that pollution from new vehicles is minimised. *The Government will discuss new vehicle emission standards with the manufacturers to ensure that standards accepted by those manufacturers elsewhere are not being bypassed in Indonesia for purely commercial reasons. Catalytic converters are one, but only one, of the means that the manufacturers may decide to use to meet the higher standard.*

- Revise and impose new vehicle emission standards covering, at least, carbon monoxide (CO), nitrogen oxides (NO_x) and hydrocarbons (HC). *The standards might be varied according to the local content of the vehicle.*
- The new standards will include those for motor cycles and will be significantly more restrictive than at present. *Four stroke motor cycles are now less polluting than two strokes. When the government has set the standard, manufacturers can decide which direction to follow to satisfy them.*

Fuel Quality

The government will ensure that pollution caused by the fuel used in Indonesia decreases to international levels as fast as reasonably possible.

- Introduce unleaded petrol at sufficient locations in all Indonesian cities as soon as possible. *Unleaded fuel is now available in only a small number of stations in Jakarta and West Java. If local producers are unwilling or unable to supply sufficient unleaded petrol it can be purchased on the international market.*
- Publicise the benefits of unleaded fuel and the vehicles that can use it: (a) with no adjustment; (b) with adjustment. *Most if not all vehicles in Indonesia can use unleaded petrol with no need for adjustment.*
- Accelerate the phasing out of all leaded petrol. *A phased program to lower average lead contents to zero will be discussed and agreed with the producers.*
- Improve the quality of fuel by lowering the sulphur content of petrol to below 500 ppm. *Catalytic converters require unleaded and low sulphur fuel.*
- Introduce low sulphur diesel. *This fuel is now thought to be one of the least polluting.*
- Evaluate and amend as necessary the relative prices of different fuel types in order to promote, rather than penalise, the least polluting fuels. *Less polluting fuels such as unleaded and low sulphur are marginally more expensive to produce. The government can amend its implicit tax/subsidy policy to adjust for this.*
- In the light of the latest developments in alternative fuel technologies, evaluate the proper roles of compressed natural gas (CNG) in large buses and liquefied petroleum gas (LPG) in other buses and taxis. *These fuels are also less polluting but they are costly to introduce. The Government can use fuel-pricing policies to give operators the incentive to change to these fuels.*

Water Quality

- Reduce the impact of transport on water quality in urban areas. *Possible actions would include surge basins in road drainage for all new road construction or major road re-construction/repair.*

Monitoring and Social Awareness

The government realises that the general level of awareness of the levels and costs of pollution caused by urban transport are limited and will work to extend the knowledge of both their staff and the public.

- Collect data on air pollution in city centres. *The present BMG data collection stations outside Jakarta are either at airports or in other locations outside the city centre. As a result city governments do not receive the correct information on which to base their policies.*
- Promote public awareness of the ill effects of air pollution and noise caused by motor vehicles

and of the more obvious indicators that can be used to determine if a particular vehicle is causing such bad effects. *In order to involve the public in the control of vehicle pollution, it will be important to increase their general awareness of the problem, to point to who is in practice the cause and to increase their willingness to intervene. Improved communication and education models will be required*

Enforcement

The government will ensure that the means and equipment required to enforce regulations are available.

- Undertake an enforcement program for motor vehicle exhaust emissions, requiring excessively smoky and/or noisy vehicles to undergo repair. *This program will include both on-street and periodic inspection, both of which are allowed under current legislation.*
- The government will review the equipment and budget available to the traffic police and DLLAJ offices in order to allow them to enforce vehicle emission and noise controls, both on-street and during the required periodic inspections. *The police are naturally concerned that motorists would object to tests based only on visual evidence. Equipment on the street and/or at testing stations will be available as back up.*

Institutional

- As soon as a vehicle inspection station is available in 2nd level local districts, vehicle inspection will be switched from provincial DLLAJ to become the responsibility of 2nd level local DLLAJ. Provincial DLLAJ and/or BSSLAK will have a role testing and checking the equipment used. *Vehicle inspection is seen as a locally focussed activity, provided consistent guidelines are applied.*

In closure, as already mentioned that these policy statements on urban transport system are being discussed and to be implemented to justify possible reforms in transport sector. It is, however, indicated that the most crucial undertaking prior to any policy implementation is the establishment of institutional framework, and it has been analysed and proposed that reinventing government would be the paradigm to work out. It is also worth-noting that issue of decentralisation is to be introduced in the establishment of transport institution and consequent policies at central and local levels.

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Presenter : Paper is to be presented by the author.

CURRICULUM VITAE

NAME : Sutanto Soehodho

PLACE/DATE OF BIRTH : Jakarta/May 6 1962

NATIONALITY : Indonesian

HOME ADDRESS : Jl. Imam Bonjol No. 24, Jakarta 10310
Phone. 62-21-3100430
Office : 62-21-7270029
Fax : 62-21-7270028
E-mail : tanto@eng.ui.ac.id

EDUCATION :

- Doctor of Engineering, Dr. Eng. , Civil Engineering, 1992 - University of Tokyo
- Master of Engineering, M. Eng. , Civil Engineering, 1989 - University of Tokyo
- Bachelor, Ir. , Civil Engineering, 1986 - University of Indonesia

POSITION : Secretary of Postgraduate Program – University of Indonesia

MEMBERSHIPS :

- ITS (Indonesian Transport Society), Founder Member & Head of Research & Development Division, Indonesia.
- IAIE (Indonesian Artificial Intelligence Experts), Founder Member, Indonesia.
- EASTS (Eastern Asia Society for Transportation Studies), Member of Board of Directors and Scientific Committee, Asian Regions.
- JSCE (Japan Society of Civil Engineers), Regular Member, Japan.
- ITE (Institute of Transportation Engineers), Full Member, USA.
- IRDA (Indonesian Road Development Association), Regular Member and Secretary for Jakarta Base, Indonesia.
- SAS (Sciences & Arts Society), Regular Member, USA.
- WCTR Society (World Conference on Transport Research), Organisation Member.