A NEW, LONG-TERM DEVELOPMENT FRAMEWORK FOR HONG KONG A RESPONSE TO CHANGE AND CHALLENGES

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BACKGROUND

INTRODUCTION

Hong Kong has developed since the 1980s in a remarkable way. This development has been very much influence by what has happened in South China, where rapid economic growth has been stimulated by the national "Open Door" policy. The close relationship between Hong Kong and its catchment in China, especially the Pearl River Delta (PRD), is apparent to all.

As we move from the 20th to the 21st century amid such rapid development, we will need a new vision of the role Hong Kong should play to keep pace with changes in China and sustain our own prosperity and stability.

Today, Hong Kong has a population of about 6.3 million. Within the next 15 years or so, we might need to provide for between 7.5 million and 8.1 million people, depending on the interaction between a number of demographic factors, especially net migration. With growing prosperity, expectations are rising for improved layouts, city forms and environmental standards.

The Government is expected to provide, in a timely fashion, sufficient land for additional new homes, offices, factories, a growing range of community services, and the necessary supporting infrastructural facilities.

To meet these challenges, Hong Kong must have an up-to-date physical planning framework to guide development and investment, to ensure the efficient use of resources and to promote a high quality living and working environment. The process of strategic planning has been established in Hong Kong for many years, involving a number of reviews to take account of changing circumstances. The Territorial Development Strategy (TDS) of 1984, in particular, provided a new framework for urban growth to help restructure the Metro Area (figure 1). The outcome of the latest review, which commenced in 1990, is the "Territorial Development Strategy Review 1996", broad proposals for which are presented in this "Consultative Digest".

In 1993, a report, "Territorial Development Strategy Review - Development Options", was published for the

purpose of seeking views form various bodies and individual members of the public on future, potential development paths over both the long term (up to 2011) and the medium term (up to 2006). Many useful comments were received and a report was compiled to summarise the principal areas of concern and also to identity what adjustments and new ideas should be taken forward in the next phase of the Review. We have subsequently prepared a three-part "Final Technical Report" and a "Consolidated Technical Report", the principal findings from which are presented in this digest. These reports and a considerable number of supporting technical documents are available for reference on request To the Director of Planning. Ample time will now be allowed for a programme of public consultation, following which, in early 1997, a "TDS Review Executive Report" will be published to set out a selected framework.

BROAD STRATEGY FORMULATION PROCESS

The current TDS Review process (Figure 2), which commenced in 1990, consists of three workstreams:

Workstream A

......comprising a series of foundation studies, including broad assessments of land use requirements, the identification of development constraints and opportunities, the establishment of baseline environmental conditions, and an analysis of base growth development patterns, as well as baseline infrastructure networks in the Territory.

Workstream B

......comprising the formulation, evaluation and progressive refinement of a series of development options set in the context of a number of broad regional development scenarios.

Workstream C

......comprising the formulation of a long-term strategy for 2011 for each assumed regional development scenario and, subsequently, a medium-term strategy for 2006 from which various sectoral land use strategies and outline development plans and programmes can be derived.

BROAD GOAL AND OBJECTIVES

The primary goal of the TDS Review is to establish a broad, long-term planning framework, which takes account of and attempts to strike a balance between various land use, transport and environmental factors. Within this framework the necessary land and infrasturcture can be provided, having regard to become a better place in which to live and work. The broad goal finds expression in the form of the following objectives, which reflect various, currently-established sectoral policies:

- Objective 1: To enhance the role of Hong Kong as an international city and a regional centre for business, finance, information, tourism, entrepot activities and manufacturing.
- Objective 2: To ensure that adequate provision is made to satisfy the land use and infrastructure needs arising from sectoral policies on industry, housing, commercial, rural, recreation and other major socio-economic activities.
- Objective 3: To conserve and enhance significant landscape and ecological attributes, and important heritage features.
- Objectives 4: To enhance and protect the quality of the environment with regard to air quality, water quality, noise levels, solid waste disposal and potentially hazardous installations by minimizing net environmental impacts on the community and maximizing opportunities to improve existing environmental problems.
- Objective 5: To provide a framework within which to develop a multi-choice, high capacity transport system

that is financially and economically viable, environmentally acceptable, energy efficient and makes provision for the safe and convenient movement of people and goods.

Objective 6: To formulate a strategy that can be carried out both by the public and private sectors under variable circumstances, particularly with respect to the availability of resources and significant changes of demand.

These objectives provide a foundation for the formulation of strategic planning options. They also serve as yardsticks for evaluating the performance of each option with the results being used to produce successively improved proposals until a final stage has been reached at which a set of recommendations is derived.

REGIONAL DEVELOPMENT SCENARIOS

In the formulation of strategic planning options, the importance of the economic interaction between Hong Kong and the wider South China region has been recognised. Two regional development scenarios have accordingly been developed as the basis for option generation:

Scenario A

....postulating that the Pearl River Delta will be Hong Kong's main economic catchment (Figure 3). This is essentially a trend-based scenario in terms of population and economic growth for Hong Kong.

Scenario B

....postulating that Hong Kong's economic catchment will extend into other parts of Guangdong and into other inner provinces of China (Figure 4). This scenario assumes a higher rate of economic and population growth.

These two scenarios are not mutually exclusive. Rather, Scenario B represents a progression from Scenario A, the principal differences between the two scenarios being the time scale over which such a progression may occur and the scale of development that may result.

Over the past 15 years or so, a tremendous amount of development has taken place in South China, especially in the PRD which is classified as "Open Economic Region" and within which are located the Shenzhen and Zhuhai Special Economic Zones (Figure 5). Development within these areas has been stimulated by policies that have drawn in considerable amounts of overseas investment, much of it from Hong Kong. Much of the development in the PRD has been led by the expansion of a wide range of manufacturing industry, with cheap land and cheap labour, acting as big "pull" factors. The economic attributes of such expansion have had substantial impacts on Hong Kong, namely:

- there has been a significant decline in the number of manufacturing enterprises (or parts thereof) and associated jobs in Hong Kong;
- the need to develop Hong Kong as a hub port to handle a very rapid increase in the volumes of re-exports, especially containerised cargoes;
- the expansion of other hub functions in such fields as business and finance, information processing, hightech research and product design, the provision of professional and academic services, tourism and cultural activities. Much of the tertiary-sector employment generated by such activities is now heavily concentrated in the Metro Area;
- the need to develop a new airport at Chek Lap Kok to handle substantial increases both in the numbers of visitors and high-value freight;
- resultant increases in demand for land for the above activities and new infrastructure, especially crossborder transport links; and
- growing pressures on the environment in respect of a deterioration of air quality and water quality, along with the increasing use of rural land for open storage, especially for containers.

BASE GROWTH AND BASELINE NETWORKS

A review of our current plans and programmes has indicated that there should be sufficient capacity for a total population of about 6.5 million people with about a 50:50 split between public and private housing. Reserve capacities are expected to provide sufficient additional housing stock to meet needs only to about 2001. The supply of sites in these areas for public housing, in particular, is diminishing at a rapid rate. Also, within the same areas, there is likely to be sufficient capacity to provide about 3.2 million jobs. These demographic components are taken as our "Base Growth", in respect of which it is assumed that there would be relatively limited opportunity to make significant changes in the context of the TDS Review.

Similarly, with regard to transport systems, there are existing and committed new trunk highways and railways that comprise "Baseline Networks".

Taken together (Figure 6), Base Growth and Baseline Networks provide a foundation on which to develop new strategic patterns of development.

POPULATION GROWTH ASSUMPTIONS

In most urban societies, population growth (and decline) depends on the balance between births and deaths ("natural change"), on the one hand, and the balance between in and out-migration ("net migration"), on the other. In the case of Hong Kong, the principal variable is net migration.

In 1993, when a consultation digest "Territorial Development Strategy Review - Development Options" was issued for public comment, a 2011 population of 6.5 million was assumed from 1991 Census-based projections. However, statistical evidence revealed that migration trends were resulting in accelerated growth, to the extent that the population of the Territory is now in the order of 6.3 million.

While it has been decided to await the outcome of analyses of the 1996 By-Census before any new, long-term projections are produced, it is necessary for the purposes of the TDS Review to assume a range of possible, long-term demographic scenarios to produce a planning framework capable of responding to new pressures of growth. Accordingly, for the assumed design year of 2011, a population of 7.5 million is assumed for Scenario A and 8.1 million for Scenario B (Figure 7).

More importantly is the need to focus on a probable estimate of population over a medium-term time horizon. This is required to provide a consistent basis for the formulation and implementation of detailed plans in respect of the production of urban land, key infrastructure and other major facilities and services for which the momentum of ongoing, policy and resource-led programmes needs to be sustained. On this account, population growth since 1961 has been of the order of one million every decade. It is considered prudent that, for strategic planning, a similar quantum of growth should be assumed, producing a total of about 7.3 million by 2006.

FUTURE LAND NEEDS

Land requirements for major land uses to satisfy the forecast strategic growth needs between 2001 and 2011 have been estimated, as set out in Table 1.

Table 1
Estimated Land Requirements for Major Land Uses
(in ha)

Major Land Uses	Scenario A	Scenario B	
Housing	580	850	
Office	54	66	
General Industry	124	175	

Special Industry	135	397	
Total	893	1,488	

Additionally, provision needs to be made for supporting infrastructure and other major community uses, such as highways, power stations, tertiary educational institutions, convention facilities etc. Allowance also has to be made of the next 15 years for over 1,500 ha of land for incremental expansion of the port for container terminals, off-port back-up facilities, mid-stream cargo handling areas, river trade terminals, and public cargo working areas.

Table 2 summarises the forecast urban and port-related land requirements. An upper limit requirement of over 3,000 ha could arise, this being equivalent to about 2.5 times the size of the area of the new airport at Chek Lap Kok.

Table 2
Summary of Additional Strategic Land Requirements
(in ha)

Population	General Urban Uses	Port	Total
6.5m	Already Planned	1,680	1,680
7.5m	893	1,680	2,573
8.1m	8.1m 1,488 1,680		3,168

In order to meet estimated future land needs for various kinds of development, a number of potential strategic development areas have been identified on the basis that such areas should be:

- of "adequate" size and shape to facilitate comprehensive planning and development and, in the process, help achieve economies of scale;
- capable of being implemented in a logical sequence of phases, bearing in mind possible delays that might arise over the programming of works due to the constrained availability of resources or for other unpredictable reasons;
- under consolidated land ownership and relatively free of such encumbrances as existing permanent or temporary uses, "fung shui" limitations, legal claims, etc;
- within close and convenient proximity to sources of fill needed for reclamation and/or for raising the levels of land-based sites;
- free of any difficult geotechnic problems or other major natural (e.g. recurrent flooding) or man-made hazards (e.g. close proximity to potentially hazardous installations);
- in locations to which timely and cost-effective provision can be made for public transport services and utility systems;
- compatible with existing adjoining uses in terms of environmental, aesthetic and functional attributes;
- situated in locations that would not cause irreparable damage to important areas of natural habitat (e.g. fish breeding grounds), ecological value (e.g. Mai Po Marshes) and high landscape/recreational value (e.g. Country Parks);
- upwind of any major sources of air pollution from fumes and/or particulates;
- well buffered from major static (e.g. shipyards) or mobile noise emitters (e.g. traffic along a trunk highway);
- capable of being developed in a way that enables any unwanted by-products (e.g. polluted mud) to be treated or disposed of in a satisfactory manner; and
- capable in the case of reclamations, of being formed in such a way to obviate any unacceptable impacts on tidal regimes, water quality, sedimentation, shipping movements and other port activities.

In broad terms, strategic growth areas fall into three main categories, namely *Redevelopment Areas*, *Land-based Sites* and *Reclamations*. Key points to note are:

- a considerable amount of redevelopment has been undertaken over the past 40 years in both the public and private sectors. That, in turn, has created rehousing demands. In the public sector, there are a number of estates built in the 1950s and 1960s that are obsolete and need to be redeveloped on a comprehensive basis. In the private sector, most of the least difficult redevelopment opportunities have been used up but there still remain many pockets of obsolete buildings that need replacement. However, the acquisition of properties is difficult and overall development costs inhibit viability. Whilst "built-back" is a source of new housing supply, it is generally the rule that, for redevelopment schemes that offer scope for comprehensive redevelopment, the overall yield of new flats on redevelopment is generally less than the original pattern of development, due to the need to satisfy modern standards for the provision of larger flats, essential community facilities and better urban design.
- We now have nine new towns and these, by and large, have involved the development of large "green-field" sites previously used for various farming pursuits. Whilst there remain other lowland rural areas that are perceived by land owners and developers to have some further potential for urban use, many such areas are beast by very difficult problems fragmented ownership, flooding, fung shui constraints, storage of containers and wrecked cars etc. However, there are a number of areas under consolidated, private land ownership and they would be worth investigating further for urban use.
- Over the past 15 years, many studies have been undertaken to identify areas that would be suitable for reclamation, which for many years has been a major source of land supply for both the new towns and the Metro Area. Future reclamations for urban use would mainly be around crowded city areas and would act as "solution spaces" to help restructure the city, to provide conveniently-located areas for rehousing people affected by urban renewal schemes, and to cater for new, major infrastructure.
- Our requirements for new land continue to grow rapidly and there is a need over the long term to make use of all potential sources of land supply from redevelopment, green-field sites and reclamations.

The current, broad territorial pattern of land use is shown by Figure 8. Potential development areas are shown conceptually by Figure 9. For certain of these areas, outline feasibility studies have been completed whilst, for other areas, only broad conceptual ideas have been formulated and in respect of which detailed investigations will have to be undertaken to assess their optimal development potential.

The estimated capacities of currently identified potential strategic growth areas are in the order of 1.7 million people (Table 3).

Table 3
Estimated Population Capacity of Potential Strategic Growth Areas

Potential Strategic Growth Area	Broad Type: RA: Reclamation Area LB: New Land-Based Site RD: Redevelopment	Potential PopulationCapacity ('000)	
1. Redevelopment, Intensification and Space Capacity in Existing Plans	RD+LB	360	
2. West Kowloon Reclamation (Intensification)	LB	30	
3. Kai Tak - Kowloon Bay Phase 1	RD+RA	176	
4. Kai Tak - Kowloon Bay Phases 2 & 3	LB+RA	109	
5. Green Island Reclamation	RA	124	
6. Central-Wanchai Reclamation (Remainder)	RA	15	

7. Tsuen Wan Bay Reclamation	RA	30
8. Hong Kong Island South	LB	60
9. Tseung Kwan O, Phase 3 (Remainder)	RA+LB	75
10. Tseung Kwan O Intensification & Extension	RA	120
11. Tung Chung/Tai Ho	RA+LB	235
12. North Lantau Extension	RA+LB	115
13. Au Tau - Kam Tin	LB	30
14. Lok Ma Chau/San Tin	LB	10
15. Yuen Long South	LB	20
16. Fanling North	LB	20
17. Tuen Mun -Yuen Long Corridor	LB	50
18. Tuen Mun East	LB	10
19. Border Zone	LB	100
20. Whitehead	LB	5
21. Other (Scattered Rural-based Sites)	LB	20
		1,714 (Say 1.7 Mn)

Source: TDS Review (1995)

Note: The above estimates have been derived on the basis of the outcome of evaluations undertaken for Long-Term Options. As such, they are refinement of the initial estimates covered in the Final Technical Report, Part 2.

BROAD DEVELOPMENT PRINCIPLES

To meet our strategic growth needs for major urban land uses, the TDS Review proposes a number of broad development principles around which to construct a development framework. These principles are as follows:

- strategic development should take account of the available capacity of transport, sewerage and other infrastructural systems, as well as the assimilative capacity of receiving water bodies and airsheds;
- strategic development should maximize the utilization of committed infrastructure and be phased in an incremental manner;
- the disposition of strategic development should recognise both the key role of the Metro Area in terms of its economic activities and also the need to restructure congested and obsolete parts of the city;
- equally, development in suitable parts of the New Territories will continue to be required to meet both local needs and "overspill" housing demands from the Metro Area;
- there should be greater emphasis on the extension/upgrading of mass transit systems, thus leaving more road space for goods vehicles on the road system to support economic activities. In particular, greater provision needs to be given to the extension of rail-based, public transport systems to cope with high-capacity demands; they are also more environmentally friendly; and

• new employment nodes should be developed around rail terminals and major transport interchanges to enable movement of the workforce in a cost/time efficient manner.

Additionally, the following principles relating to major urban land uses are proposed:

- Housing in addition to providing mass-housing areas, medium and low density areas are also required to meet market demands for a wider choice of dwellings and alternative life styles;
- Offices in addition to enhancing the role of the CBD, easily accessible, secondary Metro, and non-Metro locations are also required to decentralise office activities to meet the various needs of the business sector;
- Industrial Land existing industrial areas should be upgraded, and new areas for high-technology activities should be upgraded, and new areas for high-technology activities should be provided, especially in proximity to the new airport and port facilities on North Lantau and in a "North South Technology Corridor", generally along the line of the Kowloon-Canton Railway;
- Port Back-up Land more provision is required for such land around the border areas and adjoining the new container terminals in North Lantau;
- Tourism there should be increased provision for an adequate number and range of hotels together with the development of new tourist attractions.

In terms of the geographic distribution of sectoral functions, it is envisaged that the primary roles of the five sub-regions in the Territory should be as follows:

- Metro Area relatively high-density development with mixed urban land uses; new employment centres around main transport interchanges; a principal tourist node; and a centre for main government and cultural functions;
- North-West New Territories a "flow corridor" linking the border to the port and airport; new mass housing at Tin Shui Wai, Yuen Long South and around main transport nodes; upgrading of semi-urbanised areas (e.g. in the Tuen Mun Yuen Long corridor); village and private residential development within the scope of existing statutory plans; port development and other special uses at Tuen Mun West; and protecting the Mai Po Marshes which are of Unique ecological significance;
- North-East New Territories consolidation of development within the context of existing outline zoning plans; some measure of strategic growth around Fanling; emphasis on conservation; and provision of tourist and recreational facilities in selected locations;
- South-West New Territories airport, port and urban development along the north Lantau coastline; new leisure activity nodes in selected areas; consolidation of existing developments within currently zoned areas; emphasis on conservation in Central and South Lantau;
- South-East New Territories strategic growth in Tseung Kwan O with provision made for high-capacity MTR services; low-residential development within the scope of current statutory plans; other areas mainly for conservation and outdoor recreational purposes.

LONG-TERM STRATEGIES

A Long-term Perspective

Applying the development principles outlined above to the strategic growth needs establish under the two Scenarios, A and B, and through a series of planning, transport, environmental, economic and financial evaluations of the development options, Recommended Strategies for 2011 for the two Scenarios have been derived. The principal characteristics of these strategies are set out below in terms of the distributions of population and jobs, transport systems, overall development patterns, the future use of rural and marine areas, and the extent to which they satisfy adopted objectives.

Population Distribution

The main features in respect of the distribution of population are:

Scenario A

- consolidation of development in Base Growth Areas;
- strategic growth at Kai Tak-Kowloon Bay Phase 1, Green Island Reclamation, Central and Wan Chai Reclamation, Tsuen Wan Bay Reclamation and Hong Kong Island South; and
- strategic growth at Tseung Kwan O Phase 3 (plus intensification and further extension), Tung Chung Phases 2 to 4, supplemented by new development areas at Yuen Long South and Au Tau-Kam Tin, as well as low-density housing at Whitehead.

Scenario B - same as Scenario A plus:

- further extension of Tseung Kwan O, Tung Chung and Kam Tin-Au Tau;
- additional strategic growth at Kai Tak Kowloon Bay (Phases 2 and 3), Tai Ho, Lok Ma Chau/San Tin and rural NWNT, supplemented by low-density residential development at Tuen Mun East; and
- potential solution spaces at Tuen Mun Yuen Long Corridor, Fanling North and Border Area, subject to further studies.

The general sub-regional breakdown of population for both scenarios is shown in Table 4 and the broad spatial distribution is schematically presented in Figures 10 and 11 respectively.

Table 4
Population Distribution for
Scenarios A and B - Assumed Long-Term Development Strategies

Sub-Regions	Base Growth Strategic		Strategic Growth		y 2011
		Scenario A	Scenario B	Scenario A	Scenario B
Metro	3.72	0.66	0.84	4.38	4.56
NWNT	1.19	0.11	0.21	1.30	1.40
NENT	1.10	0.02	0.13	1.12	1.23
SWNT	0.12	0.12	0.28	0.24	0.40
SENT	0.38	0.10	0.13	0.48	0.51
Total	6.51	1.01	1.59	7.52	9.10

Distribution of Jobs

The main features in respect of the distribution of jobs are:

Scenario A

- consolidation and expansion of the existing CBD and development of Tsuen Wan as a major business centre:
- the development of job nodes around major transport interchanges in Metro Area outside the CBD;
- · retention of existing industrial areas for environmentally clean and manufacturing-related activities;
- the possible development of new industrial areas/estates at South East Kowloon, Chek Lap Kok and North Lantau Port; and
- the development of Science Park at Pak Shek Kok, and possibly business estates at Chek Lap Kok, Lantau Port and Au Tau-Kam Tin.

Scenario B - same as Scenario A plus:

· further development of job nodes along a North-South axis between Kowloon and NENT along the

KCR/MTR corridor; and

• possible development of high-tech industries in the NENT near the border area.

The sub-regional distribution of jobs for both scenarios is indicated in Table 5 and the spatial distribution of key employment centres is schematically presented in Figure 12 respectively.

Table 5 Distribution of Jobs for Scenarios A and B Assumed Long-Term Development Strategies (million)

Sub-Regions	Base Growth	Strategic	Growth	Total B	y 2011
		Scenario A	Scenario B	Scenario A	Scenario B
Metro	2.41	0.31	0.46	2.72	2.87
NWNT	0.29	0.05 0.15		0.34	0.44
NENT	0.30	0.05	0.10	0.35	0.40
SWNT	0.08	0.05	0.08	0.13	0.16
SENT	0.09	0.02	0.02	0.11	0.11
Total	3.17	0.48	0.81	3.65	3.98

TRANSPORT SYSTEMS

At present, there are about 10 million daily passenger movements in Hong Kong by various kinds of public transport, with 2.8 million journeys by heavy passenger rail services on the MTR and KCR. Our roads now have to cater for the movements of 470,000 licensed vehicles, including 118,000 goods vehicles. Also, there are some 22,000 daily, cross-border movements by goods vehicles in total.

The principal concept is to create a N-S and E-W grid of high-capacity trunk roads and railways to connect principal activity nodes with in the Territory. A further important concept is to provide new and upgraded, cross-border links, especially in the western sector to provide connections between the core of the Metro Area, the new airport and port facilities on North Lantau and the areas of growth along the eastern and western banks of the PRD. Such new links are essential to support and reinforce the hub functions of Hong Kong as a service centre and entrepot for the wider region. Detailed feasibility studies will be required for many of the new transport links, the implementation of which will depend on policy support and the availability of resources.

RURAL AND MARINE AREAS

There remain substantial parts of the Territory where the strategic planning intention is to take protective measures to conserve and enhance our natural heritage. Figure 15 shows, in broad terms, the principal framework for land and marine-based conservation areas respectively comprising:

- "Unique Areas", which cover the Mai Po Marshes, the uplands of the NENT and pockets of inshore waters in the NENT, SWNT and SENT. All such areas are distinguished by natural attributes that demand the highest levels of protection against incompatible development and management to control unacceptable levels of use; and
- "Significant Areas", which are widespread, covering the remaining major upland landscapes and certain areas of inshore waters. The protection of such areas against incompatible development should remain a priority and their potential for increasing outdoor recreational use needs to be given positive recognition.

Additionally, there remain residual, lowland areas many of which constitute "zones of transition", being in close proximity to concentrations of urban development. Most of such areas are now covered by statutory outline zoning plans or development permission area plans, which provide for the growth needs of village settlements, the reservation of land for a range of semi-urban uses (e.g. open storage), the conservation of high quality farmland, the protection of sites of special scientific interest, and the conservation of scenic and historical features.

GENERAL OVERVIEW

A broad assessment has been made as to the extent to which the Long-Term Recommended Strategies for Scenarios A and B are expected to satisfy the principal objectives of the TDS Review, as follows:

Land Use Objectives

- for Scenario A with a population of about 7.5 million people there would be adequate potential capacity within Base Growth Areas and planned Strategic Growth Areas. For Scenario B, with a population of about 8.1 million people, it is likely that additional development areas in the New Territories could be provided, subject to the outcome of feasibility studies;
- employment opportunities, especially in tertiary sector activities, are likely to remain heavily concentrated in the Metro Area but there is scope and need for efforts to be directed towards the development of satellite activity nodes around high capacity public transport interchanges. In this context, there would be the opportunity for the growth of a N S technology corridor, taking advantage of MTR and KCR rail services and road based transport systems along Route 1 (Figure 12);
- the manufacturing industrial sector can be expected to continue to change to "higher level" types of
 activities related to outward processing activities in the wider region and also to technology-driven
 production fields within Hong Kong. This will bring about a further transition in already-established
 industrial zones and the estates in close proximity to the new airport at Chek Lap Kok, the port peninsula
 at North Point, in certain areas close to the border and in selected, easily accessible areas on new harbour
 reclamations;
- substantial areas of uplands, marshlands and marine waters will be retained for their ecological, landscape and conservation-related values. Strong statutory and administrative protection measures for such areas will need to be maintained. However, there is concern over the potential for water pollution in such areas as Deep Bay and Mirs Bay; and
- growing pressures for development in lowland rural areas, especially in the NWNT and NENT, can be expected, A prerequisite for such development would be the extension/upgrading of infrastructure services. For such areas of transition, proactive and regulatory measures should be pursued within the framework of statutory outline zoning plans and associated development programmes. Work on identifying new infrastructure needs in the NWNT is now being undertaken.

Transport Objectives

- whilst pursuing the concept of development nodes around high capacity transport interchanges, as noted above, it must be recognised that there are limits to which interzonal travel demands can be regulated through the arrangement of the location, type and density of land uses, especially given the large size of Base Growth and the road-based traffic generated by the port and airport on North Lantau;
- Hong Kong's role as a regional entrepot and business centre, associated with the economic development of
 the PRD and other parts of South China, will require the provision of new cross-border transport links.
 There is a range of potential route options, the feasibility of which needs to be examined as soon as
 practicable, taking account of environmental impacts and pressure of use on the territorial road
 networks;
- within Hong Kong, the existing and planned road networks are likely to remain under high pressure of
 use, especially in north-south corridors. In this context, the feasibility and resource implications of a new
 North South highway connecting the northern part of the New Territories to the West Kowloon
 Reclamation and certain other possible new links need to be investigated; and

there needs to be a high level of commitment to the further staged provision of mass transit passenger rail lines and associated facilities in conjunction with and, where appropriate, ahead of major urban development projects. The resource implications of any additional new lines over and above those proposed by the Railway Development Strategy will need to be addressed.

Environmental Objectives

- in very broad terms, the general quality of the environment will be contingent on the extent to which it is found appropriate or necessary to continue to response to needs arising directly and indirectly from pressures of growth in the PRD and other parts of South China;
- the Strategic Environmental assessment carried out as part of the TDS Review process indicates that there are limits to the degree to which the requirements of the six TDS objectives can be met. The potential environmental impacts cast doubt on the long-term sustainability of continued demand-led development within the limits of current policies and proven technology. Whilst some of the predicted impacts can probably be mitigated, if adequate resources are applied at the appropriate stage of the development process, serious health-related environmental impacts may occur in some parts of the Territory, even if all currently proposed measures are fully implemented. Several of the more serious issues will require further detailed study and may have policy implications, in particular, the long-term sustainability of the current development path;
- on the basis of currently predicted trends, *air quality* will continue to deteriorate. Under both scenarios, vehicle related air pollution, mainly associated with goods vehicle traffic, is likely to cause exceedances of the statutory Air Quality Objectives in some parts of the Territory, even with all currently proposed pollution control measures in place. Implementation of all proposed pollution control measures is required merely to minimized the environmental impacts;
- traffic noise is expected to exceed the parameters set out in the Hong Kong Planning Standards and Guidelines in many areas for both Scenarios A and B. Development in the NWNT is of particular concern because of increased port-related activities and the anticipated growth of associated traffic;
- further study in respect of traffic-related noise and air quality problems is necessary to refine estimates of the magnitude of the problems, including cumulative impacts, and to find ways of minimizing the problems, particularly those associated with off-site, port-related impacts. A commitment to promoting environmentally friendly transport, and further reviews of transport/environment policy, will be critical to finding solutions in the long term;
- sewerage and water quality issues are of considerable concern as well. While, in theory, it may be possible to expand the existing and planned sewage infrastructure to keep pace with proposed development, it remains to be seen whether the feasibility of the necessary infrastructure can be demonstrated. It seems clear that the assimilative capacity of receiving water bodies will be overloaded, although the extent of the problem and the feasibility of technical mitigation require further investigation;
- a substantial concern arises in connection with the disposal of solid waste, as waste generation rates are forecast to exceed current estimates. In the worst case scenario, the life spans of existing and planned landfills are predicted to be reduced substantially. Measures to reduce demand need to be pursued quickly. Early policy action is required to implement active waste reduction programmes and to contain waste generation. The current strategic waste disposal strategy needs to be reviewed having regard to possible wider regional solutions;
- potential loss of habitat and destruction of fragile ecosystems would be of considerable concern. Area of ecological value that are most vulnerable include the Special Areas, Country Parks, Marine Reserves, Marine Parks, Mirs Bay, Tolo Harbour and Deep Bay. In order to protect such areas, a concerted effort will be required by the authorities in Hong Kong and their counterparts in neighbouring cross-border areas to enable decisions to be made on the effects of development on ecologically important areas; and
- the results of the Strategic Environmental Assessment make it clear that urgent action will be required to fully quantify the potential environmental problems and the cumulative impacts and to determine what policy actions, environmental protection measures and environmental infrastructure will need to be implemented to achieve sustainable development within the TDS framework over the long-term.

MEDIUM-TERM STRATEGY

WHY WE NEED A MEDIUM-TERM STRATEGY

Throughout the TDS Review process, it has been fully recognised that long-term forecasting of development demands is high complex, given the many demographic, economic, environmental and developmental factors involved, many of which are outside Hong Kong's control. It is also realised that for many of the strategic growth areas proposed, only broad conceptual ideas have been formulated and will require further derailed investigations. In view of the long lead time required for the planning and production of land for development and provision of infrastructure, it is essential to maintain a forward momentum to meet the more imminent land use and infrastructure needs of Hong Kong. A Medium-Term Strategy and Outline Development Programme for 2006 are therefore required.

MEDIUM-TERM NEEDS FOR HOUSING AND JOBS

It is predicted that, by 2001, the capacity of existing plans and programmes for the provision of new sites in urban areas for housing will largely have been exhausted, especially for public housing.

Thereafter, it is expected that over the period 2001-2006, annual demand for public and private sector housing could be in the order of 78,000 flats per annum. For the period 2001-2006, an overall potential demand of 390,000 flats is assumed for strategic planning purpose. This would equate to housing needs arising from a population of about 1.0 million people, of whom about 0.70 million would arise from population growth. The balance of 0.30 million people would come from households displaced by redevelopment/clearances and from substandard/overcrowded living quarters.

Provision would also need to be made for an additional 0.41 million job places.

ALTERNATIVE PATTERNS OF GROWTH

Towards the concluding stage of the TDS Review in 1995, there was considerable public debate over the question of harbour reclamations, arising from a number of concerns relating to such matters as water quality, marine safety, hydrological and ecological impacts, visual aesthetics and over-concentration of population and jobs in the Metro Area. To respond to such concerns, further studies have been undertaken to examine the relative merits of two "extreme" patterns of growth, namely a New Territories-biased (NT-biased) and a Harbour-biased (HB-biased) Medium-Term Option. For both options, a total territorial population of about 7.3 million by 2006 has been assumed. For the estimated additional housing needs for one million people over the period 2001 - 2006, the broad geographic distribution of population for the two options has been assumed to be as follows:

	Population (million)		
	NT-Biased	HB-Biased	
Build-Black and Residual Capacity	0.36	0.36	
New Sites in Metro Area	0.13	0.49	
New Sites in Non-Metro Area	0.51	0.15	
• Total	1.00	1.00	

The strategic growth areas assumed for both options are set out in Table 6. The general pattern of development for each option is schematically presented in Figures 16 and 17 respectively. These have been evaluated in terms of their likely performance relative to the TDS Review objectives.

Table 6
Estimated Population Capacity of Potential Strategic Growth Areas for NT-Biased and HB-Biased Medium
Term Options (in thousand)

Potential Strategic Growth Area	NT-Biased Medium Term Option	HB-Biased Medium Term Option
1. Redevelopment, Intensification and Space Capacity in Existing Plans	360	360
2. West Kowloon Reclamation (Intensification)		30
3. Kai Tak - Kowloon Bay Phase 1	100	290
4. Kai Tak - Kowloon Bay Phases 2 & 3		
5. Green Island Reclamation		125
6. Central-Wanchai Reclamation (Remainder)		15
7. Tsuen Wan Bay Reclamation	30	30
8. Tseung Kwan O, Phase 3 (Remainder)	125	125
9. Tseung Kwan O Intensification & Extension		
10. Tung Chung Phase 2 (Remainder), 3&4	150	25
11. Au Tau - Kam Tin	40	
12. Lok Ma Chau/San Tin	80	
13. Yuen Long South	20	
14. Fanling North	20	
15. Tuen Mun - Yuen Long Corridor	50	
16. Tuen Mun East	10	
17. Whitehead	5	
18. Rural NWNT	10	
Total	1,000	1,000

Source: TDS Review (1995)

Note: The above estimates have been derived on the basis of the outcome of evaluations undertaken for Long-Term Preferred Options. As such, they are a refinement of the initial estimates covered in the Final Technical Report, Part 2.

FINDINGS

The main findings from evaluations of the two options are:

NT-Biased Option

Advantages:

- more financial returns to provide land owners;
- greater involvement of private sector;
- broadens choice of housing;
- promotes closer interaction with the PRD;
- increases viability of new rail links;
- helps achieve a better population-job distribution in non-Metro areas and thus reduces worker travel times:
- encourages creation of new employment nodes in the NT;
- · upzoning could facilitate the clearance of temporary uses; and
- · enhances accessibility of residents to wider outdoor recreational opportunities.

Disadvantages

- longer lead-time prior to development due to need for comprehensive feasibility studies;
- · assembly of land of fragmented ownership difficult, time consuming and costly;
- difficulty in obtaining adequate supplies of fill for raising site levels;
- requires heavy expenditure of public funds to overcome drainage and flooding problems and also to provide other major infrastructure;
- problems in inducing creation of employment opportunities;
- large commuter travel demands;
- longer trip times and higher levels of congestion in the NT;
- congestion on cross-harbour transport links;
- air pollution impacts in Tuen Mun Air Quality Control Zone;
- sewerage and river pollution problems;
- potentially serious impacts on water bodies in the NWNT and North Lantau;
- · increased threats to ecologically sensitive areas; and
- · high cumulative environmental impacts.

Harbour-Biased Option

Advantages

- earlier start possible as harbour reclamation areas are either covered by detailed feasibility studies or are currently subject to such investigations;
- provides "solution spaces" for urban renewal;
- new commercial nodes to satisfy market preferences;
- relatively few land acquisition problems for reclamation projects;
- high net financial benefit for the community;
- better job-population balance and shorter travel times;
- · facilitates improvement to road and rail-based transport systems of the Metro Area;
- relatively easy to extend infrastructure services to new development areas;
- relieves pressures of development on areas of ecological and landscape value in the NT;
- eliminates some highly polluted bodies of water such as Kai Tak Nullah; and
- provides opportunities to develop new waterfront promenades to enhance public use and visual appeal of the city

Disadvantages

- further reduction in the size of Victoria Harbour;
- substantial up-front works and resource allocations;
- large quantities of fill required;

- relocation of some port facilities;
- more congestion on cross-harbour links;
- local traffic congestion;
- heavy utilisation of all passenger rail lines;
- deterioration of air quality in the Harbour Air Quality Control Zone;
- · reclamation works can have temporary adverse effects on water quality and marine activities;
- earlier implementation of the later stages of the Strategic Sewage Disposal Strategy would be required; and
- potential strategic growth development in the N.T. held back post 2006.

In terms of the overall performance of the two options, the following broad assessment has been made;

Infrastructure and Resource Implications

- both options would require significant upfront investment in transport and environmental infrastructure. For example, the treatment and disposal of liquid wastes would be a cause for particular concern in the rural areas of the NWNT. On the other hand, major development under the HB-Biased Option would call for an earlier implementation of the later stages of the Strategic Sewage Disposal Scheme. Under both options, heavy investment in transport and environmental infrastructure systems would be required; and
- for the NT-Biased Option there are likely to be more uncertainties in terms of resource implications as all the proposed strategic growth areas require detailed feasibility studies.

Feasibility of Implementation

- the HB-Biased Option has an advantage over the NT counterpart on the basis that the feasibility of most growth areas has been established, although phasing and programming are subject to detailed design;
- the integration of development programmes in dispersed locations in the NT would be more difficult than the HB-Biased Option;
- the NT-Biased Option is likely to have implementation problems due to land assembly and the provision of infrastructure. The HB-Biased Option would have greater flexibility in respect of co-ordination of development projects;
- implementation of the NT-Biased Option would require significant institutional and policy changes to encourage large-scale decentralisation of economic activities whereas the HB-Biased Option is more able to satisfy locational preferences in response to market forces;
- the NT-Biased Option would be more capable of promoting the restructuring and environmental upgrading of urban transitional areas such as the Tuen Mun Yuen Long Corridor; and
- the HB-Biased Option would be more likely to accelerate the restructuring and 'thinning out' of inner city areas, particularly through programmes initiated by the Housing Authority, the Housing Society and the Land Development Corporation.

Timing and Programming

- both options would encounter programming problems but the majority of growth areas for the NT-Biased Option would be more difficult to implement by 2006 as most of the strategic growth areas are "untested" opportunity spaces; and
- the HB-Biased Option is more capable of being implemented by phases, but a review of the overall programming is required to take account of the lead times for various procedural steps, such as the gazetting of plans under various ordinances.

A BALANCED APPROACH

The general conclusion is that neither option emerges as a clear winner. Both the Metro and the NT areas face problems and have locationally-tied social and economic needs that have to be addressed in a positive way.

For the Metro Area, new solution spaces are required to:

- facilitate the restructuring of congested, obsolete urban areas and the upgrading of environmental conditions:
- provide opportunities for the provision of new housing for households displaced by redevelopment schemes, especially for major projects such as those undertaken by the Housing Authority, the Housing Society and the Land Development Corporation;
- provide opportunities for the development of new employment centres beyond the current concentration in the Central Wanchai area and Tsim Sha Tsui, especially in locations around major public transport interchanges;
- provide new road and passenger rail transport links to alleviate congestion along currently congested corridors and also to provide additional capacity in new corridors of growth; and
- provide opportunities for the realisation of the Metroplan aim to 'bring the harbour to the city and the city to the harbour' through the provision of an integrated system of waterfront promenades.

For the New Territories, new solution spaces are required to:

- provide a wider range of choice of housing to respond to changing trends and aspirations, especially among households who wish and can afford to purchase private housing;
- provide opportunities to make the best possible use of the resources of the private sector in helping to fulfill the development needs of the territory;
- encourage, through appropriate institutional policies and mechanisms, a greater measure of decentralisation of jobs, especially at key nodal points in the principal N-S "flow corridors" between the Metro Area and the Pearl River Delta;
- enhance the viability of currently planned trunk highways, passenger rail links and other infrastructure, especially to the NWNT; and
- rationalise development patterns in such a way that could help clear up existing environmental black spots and also divert development pressures away from of high landscape, agricultural and ecological value.

It is thus proposed that the aim should be to be achieve a balanced distribution of new development to the forecast housing need of about 1 million people as follows:

	Population (million)
Build-Black and Residual Capacity	0.36
New Sites in Metro Area	0.34
New Sites in Non Metro Areas	0.30
Total	1.00

To achieve this general pattern of growth, as indicated in Figure 18, it would be necessary to undertake the development of the following areas:

- "build-black" through redevelopment and the re-use of vacated flats in the public and private sectors, mainly in the Metro Area
- 290,000 people
 - space capacity in current development plans, mainly in the new towns in the New Territories
- 70,000 people
 - west Kowloon Reclamation (intensification)
- 30,000 people

- Kai Tak and Kowloon Bay, Phases 1 (Land-based) and 2 (Reclamation-based)
- 230,000 people
 - Tung Chung, Phases 2 (Remainder), 3 and 4
- 115,000 people
 - Yuen Long South
- 20,000 people
 - · Au Tau Kam Tin
- 30,000 people
 - Whitehead
- -5,000 people
 - Green Island Reclamation (Initial Phase)
- -40,000 people
 - Tsuen Wan Bay Reclamation
- -30,000 people
 - Central Wanchai Reclamation (Remainder)
- -15,000 people
 - Tseung Kwan O Phase 3 (Remainder) and Intensification/Extension
- -125,000 people

BROAD DISTRIBUTION OF POPULATION AND JOBS

The broad distribution of population and jobs for the Recommended Medium-Term Strategy, as given in Tables 7 and 8, would be as follows:

- 36% of the projected strategic growth of population would be located in the Metro Area. The remaining 64% would be in other parts of the Territory, with the NWNT, SWNT and SENT taking a significant share of the overall increase during the period;
- 61% of the projected strategic growth of jobs would be in the Metro Area leaving 39% for other areas in the Territory;
- the Metro Area would accommodate 58% of the total territorial population and about 74% of the total iobs:
- the New Territories would accommodate more population, about 42% of the territorial total compared to about 29% in 1991. The share of employment is expected to increase to 26%, compared to about 17% in 1991; and
- with the continuing decentralisation of population, the overall population/job ratio for the NT by 2006 would be 3.19: 1.00 compared to 3.59: 1.00 in 1991. Such improvements would be particularly evident in absolute terms in both the NWNT and the NENT.

Table 7
Distribution of Population for Recommended Medium-Term Strategy
(in million)

(IN MILLION)								
Broad Regio ns	1991*	2001	2001-2006			20	06 Total***	
			Strate	Strategic Growth**				
			NT Biased Option	Harbour Biased Option	Recom- mended Strategy	NT Biased Option	Harbour Biased Option	Recom- mended Strategy
Metro	3.95 (71%)	3.99 (60%)	0.08 (11%)	0.37 (53%)	0.25 (36%)	4.07 (56%)	4.36 (56%)	4.24 (58%)
NT	1.65 (29%)	2.64 (40%)	0.62 (89%)	0.33 (47%)	0.45 (64%)	3.26 (44%)	2.97 (41%)	3.09 (42%)
NWNT	0.62 (11%)	1.10 (17%)	0.26 (37%)	0.15 (21%)	0.19 (27%)	1.36 (18%)	1.25 (17%)	1.29 (17%)
NENT	0.85 (15%)	1.07 (16%)	0.09 (13%)	0.02 (3%)	0.01 (1%)	1.16 (16%)	1.09 (15%)	1.08 (15%)
SWNT	0.05 (1%)	0.11 (2%)	0.14 (20%)	0.03 (4%)	0.12 (17%)	0.25 (3%)	0.14 (2%)	0.23 (3%)
SENT	0.13 (2%)	0.36 (5%)	0.13 (19%)	0.13 (19%)	0.13 (19%)	0.49 (7%)	0.49 (7%)	0.49 (7%)
Grand Total	5.60 (100%)	6.63 (100%)	0.70 (100%)	0.70 (100%)	0.70 (100%)	7.33 (100%)	7.33 (100%)	7.33 (100%)

Source: Planning Department * Based on 1991 Census.

*** The territorial total for 2006 includes the additional growth and net balance due to upgrading and decantation.

Table 8
Distribution of Jobs for Recommended Medium-Term Strategy
(Million)

Broad Regions	1991*	2001	2001-2006 Strategic Growth				2006 Total	
			NT - Biased Harbour-Biased Option Option Strategy		NT - Biased Option	Harbour- Biased Opjtion	Recom- mended Strategy	
Metro	2.30 (83%)	2.45 (75%)	0.14 (34%)	0.30 (73%)	0.25 (61%)	2.59 (71%)	2.75 (75%)	2.70 (74%)
NT	0.46 (17%)	0.81 (25%)	0.27 (66%)	0.11 (27%)	0.16 (39%)	1.08 (29%)	0.92 (25%)	0.97 (26%)

^{**} The strategic growth for 2001 - 2006 is a net figure comprising the population for which new strategic growth areas are required (0.64 million) adjusted for changes due to upgrading and decantation.

NWNT	0.18 (7%)	0.31 (10%)	0.14 (34%)	0.05 (12%)	0.09 (22%)	0.45 (12%)	0.36 (10%)	0.40 (11%)
NENT	0.23 (8%)	0.33 (10%)	0.07 (17%)	0.02 (5%)	0.02 (5%)	0.40 (11%)	0.35 (9%)	0.35 (9%)
SWNT	0.02 (1%)	0.09 (2%)	0.02 (5%)	0.01 (2%)	0.02 (5%)	0.11 (3%)	0.10 (3%)	0.11 (3%)
SENT	0.03 (1%)	0.08 (3%)	0.04 (10%)	0.03 (8%)	0.03 (7%)	0.12 (3%)	0.11 (3%)	0.11 (3%)
Grand Total	2.76 (100%)	3.26 (100%)	0.41 (100%)	0.41 (100%)	0.41 (100%)	3.67 (100%)	3.67 (100%)	3.67 (100%)

Source: Planning Department * Based on 1991 Census. SOME KEY DEVELOPMENT ATTRIBUTES

The Recommended Medium-Term Strategy represents a combination of reclamation-based and land-based developments in the Metro Area and the New Territories. The strategy would create secondary employment centres in Kai Tak - Kowloon Bay to achieve a more rational job pattern, followed by redistribution of certain economic activities to growth nodes in the New Territories, such as Au Tau - Kam Tin, as a means to help alleviate Metro-bound commuting. The institutional and policy mechanisms required to achieve this will need to be studied in more detail.

Another strategic intention is to improve the current population and job distribution by making provision for comprehensively planned, mass-housing development areas to be served by an integrated, environmentally-friendly mass transit networks, particularly rail-based systems. Such a growth pattern should be more capable of facilitating the movement of people while reserving a greater margin of road space for the movement of goods vehicles (particularly those arising from cross-border interaction). This would enhance economic activities related to the hub functions of Hong Kong.

The redevelopment of sites in the Metro Area will depend on private initiatives as well as the programmes of the Housing Authority, the Housing Society and the Land Development Corporation. For growth areas involving reclamation sites, development programmes could be flexibly integrated and co-ordinated. In addition to mass housing sites in the Metro Area, and to a certain extent in the new towns, other smaller scale and medium-density areas in various New Territories locations are also included to provide a better mix of housing and wider market choices. Similarly, a more comprehensive locational strategy is proposed for major land uses, such as offices, hotels, retail centres and industry, along major transport corridors to provide a range of locational choices to cater for different market demand.

ENVIRONMENTAL ISSUES

The evaluation of the NT-biased and HB-biased, medium-term options clearly show that, in both cases, there would be a number of environmental problems to address. Even with the Recommended Medium-Term Strategy, there will remain a number of substantive environmental issues to resolve. In particular, further measures will be needed to alleviate air quality problems; there needs to be a firm commitment to the earliest possible implementation of the remaining stages of the Strategic Sewage Disposal Scheme to serve the Metro Area; there continues to be a matter of considerable territorial concern in respect of both the disposal of solid wastes and mud deposits arising from reclamation work; the clean-up of black spots in the New Territories caused by the random use of land for open storage still has a long way to go; and the momentum of works for the extension of environmentally-friendly, high-capacity passenger rail systems needs to be maintained.

BROAD SEQUENCE OF WORKS

Once a Recommended Medium-Term Strategy is accepted as a basis for development up to the year 2006, it will be necessary to formulate plans and programmes for packages of major works. Apossible broad target-driven programme is indicated in Figure 19. The spatial distribution of the development packages is presented in Figure 20. Current ideas are as follows:-

Initial development package covering:

- the completion of outstanding public works programmes in current development plans;
- the revision of plans and completion of additional works at West Kowloon Reclamation to allow some intensification of development;
- the completion of Tseung Kwan O Phase 3 remaining works to optimise the infrastructural capacities as envisaged in the New Town Development Programme;
- the development of Kai Tak Kowloon Bay Phase 1 (land-based portion) covering the site preparation works of the terminal apron area and the filling in/decking of the nullah, to satisfy medium-term housing needs and provide pump-priming sites for urban upgrading in East Kowloon; plus
- the earliest possible completion of the Central Kowloon Route to provide a new E W trunk highway between Kwun Tong and the West Kowloon Reclamation.

A second development package covering:

- completion of remaining phases of the Central and Wan Chai Reclamation, namely the Tamar and Island Eastern Corridor cells to provide prime office sites for the service sector and also some measure of high-class, executive housing;
- reclamation of Tsuen Wan Bay, accompanied by the West Rail and Airport Rail, to facilitate urban restructuring in Tsuen Wan;
- site formation and infrastructural works at Au Tau and Kam Tin area to provide opportunities for an out-of-town office and service centre as well as residential development around a passenger-rail interchange;
- further expansion and intensification of Tseung Kwan O Phase 3 to accommodate extra population to optimise the use of designed infrastructural capacities. This would also require the provision of a new coastal road to divert industrial traffic away from the main town centre;
- formation works and upgrading infrastructure at Ma On Shan to provide alternative sub-urban, lowdensity housing development at the scenic location at Whitehead to cater for higher income households; and
- the southern expansion of Yuen Long town, requiring the upgrading of transport, sewerage and drainage systems.

A third development package covering:

- later phases of the full airport community at Tung Chung to support ongoing housing development programmes. This would involve further site formation and infrastructure works, such as upgrading of the Siu Ho Wan sewage treatment works and the provision of district road networks linked to the North Lantau trunk o\road system;
- the development of initial phases of the Green Island Reclamation to provide urban housing for white collar households in close proximity to the concentration of jobs in Central Wanchai. It would also facilitate the redevelopment of surrounding inner city areas by providing opportunities for the rehousing of households affected by renewal schemes. This would require implementation of the MTR from Sheung Wan to Kennedy Town and the provision of district roads to segregate local and by-passing traffic; and
- development of the remainder of Phases 1 and 2 of the Kai Tak-Kowloon Bay development scheme for a range of housing, commercial, community and high-tech industrial uses with a view to creating a secondary employment centre. With this would be the provision of new links to the district road networks and the provision of a passenger rail connection from Diamond Hill to the KCR station at Hung Hom.

All the above will call for urgent action to be taken within the framework of Government's Resource Allocation

System to move forward with the formulation and implementation of a number of integrated, medium-term plans and programmes, generally along the lines successfully used for our current new towns. The current programming of works for certain, already planned projects would need to be reviewed.

A minimum period of at least 10 years is likely to be required for completion of the development process. This is due to the time needed to prepare feasibility studies, the gazetting of plans under various ordinances, the allocation of funds, land acquisition and clearance, the letting of contracts and the completion of engineering and building works. Achievement of all the required actions would, in turn, depend on the adequate and timely provision of funding and other resources.

Whilst action is being pursued to achieve medium-term objectives, it would also be prudent to launch, as soon as possible, a number of outline planning studies for other potential strategic growth areas (mainly in the New Territories) to provide a framework for a sustained land production and infrastructure development programme over the long-term.

TO SUM UP

The proposed development pattern postulated for the Recommended Medium-Term Strategy is illustrated in Figure 18. The general distribution of population and jobs are summarised in Tables 7 and 8 respectively. Additionally, Figure 19 presents a broad, outline development programme for the new strategic growth areas over the medium term. Figure 20 illustrates an outline sequence of works, linking land development with the provision of new transport infrastructure. Related to these proposals, four points of emphasis need to be made:

- the supply of land for public housing, in particular, from current plans and programmes is diminishing very rapidly and there is an urgent need to move forward with the large-scale provision of additional sites in the strategic growth area listed above;
- the minimum lead-time currently required to complete the development process is in the order of ten years. In order to achieve the assumed targets of a Medium-Term Strategy, a review of certain development programmes and the timely provision of adequate resources will be necessary;
- besides the provision of new land, it will be essential for parallel action to be taken to make timely provision for essential infrastructure works. An integrated project management approach is required; and
- in parallel with efforts to move forward with a Medium-Term Strategy, steps need to be taken to launch planning-led studies to establish the suitability of other potential strategic growth areas that will eventually be needed to meet long-term needs.

Clearly, time is not on our side. The earliest possible action is required to move forward on a broad front. Failure to do so can be expected to result in rapidly escalating housing shortfalls and related social problems. PUBLIC CONSULTATION

THE WAY FORWARD

The formulation of a new strategic planning framework to cater for the medium and long-term development needs of Hong Kong has been no easy task since, within a territory of limited size, there are many competing needs to satisfy.

The TDS, being a broad framework for more detailed planning and development is, to a large degree demandled, based on currently known policies and standards. As such, it cannot provide answers to all the inter-related questions associated with the creation of an urban-based environment that satisfies all aspirations. In this connection, it is proposed to proceed with a study, known as "Sustainable Development for the 21st Century (SUSDEV21)". The study will examine how, in the long term, it may be possible to establish an improved corporate process through which more balanced decisions can be achieved in the formulation of policies, plans and programmes to meet the changing but inter-connected economic, social and environmental needs of the community relative to resource constraints. In the meanwhile, however, it will be important to move forward with the implementation of an agreed Medium-Term Strategy on the basis of current policies and standards.

YOUR VIEWS ARE WELCOME

In 1993, we carried out a public consultation exercise on the TDS Review Development Options. There was a good public response. Before we finalise the current TDS Review, we would like to obtain your comments and views on the contents of this digest and other related documents. Some points on which you may wish to offer views are:

On Land Use Issues

- do the strategic development principles we have assumed seem reasonable?
- what policy and institutional measures might be worth considering to encourage a higher level of decentralisation of jobs from the Metro Area?
- has a reasonably balanced view been taken of the relative merits of the options for a Medium-Term Strategy?

On Transport Issues

- do you consider that more needs to be done to promote the use of mass-transit systems?
- besides building more roads and railways, what other measures do you think we should consider to facilitate travel?
- would you prefer to live in a more spacious, out-of-town environment and have longer journeys to work or would you prefer to live in the Metro Area closer to your job and have shorter journeys to work?

On Environmental Issues

- do you consider that more efforts should be directed toward solving major environmental problems, especially in respect of air quality and water quality?
- what new measures do you consider might be worth considering to help relieve pressure on our environment, such as demand management?
- what priority do you feel should be given to the development of new country parks and the protection of areas of ecological value?

If you have any comments to make, please send them in writing before the end of December 1996 to:

Territorial Development Strategy Review,

General Registry, Planning Department,

Murray Building,

Garden Road,

Hong Kong.

Tel: 28486247, Fax: 28770389