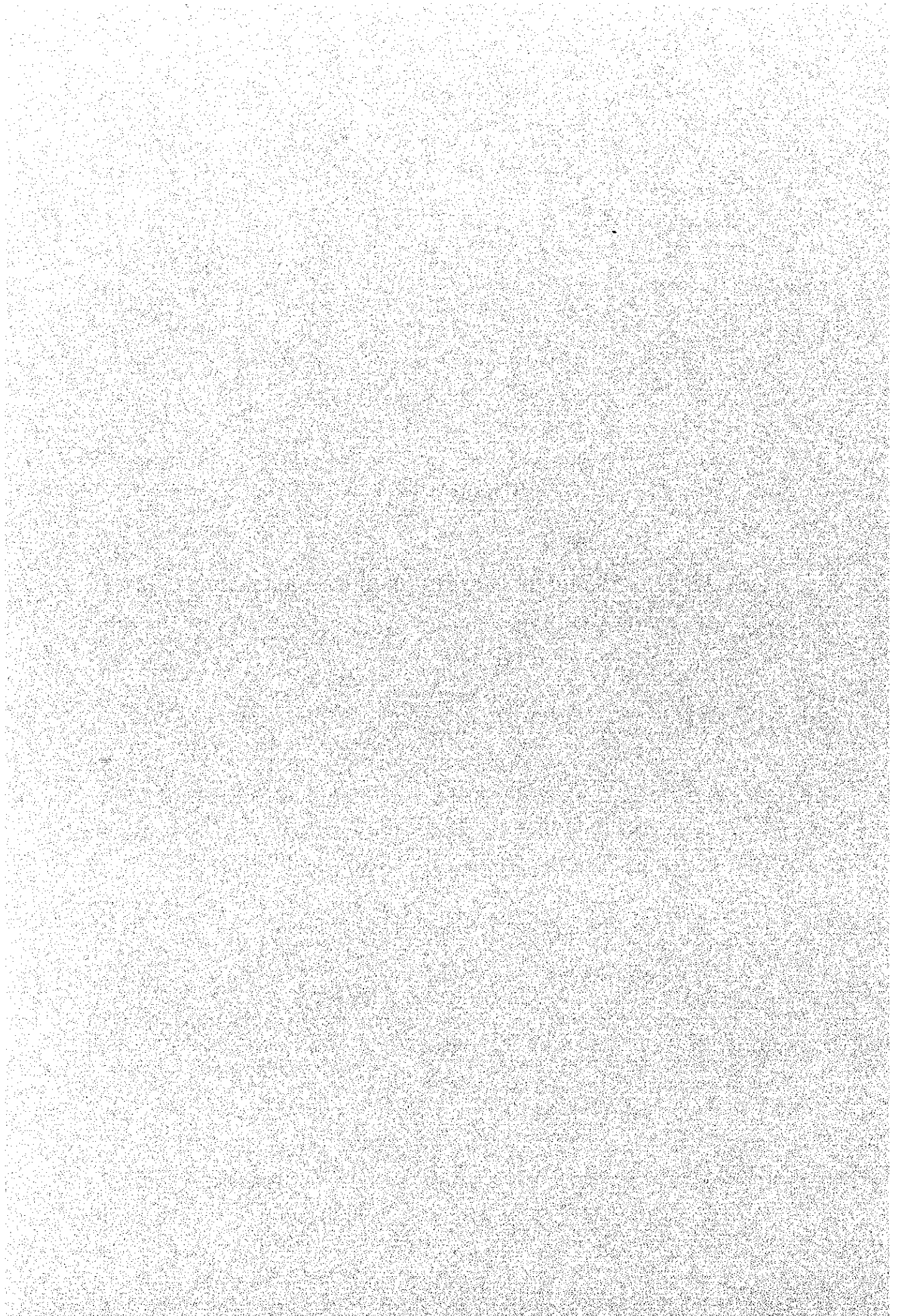


Chapter 14

Organisational and Institutional Arrangement



Chapter 14 Organisational and Institutional Arrangement

14.1 General

In the previous chapters, the main focus was on urban transport facility developments and improvements in the level of transport services which are the most basic items in transportation planning. Improvements and construction of new urban transport components were proposed and recommended under the SMURT-KL Master Plan.

In this chapter, emphasis is placed on organisational and institutional aspects of urban transport problems. These aspects are not directly concerned with urban transportation improvement, although they complement the Master Plan realisation. The Study Team examined possible measures to realise the Master Plan extensively and made recommendations on organisational and institutional aspects.

In this context, the current situation of the urban transportation facility development process, administrative issues and urban transport operating bodies in the Kuala Lumpur conurbation area were analysed. The Study Team made efforts to reveal the problems and issues concerning these aspects.

Practical measures were selected and recommended after examining the various methods available to solve and/or ease the problems and issues. The Study Team hopes that the recommendations made in this chapter will be beneficial and useful in realising the Master Plan.

14.2 Organisations and their Responsibilities Related with Current Urban Transport

14.2.1 Organisations and Responsibilities

Currently, many government and private organisations are responsible for urban transport issues in Kuala Lumpur and its conurbation area. Table 14.2.1 shows the major administrative organisations concerned with urban transport in the area.

The government organisations are divided into two, which are the Federal Government and the local government organisations.

Generally speaking, the Federal Government deals with nation-wide transportation plans, transport policy guidelines, and matters concerned with overall transport administration, while the local governments cope with urban transport problems under their jurisdiction. The local governments plan, execute, and administrate road networks and urban public transport improvements.

Among the Federal Government organisations, the Economic Planning Unit, of the Prime Minister's Department, formulates the five-year Malaysia Development Plans

and plans, evaluates, and identifies the major transport projects including urban transport development. Regarding the Klang Valley area, the Federal Territory Development and Klang Valley Planning Division co-ordinate development plans in the area.

The Ministry of Transportation administrates air, maritime, and surface transport systems in general. The Ministry controls motor vehicle registration and the issuance of driving licenses and relates to transport safety problems. As for the railway, the Department of Railway is responsible for railway operators overall including the issuance of licenses, controlling rates and fares and technical evaluation of new railway projects. The KTM, the former national railway of Malaysia, was corporatised to KTMB in 1992 and is now in a transition period to be privatised.

The Ministry of Works plans, designs, and constructs national infrastructure including roads, airports, ports and jetties. The Ministry's major concerns are national highways and toll expressways, while the latter is frequently undertaken under the privatisation scheme supervised by the Malaysian Highway Authority. The National road network system is planned by the Highway Planning Unit (HPU).

The Commercial Vehicle Licensing Board in the Ministry of Entrepreneur Development processes and issues commercial vehicle licenses in Peninsular Malaysia. The Board determines the terms and conditions of commercial vehicle operation such as buses and taxis. The major contents of the terms and conditions include fares, operation area and passenger capacity.

The Royal Malaysian Police is responsible for enforcing traffic rules and regulations related to road traffic together with traffic control work.

The local government consists of the City Hall of Kuala Lumpur, the Selangor State, and the municipalities in the Klang Valley area. These local governments face various actual, daily urban transport problems as well as the tasks of planning, construction, and maintenance of local transport facilities in each jurisdiction area.

Taking City Hall as an example, it carries out the planning, design, implementation, and maintenance of road projects; traffic management, design, and implementation of urban transport projects; co-ordinate the LRT and Monorail projects; manage, public transport facilities; and so on.

Regarding taxation, which is not included in the above table, the Ministry of Finance and the Ministry of Transportation are responsible for urban transport related duties and taxation.

Table 14.2.1 Organisations Related with Urban Transport

| Federal Government Organisations | Major Functions on Urban Transport |
|--|--|
| Prime Minister's Department | |
| Economic Planning Unit | To formulate objectives, policies and strategies in development planning To plan the five-year development plans. To coordinate and prepare the development budget for the five-year plans. To coordinate the Privatisation programme. |
| Federal Territory Development and Klang Valley Planning Division | To coordinate development plans in the Klang Valley area. |
| Ministry of Transportation | |
| Road Transport Department | To update the revenue collection system. To register and license drivers of motor vehicles. To ensure that motor vehicles are roadworthy. To reduce the rate of road accidents. To maintain records of information pertaining to motor vehicles and drivers. |
| Department of Railways | To control rates of fares and tariffs by examining all proposals for change in the structure and rates of fares, tariffs or charges submitted by any railway company. To formulate regulations and prescribe minimum standards. To ensure compliance of safety standards. To enforce regulations (issuance, suspension and withdrawal of railway licenses, etc) To study proposals for new railway schemes and make recommendations for the approval of the Minister To determine the performance standards of the services of the railway company through statistical formats and reports. |
| Railway Asset Corporation | To administer and manage lands, properties and rights for railway services. To develop infrastructure facilities for railway services. |
| KTMB | To provide a modern, efficient and competitive rail transport system. |
| Ministry of Works | |
| Public Works Department | To plan, design and construct infrastructure projects, mainly, roads, water supplies, Government buildings, airports, ports and jetties. To operate and maintain roads, water supplies and certain Government buildings. To provide technical advice to the Government at federal, state and district levels. |
| Highway Planning Unit | To conduct periodical traffic count surveys and issue a report on traffic volume annually To formulate national road and highway network system plan and programme To assist state government and other agencies |
| Malaysian Highway Authority | To supervise and execute the design, construction and maintenance of highways as determined by the Government. To supervise and execute the design and construction of the rest and service areas and other facilities that may be deemed necessary along highways. To collect toll from the users of highways and other dues from the utilisation of facilities along highways. To plan and conduct research to ensure the efficient utilisation of highways and other facilities along highways. |
| Ministry of Entrepreneur Development | |
| Commercial Vehicle Licensing Board | To process and issue licenses of all classes of commercial vehicles in Peninsular Malaysia (including condition of licenses) To determine the terms and conditions attached to all classes of commercial vehicle licenses issued (fares, operation area, passenger capacity or type of goods, maximum load weight). To formulate policies, roles and regulations pertaining to licensing of commercial vehicles, and monitor their impact on the efficiency of the road transport industry. |
| Ministry of Home Affairs | |
| Royal Malaysian Police | To maintain law and order. |

Source: "Information Book", City Hall Kuala Lumpur, 1993

"Dealing with the Malaysian Civil Service - 2nd Edition", Pelanduk Publications (M), 1994

Table 14.2.1 Organisations Related with Urban Transport (Continued)

| Local Government Organisations | Major Functions on Urban Transport |
|--|--|
| City Hall of Kuala Lumpur | |
| City Economic Planning Unit | <p>To formulate policies and strategies on the Socio-Economic Development of the Federal Territory of Kuala Lumpur.</p> <p>To co-ordinate and monitor development projects.</p> <p>To manage all data and information on the development of Kuala Lumpur.</p> <p>To ensure that infra-structure development and public facilities are planned and implemented to promote urban economic activities such as property development, business, transport, finance, tourism and others.</p> <p>To ensure an integrated development of the industrial sector which will contribute to the urban economic growth.</p> |
| Urban Transport Department | <p>To co-ordinate and manage the implementation of the Monorail project and Light Rapid Transit(LRT) System in Kuala Lumpur and areas connected to it.</p> <p>To plan and research on the development of an urban transportation system that covers public and highway transportation.</p> <p>To control urban development in terms of transportation system.</p> <p>To design and implement urban transportation projects financed by the government through City Hall Kuala Lumpur(bus/taxi stops, terminals for city buses and inter-town express buses and taxis).</p> <p>To co-ordinate and manage public transport facilities and services financed by the government through City Hall Kuala Lumpur.</p> |
| Public Works and Traffic Management Department | <p>To plan, design and implement road projects in the Federal Territory.</p> <p>To co-ordinate with private agencies in the planning and developing of road systems in the Klang Valley.</p> <p>To co-ordinate with the relevant agencies on matters relating to road system and traffic management in Kuala Lumpur City.</p> <p>To improve on road designs and to increase road capacity to cater to the needs of the increasing traffic volume.</p> <p>To plan and implement traffic management schemes to improve traffic flow.</p> <p>To maintain road networks to specific standards for the safety and comfort of road users.</p> <p>To minimise road accidents.</p> <p>To contribute towards a healthy environment, improve public transportation and promote pedestrian traffic.</p> |
| Enforcement Directorate | <p>To manage metered parking areas (privatised concept) and manual parking areas.</p> <p>To control and enforce traffic rules and regulations.</p> <p>To conduct operations to eradicate illegal activities such as illegal car/motorcycle attendants,.....</p> |
| Other Local Government Organisations | Similar to City Hall of Kuala Lumpur. |
| Selangor State | |
| Municipalities of Selangor State | |

Source: "Information Book", City Hall Kuala Lumpur, 1993

"Dealing with the Malaysian Civil Service - 2nd Edition", Pelanduk Publications (M), 1994

14.2.2 Functional Aspects of the Organisations

Table 14.2.2 summarises the relationship between the organisations concerned and their functions by mode of transport.

Table 14.2.2 Urban Transport Organisation and Functions by Mode

| Organisation | Road | Private Car Motorcycle | Bus & Taxi | Traffic Rules Enforcement | Railway | Pedestrian Facilities |
|--|---|---|---|---|--|---|
| Economic Planning Unit | Planning | Planning | Planning | | Planning | Planning |
| Federal Territory Development and Klang Valley | Co-ordination | | Co-ordination | | Co-ordination | |
| Ministry of Transport | | Driving License Registration Vehicle Inspection | Driving License Vehicle Inspection | Traffic Safety | Licensing Supervising | |
| Ministry of Works | Planning, design, construction, maintenance | | | | | |
| Ministry of Entrepreneur Development | | | License, route, fare control | | | |
| Royal Malaysian Police | | | | Traffic control, enforcement | | |
| Local Government including City Hall of Kuala Lumpur | Planning, design, construction, maintenance | | Bus/Taxi stop construction, bus terminals, bus-lane | Traffic control, enforcement, one-way control | Co-ordination | Planning, design, construction, maintenance |
| Private Sector | Construction, maintenance, operation | | Operation | | Construction, maintenance, operation | |

It is clear from this table that the EPU's major function is planning for all modes of transport excluding traffic control, and that the Ministry of Transport covers all transport modes. On the contrary, the Ministry of Works concentrates on roads and the Ministry of Entrepreneur Development is concerned with buses and taxis only.

The local government's functions cover all aspects of urban transport management including planning, design, construction, operation, and maintenance. However, the function of the local governments is limited; this is because the Federal Government determines the general plans and plans the big projects, while the local governments implement the general plans and big projects financed by the Federal Government except for the planning and implementation of smaller projects.

The private sector has been involved extensively in transport facility development projects and their operation since 1983 when the government declared the privatisation scheme as one of the National Policies. The private sector has been expanding its territory from the traditional bus/taxi transport to toll road construction/operation and railway construction/operation.

Regarding government assistance for urban transport facility developments and operations, very limited assistance has been rendered to the private sector. These have been soft and sometimes interest free loans and assistance in land acquisition for so-called BOT projects. Though it is not a subsidy, bus/taxi stops and terminals have been developed by the government as basic social infrastructure.

However, the situation has been changing. The government is considering various options to render extensive financial assistance to the Monorail project, which has stopped construction work after have been affected by the current economic crisis. In the case of toll expressway projects, the government has decided to spend money every year to compensate for the loss incurred by the private sector due to the reduced toll rates for the Kuala Lumpur – Karak Highway project. The reduction was partly in response to the public's comments and reactions.

14.3 Institutional and Organisational Problems

Based on the above examination and findings regarding the current organisational and institutional situation, the Study Team considers that following problems needs to be resolved in advance to achieve the Master Plan.

(1) Discrepancy between the metropolitan area and the local governments jurisdiction

The Kuala Lumpur conurbation area has been expanding as the Malaysian economy has grown. Currently, severe traffic congestion is seen on roads every day both in the CBD area and on radial routes connecting the suburban areas to the CBD, due to the expansion.

This phenomenon suggests that transportation planning should take all areas of the region into consideration, because the traffic flows across the local governments' boundaries in the region. The plan should be prepared from a regional point of view. The view should not be made based on local or a national point of view.

However, there has not been such a government organisation which deals with the transportation problems of the whole conurbation area till now. As a result, the Federal Government organisations such as the EPU, the Ministry of Transport, and the Ministry of Works, have made the plans related to the Kuala Lumpur conurbation area, although their basic stance is from the view point of national level planning. Meanwhile the local governments concerned have been trying to co-ordinate their own projects each other.

This lack of a proper organisation to supervise the overall region as a whole might cause conflicts between the Federal Government plans and their implementation by the local governments.

It is true that the Klang Valley Development Committee, which is co-chaired by the City Hall and the Selangor State Government, is responsible for the co-ordination of

all development projects related to both local governments. The Federal Territory Development and the Klang Valley Planning Division, Prime Minister's Department also have a similar role of co-ordinating plans for the region. Although the two government organisations are responsible for the co-ordination of the common development plans in the region, they are considered to be unconcerned with planning from a regional point of view nor are they considered to have sufficient capability to establish comprehensive plans over looking the whole region.

Therefore, the problem is that there is no proper government organisation which deals with regional problems as its responsibility. The Federal Government organisations should have a national point of view and the local governments should have a local one under its jurisdiction.

In addition, transport-related administration to control parking regulation. In particular, is duplicated by the City Hall and the Royal Police. On the other hand, function of licensing operation is owned by the Commercial Vehicle Licensing Board, as described before. This means that the local government has nothing to do with bus operation improvement, though the local government has sound information on bus operation and problems within its jurisdiction.

(2) Insufficient function in transportation planning

Activities related with transportation planning generally consist of information/data collection/storage, analysis of them, problem recognition, examination of countermeasures, establishment of plans, and execution.

Among the above, information/data collection is a basic procedure. However, the local governments in the area have not collected enough information/data for transport planning. For example, parking lot data is not collected by them. They do not have exact information on bus operation routes and the number of bus passengers by route. Furthermore, reliable updated road network data with inventory information are not being prepared by the authority.

It is true that road traffic volume data is being collected using detectors installed under major signalised intersections. However, the count data does not have traffic volume data by vehicle type. This data would be very useful for transport modelling, if the data was obtained by vehicle type. The current data provides only general information regarding the trend of traffic volume at intersections.

In reality, transport planning needs a substantial amount of information/data on various matters, such as transport-related, of course, as well as the socio-economic activities of private sector, future development plans, and so on. Therefore, it is not possible to expect local governments to have transport planning capability.

In addition to the above matters, land use plans and/or the urban development control does not seem to be closely connected with transport planning, although this is essential as well. As mentioned before, large-scale urban developments have been

approved and are in progress at present. It is feared that these developments may cause terrible traffic problems in the near future.

The Study Team believes that this problem is related to the lack of a regional planning organisation described above.

(3) Problems in providing transport facilities

Facility development in the transportation field has been changing from government financing to private sector financing, through for example by the BOT method, in recent years.

However, government-financed transport development still has a role at the local government level, such as pedestrian facilities, traffic management systems, local road development, and so on. The Federal Government's role in the national road development field is gradually diminishing, and its role has changed to supervision of the transport development projects implemented by the private sector.

The private sector has been investing intensively in transport facility developments in the area. The construction of many new high-quality toll roads and improvement of existing roads have been completed and they are being operated by the private sector. Rail-based systems have been completed and are operating in the region as well.

Regarding the BOT project development procedure, the following is a typical example in Malaysia.

- Proposal by a private investor
- Evaluation by the concerned Federal Government authorities
- Negotiation of conditions of concession
- Approval by the government
- Co-ordination with the concerned local governments
- Execution

The advantage of the BOT scheme is generally accepted as being the fact that the government does not have to spend its limited budget on development projects. However, it should be noted that the following problems might occur by the adoption of the scheme in general.

- The private sector takes the initiative in transport facility development.
- The private sector tends to execute profitable projects, and the profit, which could have been used for other unprofitable but indispensable

projects otherwise, would belong to the private sector and not the public sector.

- The order of priority of the development projects might be changed.
- The indispensable projects in a Master Plan might be delayed because of low financial viability.

In Malaysia particularly in this economic recession period, concerns about BOT projects being abandoned have been increasing.

(4) Weak enforcement function

1) Bus transport service

Currently, new rail-based transport systems are being developed to strengthen the public transport in the area. However, the stage bus service is still dominant in public transport service in the area.

Therefore, the stage bus transport still has a very important role in the urban transport field. However, it was discovered in the course of the study that some bus routes were not being operated as scheduled. This meant that passengers had to wait a much longer time than expected for a bus. This is a fatal flaw of the service. Some buses disembark passengers on a very busy trunk road where there are no bus stops provided, and disturb the heavy traffic flow.

Licenses of bus operation are issued by the Commercial Vehicle Licensing Board, Ministry of Entrepreneur Development. Bus fares, operation area and route, and operation frequency are also supervised by the Board.

Enforcement of the operating conditions of the stage bus is considered to be insufficient.

Regarding the feeder bus services to the newly opened rail-based stations, some feeder bus services to/from the KTMB commuter service and the LRT System I were suspended because they were not profitable. Recently, the LRT System I has begun its own feeder bus service along its route and the newly opened System II provides a similar service by using an affiliated bus company. Although the government is promoting multi-modal transport service to enhance public transport, these suspensions are considered to be inconsistent with the policy.

It will not be proper to insist that a bus operating company keep an unprofitable route. However, the suspension destroys the intended integrated public transport network. The Study Team feels that such light hearted suspension of the feeder service should not be permitted.

The rail-based modes, which were completed with huge investment, need a feeder service system function to collect and distribute passengers. If no measures are taken, the huge investment would have been for nothing.

2) Areas without public transport service

Some areas, including newly developed residential areas, are not covered by the public transport service. In these poorly-serviced areas, people are forced to own and use private transport modes. The public sector should ensure freedom of travel for every person including children, the handicapped, and the aged in a areas.

Amalgamation of bus companies in the area was carried out to ensure the provision of bus services on unprofitable routes. However, enforcement measures are considered to be weak.

(5) Lack of incentives to promote public transport systems

The past Malaysia Plans have increasingly recognised the importance of urban transport problems. The Sixth Malaysia Plan prospected "increase of public transport demand" based on "improvement of bus service quality" and "introduction of railway commuter service"(refer to Appendix 14-1). The Mid-Term Review of the Sixth Malaysia Plan expected "greater use of public transport" and "by the end of the decade, more than half of commuter transport should be carried by public transport". The Seventh Malaysia Plan declared "further development of an efficient, integrated, multi-modal, and environment-friendly public transport" through "Physical integration", "Route integration" and "Ticket integration".

Currently, more than eighty-percent of trips are made by private transport modes according to the Home Interview Survey. Public transport share has been declining in accordance with the rapidly growing car/motorcycle ownership caused by the high economic growth of Malaysia.

In order to understand the backgrounds of heavy dependence on private modes other than the high motor vehicle ownership and the difference of the transport service level between the public and the private, the Study Team examined institutional aspects of the private car usage.

As a result, it appeared that the Malaysian society has given a greater priority to private car usage compared to the enhancement of the use of public transport system. For example, more than 90 % of commuters who use public transport (bus) are not given any commuting allowance by companies, while 75% of car users are provided with a parking allowance according to the building survey results. Furthermore, more than 20 % of the commuters using a private car are given a fuel allowance according to the survey.

Apparently, the Malaysian society encourages private car usage. This must be changed to enhance public transport usage as desired by the government.

Private cars are very convenient, fast, and comfortable transport modes compared to public transport, particularly road-based public transport. Therefore, people will continue to use private transport modes even if the level of service of public transport mode were to improve substantially, as long as the society accepts the current institutions.

14.4 Pursuit of Practical Measures

(1) Necessity of new regional administrative organisation

1) New organisation or strengthening the existing authority?

The discrepancy between the metropolitan area and the concerned local governments jurisdiction has caused problems as explained before. One way to fix the discrepancy would be to establish a new government organisation which administrates the transport-related problems overall from a regional view point. Another idea is to strengthen the existing functions of the Klang Valley Development Committee or to strengthen the Federal Territory Development and Klang Valley Planning Division.

The idea of a new organisation is considered to be better than to strengthening the existing organisations, because the most important thing is to plan the area from a regional point of view. The existing organisations have more or less a tendency to do things for their benefit. This might disturb the regional perspective. The organisation should have a comprehensive perspective of the whole area as an integrated one.

Regarding the jurisdiction area of the new organisation, one idea is to cover all of the Klang Valley area, while another is to limit it to the Kuala Lumpur metropolitan area. Considering the currently urbanised areas and the regional interchange such as commuting trips as shown in Appendix 3, it is better to limit the area to the Metropolitan area. Furthermore, if the Area Pricing Scheme is implemented and the revenue is pooled for regional benefit, the idea of the whole Klang Valley region seems too big.

2) Administrative hierarchy

The new organisation has to be placed under the Federal Government. It should have the power to control the local governments within the region with regard to regional transport matters. It should be independent from other Federal Government organisations to accomplish its responsibility to secure the regional point of view.

3) Creation of fund for urban transport

To secure realistic power for the new organisation, it has to be equipped with a sound financial source. The fund would be spent based on its own independent decision. By the financial background, the new organisation is considered to be able to handle various urban transport problems in the region. However, there is no such fund system in Malaysia at present. The following discussion will help in the creation of a fund.

Under the current budget system, the Government supplies the funds necessary for the urban transport system, which is determined basically by the five-year plan. The Government decides the budget allocation, which is not always necessarily appropriate for realising the socio-economic goals of Malaysia. Some countries, therefore, adopt a special fund system such as a road fund. The fund accepts tax and non-tax revenues, which are designated to be used only for road related expenditures by law. The revenue for the fund is collected from road users as fuel tax, road tax, and so on. The justification of such a system is that revenue collected from the road users should be spent for the road users' benefit.

The new fund for the regional organisation could be justified if the range of users and beneficiaries are expanded to include urban public transport. By improving urban public transport services coupled with some institutional enhancement measures, private mode users also receive benefits, in the form of less congested roads resulting from commuters switching over to the improved public transport. Furthermore, the current private mode users will have the option if using public transport use.

Potential revenue for the fund will be the Area Pricing Scheme revenue, traffic generation tax, increased parking lot tax, increased sales tax in the area, and so on.

However, the amount necessary to satisfy the expenditures of the new organisation may not be fulfilled by the fund. In that case, some of the national general budget could be used for the region as of social minimum infrastructure development. This is common in developed countries such as the U.S., Japan, France, Germany, U.K., and so on. This budgeting is executed from a national point of view.

4) Arrangement of some organisational functions

The function to give licenses to bus operators is owned by the Commercial Vehicle Licensing Board, as mentioned before. The problem in enforcing the conditions of bus operation should be resolved to assure a reliable bus transport.

The problem could be resolved if the new organisation took over the function and utilised the enforcement power to realise the public transport service envisaged. For example, operation frequencies and operation routes should be maintained as one of the conditions between the bus operators and the organisation. Strong monitoring power should be given to the organisation. This would also contribute to its transportation planning of the public transport network including the feeder service

to/from stations of rail-based transport modes. Furthermore, those areas poorly serviced by public transport could also benefit from the strong monitoring power, though this will need a financial treatment by the organisation.

The Commercial Vehicle Licensing Board is expected to remain as a federal government organisation concentrating on much higher level policy making and control of national registration.

(2) Encouragement of transportation planning capability

It was mentioned in 14.3 that the local governments do not have sufficient enough capability to conduct transportation planning. Information/data collection was pointed out as one of the reasons. Another major reason was that they are not expected to cope with the regional transport planning.

However, as mentioned before, transport problems are spreading all over the region. The transportation planning work should be taken care by some organisation. One possibility is for the new regional organisation to be the responsible party, while another is for a new institute specialising in transportation planning of the region to be established.

The Study Team feels that the establishment of a new research institute would be better, because transportation planning needs highly technical knowledge and a long career in the specific field is necessary. Even if the new organisation were to have a planning function, the research section should be independent. However in such a case, some conflicts such as personnel reshuffling might arise and disrupt its effectiveness. Therefore, an independent research and planning institute would be most appropriate.

However, close relations with the new organisation is indispensable. The new institute will have to rely on the new organisation, and the existing Federal and local government for information/data collection on the current traffic situation, development projects in the area, socio-economic data, and so on. The difference is that the new institute would collect the necessary information/data for a specific purpose, namely the regional transportation planning. The institute should store the collected information/data for the planning purposes, paying attention to convenience in data retrieval.

It will be beneficial for the new institute in its early years to hire some expatriates with professional expertise in transportation planning.

A completely different idea, is the possibility of contracting out the work to some transport planning consultants. However, under this method the planning capability in the transportation field will not be encouraged in the government organisations in Malaysia. The Study Team believes that only a continuous planning effort would foster the capability.

(3) Improvement of transport facility development procedure

In Section 14.3, several problems were mentioned concerning the transport facility development procedure in Malaysia. The biggest important problem is the fact that the private sector takes the initiative in the development and that the order of the development projects might be changed, related to the BOT scheme (it should be mentioned that, in some BOT scheme projects, the Government took initiatives and the procedure was almost same as that below).

To solve these problems, the following procedure is recommended.

- The government makes a public announcement of possible BOT scheme projects, in order of development priority.
- Investors submit proposals.
- Government evaluates the proposals and decides on the investor.
- Project execution and operation.

By adopting the above procedure, the government can expect the following advantages. However, periodical review of the priority order, by reflecting on the socio-economic changes, will be necessary to ensure the national benefit.

- The Government can take the initiative in transport facility development.
- The Government can control the order of project implementation.
- The Government can avoid non-feasible projects in advance.

For the Kuala Lumpur conurbation area, it will be beneficial for both the residents of the area and the Federal Government, if the new organisation were to take over the role of the whole procedure. Because the new organisation is able to control the regional transport facility development according to its own Master Plan for the area. The Federal Government can reduce works.

Countermeasures to resolve the problem of BOT projects being abandon due to the current economic crises should be studied further. Indispensable transport projects should be continued by any means. A sound policy to cope with the problem should be worked out including various government assistance.

(4) Enhancement of public transport usage

In 14.3 of this chapter, it was pointed out that the Malaysian society gives priority to private transport over to public transport. To enhance public transport usage, it is necessary to change the society to one which views public transport more favorably than private transport, particularly in terms of travel cost.

To clarify the current travel cost of commuters, the Study Team compared the cost of public mode and private mode as follows.

- Combined rail-based and bus mode users

According to the Study Team's estimation, the average travel cost for a rail-based commuter per day is RM3.54. Assuming that there are 26 working days in a month, the monthly commuting travel cost is estimated to be RM92.04.

- Bus only users

According to the Study Team's estimation, the average travel cost for a rail-based commuter per day is RM2.36. Assuming that there are 26 working days in a month, the monthly commuting travel cost is estimated to be RM61.36.

- Private car users

Private car users are deemed to only recognise an out-of-pocket cost for car usage. Usually, this is called the perceived cost of car users, because they do not care for other costs such as tyre, oil, repair, and tax as these costs must be paid even if they do not use the car. Therefore, only the fuel cost is counted as the travel cost of private car commuters as follows.

Assuming a private car commuter travels a 20-km round trip per day and fuel consumption is 1 litre per 10 km, the travel cost per day is RM2.20. Assuming that there are 26 working days in a month in the same manner as the public transport users, the monthly cost is estimated to be RM57.20.

It is clear that private car users perceive their expense for commuting to be less than that of public transport users according to the above comparison. However, there are many toll roads in the region. Therefore, the premise should be changed a little. If the private mode users pay RM2.00 per day for toll, the travel cost is calculated as RM109.20. This amount is higher than that of public transport modes. However, the difference is not considered to be substantial enough for them to change their commuting mode at present. It should be noted that car ownership is one of the important social symbols in Malaysia and that the cost difference should be substantial for it to promote public transport mode usage.

To enhance public transport usage, a measure involving public travel cost reduction coupled together with an increase for private mode users was examined.

To begin with, the Study Team recommends that companies pay the commuting cost of the employees who use public transport. This measure is considered to be remarkably effective in enhancing public transport usage, because monetary impedance to use public transport diminishes as discussed in the previous chapters.

This institution is common in Japan. In Paris, France, a half of the commuting expense must be paid by the company for their employees by law.

However, there is one obstacle to implementing this measure. In Malaysia, the Income Tax Act prohibits the appropriation of transportation expenses of employees to deductions in Sec 39(1)(a) even if the expenses are made for commuting purposes. Therefore, companies are not willing to pay the expenses for their employees under the circumstances. The Study Team recommends concerned authorities to reconsider this Act to enhance public transport usage by easing the travel costs of commuters.

Secondary, a car usage restraint scheme should be implemented, particularly against commuting trips. In this context, the introduction of the Area Pricing Scheme was recommended on specific roads as explained in Chapter 9. Other measures such as higher taxation on parking lots for employees and on of commuting costs allowances of private car users, should be applied in tandem to ensure the desired expected effect of the car restraint scheme.

Public transport operators, should consider issuing discount commuting pass to increase their patronage. The operators could obtain much more regular patronage and as well as a firm financial revenue by the measure.

14.5 Recommended Organisational and Institutional Arrangements

(1) Establishment of Klang Valley Transportation Authority

The establishment of a Klang Valley Transportation Authority is recommended. As mentioned before, the gap between the metropolitan area in the region and the local governments' jurisdiction has made it very difficult to establish a transport planning policy and strategies from a regional view point.

A new transportation authority, covering the Federal Territory of Kuala Lumpur and Municipal Councils including Ampang Jaya, Selayang, Kajang, Petaling Jaya and Subang Jaya, is extremely necessary. The basic functions of the new authority are envisaged to be as follows:

- An independent Federal Government authority;
- Regarding regional transportation matters, the above mentioned local governments will be under the control of the Authority;
- Have administrative powers to approve BOT transport related projects in the area together with the concerned authorities;
- Be equipped with financial sources for its own fund, including revenues from the recommended Area Pricing Scheme, additional taxes, possibility government budget, and so on;

- Have the function of issuing licenses on public transport operation including stage bus service, feeder bus service and rail-based systems; and
- Keep close relations with the recommended Klang Valley Transportation Research Institute to strengthen its planning capability.

Figure 14.5.1 shows a likely organisation chart of the new authority. Due consideration and co-ordination will be necessary to realise the authority based on further study.

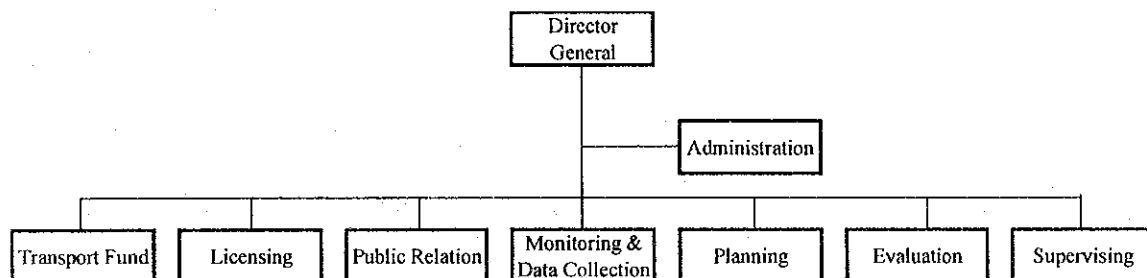


Figure 14.5.1 Presumable Organisation Chart of the Klang Valley Transportation Authority

(2) Establishment of Klang Valley Transportation Research Institute

As described before, transportation-related data include the variety of sources, because transportation is one of the basic needs of human beings. If one wishes to understand transportation problems, one will need information on population, income level, car ownership, employment by industry, business distribution by type, geographical situation, transportation networks, and traffic volume on the road by vehicle type, of course, and number of passengers using public transport by route, for example.

In addition, excellent planning skills are necessary to cope with the existing and future urban transport problems coupled with state-of-the-art computer software and hardware with peripheral devices.

Therefore, the Study Team recommends the establishment of a Klang Valley Transportation Research Institute to understand, examine and plan necessary measures especially for the urban transportation problems in the Klang Valley Area. This Institute is not necessarily a transport specific organisation, but part of a much broader institute that covers whole urban problems such as the Institute of Urbanisation Issues. Furthermore, utilisation of IKRAM, which is an institute under the Ministry of Works, should be taken into consideration when the new institute becomes a reality.

It should be mentioned that close co-operation with the new Klang Valley Transportation Authority is important though the Institute itself should be independent.

With regard to transport modelling and related works, it would be effective and efficient to invite some foreign expatriates who have professional expertise in transportation planning, including technical aspects, in the initial stage.

Figure 14.5.2 shows a likely organisation chart of the new Institute.

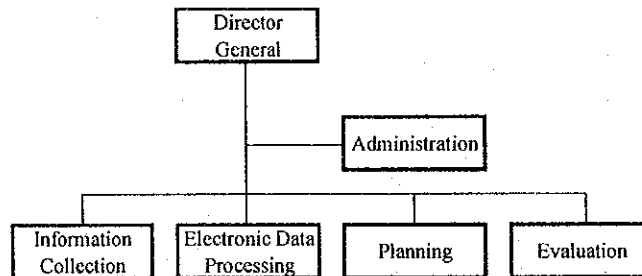


Figure 14.5.2 Presumable Organisation Chart of the Klang Valley Transportation Research Institute

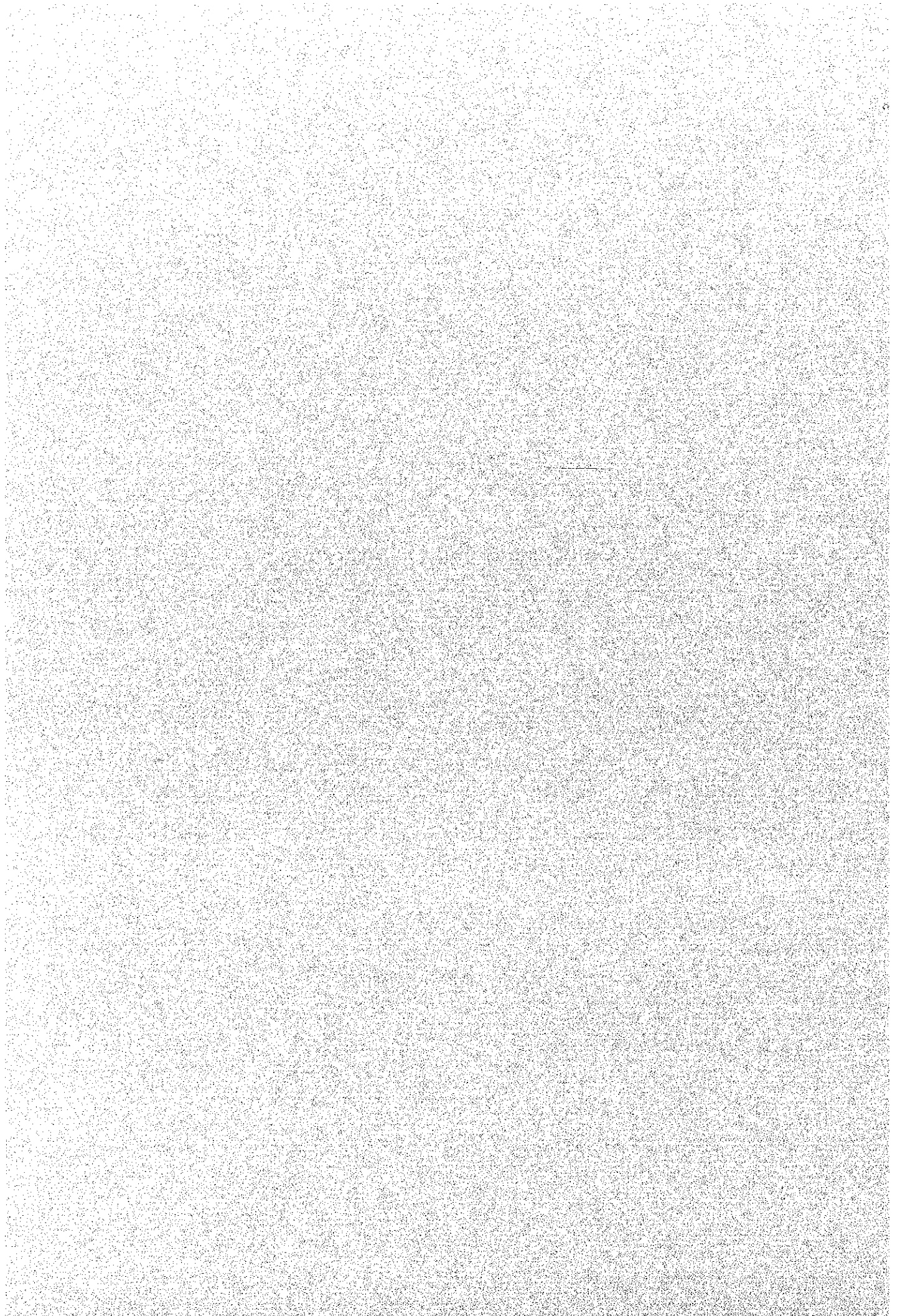
(3) Measures to enhance public transport usage

As discussed above, a commuting allowance for public transport mode users is recommended, coupled with the revision of the Income Tax Law for enhanced public transport usage.

On the other hand, the Study Team recommends the implementation of the Area Pricing Scheme and a higher the tax rate on allowances given to commuters using private transport mode such as the parking lot allowance.

Chapter 15

Conclusions and Propositions



Chapter 15 Conclusions and Propositions

15.1 Directions of Policies and Strategies for Urban Transportation

(1) Urban Structure and Trend of Urban Development

Under the past urban development, the Kuala Lumpur metropolitan area has developed with business districts in the CPA, and residential districts around its peripheries. Housing complexes have been developed in suburban areas but the newly developed areas are rarely served by public transport. Thus most people moved to the suburban housings under the premise that they would use automobile to get to their work place and other travel destinations.

In contrast, large-scale urban commercial complexes, consisting of office building, shopping centre, hotel and condominium, have been developed in the CPA and its peripheral areas. Recent large-scale urban developments in Kuala Lumpur, including KLCC, KL Central, Mid-Valley, and among others, will attract an enormous amount of additional trips to these areas.

Increase in job opportunities within the city centre together with the dispersal of residential development in the suburb has resulted in an increase in commuting distances. These factors, combined with the increasing automobile ownership, would make the metropolitan area a car-driven society.

(2) Desirable Future Urban Transportation System

Two main directions can be considered for the future urban transportation system development in the Kuala Lumpur metropolitan area. One direction is to follow the past trend and to accept the present automobile society and its advantages; the other is to change the existing system into a public transport oriented society. In the former case, it may be impossible to avoid further increase in traffic congestion and the deterioration of the environment. In contrast, the latter case cannot be achieved without the development of an efficient urban public transport system. It is also necessary, to some extent, to enforce people to shift from automobile use to public transport by applying transportation demand management measures.

Taking into consideration that the Kuala Lumpur metropolitan area is not a large urban area with dispersed land use, the most realistic approach is to combine these two directions and to enjoy the benefits incurred from both. In other words, it is desirable to develop transport facilities for both automobile and public transport, as an alternative mode of transport, and to give users an opportunity to select one of the two modes according to the time, place, and purpose of their travels.

(3) Future Traffic Demand

Future traffic demand was predicted based on the assumption that additional rail-based transport systems would be developed and that automobile use would be controlled. In other words, an increase of automobile usage is expected, although the currently planned rail-based transport system will be developed together with the proposed trunk bus systems, which supplement those areas which are not served by the rail-based transport systems. By enhancing the public transport system, it is estimated that the share of public transport modes would increase from the current 19.7 percent of the total trips made by motorised modes to 27 percent in 2020.

15.2 Recommended Urban Transport Policy Measures

(1) Immediate Measures to Alleviate Traffic Congestion in CPA

1) Transportation Demand Management : Area Pricing Scheme

One of the main objectives for solving the traffic problems in the metropolitan area is to preserve its function as the Capital City and to support social and economic activities. The CPA is considered to be as the most significant core district in the metropolitan area. The CPA, however, has suffered from chronic traffic congestion, thus one of the most important issues for urban transportation is how to cope with the concentrated automobile traffic in the CPA, and how to provide safe, convenient, and attractive transportation facilities.

Area Pricing Scheme should be introduced as a short-term measure to control automobile traffic demand in the CPA during the morning and evening peak hours. Employing this scheme would bring about a reduction of around 7,200 vehicles in the peak hours. In other words, it would be a reduction of about 15,000 vehicles per day. This is about 12 percent of the total inbound traffic volume coming into the CPA during the morning peak hours.

It is most appropriate to bring the Area Pricing Scheme into effect after the completion of the rail-based transport system developments and also after the introduction of the trunk bus system supported by exclusive bus lanes.

2) Traffic Control and Management Plan : A Package Plan

It is important to provide exclusive bus lanes to improve the bus operation and to make bus transport more reliable and attractive to the people. Since most of the main roads inside the CPA have merely four lanes, it is difficult to provide the bus priority lanes without reducing the existing level of service for private vehicles. Therefore, the introduction of a reversible flow lane system is recommended at the same time to maintain the existing number of lanes for private vehicular traffic for heavier traffic direction.

In addition, in order to increase the capacity of the road network in the CPA, it would be effective to adopt a package of traffic control and management plans, which includes the improvement of traffic signal control system, the improvement of the Puduraya roundabout, and so on. The package plan is expected to contribute significantly to alleviate traffic congestion in the CPA in the short-term.

3) Pedestrian Facility Development

It is of importance to create well-designed pedestrian facilities. People are willing to walk a short distance if such a comfortable environment was available, consequently it would lead to a reduction in automobile use. In developing pedestrian facilities it should be reminded that the facilities should be such that they may be used safely by the handicapped, infants and the elderly. Such an environment enables people to walk to/from railway stations without discomfort and brings about the promotion of public transport usage.

(2) Promotion of Public Transport

1) Introduction of Trunk Bus System

SMURT-KL Home Interview Survey revealed that the modal share of public buses, excluding school bus and factory bus, has decreased dramatically from 24 percent of the total person trips made by motorised modes to 8 percent during the last decade. This sharp drop in the bus share implies the strong preference of people to use private modes of transport, since conventional buses cannot excel private automobiles in speed, comfort, reliability and convenience.

Therefore, in order to revitalise bus transport, it is necessary to introduce a faster and more reliable public transport than the existing bus transport; otherwise people will continue to shift to private mode of transport.

There are two options in public modes of transport. One is the rail-based transport system and another is the trunk bus system.

Since the rail-based transport system needs huge initial investment and the fares tend to be relatively high to cover the operating and maintenance costs as well as the initial investment costs if projects are implemented under a privatisation scheme. This high fare results in low ridership and insufficient revenue, and as a consequence, all of the rail operators have been facing financial problem. Thus, the development of rail-based transport system is limited to areas where sufficient passenger demand is expected, and the system, without doubt, cannot cover the whole metropolitan area.

As for conventional buses, the operation speed is slower than automobiles and their operation is not punctual due to traffic congestion. In order to overcome this drawback of the existing bus operation, it is proposed that a trunk bus system be introduced, which has railway-like operation using the exclusive right of way for bus

operation. Since the trunk bus system makes use of the existing road space, initial investment cost can be minimised.

The system should be introduced in the Damansara, Kepong, Genting Kelang, and Cheras corridors. Some roads, however, are currently being improved under the privatisation scheme, and immediate implementation there seems difficult because it requires negotiations to the change of concession condition with the concessionaire company. In the short term, it is proposed that the trunk bus system be introduced on 6-lane sections as there will be no such problems. These include the section with six lanes on Jln. Syed Putra, Jln. Phang, Jln. Ipoh, and Jln Pudu.

In addition, although the southern part of the PRT had been planned in tandem with a large-scale urban development, the project has been frozen due to the recent recession. This section would have competed with the KTMB and Putra, LRT System (II) anyway. Therefore, the southern section of the PRT should be replaced by a trunk bus system.

In the CPA, these trunk bus routes should be connected with the existing and proposed exclusive bus lanes, together with the reversible flow lanes, to secure reasonable bus operation speeds by giving priority to bus operation.

Furthermore, it is desirable from a long-term viewpoint for some of these trunk bus systems to be converted into rail-based transport systems which have more passenger capacity. In particular, the trunk bus routes in Damansara and Cheras should be converted into a LRT system and connected with a new underground section along Jln. Raja Chulan. It is desirable for the underground expressway, as mentioned below, and the underground section of the LRT to be constructed simultaneously.

2) Support for Rail-based Transport System

a. Important role of rail-based transport systems

Rail-based transport systems are considered to be superior to buses. It is predicted that about 1.4 million passengers, accounting for 12 percent of the total person trip demands, would use the rail-based transport systems, on the assumption that expansion of the feeder services, improvement of transfer facilities, and introduction of a common fare were realised. If the rail services were not provided, all the users would rely on automobiles or buses. Thus, a tremendous amount of person trip demands would be carried by road transport, and this, in turn, would result in serious traffic congestion and deterioration of the urban environment.

b. Crisis of rail-based transport system

Totally segregated from automobile traffic, rail-based transport systems are considered to have great potential as a core public transport mode in the future. However, at present, it is difficult to attain financial viability due to insufficient revenue. The PRT project was suspended as of November, 1998. Rail-based

transport systems presently in service include KTMB, the LRT System (I), and a part of the LRT System (II), but all the lines have suffered from the low passenger demands. It is evident that the operations of the rail-based transport systems will fail sooner or later if the trend in low ridership continues.

c. Improvement of feeder bus service

Under the present situation, the rail-based transport systems in the metropolitan area are inconvenient to use due to the lack of feeder bus services, in particular, for KTMB lines. These facts diminish the advantages of the rail-based transport systems, such as punctuality, reliability, and high speed. In this sense, feeder bus services may be the most important means to increase the number of passengers.

d. Improvement / development of transfer facilities

There are several existing and planned rail-based transport systems in the metropolitan area. The system should work well if the impedance for transferring to other lines is minimised by improving the transfer facilities. Therefore, it is necessary to provide better transferring facilities, such as moving walks and so forth. The most crucial transfer point that can be pointed out is between the Sultan Ismail station, the P. Ramlee station, and the Wawasan station, which are the interchange stations between PRT and LRT System(II).

e. Transport allowance for employees commuting by public transport

The low ridership of the rail-based transport systems is attributable to the expensive fare. Consequently the reduction in "Out of Pocket" transport costs would lead to an increase in passenger demands. For employees using car parks, the employers reimburse the cost in most cases, whereas few employers reimburse the public transport cost for their employees. Therefore, it is proposed that a transport allowance be provided for the employees using public transport through the preferential treatment in taxation. If the transportation allowance could be deducted from the company profit, most employers are likely to give transport allowance to employees. In this way, the financial burden on both the employees and the employers will be reduced, and the number of passengers may be expected to increase.

f. Needs of financial assistance for rail-based transport system by public sector

Complete BOT or BOO are hardly effective for the rail business, even under special conditions where the right for land development along the corridor is given to the concessionaire companies. As has been adopted in other countries, it is necessary to construct part of infrastructure under financial support by the Government. This can be justified by the following reasons.

Economic analyses have revealed that rail-based transport systems bring significant benefits to the society by reducing traffic congestion and by improving urban environment, and rail-based system development projects are feasible in terms of economics.

On the contrary, financial analyses have shown the difficulties of operating rail-based transport as a business, and conclude that the projects are not feasible by any means. Thus, intervention by the public sector is justified to support the rail-based transport systems.

Further studies are necessary to explore how much and what kind of supports will be needed.

(3) Enhancement of Road System

As for road network planning, the future road network, which will be formed by additional privatised project roads added to the existing road network, can be regarded as the basis to establish a road network development plan. The following are recommendations to amend the planned road network.

1) Road development in CPA and needs of transportation demand management

The road capacity in the CPA will not be able to increase to a great extent due to difficulties in land acquisition. It is expected, however, that more traffic will be attracted to the CPA rapidly due to the on-going and planned urban developments, and the construction of the expressway plunging into the CPA will also induce more traffic by providing easy access to the area. Thus it is proposed that a new underground expressway be developed under Jln. Raja Chulan, linking Jln. Parlimen and Jln. Tun Razak and the Middle Ring Road (II) to fulfil the gap between demand and supply.

However, it is predicted that traffic demand will surpass the road capacity in the CPA even if several roads are developed and improved. In this regard, transportation demand management measures such as the Area Pricing scheme, should be applied throughout the planning period by monitoring the traffic condition at each stage.

2) Importance of minor arterial roads and local roads

By examining the future traffic demand and the network configuration, several new arterial roads and local roads have been proposed to supplement the planned road network in the Study area. Since almost all the BOT project roads are major trunk roads, there is a concern that development of only trunk roads in the absence of minor arterial road development will cause the division of the community and deterioration of the environment. Roads have not only a traffic function but also a variety of functions such as a guideline to form an urban area by providing a framework. Therefore it is recommended that minor arterial roads and local roads be built at the same time as the construction of the major trunk roads.

3) Priority of road development

The order of road construction is also important, since the development of a road will affect the traffic demand on the roads in the surrounding area, in particular, parallel roads. It will also affect the financial situation of the privatised road projects directly. In this regard, attention should be paid to the trend in traffic demand in the corridor, and a careful feasibility study should be conducted on the implementation schedule of the new roads, such as the Wangsa-Karamat Highway, the KL North-East Highway, and the eastern part of the proposed underground expressway.

15.3 Establishment of a New Transportation Organisation

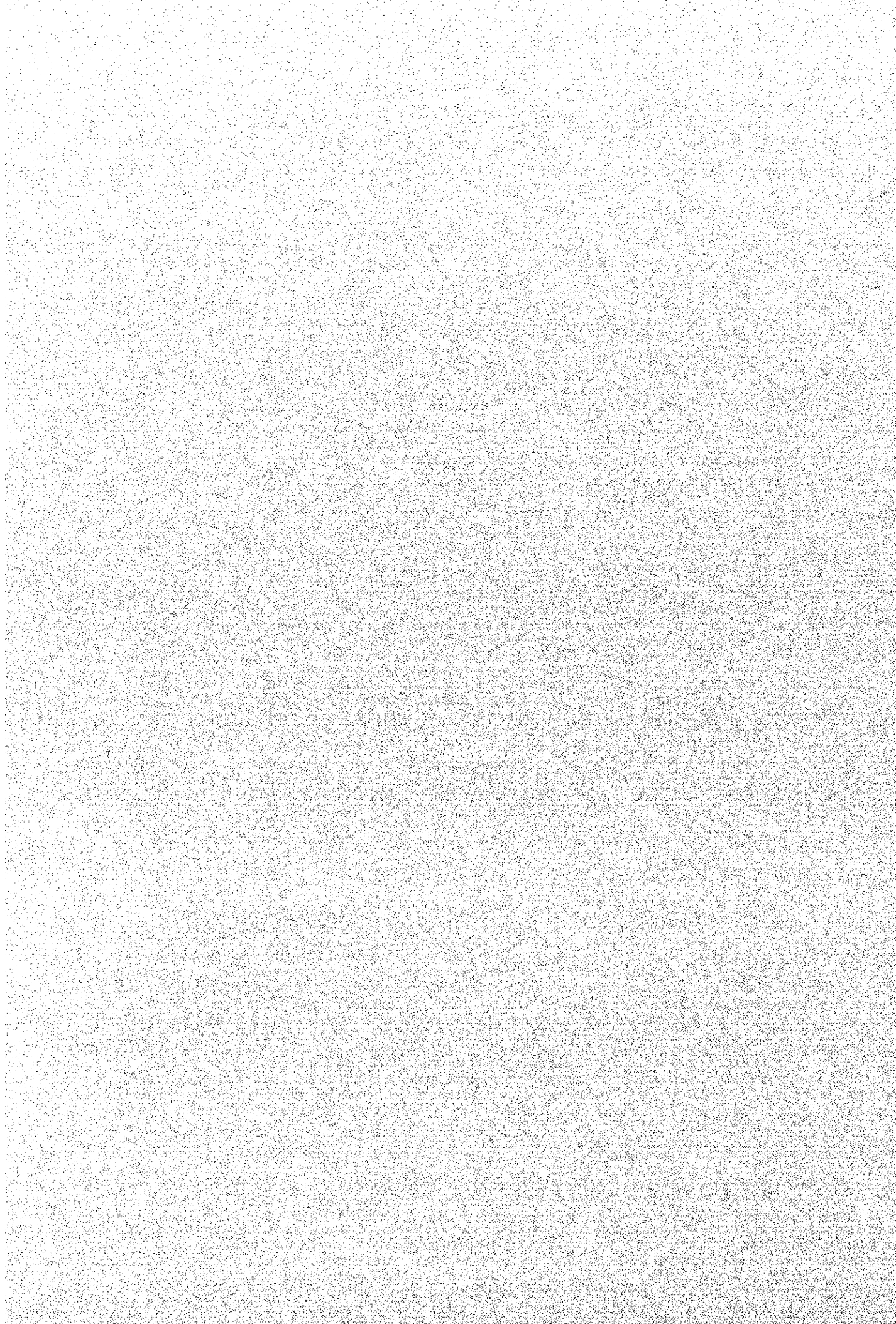
The Kuala Lumpur metropolitan area has sprawled over and it has already extended beyond the administrative boundary of the City of Kuala Lumpur. Many people commute to the city from outside of the city every day; thus the planning of urban transport facilities and operation, such as road network, railway lines and bus routes cannot be dealt with only within the city

Consequently urban transportation problems and issues of the Kuala Lumpur metropolitan area cannot be dealt with by the City of Kuala Lumpur. Taking the current situation into account, it is recommended that a metropolitan-wide transportation organisation be created. The organisation should have a transportation planning function, monitoring function, traffic control function, transportation demand management function, as well as supervising function on transport facility development.

Among the policy measures recommended in the Study, the Area Pricing Scheme and the trunk bus system should be implemented by the new authority. Execution of the Area Pricing Scheme should be handled by the new organisation and the revenue should be used for relevant expenditure. The facilities of the proposed trunk bus system, such as bus shelters, the traffic signals for bus passengers close to the bus stops, and among others, should be developed by the new transport authority as well. In turn, the authority shall have the right to collect the charges from bus companies which operate their buses on the routes.

In conclusion, the transport authority is required to deal with the urban transportation problems and to implement a variety of policy measures in the metropolitan area.

Appendices



Appendix 8



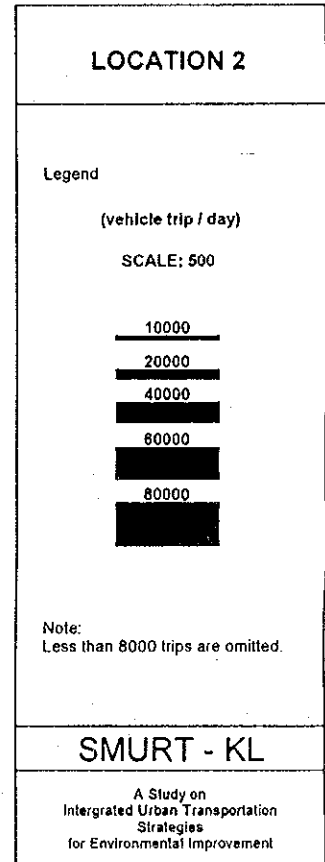
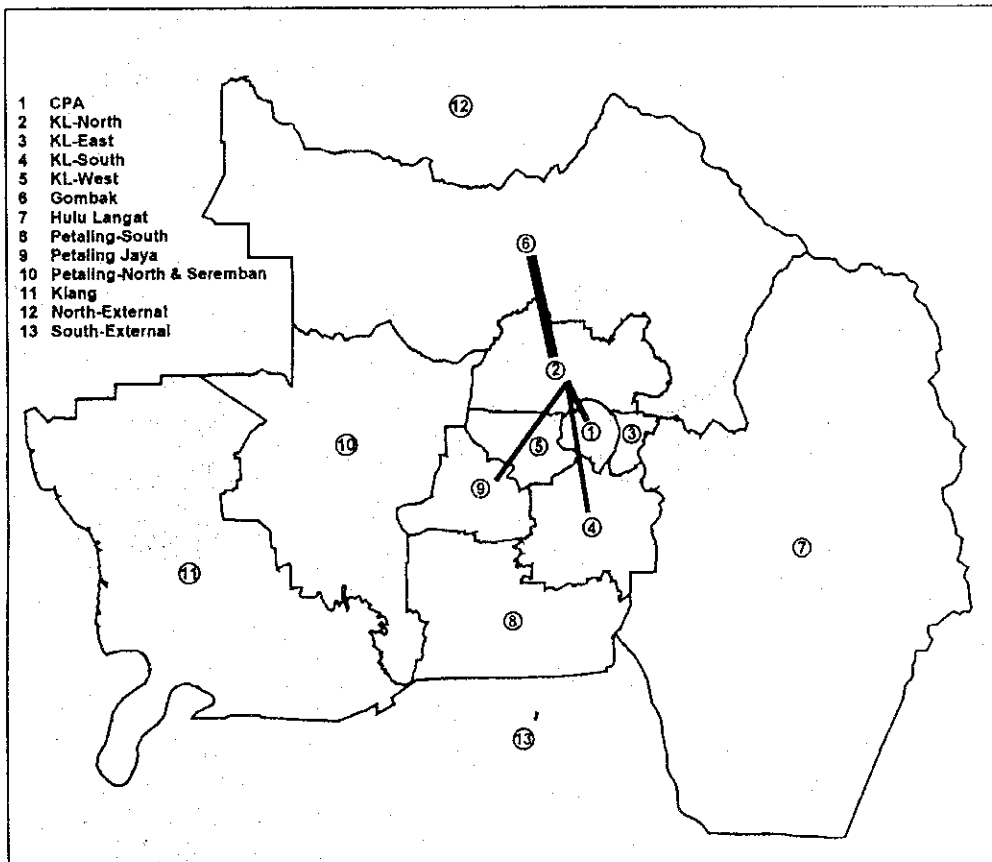
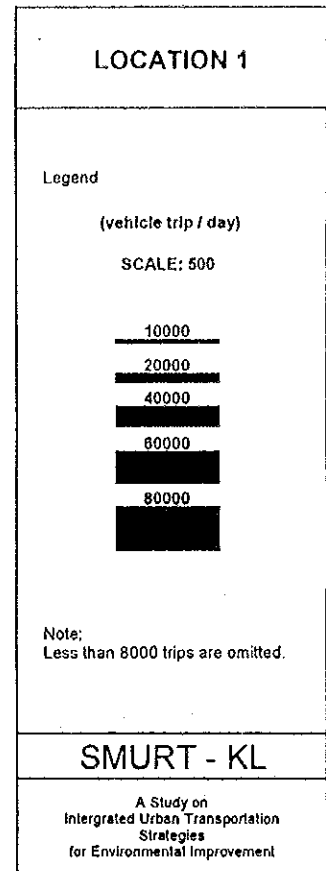
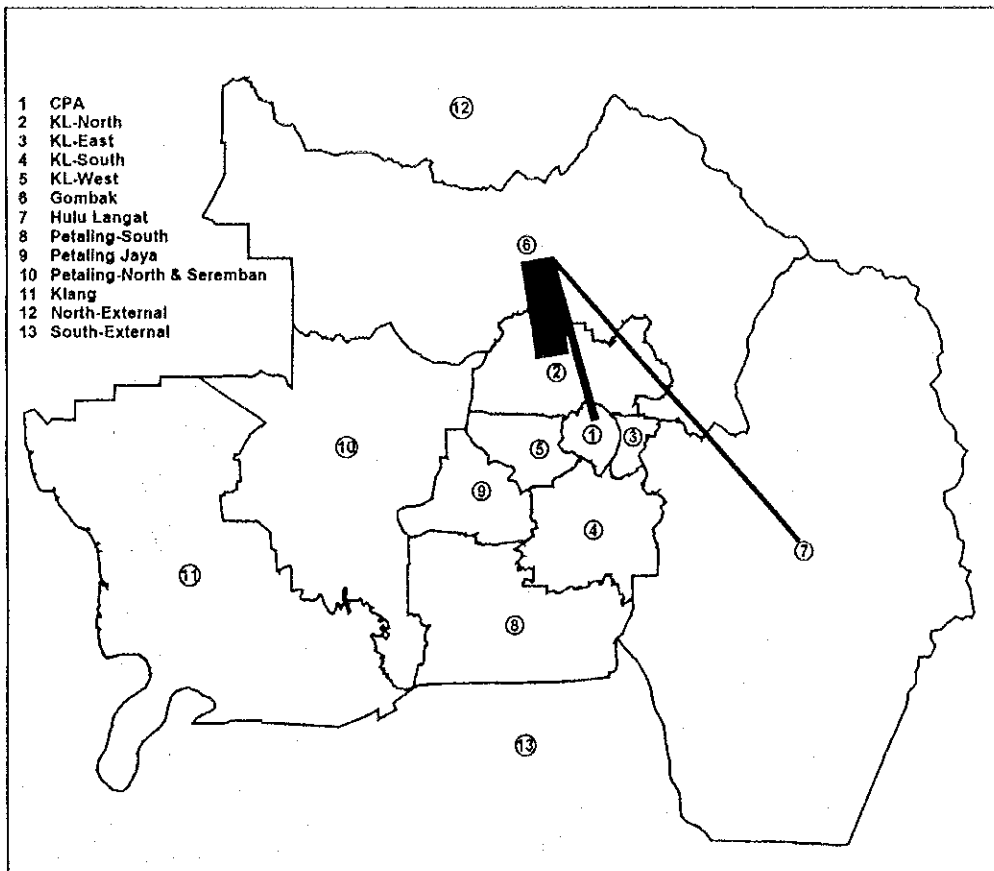
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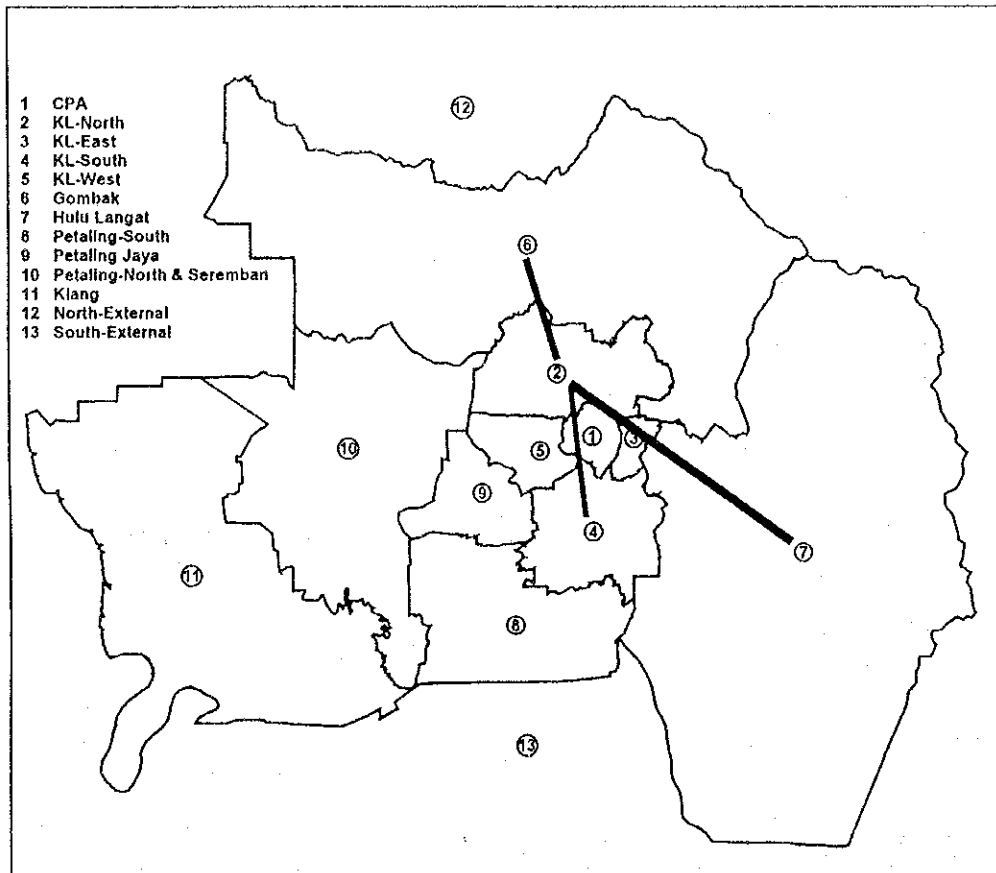
- Location for OD Distribution Analysis
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Fig. A8-1

**Location and Congestion Ratio
on Screen Lines**

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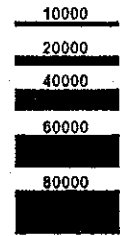


LOCATION 3

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(vehicle trip / day)

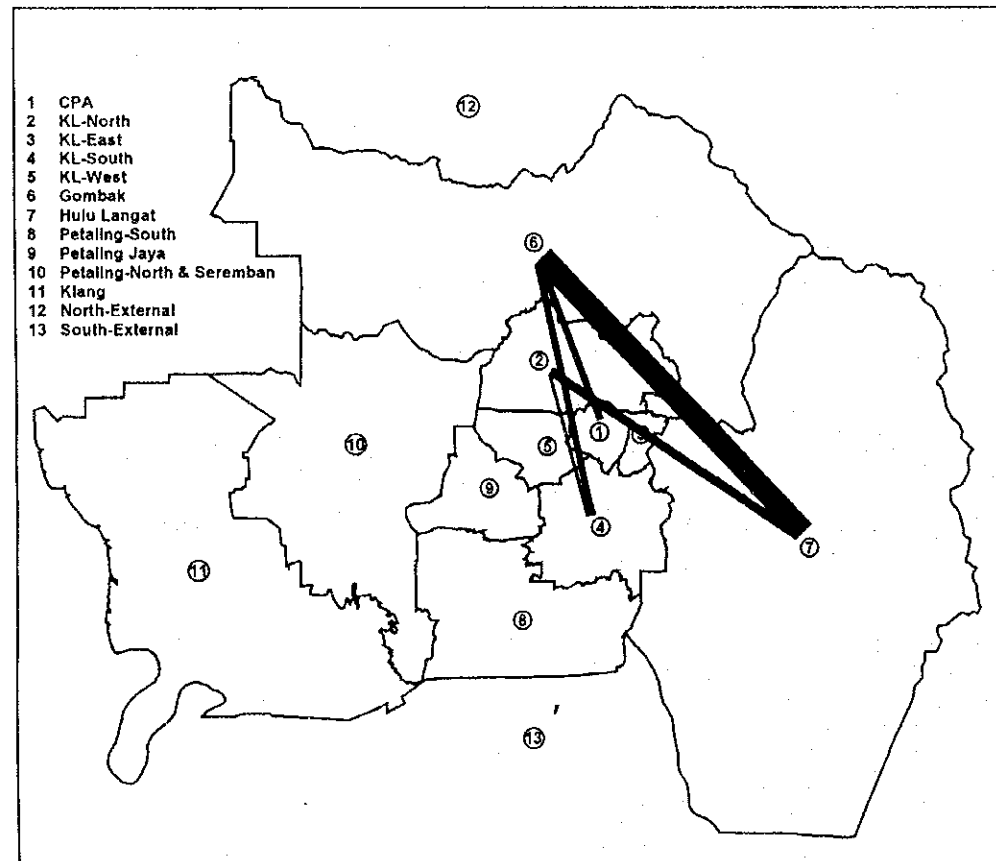
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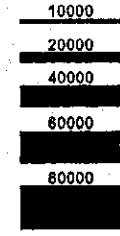


LOCATION 4

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(vehicle trip / day)

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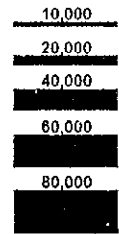
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LOCATION 7

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(vehicle trip / day)

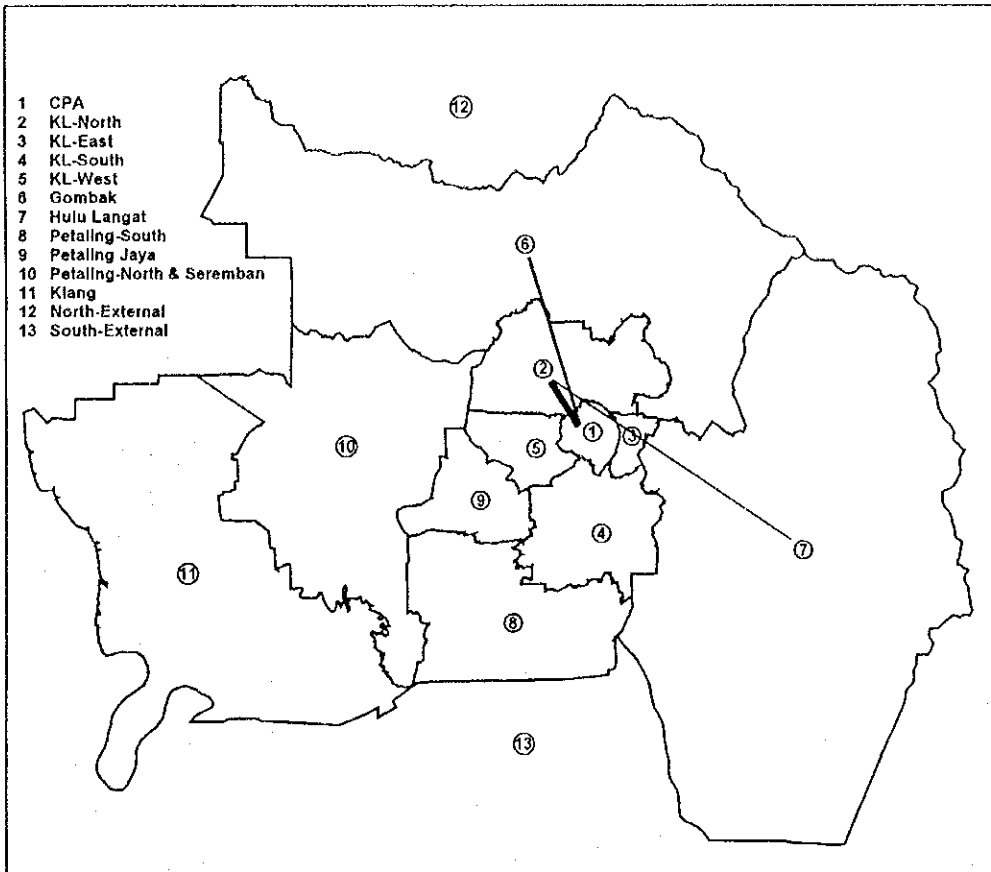
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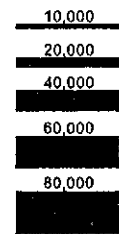


LOCATION 8

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(vehicle trip / day)

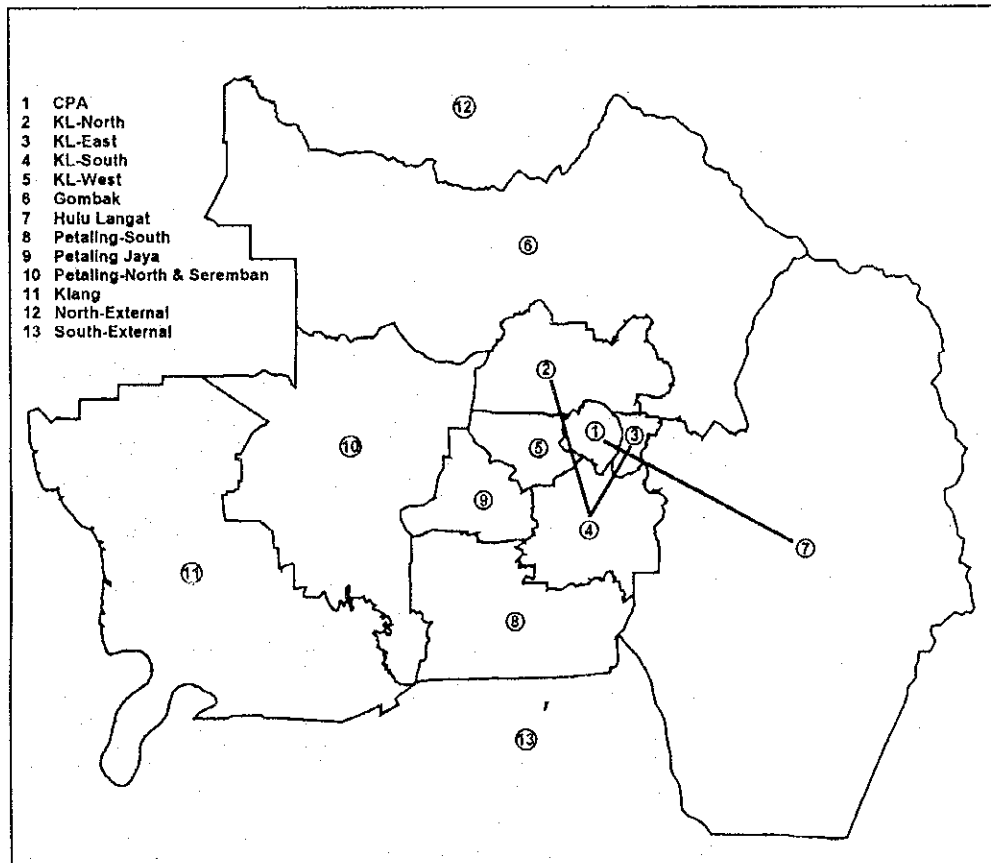
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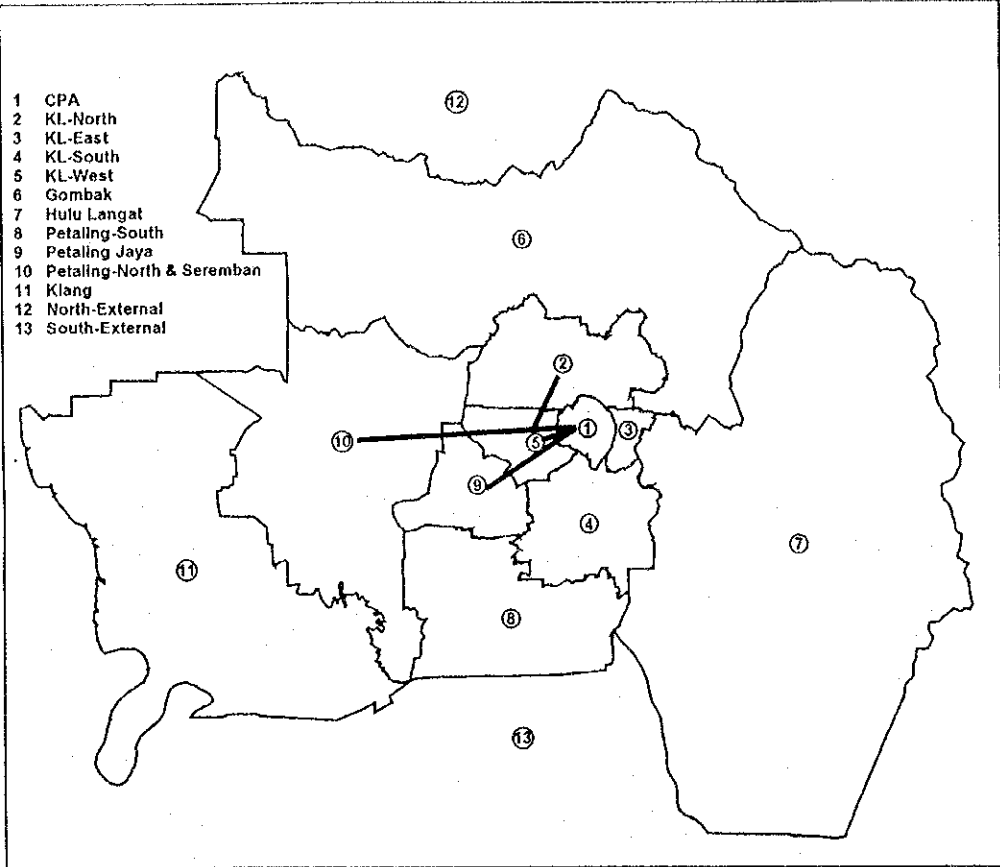


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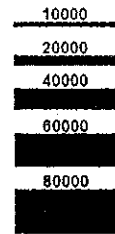


LOCATION 12

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(vehicle trip / day)

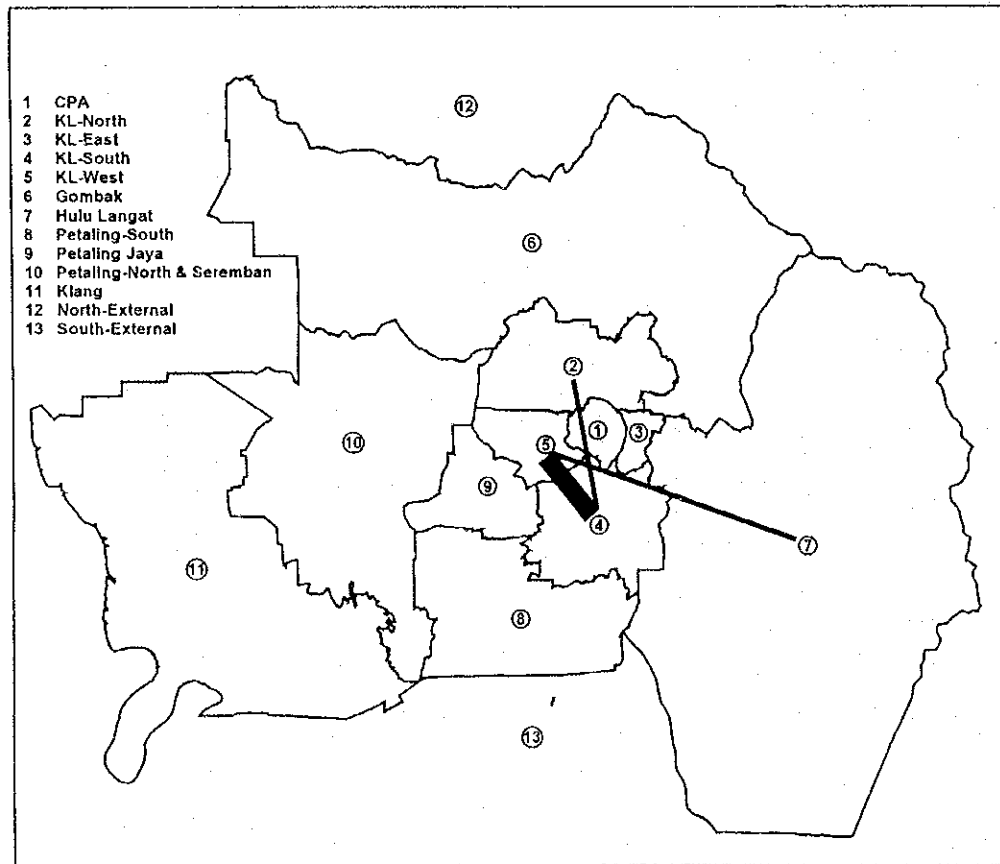
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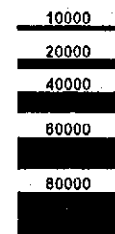


LOCATION 13

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(vehicle trip / day)

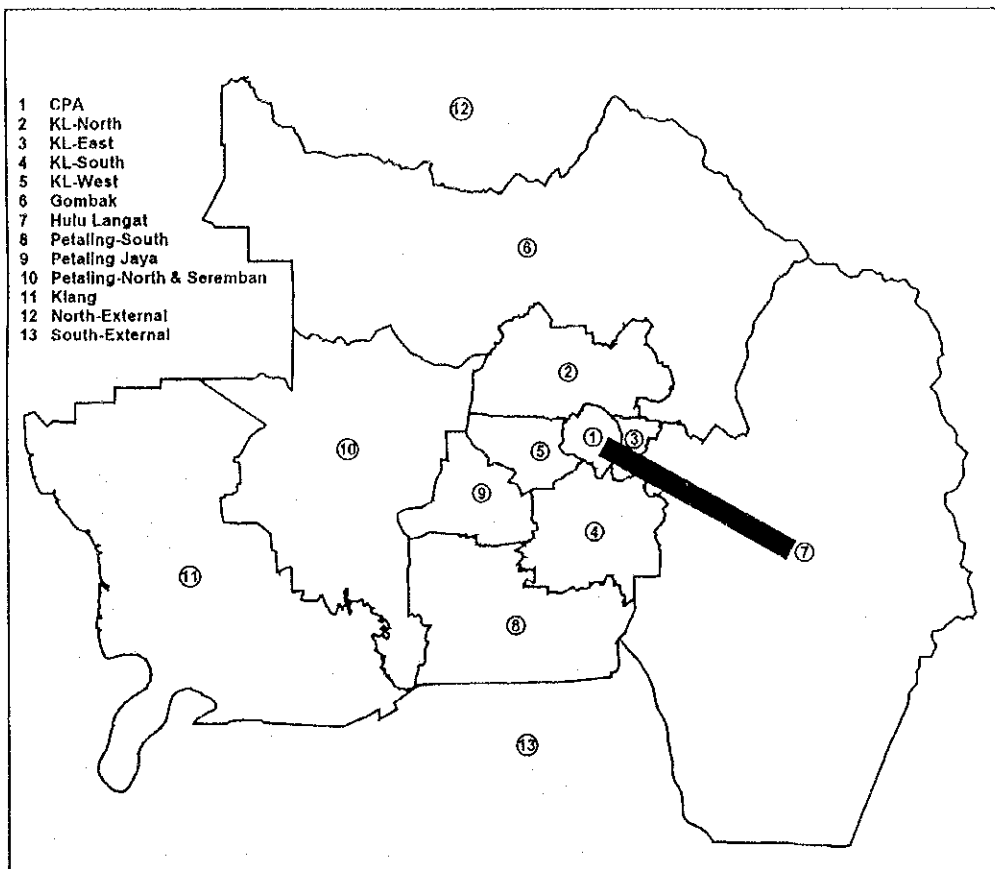
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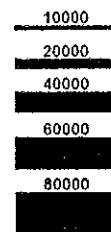


LOCATION 15

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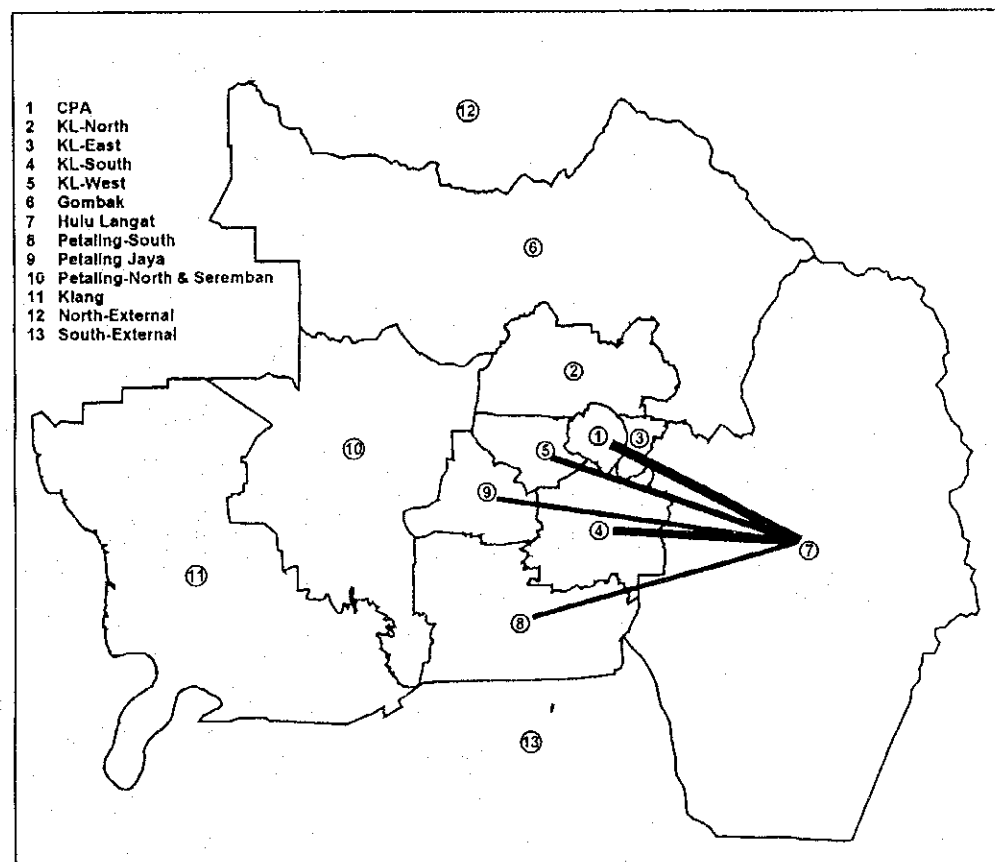
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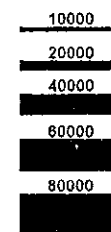


LOCATION 16

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(vehicle trip / day)

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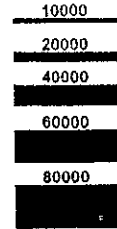
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LOCATION 19

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(vehicle trip / day)

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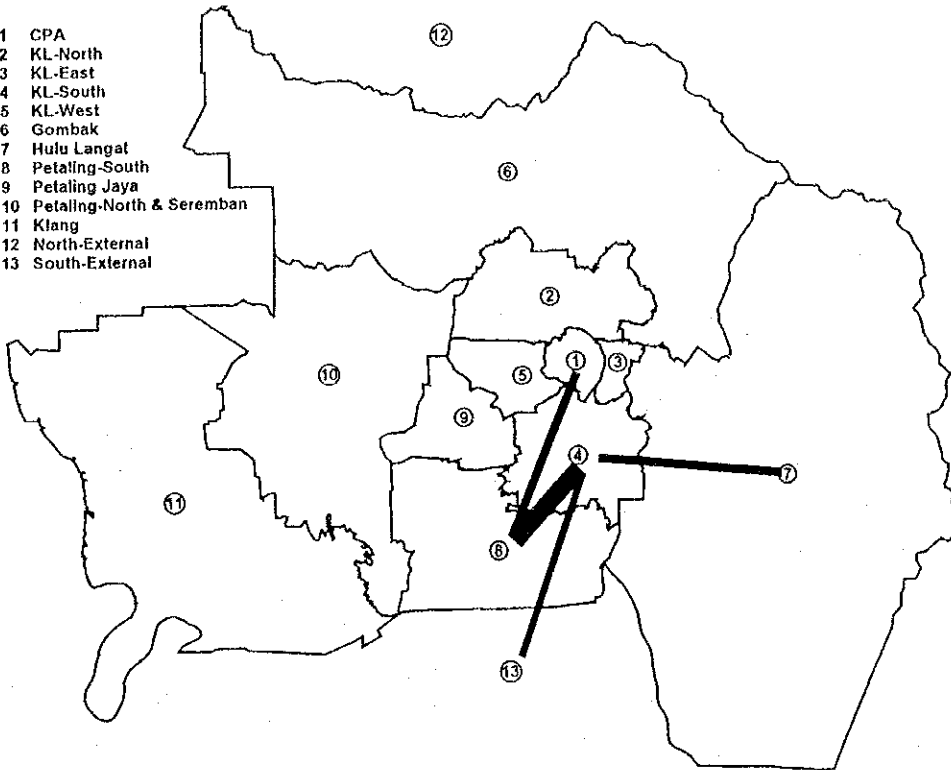


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for Environmental Improvement

- 1 CPA
- 2 KL-North
- 3 KL-East
- 4 KL-South
- 5 KL-West
- 6 Gombak
- 7 Hulu Langat
- 8 Petaling-South
- 9 Petaling Jaya
- 10 Petaling-North & Seremban
- 11 Klang
- 12 North-External
- 13 South-External

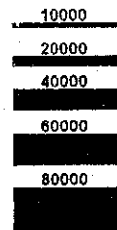


LOCATION 20

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(vehicle trip / day)

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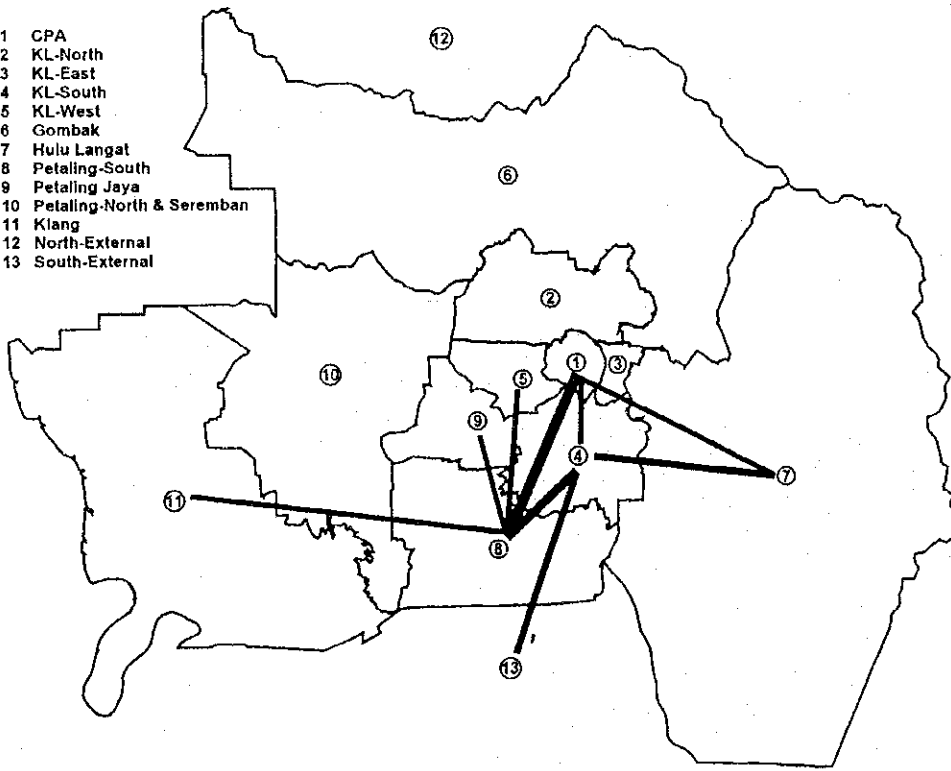


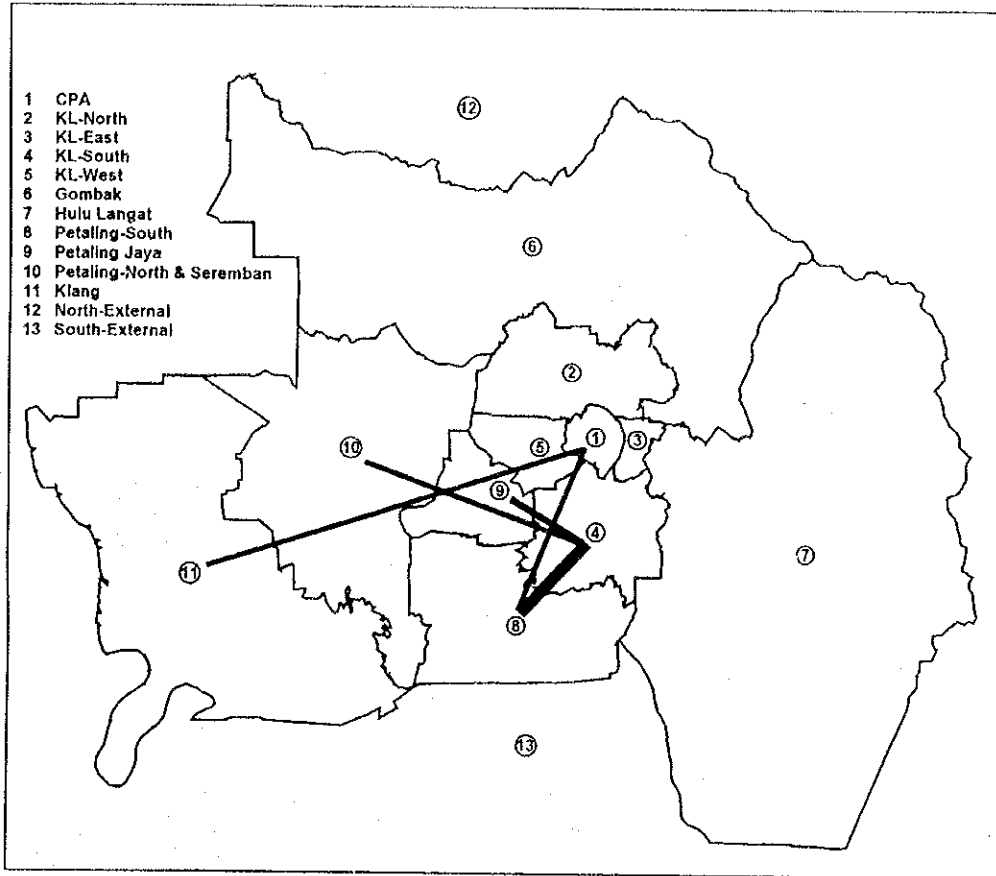
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- 1 CPA
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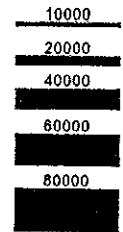


LOCATION 23

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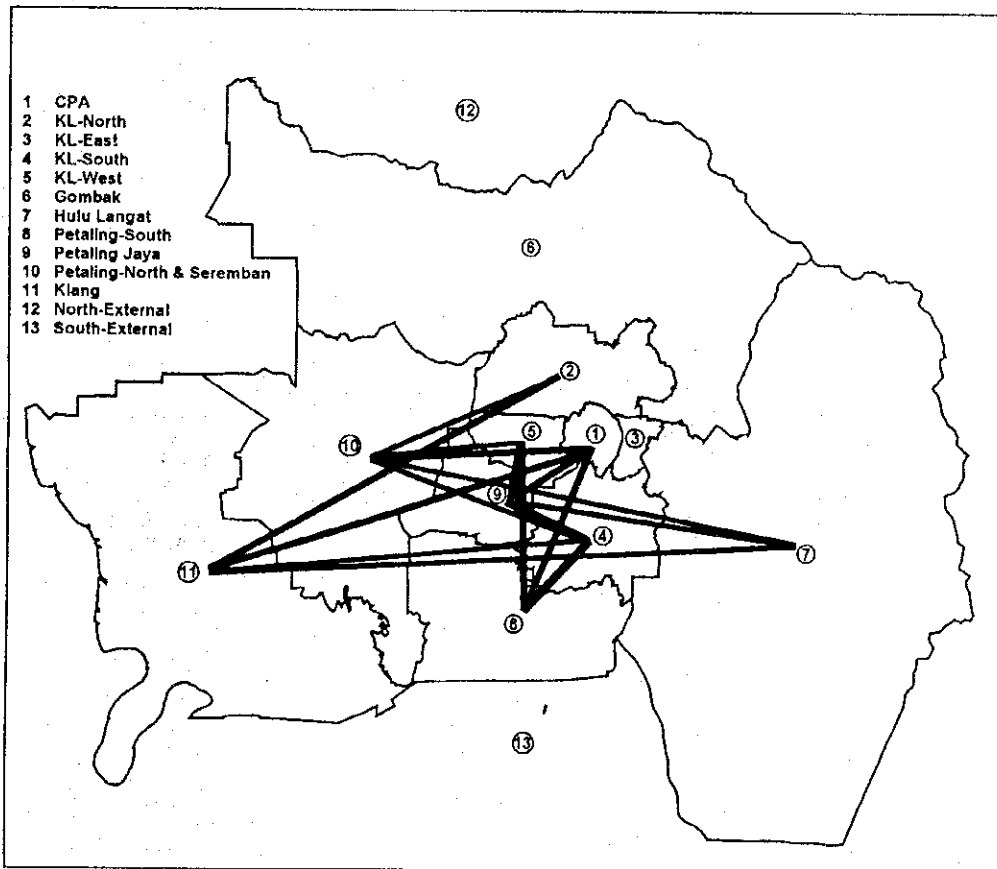
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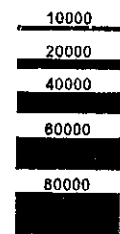


LOCATION 25

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(vehicle trip / day)

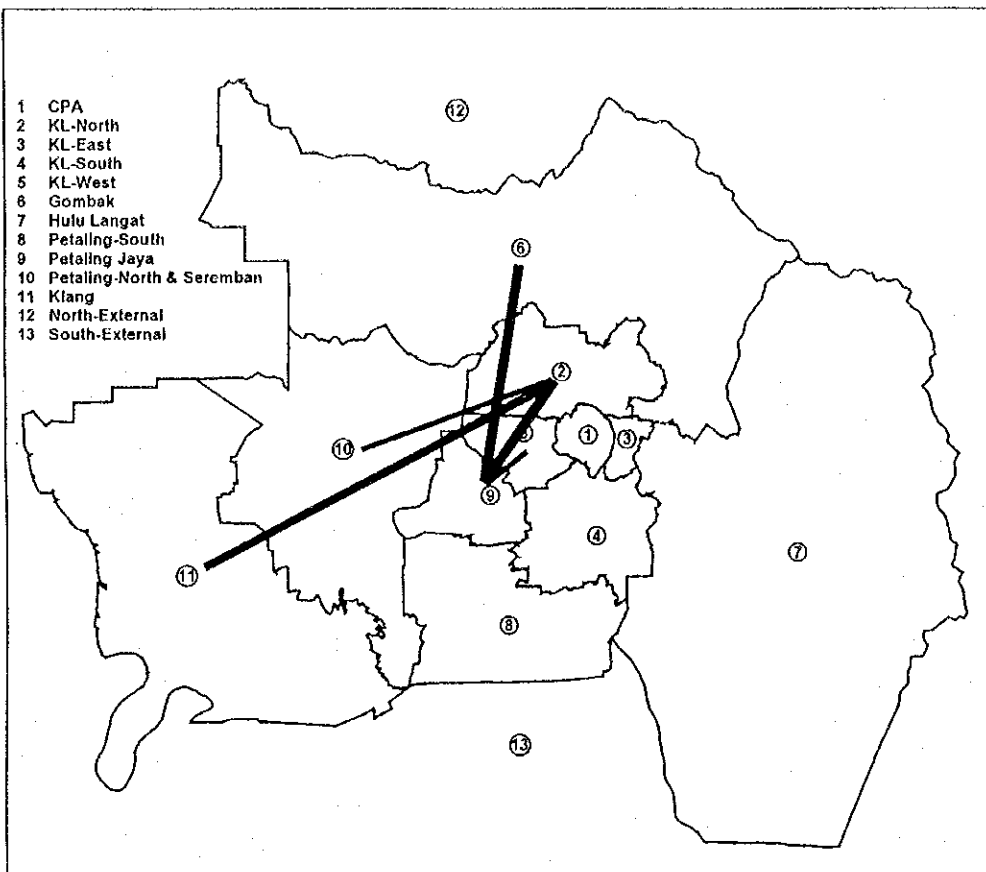
SCALE: 500



Note:
 Less than 8000 trips are omitted.

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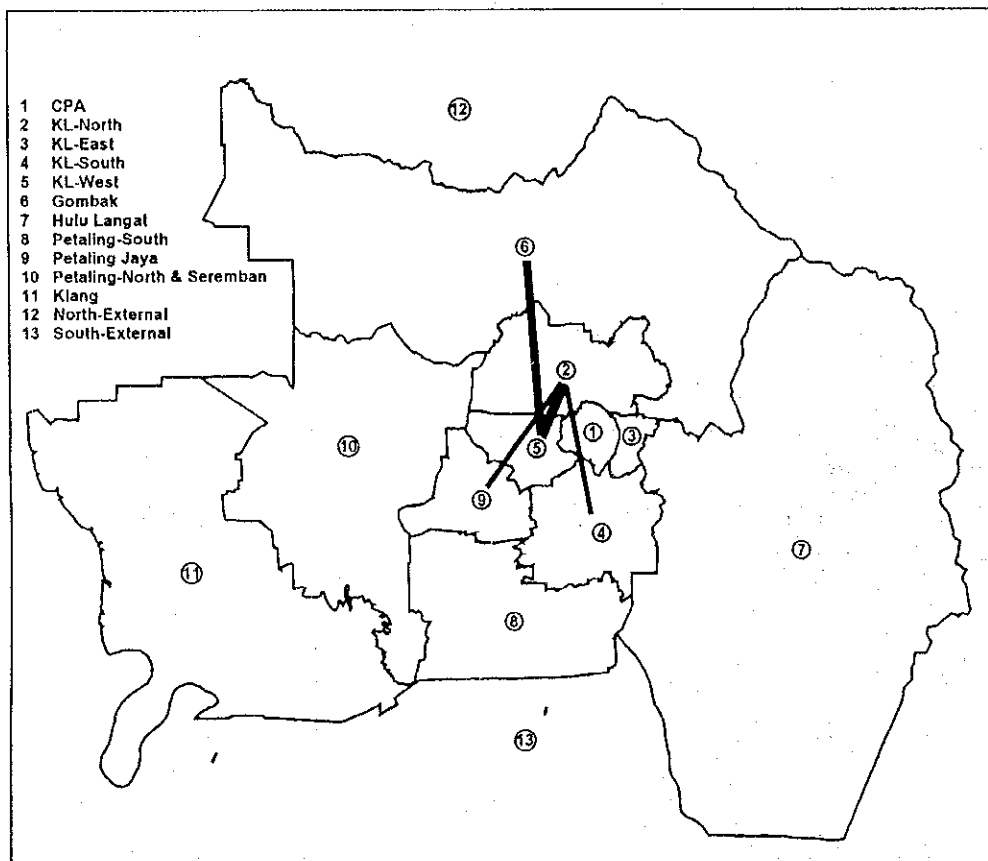
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