

## CHAPTER THREE

## SCENARIO DEVELOPMENT

1. Two broad strategies were formulated for the overall TDS taking into account the phasing of development programmes for the next two decades. Essentially Scenario-A was conceived as the "low growth" scenario which perceives the Pearl River Delta (PRD) to be the major economic hinterland for Hong Kong in the next few years. This is a trend based scenario which takes account of the interaction between growth and development in Hong Kong and the PRD. Scenario B was formulated on the basis that the Guangdong Province and the inner provinces of China will be the major economic hinterland of Hong Kong.
2. These two scenarios are not necessarily mutually exclusive but are reflections of the responses to growth as development patterns and trends in the Region emerge. The formulation of the medium-term development strategy is a particularly important component of the overall TDS Review as it is essential to lay the foundation for development which can respond to the demand in the longer term. Whichever medium-term Strategy is ultimately adopted, it must be flexible, resource-effective and environmentally effective.
3. The principal working assumptions adopted for the NT-biased and HB-biased Medium-Term Options are summarised below:
  - territorial population of about 7.33 million with 3.67 million job places;
  - for HB-Biased and NT-Biased Options, strategic growth capacity should be exhausted in the respective areas before any other development areas are considered;
  - development plans for new airport and port will be implemented on the basis of the perceived demands; and
  - all new road and rail transport projects that form baseline networks will be implemented within the time frame set.
4. The population capacity of each strategic growth area are given in Table 3.1 and the broad pattern of population and jobs are summarised in Tables 3.2 and 3.3.
5. To consider the merits and demerits of the options the main criteria used are infrastructure requirements and resource implications; feasibility and flexibility in implication; and timing. The key parameters for the two variant options are summarised in Table 3.4.
6. It was identified that despite the two extreme cases which have been promulgated, the general situation does not indicate very extreme contrasts due to the dominance of the base growth elements.

**Table 3.1**

**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 Population Capacity ('000)
1. Redevelopment, Intensification and Spare Capacities in Existing Plans	RD	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. Tsueng Kwan O, Phase 3 (Remainder)	RA + LB	75
10. Tseung Kwan O, Intensification / Extension	RA	120
11. Tung Chung Phases, 2, 3 & 4 and 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. Kwu Tung - Border Zone	LB	100
20. Whitehead	LB	5
21. Others	LB	20
<b>Territorial Total</b>		<b>1,714 (say 1.7Mn)</b>

Source : Planning Department

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 in the Final Technical Report Part 2.

**Table 3.2**

**Distribution of Population for  
NT-Biased and HB-Biased Medium-Term Options  
and Recommended Medium-Term Strategy by 2006**

(in million)

Broad Region	1991*	2001	2001 - 2006 Strategic Growth**			2006 Total***		
			NT-Biased Option	HB-Biased Option	Recommended Strategy	NT-Biased Option	HB-Biased Option	Recommended Strategy
Metro	3.95 (71%)	3.99 (60%)	0.08 (11%)	0.37 (53%)	0.25 (36%)	4.07 (56%)	4.36 (59%)	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%)
Territorial 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 strategic growth for 2001-2006 includes the additional growth and net balance due to upgrading and decantation.

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

**Table 3.3**

**Distribution of Jobs for  
NT-Biased and HB-Biased Medium-Term Options  
and Recommended Medium-Term Strategy by 2006**

(in million)

Broad Region	1991*	2001	2001 - 2006 Strategic Growth			2006 Total		
			NT- Biased Option	HB- Biased Option	Recommended Strategy	NT- Biased Option	HB- Biased Option	Recommended 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%)
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%)
Territorial 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

Table 3.4

**Broad Development Orientation and  
Spatial Emphasis of NT-Biased and HB-Biased Options**

Development Orientation	Spatial Emphasis of Strategic Population and Jobs	Strategic Growth Area (Housing capacity in terms of '000 population equivalent)	
		Common Growth Area	Optional Growth Area
<p><b>NT-Biased Medium-Term Option</b></p> <ul style="list-style-type: none"> <li>- predominantly land-based development</li> <li>- largely private sector-led as majority of sites are private land</li> <li>- rural focused with swing of development pendulum from Metro to NT</li> <li>- creation of new population centres in rural transitional areas and major activity nodes along transport corridors/nodes</li> </ul>	<p>predominantly NWNT- and NENT- biased with a broad Metro/NT split of 11/89 for population and 34/66 for jobs</p>	<p>Assumed redevelopment - 290</p> <p>Kai Tak-Kowloon Bay, Ph 1(Land-based) - 100</p> <p>Tsuen Wan Bay Reclamation - 30</p> <p>Tseung Kwan O, Ph 3 (Remainder) - 75</p> <p>Spare Capacity in Current Development Programmes - 70</p>	<p>Tuen Mun-Yuen Long Corridor - 50</p> <p>Yuen Long South - 20</p> <p>Au Tau/Kam Tin - 40</p> <p>Tung Chung, Ph 2, 3 &amp; 4 -150</p> <p>Tseung Kwan O Intensification/Extension - 50</p> <p>Rural NWNT - 10</p> <p>Fanling North - 20</p> <p>Tuen Mun East - 10</p> <p>Whitehead - 5</p> <p>Lok Ma Chau/San Tin - 80</p>
<p><b>HB-Biased Medium-Term Option</b></p> <ul style="list-style-type: none"> <li>- predominantly reclamation-based development</li> <li>- largely public sector-led as majority of sites are public land</li> <li>- continuation of reclamation around the harbour with gradual spread of Central Business District along MTR Hong Kong Line Extension to Kennedy Town/Green Island and secondary office/job centre in Kai Tak-Kowloon Bay reclamation</li> </ul>	<p>predominantly Harbour-biased with a broad Metro/NT split of 53/47 for population and 71/29 for jobs</p>	<p>same as above</p>	<p>Central &amp; Wanchai Reclamation (Remainder) - 15</p> <p>West Kowloon Reclamation (Intensification) - 30</p> <p>Kai Tak-Kowloon Bay, Ph 1 (Reclamation-based) - 70</p> <p>Kai Tak-Kowloon, Ph 2 and 3 (Reclamation-based) - 120</p> <p>Green Island Reclamation - 125</p> <p>Tseung Kwan O, Intensification/Extension - 50</p> <p>Tung Chung, Ph 2 (Remainder) - 25</p>

Source : Planning Department

## **Transport Links and Border Crossings**

7. It should be noted that initial TDS planning studies were based on a territorial population of 6.5 million. With the forecast increases in population to 7.5 and 8.1 million for Scenarios A and B respectively, some modifications were required to be made to the transport network. With the two variants on the Medium-Term Strategy this is even more pertinent.
8. One of the ways to accommodate the future developments in the Territory while minimising the environmental impacts is to increase rail patronage. There is presently only one direct rail link between Hong Kong and Guangdong which serves passenger traffic as well as the freight transport. As it has been concluded that the capacity will be exceeded in the short term, alternative arrangements will be required to meet the demand forecast.
9. Common rail projects were adopted on the basis of the findings of the Rail Development Study, but the outer western corridor between Green Island and Tuen Mun was not included as it is likely to be a very long term proposal which extends beyond the time frame of this medium-term option.

## **High Technology Corridors**

10. The Industry Department Study on Science Parks (1992) concluded that a high technology corridor should be established in keeping with Hong Kong's expansion in this field. The stated aim of this concept is to attract investment in high value and high technology activities providing easy access to markets in China, the port and airport as well as the urban areas. Furthermore this corridor was also conceived to be used by institutions of higher education. The Science Park Study proposed two potential development corridors:
  - (a) a north-south axis from Central to the Chinese border via the Chinese University and Tai Po Industrial Estate; and
  - (b) an east-west axis from Chek Lap Kok to Hong Kong University of Science and Technology.
11. The enhancement of the north-south technology corridor has greater potential in terms of the overall and medium term development strategy as it includes existing well defined nodes such as the Chinese University, Tai Po Industrial Estate and the City Polytechnic. The second option lacks established centres (or base points) and largely depends on the implementation of the Route Y concept which makes it a long term proposal rather than being developed in the short or medium term.

## **River Trade Freight Distribution Centres**

12. In the Port and Airport Development Study (PADS) it was proposed that the river trade activities should be located to the west of Tuen Mun to avoid additional congestion of traffic in the Western Harbour and to preclude the need for barges to traverse the Ma Wan Channel. Further river trade facilities have been proposed for North Lantau and if Route Y were to be realised then the possibility of providing river trade facilities at Neilingding or Lung Kwu Chau also exists. The merit in this proposal is that cargo could be routed via the port or road thereby avoiding the already

congested and environmentally sensitive areas (in terms of noise and air pollution) of Tuen Mun and the Metro Area.

### **Residential Developments**

13. Strategic growth areas which have been identified for inclusion in the development scenarios at different time horizons, and with different levels of development potential, are outlined in Table 3.4. For the Medium-Term Strategy, potential growth areas are set out in Table 3.1.

### **Industrial Strategy**

14. The industrial land strategy was founded on the principle that priority should be given to already formed areas and where infrastructure is already existed. The decentralisation of the Metro Area to non-Metro subregions close to the port, airport and along routes leading to the Border is also a development principle subject to detailed study for each proposal. The fundamental aims of the industrial strategy include the reduction of interface problems, improvement in the job balance (with consequential improvements in environmental quality as the need to travel to work is reduced) while providing distribution centres close to the processing plants in the People Republic of China.

### **Port Development**

15. Port back up and open storage trips have been identified as being significant contributors to the distribution of goods vehicle trips. Off-site impacts associated with port development was identified as an important area for further study (at a district and local level) in the Environmental Assessment Report of the Recommended Preferred Options, and will be remain an important issue for the three medium-term options.