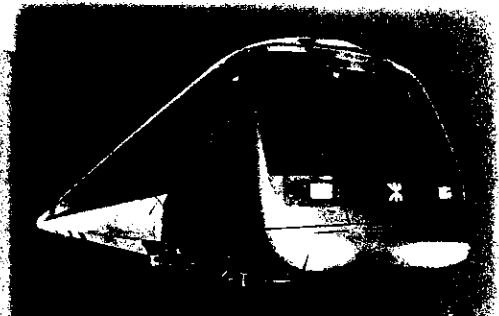
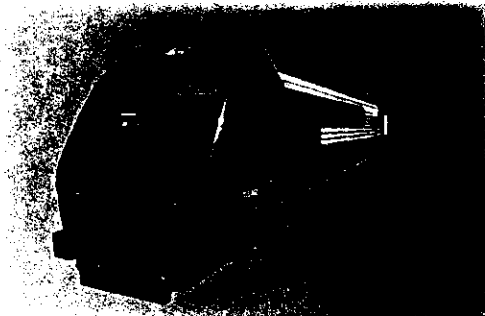
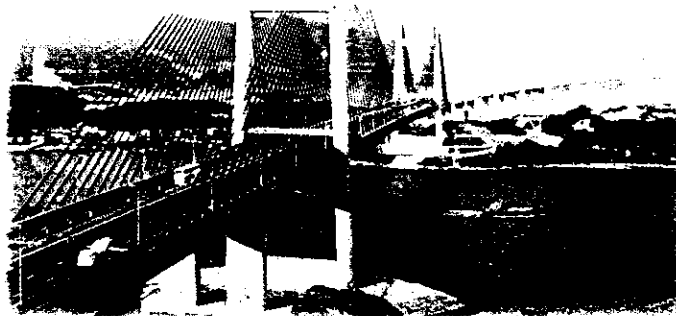

Third Comprehensive Transport Study

Consultation Document



June 1998

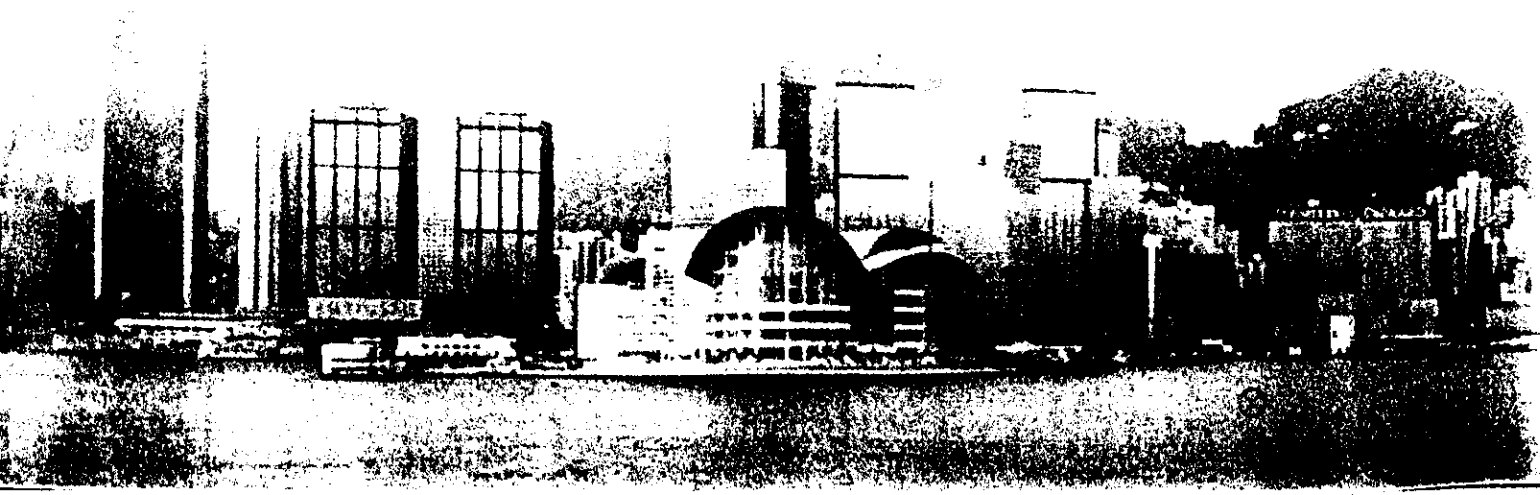
Transport Bureau
Government of the Hong Kong Special Administrative Region

Consultation Document on the Third Comprehensive Transport Study (CTS-3)

FOREWORD

- i. Transport policies must evolve over time. They need to respond to community aspirations and cater for economic and population growth. In 1990, the Government published a White Paper on transport policies entitled "Moving into the 21st Century". This was based on the recommendations made in the Second Comprehensive Transport Study conducted in the late 80s. Since then, there have been many developments and community expectations have risen. While many of the transport policies in the White Paper remain valid, others need to be updated and refined. For this purpose, the Government has commissioned the Third Comprehensive Transport Study (CTS-3). This study commenced in August 1997 and is scheduled to be completed in early 1999.
- ii. CTS-3 will study our future transport needs and provide the broad parameters for the long term development of our transport infrastructure, for the expansion of public transport services and for setting traffic management objectives for the next 20 years. This consultation document seeks the public's views on some of these parameters before detailed recommendations are finalised.
- iii. Members of the public are invited to comment on the issues raised in this document. Written comments should be sent, by the end of June 1998, to:

*The Secretary for Transport
Government Secretariat
Lower Albert Road
Hong Kong
Fax: 2868 4643, 2868 5261
E-mail: tbenq@tb.gcn.gov.hk*

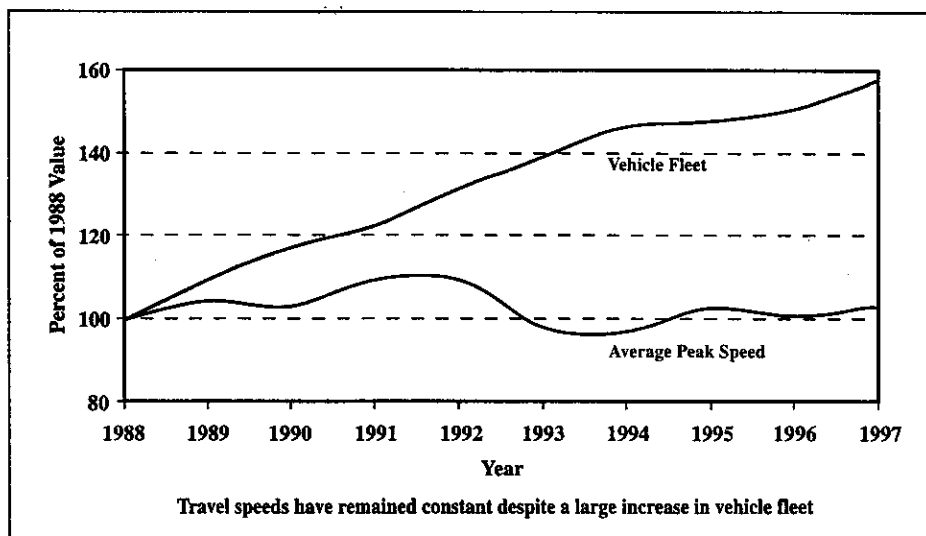


OBJECTIVES OF CTS-3

1. The main objective of the Government's transport policy is to maintain a reasonable level of mobility for people and goods, necessary to support the economic growth, social and recreational needs of Hong Kong. Despite our geographical constraints, increasing population and number of vehicles, this objective has been largely achieved by a three-pronged strategy:

- *improving the transport infrastructure;*
- *expanding and improving public transport; and*
- *managing road use.*

The following graph on the growth of the vehicle fleet and the average road speeds for the last ten years illustrates this point.



2. However there is no room for complacency. Hong Kong is moving into the 21st century with a new housing development programme and closer links to the Pearl River Delta and beyond. We therefore need to plan ahead to ensure that the anticipated transport demands can be met and accompanied by a reasonable degree of mobility and quality of environment.

CTS-3

3. CTS-3 will explore new strategies for the next two decades in order to achieve our transport policy objectives. It has been suggested that CTS-3 should explore a more visionary and proactive approach in transport planning in order that:

- *transport infrastructure will be provided in a more timely manner to meet anticipated demand from strategic growth areas;*
- *railways, being the most efficient mass carriers, will be accorded priority in the use of valuable land space;*
- *public transport services will be better co-ordinated; and*

- *traffic demand will be rationalised and managed in more cost-effective ways through the application of new technologies.*

4. The following sections discuss these proposals in greater detail.

DEVELOPMENT OF TRANSPORT INFRASTRUCTURE

Present Position

5. Many of our current road and rail projects are designed to relieve congestion and to extend transport links to major population centres. For this purpose, no less than \$200 billion will be invested in major highway and railway projects to be completed in the coming decade.

- advance the planning process and the start time for the construction of new transport infrastructure projects. This may mean, in some cases, the provision of transport facilities will lead development; and
- accord priority to the most efficient mass carriers i.e. railways, in allocating land for transport purposes.

Problem

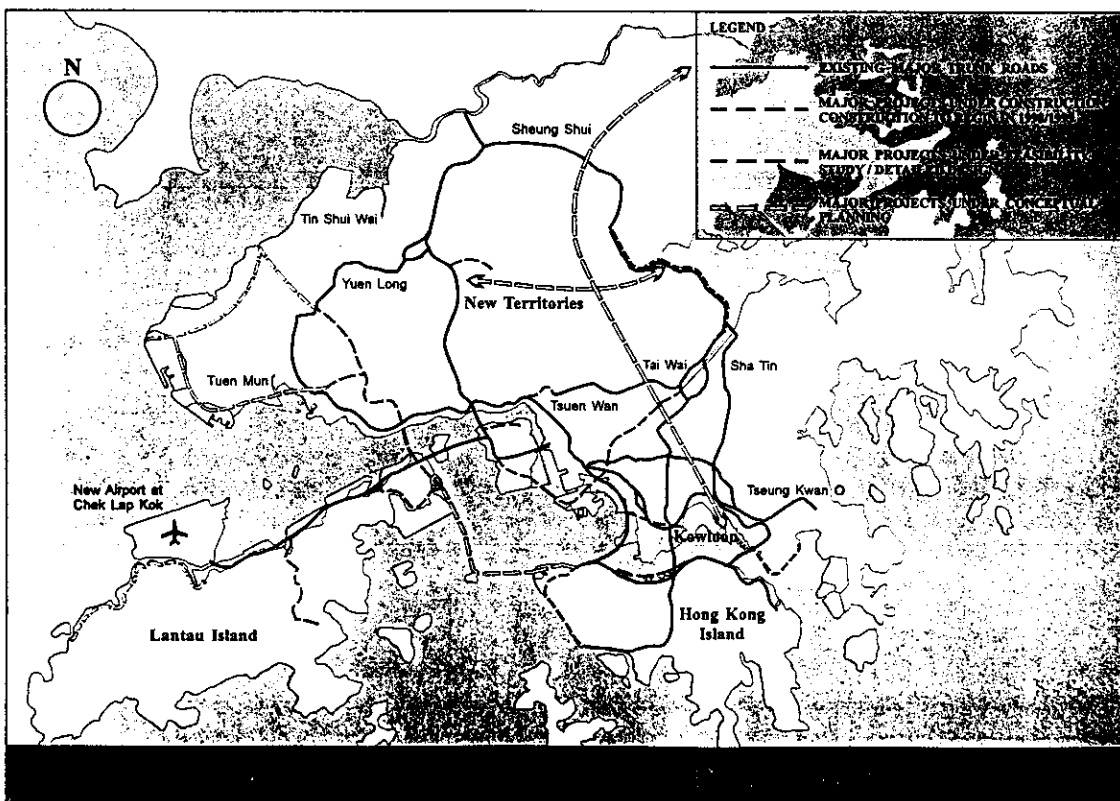
6. However, due to an accelerated housing development programme and increasing cross-boundary activities, transport demand in the next two decades will be growing at a rate far exceeding the capacity of our existing infrastructure and of projects under construction. A more visionary approach is needed in planning transport infrastructure in order to meet anticipated demand in a more timely and efficient manner.

Proposal

7. It has been suggested that the Government should:

Trigger Point Mechanism

8. A trigger-point mechanism will help define the most appropriate time at which the detailed planning, design and construction processes for infrastructure projects should commence. Trigger-points would be based on measurable criteria related to the progress of development, such as population figures or the target completion date of relevant housing developments. In order to ensure more timely provision of transport to meet anticipated demand, CTS-3 will seek to develop a trigger-point mechanism and to streamline the planning process.



According Priority to Railways

- Resources, including land available for the development of infrastructure, are limited and need to be put to the best use. In deciding whether valuable land space should be used for rail or road projects, it is necessary to consider the costs, benefits and efficiency of those projects. Railways, being the most efficient mass carriers and being environmentally more friendly, should be given priority in the development of our future infrastructure programme.
- However, infrastructure projects involve massive investment. When we invest in railways, care must be taken to make the most of the investment by ensuring that the railways serve the largest clientele. This can be done, for example, by providing good interchange facilities with other modes of transport. The detailed rail network requirements for Hong Kong's future are being examined in the Second Railway Development Study (RDS-2).

Allowing Room for Expansion

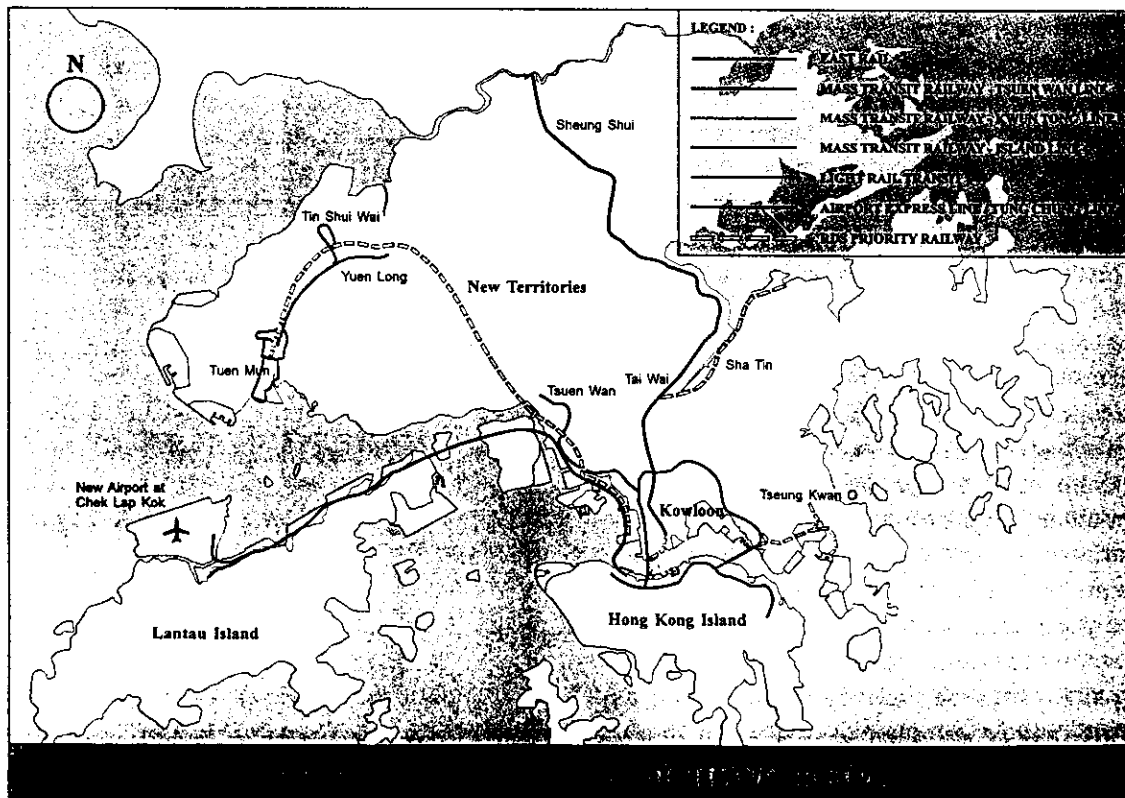
- While priority will be accorded to railways, we should also plan for strategic highway developments especially for those corridors

which are essential for freight transport and for connections with trunk routes and local distributor networks. Strategic highway and rail development will act as the backbone of transport infrastructure. There are inherent difficulties in expanding any existing road network and in finding alternative new alignments in the strategic corridors. It has therefore been suggested that in order to accommodate future demand, the planning of new highway projects should allow room for expansion to cover a longer planning horizon, say at least 10 to 15 years following completion of the road project.

Important Considerations in Developing Infrastructure

Cross-boundary Implications

- The planning of infrastructure for Hong Kong must take into account future demands in cross-boundary passenger and freight movements. Some of the possible long-term strategic highway and railway routes identified in the latest Territorial Development Strategy Review (TDSR) have cross-boundary implications. They should be explored in greater detail in CTS-3 and RDS-2.



13. We will ensure that the implications of cross-boundary links for the transport network in Hong Kong are fully identified at an early stage and that planning assumptions and data used by Hong Kong and our neighbours are compatible. CTS-3 envisages that co-ordination of cross-boundary infrastructure will play a more significant part in our transport planning.

Environmental Considerations

14. Traffic can adversely affect the environment. It is however a fact of daily life and essential to our economic development. We will seek to achieve the minimum impact on the environment from transportation by careful planning and effective traffic management. Giving preference, where possible, to less polluting modes, such as railways, and to alternative fuel will reduce air pollution. Effective traffic management can also play a part in reducing the number of journeys made, and thereby minimising air and noise pollution. CTS-3 will pay attention to the possible ecological, noise and air quality impacts which transport development may create and will suggest mitigating measures within a framework of existing legislation and established guidelines.

Funding Implications

15. Rail and road projects are expensive to build. It is important that we should continue to invest heavily in transport infrastructure and maximise the benefits derived from that investment. There is also a need to develop alternative sources of funding. Private sector participation in the provision of transport infrastructure should therefore be encouraged as far as possible. Private sector participation would not only increase the source of funding for transport investment, but also bring in entrepreneurial expertise. Private sector participation, usually in the form of Build, Operate and Transfer (BOT) franchises, has worked well in a number of projects. We will continue to look for opportunities to involve the private sector in this and other ways. It is also possible to involve the private sector in the management and maintenance of Government transport facilities, such as carparks and road tunnels.

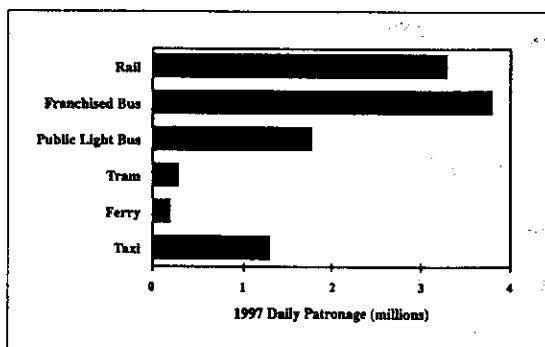
PUBLIC TRANSPORT SERVICES

The Role of Government in Public Transport Services

16. The Government believes that public transport services should be operated without direct Government subsidy. They should be operated either by the private sector, or by public corporations in accordance with prudent commercial principles. Government will provide a regulatory framework, and will facilitate co-ordination, competition and integration of the various transport modes. Our past record has demonstrated the success of this philosophy in the provision of reliable and efficient public transport services. The Government will continue to monitor and take steps to improve these services. CTS-3 will consider what more can be done in this respect.

Different Modes of Public Transport

17. Every day, over 10 million passenger journeys are made on our public transport system, which offers commuters a wide range of choices in modes, routes and fares. Buses and railways (including the Light Rail) are the main mass carriers. Trams, public light buses, taxis and ferries also provide important services to areas not conveniently served by mass carriers and complement the services of mass carriers on major trunk routes. Up to now, franchised buses have taken up the largest share of public transport passenger journeys (36%), followed by rail (30.6%), public light buses (16.2%), taxis (11.8%) and others (5.4%).



18. In order to relieve pressure on the limited road space, and recognising that rail transport is safe, reliable and environmentally more friendly, we will continue to invest in rail transport. With the completion of the three priority railway projects (i.e. West Rail, Tseung Kwan O Extension and Ma On Shan to Tai Wai line) in the early years of the new millennium, railways will probably attract the largest share of passenger trips.

19. Amongst the on-road carriers buses are the most efficient form of transport. They offer scheduled services at reasonable fares and are highly flexible in adjusting their service pattern to meet changes in demand in a relatively short time e.g. when there is disruption to train services. Franchised buses will remain important passenger carriers even as railways assume a greater role in public transport in the years to come. These two modes complement each other in providing trunk route services. Franchised buses also play an important role in providing feeder services and in areas where there is no convenient rail transport.

20. Public light buses (PLB) provide supplementary transport services along routes which do not justify the provision of high capacity modes. A recent review of PLBs confirms that they still play a useful role in the public transport system. We will maintain the total number of PLBs and continue to identify opportunities to convert more PLBs to the scheduled Green Minibus (GMB) service.

21. Trams provide important services on the north Hong Kong Island corridor. They carry an average of 280,000 passengers each day. While there may be little room for network expansion without massive investment, trams will remain a popular mode of public transport because of the relatively low fares and frequent stop spacing. The tram operator is taking measures to modernise the management and operation of the network and to improve services. These include better staff management and training, and improvements to safety and to the track work.

22. Ferries provide essential links to the outlying islands. They also provide ancillary services in the inner harbour and to the new towns. They are facing keen competition from road and rail transport. In order to maintain essential services to the outlying islands and retain as many of the other services as possible, certain aspects of ferry services will need to be reviewed. These include the types of vessels, the fare structure and service flexibility.
23. Taxis provide a choice to commuters who are prepared to pay a premium fare in return for a personal, door-to-door service. However, it is necessary to regulate the operation of taxis given their relatively uneconomic use of road space. The taxi licensing system and the operation of the taxi trade are the subjects of a current study by the Transport Advisory Committee. The relevant findings will be available shortly.

Co-ordination and Integration of the Different Transport Modes

24. Rail and road infrastructure and public transport facilities represent major investments. While we will encourage competition amongst the providers of public transport, excessive duplication or surplus capacity wastes valuable resources. Also, given that road space is at a premium in Hong Kong and that a wide variety of transport modes are competing for its use, there is a need to ensure optimal road use by the different public transport service providers. Some rationing of road and kerbside space by Government as the regulator will be necessary to avoid creating impossible traffic conditions on the roads. All these measures require co-ordination of the scope, range, and standard of services of the various public transport modes i.e. inter-modal co-ordination.
25. Improved co-ordination between the public transport modes will help people to move around more easily and reduce the costs and inconveniences of travel. Most of us know the routes that we use regularly, but may not know the alternatives for getting to other places. All the time new services and modes are being introduced and we are offered new and possibly more effective choices. For

example, to travel from Tuen Mun to Hong Kong Island until recently the choice was between a bus or PLB to Tsuen Wan and then the MTR, or the direct high-speed ferry. Since the opening of the Western Harbour Crossing new bus services have been introduced. These services are even more attractive now that the Ting Kau Bridge and Route 3 Country Park Section are in use. In the next few years, the West Rail will give further choices.

26. To use public transport to our best advantage, we need more convenient interchanges and information about the travelling alternatives. The interchanges should include at least one mass carrier, such as MTR or KCR, to provide the long distance services, and as many access feeders as possible, such as bus, PLB, taxi and car parking. The information system needs to be comprehensive so that people can easily and quickly find and compare different routes and select the most suitable one. In the example above, the system should give the alternatives mentioned, together with their fares and travel times, in an easily understood way, so that users can make an informed choice. New technologies, like the Octopus card, will allow the same or comparable fares to be charged for the same multi-modal journey irrespective of how the transfer between modes is made. This kind of fare integration will facilitate passengers to interchange between different transport modes.
27. A better co-ordinated system will lead to benefits to all. The operators will be able to run their services more efficiently, and thus reduce their costs. Congestion will be reduced on trunk roads by increasing the use of rail and the most economic road users. Travellers will be aware of more and better choices. CTS-3 will be pointing the way forward towards co-ordination of public transport services, through recommendations on interchanges, information systems and fare integration.

TRAFFIC MANAGEMENT

A Balance between Meeting and Managing Demands

28. Road congestion entails heavy economic and social costs. Despite our commitment to provide more transport infrastructure, there are areas where it is just not possible to build more roads and railways, for example in the most congested parts of town. We must therefore strike a balance between meeting in full the demand for road use and the need to maintain reasonable mobility of goods and people. Demands on road use can be met partly by investing in transport infrastructure. Demands can also be diverted by providing adequate public transport. Vehicle trips may be rationalised by a variety of means, including encouraging a shift to efficient mass carriers, such as rail and franchised buses, and restraining the growth in the number or use of private cars.

Giving Priority to Efficient Road Users

29. In order to make the best use of valuable road space, we should ration road use and give priority to efficient mass carriers such as franchised buses. We may have to manage or ration competing uses for roads by less efficient road transport modes.

Private Vehicles

30. From the traffic management point of view, private vehicles should be accorded lower priority in the use of road space because they are uneconomic road users and their functions can often be fulfilled by public transport. It may be argued that if the road capacity exists to accommodate more traffic, we should not impose unnecessary restraint on the right to own a private car. However, the harsh fact of the matter is that given the vast resources required, the long lead time involved and the constraints in the availability of land, there are great limitations in building "sufficient" roads. We must therefore restrain the growth in the number and manage the use of private vehicles by fiscal and non-fiscal means. Fiscal disincentives on ownership and use of private

cars include first registration tax, excise duty on fuel or annual vehicle licence fees, and introducing road pricing, while non-fiscal methods include encouraging car pooling and park and ride, and controlling the number or use of vehicles by rationing or quota. Some argue that between ownership and usage restraint, the latter approach is more equitable. For this purpose, the feasibility of introducing electronic road pricing in Hong Kong based on a user-pays principle is currently being studied.

Freight Transport

31. Freight transport in its various forms generates a significant volume of traffic, particularly cross-boundary traffic. Freight transport is an essential element of economic activity and brings about great economic benefits. However, goods vehicles are associated with noise and air pollution and, on certain roads, are the major source of congestion. It has been suggested that due to the useful role played by goods vehicles in the economic development of Hong Kong, it would be inappropriate to restrain their growth or their use of roads. However, to address the negative impact goods vehicles have on the environment, it is also untenable to give goods vehicles the same priority on the roads as mass carriers. We recognise that there is no substitute for goods vehicle in the local goods delivery service but will examine, in the context of RDS-2, the use of rail for cross-boundary container freight movements.

Applying Information Technology in Traffic Management

32. With the development of information technology, there is great potential in the application of modern technologies to maximise the capacity of our road network, to control traffic better and to provide real time information to road users.
33. Modern information technologies can be used to make the best use of our roads. Some of these technologies are already in use in the

Area Traffic Control System, which coordinates the traffic signals in the area to maximise travel speeds. There are others which may be used:

- ❑ *to provide commuters with up-to-date information about the best routes to any destination;*
- ❑ *to advise motorists about current and expected traffic conditions and delays arising from accidents, road works, etc.;*
- ❑ *to inform drivers about the availability of spaces at car parks;*
- ❑ *to integrate toll and parking payment systems; and*
- ❑ *to increase the efficiency of fleet management for public transport and commercial vehicle operators.*

34. The information can be given by roadside variable message signs, or ultimately by in-vehicle map or message systems. We are now studying the feasibility of applying cost-effective new technologies to Hong Kong.

Pedestrian Facilities

35. Pedestrian circulation is a vital part of the transport system. Pedestrian precincts, subways, footbridges and walkway systems are planned as an integral part of new town development and road improvement programmes. We will bring in similar provisions in the built-up areas where the traffic volume justifies the expenditure. The priority areas will be the business districts. The objectives of a pedestrian system include:

- ❑ *attracting more people out of vehicular modes for short and medium journeys so as to reduce pressure on roads and impact on the environment;*
- ❑ *providing better access to, and thereby encouraging the use of, mass carriers; and*
- ❑ *reducing the need for pedestrians to cross roads at ground level in order to improve pedestrian safety and the capacity of the road system.*

36. We shall develop planning guidelines for the provision and design of pedestrian walkway systems which in many cases require the co-operation of private developers.

YOUR VIEWS ARE IMPORTANT

- i. CTS-3 will test a number of scenarios consisting of alternative policies and infrastructure developments for the next 20 years. These scenarios will be evaluated according to their economic, financial, budgetary, operational, developmental and environmental impacts. To provide a complete picture of the performance of each scenario, it will be necessary to address the question of what the public actually wants from their transport system, and how these desires could be accommodated.
- ii. The purpose of this document is to invite views on how Hong Kong will be best served by our transport policies for the next two

decades. In particular, your views on the following major directions expounded in this document will be most useful:

- to develop a trigger-point mechanism for the purposes of ensuring a more timely provision of infrastructure and streamlining the planning process;*
- to accord priority to railways in the development of infrastructure and in the provision of public transport services;*
- to enhance co-ordination and integration of different transport modes; and*
- to make more use of cost-effective new technologies in traffic management.*

Transport Bureau

June 1998

