WORKING PAPER No.26
REFERENCE SCENARIO

Purpose

1. This paper lists out the major assumptions adopted in the Reference Scenario\(^1\) of the HK2030 Study regarding the Pearl River Delta (PRD) development context, the population issue and the improvement on our living environment and the economic aspect.

Pearl River Delta Regional Context

2. The HK2030 Reference Scenario assumes a regional development concept whereby the PRD Region together with HK would move towards the development of a multi-centred city region.

3. Based on the above development concept, the Reference Scenario assumes the need to strengthen the links with the Mainland. In particular, there is a need to improve the cross-boundary facilities and infrastructure to meet the demand arising from passenger, vehicle and cargo flows as well as the growing number of Mainland visitors.

4. Short- to long-term measures are also considered under the HK2030 Study including the enhancement of handling capacities of the control points between HK and Shenzhen, provision of new additional road and rail links and port and airport development opportunities. A bridge linking HK to Macao and the western part of the PRD Region and areas beyond has also be assumed under the Reference Scenario due to its strategic importance to the development of the whole region.

---

\(^1\) Details refer to Working Paper No. 24 – “Different Approaches to the Formulation of Scenarios”
5. A close HK-Shenzhen co-operation would also be important in potential areas such as development of Frontier Closed Area, including identifying potential areas such as Lok Ma Chau Loop for economic development, and integration with Shenzhen Metro system. Detailed discussion on the regional context is at Annex A.

Population and Living Environment

6. To tie in with the measures under the Population Policy, the HK2030 Study has assumed a slightly higher population growth than the Census and Statistics Department’s forecasts, it is mainly due to the result of assuming a greater number of incoming talent and skilled workers, a slower drop in fertility, and a higher outflow of Hong Kong residents to the Mainland. We have assumed a population of 9.2 million by 2030. As the current assumption is much lower than that in the previous Territorial Development Strategy Review, the current planned land provision may be able to accommodate the housing and community needs of the population up to 2020 or further beyond. This provides an opportunity to re-focus the HK2030 Study on enhancing the quality of our living environment instead of identification of new lands for further development.

7. A number of issues related to the quality of the living environment have already been discussed in Stage 2 of the Study. Some broad concepts have been taken into account in the Reference Scenario including protection and enhancement of environmental resources, adoption of lower development densities and creation of environment- and people-friendly communities. Details are elaborated at Annex B.

Economic Aspect

8. The long-term development of the economy of Hong Kong, to a large extent, hinges on the success of the structural changes of the local economy in the context of globalization development of knowledge-based society and its integration with the PRD Region. Our vision is to develop Hong Kong as Asia’s World City, and consolidate our position as an international financial centre, a producer services centre, a hub for information services and logistics, and a premier tourist destination. In other words, finance, producer services, logistics and tourism sectors are the four main sectors of our economy, which need to be strengthened.
9. The Reference Scenario of the HK2030 Study has taken into account the forecasted floorspace demand of employment use (about 52 million m² GFA by 2030) and will ensure an adequate supply of commercial land to support the expansion of our finance and business services sectors. It has also taken into account the need to provide additional port/airport facilities, transportation infrastructure etc. to support our core industry of logistics. To foster the development of tourism, the HK2030 Study would also ensure an adequate provision of tourist attractions such as theme parks, cultural, recreational, heritage and arts facilities, districts with local character etc. Major economic development assumptions of the HK2030 Study are highlighted at Annex C.
ANNEX A
HK2030 REFERENCE SCENARIO : PEARL RIVER DELTA
DEVELOPMENT CONTEXT

PURPOSE

1. The purpose of this note is to set out the major assumptions adopted in the HK2030 Reference Scenario regarding the Pearl River Delta (PRD) development context.

MAJOR ASSUMPTIONS

(A) Regional Development Concept - The Emerging Multi-centred City Region

2. The PRD Region together with HK would move towards the development as a multi-centred city region in the light of the following:-

(a) Much of the global competition is a contest of integrated strengths among different economic regions. A city is simply not strong enough to compete on its own. To advance its competitive edge, HK must pool its strengths with other cities in the PRD Region;

(b) Spurred by massive infrastructure development and rapid economic growth, the Guangdong Province, in particular the PRD Region, together with HK is moving towards the development of a closely integrated city region with strong symbiotic relations;

(c) There are similar city regions in East Asia and the Mainland, e.g. Tokyo-Kobei-Osaka Region, Yangtze River Delta Region, Beijing and the Bohai Rim Region; and

(d) Future development of HK hinges on how we could capitalize on the advantages of the development of a city region within which HK could find its own niche.

3. As mentioned in the Commission on Strategic Development’s report on

---

2 Commission on Strategic Development, "Bringing the Vision to Life: Hong Kong’s Long-Term Development Needs and Goals" (February 2000)
3 CE Policy Address 2003
“Bringing the Vision to Life”, one of the challenges to the development of a multi-centred city region is the question of governance. Under the “one country, two systems”, HK and the rest of the PRD Region are responsible for the planning and development matters under their own jurisdictions. The Commission believes that continued co-operation is needed to foster better regional planning and economic development under “one country, two

Government, non-governmental organizations, the private sector and professional institutes, and assessment of how the strengths of HK and the rest of the PRD Region can best be enhanced for the multi-centred city region to compete successfully in world markets. Notwithstanding that, some issues pertaining to the regional development should be noted:-

(a) HK in the recent years has gradually developed into a world-class international centre of finance, business and logistics and the PRD Region as the fastest-growing processing base in the world will continue to develop its modern manufacturing and hi-tech industries;

(b) Prodigious growth of the PRD Region (including tertiary sector and infrastructure facilities) helps bridge PRD cities’ economic gap with HK;

(c) The standard and level of “qian dian hou chang” (前店後廠 shop at the front, factory at the back) need to be upgraded to meet the future development of both Hong Kong and the PRD Region4;

(d) HK needs to make the PRD Region the economic hinterland supporting development in the rest of the country and the PRD Region to use HK’s strengths to elevate its status and competitiveness to become a global player5; and

(e) Cut-throat competition amongst the PRD cities and one city in the PRD area to play the dominant role as a ‘dragon head’ of the region will not add up to the enhancement of the competitive edge of the Greater PRD Region6.

4. Moreover, according to the Mainland’s published documents, cities within the PRD Region have been planned with various emphases as highlighted below:-

4 Press Statement by the Governor of Guangdong Province on 5.8.2003
5 CE Policy Address 2003
6 Greater PRD Region includes the PRD Region, HK and Macao
(a) Guangzhou – to become a modernized city in south China and its three key industries are IT, automobile and petrochemical industries; 

(b) Shenzhen – to attain the status of an international city and to develop finance, hi-tech and logistics as its principal growth engine;

(c) Dongguan – to develop as an international manufacturing city; and

(d) Zhuhai – to become a central city of PRD, focusing on hi-tech, tourism, logistics and convention services;

(e) Zhongshan - to urbanize and become an important regional centre, with emphasis on the development of hi-tech industries.

5. In parallel, Macao has also set out its long-term vision to become the region’s “gambling, tourism and exhibition centre”. In the Policy Address 2003, the CE of Macao has stated that the gambling and tourism sectors would be the major pillars of the city’s economy.

6. So the concept of Ranstadt model is relevant in this case in that:-

(a) The Greater PRD Region is moving towards the development as a multi-centred region, with multiple centres and each having its own functions. No single centre will dominate. This pattern of development will be quite similar to the Ranstadt region of the Netherlands:-
   - Hague – political centre
   - Amsterdam – business and commercial centre
   - Rotterdam – port and logistics centre
   - Utrecht – education centre

(b) The Randstadt region has a polynucleated nature and none of the cities

---

7 "Outline of the Tenth Five-Year Plan for Guangzhou's Economic and Social Development" (廣州市國民經濟和社會發展第十個五年計劃的綱要)
8 "Outline of the Tenth Five-Year Plan for Shenzhen's Economic and Social Development" (2001-2005)" (深圳市國民經濟和社會發展第十個五年計劃綱要), 深圳市《政府工作報告》 (摘要)
9 "Outline of the Tenth Five-Year Plan for Dongguan's Economic and Social Development (2001-2005)" (東莞市國民經濟和社會發展第十個五年計劃綱要), 2003年東莞市政府工作報告
10 "Outline of the Tenth Five-Year Plan for Zhuhai's Economic and Social Development (2001-2005)” (珠海市國民經濟和社會發展第十個五年計劃綱要), 珠海市城市總體規劃(2001-2010)
11 "Outline of the Tenth Five-Year Plan for Zhongshan's Economic and Social Development (2001-2005)” (中山市國民經濟和社會發展第十個五年計劃綱要), 2003年中山市政府工作報告
within the region can be regarded as the uncontested “dragon head” of the area\textsuperscript{14}. Cities within the Randstadt region have no hierarchical relationships and are much related to the diverse functions performed by the cities. The Randstadt model has also been taken as a reference in the studies on the future development of Guangzhou city\textsuperscript{15}.

(B) Strengthening Links with the Mainland

7. With regard to the above development concept, the Reference Scenario will assume the following development views and parameters in the context of future development of the PRD Region.

Facilitation of Cross-boundary Traffic Flow

Passenger and Vehicle Flows

8. HK’s close relationship with the PRD Region is reflected in the large volume of people and goods crossing the boundary everyday. It is assumed that HK will continue to facilitate the flow of cross-boundary traffic, including passengers, vehicles and cargoes.

9. It is projected that cross-boundary passenger and vehicle flows will grow as below:

\begin{center}
\begin{tabular}{l|c|c|c}

  & 2002 & 2020\textsuperscript{16} & 2030  \\
\hline
Cross-boundary vehicle trips (daily) & 34,000 & 141,000 & 181,000 \\
Cross-boundary passenger trips (daily) & 350,700 & 815,000 & 1,107,000 \\
\end{tabular}
\end{center}

10. Given the intensification of the socio-economic integration between HK and the Mainland, the portion of the mobile residents\textsuperscript{17} having strong Mainland ties will further increase. It is estimated that the number of mobile residents will grow as follows:

\textsuperscript{13} Macao CE Policy Address 2003, 20.11.2002
\textsuperscript{14} Same view is shared by the report “HK and the PRD: The Economic Interaction” published by The 2022 Foundation in February 2003
\textsuperscript{15} Conceptual Planning Research on Guangzhou, Qinghua University (August 2000)
\textsuperscript{16} 2020 and 2030 figures have assumed that HK-Zhuhai-Macao Bridge and Express Rail Link between HK and Guangzhou will be in place.
\textsuperscript{17} Mobile Residents are HK permanent residents who have stayed in HK for at least one month but less than three months during the six months before or after the reference time-point, regardless of whether they are in HK or not at the reference time-point.
Mainland Tourists

11. As part of the ongoing measures to facilitate the entry of Mainland tourists into HK, the quota system for the HK Group Tour Scheme has been abolished with effect from January 2002. Also, from 1.12.2001 onwards, the multiple entry business endorsement has been extended from up to 6 months to a maximum of 3 years, with a stay of up to 14 days on each landing.

12. The Central Government also relaxed travel restrictions so as to facilitate Mainland residents visiting HK, including allowing residents within Guangdong Province and of Beijing and Shanghai to visit in their personal capacity. These measures will not only provide a welcome stimulus to tourism and consolidate our position as a preferred tourist destination, but will also help further strengthen our ties with Guangdong Province, Beijing and Shanghai and expand the scope for mutual co-operation.

13. With the opening of new tourist attractions in HK, e.g. Disneyland, HK will likely attract increasing number of Mainland tourists which needs to be duly considered in the overall planning of our tourist attractions and cross-boundary infrastructure. This will be inducive to the strengthening of the overall attractiveness of the Greater PRD Region as a tourism hub.

14. In the assessment of Mainland visitors, consideration has been given to the abolition of quota system on Mainland tourists in January 2002, the expected growth resultant from the opening of the Disneyland in 2005 and a gradual leveling out in the growth pattern for the longer term. According to our current estimate, the number of Mainland tourists will grow as follows (figures are under review to take account of impacts of current measures):

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of Mobile Residents</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>0.18M</td>
</tr>
<tr>
<td>2010</td>
<td>0.28M</td>
</tr>
<tr>
<td>2020</td>
<td>0.44M</td>
</tr>
<tr>
<td>2030</td>
<td>0.54M</td>
</tr>
<tr>
<td>Year</td>
<td>No. of Mainland Tourists</td>
</tr>
<tr>
<td>------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>2011</td>
<td>23 M</td>
</tr>
<tr>
<td>2016</td>
<td>31 M</td>
</tr>
<tr>
<td>2020</td>
<td>38 M</td>
</tr>
<tr>
<td>2030</td>
<td>53 M</td>
</tr>
</tbody>
</table>

15. For the sake of comparison, it should be noted that Beijing in 2002 have respectively handled a total of 115 million Mainland visitors and 3.1 million foreigner visitors\(^\text{18}\) whereas in the same year, about 87.6 million Mainland visitors and 2.7 million foreigner visitors have gone to Shanghai\(^\text{19}\).

**Improvement of Cross-boundary Facilities**

16. To meet the increasing demand, it is assumed that both HK and the Mainland will continue to pursue plans to improve the cross-boundary transport facilities. Various proposals are highlighted in the following paragraphs. Our long-term vision is to integrate HK road and rail network with the national and the PRD networks.

17. Short term measures include:-

(a) To enhance the handling capacities of our control points between HK and Shenzhen, plans have been prepared to increase the handling capacities of our control points. Amongst others, consideration is being given to developing multi-modal transport facilities at the control points with a view to augmenting cross-boundary passenger flow. The existing desirable handling capacities of the road-based control points are shown in the table below:-


\(^\text{19}\) Statistical Report on Shanghai’s socio-economic development in 2002 (2002 年上海市國民經濟和社會發展統計公報)
<table>
<thead>
<tr>
<th>Control Points</th>
<th>Average Weekday Daily Capacity (2-way)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>In Passenger</td>
<td>In Vehicle</td>
</tr>
<tr>
<td>Lok Ma Chau (LMC)</td>
<td>40,000</td>
<td>32,000</td>
</tr>
<tr>
<td>Man Kam To</td>
<td>25,000</td>
<td>8,000</td>
</tr>
<tr>
<td>Sha Tau Kok</td>
<td>12,000</td>
<td>2,500</td>
</tr>
</tbody>
</table>

(b) New additional road and rail links, including the HK-Shenzhen Western Corridor (SWC) to be completed in 2005 and LMC Spur Line in 2007, are in the pipeline to further improve the cross-boundary passenger and vehicle flows between HK and Shenzhen. The desirable handling capacities of the said control facilities are shown below:-

<table>
<thead>
<tr>
<th>Control Points</th>
<th>Average Weekday Daily Capacity (2-way)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>In Passenger</td>
<td>In Vehicle</td>
</tr>
<tr>
<td>LMC Spur Line</td>
<td>150,000 (Rail – by 2007)</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>300,000 (Rail – Phase II)</td>
<td></td>
</tr>
<tr>
<td>SWC</td>
<td>59,000 (by 2006)</td>
<td>44,000 (by 2006)</td>
</tr>
<tr>
<td></td>
<td>78,000 (by 2016)</td>
<td>88,000 (by 2016)</td>
</tr>
</tbody>
</table>

(c) HK-Zhuhai-Macao Bridge

- Existing and planned road-based connections focus on the east bank of the Pearl River. However, region to the west of the Pearl River (or areas further beyond e.g. South-west Region including Guangxi and Yunnan) is important to HK’s future economic development. A bridge linking HK to Macao and the western part of the PRD Region and areas beyond will therefore be of strategic importance to the development of the whole region. CE in his Policy Address 2003 announced that a bridge linking HK to the western PRD will be built as soon as possible through the joint efforts of Guangdong, HK and Macao. A study jointly commissioned by the National Development and Reform Commission and the HKSAR Government has confirmed the need for and urgency of a land transport link connecting Hong Kong, Zhuhai and Macao. The Governments of Hong Kong, Macao and Guangdong have set up a Hong Kong - Zhuhai - Macao Bridge Advance Work Coordination Group to take forward the advance planning of the bridge. The Coordination Group has set up an office in Guangzhou and commissioned a design institute
(中交公路規劃設計院) to conduct feasibility studies. In parallel, HKSARG will carry out all necessary statutory procedures and feasibility studies for the connecting infrastructure within the territory of Hong Kong.

- Programme for the bridge and the connecting link will have to be co-ordinated and discussed with Guangdong and Macao Governments. For the purpose of the HK2030 Study, it is assumed that the bridge will be in place before the reference year 2020.

18. Medium- to long-term measures include: -

   (a) Express Rail Link (ERL) between HK and Guangzhou

   - The planned ERL targets to improve the connection between Guangzhou and HK by reducing the travelling time between these two cities to within one hour. The ERL will also enable HK to hook up with the national and the PRD rail networks, thereby strengthening and broadening our catchment.

   - We are studying with Mainland authorities the feasibility of the ERL. For the purpose of the HK2030 Study, it is assumed that the proposed rail will be in place before the reference year 2020.

   (b) PRD Inter-city Rapid Transit System

   - PRD Inter-city Rapid Transit System targets to link various PRD cities within one hour traveling time. According to the plan of Guangdong, the first phase will include the line from Guangzhou to Foshan. At present, planning work on Guangzhou to Foshan line has commenced and the railway line is targeted for completion in 2007.20 The Guangzhou-Zhuhai and Guangzhou-Shenzhen lines will be completed in the medium term (up to 2010)21. In the longer term (2020 and beyond), other lines connecting Guangzhou with Zhaoqing, Jiangmen, Huizhou and other PRD cities will be completed and a comprehensive network covering all PRD cities will then be in place.

---

20 廣東建設信息網: 5-9-03, 29-10-03, 20-11-03
21 According to the tender document published by the Guangdong Development Planning Commission in November 2002, the proposed Guangzhou-Zhuhai Line will start from Dashi (Panyu) in Guangzhou to Gongbei in Zhuhai with a total length of 138km (including a branch line from Zhongshan to Jiangmen). As to the Guangzhou-Shenzhen Line, there is no known proposal pertaining to its alignment or design.
At present, Hong Kong is not included in the Guangdong study group on the PRD Rapid Transit System. The proposed Guangzhou-Shenzhen line only links up with the metro stations in the northwestern outskirts of Shenzhen. HK could only be connected to the Rapid Transit System through the connection with the Shenzhen Metro System. In order to make better use of the system and achieve mutual benefit, both Guangdong and HK should thoroughly study how to connect the PRD Rapid Transit System with our transport network. For example, the capacity of the Shenzhen Metro System would probably need to be reviewed if HK plans to connect the PRD Rapid Transit System through Shenzhen.

Other Infrastructure Facilities in Regional Context

Port Development

19. In view of the sustained economic growth of the Mainland (in particular Guangdong) and the development of a manufacturing base in the PRD Region, it is estimated that the cargo base in Guangdong will continue to grow. As Southern China is and will continue to be a major cargo source for HK, HK will be able to benefit from this growth and enjoy a steady increase in its cargo throughput in future despite the decline of HK’s relative share in the overall cargo pie.

20. In face of the rapid growth of Shenzhen Port and the development of Nansha Port\(^{22}\), it is important to increase the physical connectivity between our cargo source, especially in the western part of the PRD Region and the port of HK (HK-Zhuhai-Macao Bridge) in order to maintain HK port's competitive edge. In this regard, we will take account of the findings of the on-going HK Port 2020 Study (under which the Port Cargo Forecasts would be extended to 2030). The total throughput handled by Guangzhou and Shenzhen ports in 2002 is shown in the following table.

---

\(^{22}\) Phase I of Nansha to be completed in 2004 will provide a total of four 50,000-tonne berths and Phase II comprises six 100,000–tonne berths.
<table>
<thead>
<tr>
<th>Port</th>
<th>Freight (10,000 tons)</th>
<th>Container (TEU)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guangzhou</td>
<td>15,324</td>
<td>2,172,805</td>
</tr>
<tr>
<td>Shekou</td>
<td>1,391</td>
<td>600,820</td>
</tr>
<tr>
<td>Chiwan</td>
<td>2,006</td>
<td>1,543,683</td>
</tr>
<tr>
<td>Mawan</td>
<td>688</td>
<td>228,868</td>
</tr>
<tr>
<td>Yantian</td>
<td>2,272</td>
<td>4,181,477</td>
</tr>
</tbody>
</table>

**Airport Development**

21. Under the Guangdong’s Tenth Five-Year Plan, the New Baiyun International Airport in Guangzhou now under construction would be one of the three international airport hubs (國內的國際航空中樞) in the Mainland. Upon its operation in 2004, it is expected to have an initial capacity to handle 27 million passengers per year and a design capacity of 80 million passengers per year.

22. HK has an extensive air services network, frequent flight schedules and comprehensive supporting facilities such as efficient administrative services and modern e-commerce and telecommunications facilities. HK is also a centre of finance, commerce and tourism. The Hong Kong International Airport (HKIA) and the other airports in the PRD have different market networks, with the former being more international and external-oriented and the latter more domestic and intra-Mainland city oriented. The development of the New Baiyun International Airport and the potential development of international services there will create a more competitive environment for the HKIA.

23. In order to extend its catchment, HKIA is investigating the possibilities of linking with the nearby Shenzhen and Zhuhai airports for more passenger and cargo sources. A marine cargo terminal opened in 2001 already helps link HKIA with 20 ports in the PRD Region and significantly enhances the airport’s accessibility to its cargo hinterland. The planned development of a passenger ferry terminal by 2005 will further enable HKIA to strengthen its connectivity with the PRD Region and hence, its passenger hub function.
HK-Shenzhen Co-operation

24. HK and Shenzhen may co-operate on the following potential areas: -

*Development of Frontier Closed Area (FCA)*

(a) FCA covers the northern part of the NT along the boundary. On the Mainland side, Shenzhen’s Futian and Lowu (Luohu) districts adjoining the boundary are important growth centres of the city, with high-rise and massive buildings. On the HK side, FCA and its adjacent area are rural in nature. In view of the contrasting developments on both sides of the boundary, FCA has potential to facilitate greater interactions and enable economic integration between HK and the Mainland, particularly Shenzhen.

(b) Potential development area identified at LMC Loop may be developed in the form of a possible trade expo or a special economic node serving the following functions:

- a window for the Mainland provinces/cities to attract foreign investment as well as to promote their own products to the overseas market;
- a springboard for the international firms to establish their own showrooms or bases for Mainland sourcing activities;
- a business centre (providing professional and accounting services) to provide a one-stop service for the business transactions undertaken there using HK business laws; and
- a large-scale exhibition area (both outdoor and indoor) to provide an opportunity for the Mainland or overseas companies to organize thematic or topical exhibition activities e.g. machinery, motor vehicles or agricultural products.

(c) This proposal is in line with the CE’s Policy Address 2003 which affirms HK’s role as a base for overseas enterprises to operate businesses in the PRD Region as well as a springboard for PRD enterprises to establish outlets in HK so that they can sell directly to foreign companies, and develop ties with trading partners.

(d) Besides, the Loop may also have the potential to be developed for other economic activities, such as high value-added, high-tech
production and logistics activities.

(e) In considering the development potential of LMC Loop, possible constraints should also be noted as follows:

- lack of infrastructure;
- about 1 million m$^3$ contaminated mud and 3 million m$^3$ uncontaminated mud has been deposited in the LMC Loop during the Shenzhen River training project. Together with the bottom layer of the mud in the Loop, about 4.5 million m$^3$ mud would require removal or treatment in compliance with EIAO requirements. This may take years and the cost could be prohibitively expensive. Moreover, the meander surrounding the LMC Loop is an ecologically restored site provided to compensate for the ecological damage caused by the Shenzhen River Regulation Stage I & II Works;
- ecological impact of development there needs to be carefully assessed in view of its proximity to the wetland area;
- although the existing LMC Road between Castle Peak Road and Ha Wan Tsuen Road will be widened to a two-lane carriageway by 2007, the capacity of the LMC Road and Ha Wan Tsuen Road may need to be further increased to cope with the additional traffic.

(f) Detailed impact assessments (e.g. environmental, traffic and engineering) would therefore be required to ascertain the development feasibility of the LMC Loop.

Integration with Shenzhen Metro System

(g) In addition to the existing through train service and development of proposed ERL, HK’s connectivity to the PRD Region could be enhanced by integrating with Shenzhen Metro System, the first phase of which will be completed in 2004.

(h) Lines 1 and 4 of Shenzhen Metro System will connect with our Lowu control point and LMC Spur Line. This will strengthen HK’s integration with Shenzhen’s transport network, to the benefit of cross-boundary passenger flow.
If the HK’s Octopus Card can be used for the Shenzhen Metro System in the future, this will be another step to the benefit of improving the connectivity between HK and Shenzhen.
ANNEX B
HK2030 REFERENCE SCENARIO : POPULATION AND THE LIVING ENVIRONMENT

PURPOSE

1. The purpose of this note is to set out the major assumptions adopted in the HK2030 Reference Scenario regarding Hong Kong’s population and describe the proposed approach to address population needs as well as the broad concepts for improving the living environment that are to be adopted in formulation of the overall development strategy.

POPULATION TRENDS

2. Hong Kong’s population has grown by some 2.8 million since 1971, at a rate of about a million a decade (see Figure 1) and this growth has largely been attributed to inward migration from the Mainland.

*Figure 1  Hong Kong’s Population Growth - Historical Perspective*

3. Looking ahead, with continually falling fertility rates and higher life expectancies in Hong Kong, together with increasing opportunities available in the Mainland due to her rapid development (which tend to weaken Mainlanders’ wish to emigrate), we can anticipate a gradual levelling out of Hong Kong’s population growth in the next few decades, as well as a persistently ageing trend. Indeed, Hong Kong is beginning to exhibit the early signs of a mature city. In years to come, its growth will more likely be dominated by forces of the market and of
globalisation. That is to say, whether people aspire to come to Hong Kong and who they are would very much depend on Hong Kong’s economic functions and the opportunities lent by these functions. To a lesser extent, costs of living will also be a key factor, but such costs will likely be linked to the economic functions in any case. Nevertheless, they could be a prime concern to retirees in making locational choices.

4. Based on past trends, especially the more recent traits, the Census and Statistics Department (C&SD) estimates that Hong Kong’s population will reach 8.7 million by 2031, a quarter of whom will be aged 65 or above. However, this forecast has not taken into account the more vigorous efforts Hong Kong will take to achieve its long-term vision, especially those related to the Population Policy announced in February 2003.

5. We acknowledge that world-class human resources are critical if a location wants to enhance its competitiveness and that a true world city should be able to attract a mass of people and resources and thereby build up its strength over a long period. A key objective of the Population Policy is therefore to secure and nurture a population which sustains our development as a knowledge-based economy.

6. Following relaxation of the Importation of Talent Scheme promulgated in the Population Policy, there could be more skilled and professional persons, as well as academics and researchers, admitted to Hong Kong as migrants. Many of these talent and academics are expected to be in their prime, thus their admission to Hong Kong could help to slow down the rate of population ageing and raise the overall fertility level. At the same time, the opening up of investment migration could boost the number of incomers. Policies relating to childbirth could also have an effect of slowing down the drop in fertility, although the extent of effect is not expected to be very significant.

**Mobile Residents and Frequent Travellers**

7. As a major city in China and an important node within the Greater Pearl River Delta (PRD) Region, we also expect a high volume of movements within the region – of people, goods and vehicles. Based on this notion, we would expect

---

24 Details refer to Information Note on “Implications of the Population Policy for HK2030 Study”.

- 18 -
more visitors and short-term stayers in Hong Kong from the PRD Region, for leisure, business as well as social purposes. This will have implications for our cross-boundary infrastructure and tourism facilities, which are further discussed in Annexes A and C of this paper. On the other hand, we could also see more Hong Kong people, for various reasons, travelling frequently to the Mainland or even choosing to reside over there. This could increase the cross-boundary movements of Hong Kong people.

8. In terms of implications on our population figures, frequent travellers (e.g. those who spend less than half of their time in Hong Kong but returning frequently) are considered as Mobile Residents\(^{25}\) (MRs). Those who return to Hong Kong only infrequently (often known as “Weak Links”) will no longer be counted as Usual Residents\(^{26}\) (URs) of Hong Kong. That is to say, there is a reduction effect to Hong Kong’s population size if people relocate to the Mainland (or elsewhere in the world), whether or not they maintain a weak link with Hong Kong. On the other hand, for those persons spending, say, one or two days a week in the Mainland with the rest of the time in Hong Kong, there will be no impact on their status as URs of Hong Kong. Figure 2 illustrates the above relations.

\(^{25}\) Mobile Residents are defined by the Census & Statistics Department as Hong Kong Permanent Residents who had stayed in Hong Kong for at least one month but less than three months during the six months before or for at least one month but less than three months during the six months after the census moment, regardless of whether they are in Hong Kong or not at the census moment.

\(^{26}\) Usual Residents refer to (i) Hong Kong Permanent Residents who have stayed in Hong Kong for at least three months during the six months before or for at least three months during the six months after the reference time-point, regardless of whether they are in Hong Kong or not at the reference time-point, and (ii) Hong Kong Non-Permanent Residents who are in Hong Kong at the reference time-point.
Figure 2  Relationship between Time Spent in Hong Kong by Hong Kong Permanent Residents and Their Status During Population Counts

Proportion of time spent

- in HK
- outside HK

→ Usual Resident
→ Usual Resident
→ Mobile Resident
→ Not counted (Weak Link)
→ Not counted

HK2030 Population Scenario

9. Based on the above assumptions, the HK2030 Study anticipates a slightly higher population growth than C&SD’s forecasts - an increase resulted from more incoming talent and skilled workers together with a slower drop in fertility, offset by an outflow of Hong Kong residents to the Mainland. We expect our population could reach 9.2 million by 2030, half a million of whom are expected to be MRs, as shown in Figure 3. Other population scenarios will also be considered under the “What If” scenarios to be undertaken in Stage 4.

Figure 3  HK2030 Population Scenario
ACCOMMODATING POPULATION NEEDS

10. A key planning objective of the HK2030 Study is to meet housing and community needs of Hong Kong’s population by providing adequate land and infrastructure for the development of housing and community facilities.

11. One of the issues raised at Stage 2 Public Consultation was how we should cater for the increasing mobile population. Some people commented that our current population-based planning standards would need to be reviewed to take into account this population trend. However, before we draw any conclusion as to whether and how their needs should be met in our development strategy, we have commenced a survey in the PRD Region to find out more about Hong Kong people who have taken up residence there. The survey is target for completion in early 2004.

12. Regarding how we should address the housing and community needs of the forecast population, we note that in the previous Territorial Development Strategy Review (TDSR), we assumed a population of 8.1 million by 2011, which was significantly higher than the current forecasts. In fact, given the much lower current forecasts, the land provision planned for in TDSR and consequential sub-regional plans will roughly be able to accommodate the housing and community needs of our population up to 2020 or further beyond, even when we assume that the needs of MRs will be fully met.

13. Indeed, previous TDS exercises have been to a large extent housing-led, i.e. the prime concern has been to identify new development lands to meet the rapidly rising housing demand. However, the slowing down of population growth (though still growing) provides an opportunity for us to redefine our approach. We believe that the focus of the HK2030 Study should no longer be on the identification of new lands for development as in the past, but rather to pay more attention on the quality of our living environment, and how our future development can proceed in a more sustainable manner. In other words, we do not intend to change our previous land use proposals drastically but to make appropriate modifications to accord with the times. Specifically, in terms of formulating options for housing land provision, we will:

(a) make adjustments to the previous housing land development strategy to reflect the latest housing policies as well as to accommodate, where suitable, new planning proposals for other uses, such as economic uses
and cross-boundary infrastructure;

(b) review the appropriateness of the adjusted housing land strategy in the light of new standards and aspirations, including test of sustainability;

(c) review the previous development programmes to tally with the latest population growth forecasts and demographic changes, in particular the development programmes for the new development areas, as well as to devise mechanisms/solutions which could induce a greater level of flexibility in the programmes; and

(d) more vigorously pursue with the enhancement to the quality of the living environment for Hong Kong people through better development planning and control.

14. Tasks (a) to (c) will be intrinsic components of the ensuing work on compiling development options under Stages 3 and 4 of the Study.

Enhancing the Living Environment

15. As regards the quality of the living environment, we have already flagged up a number of issues in Stage 2 of the Study as well as under the Strategic Environmental Assessment Study. Extensive consultations with stakeholders both within the Government and the community have been conducted on the most important of these issues. While these will be set out in further detail during the formulation of the development strategies under Stage 4 of the Study, some broad concepts in this regard are presented as follows.

(a) Natural/Cultural Heritage

Due regard should be given to conserving our natural and cultural heritage in a holistic manner. For geographical and historical reasons, Hong Kong has been blessed with a wealth of natural land and wildlife species, mostly very well-protected by statutes. While many historical relics have unfortunately surrendered to development forces, some still remain. In the past,

27 The nine issues raised in Stage 2 Public Consultation were: (i) Closer Links with the Mainland; (2) More Responsive to Special Land Needs; (3) More Sustainable Use of Industrial Buildings; (4) New Development Opportunities, Better Quality; (5) More Jobs Closer to Homes (6) Facilitating Businesses of Tomorrow; (7) Essential But Unwelcome Facilities; (8) Better Planning for Waterfront Uses; and (9) More Choices for Recreation and Sports.
development has always been regarded as a “destroyer” of natural/cultural heritage and the approach to protect resources has been to warily “guard” them against development. In future, our approach should aim to seek out innovative solutions as to how development and heritage could assimilate for mutual benefits, with a focus on quality and sustainability, rather than on quantity per se.

(b) Development Intensity

In determining appropriate development intensity, attention has often been focused on infrastructure capacities. For old areas where there are practical difficulties in improving the infrastructure, this should continue to be an important determinant. However, some people may have the impression that Hong Kong is too crowded and advocate for the lowering of intensities. But subsequent to consultation with the public in Stage 2 of the Study, we have found that, on the whole, Hong Kong people do not resist “high-density living” (which differs from “overcrowdedness”), but are more concerned about breathing space and views from their windows, and to some extent, the visual and psychological impacts of massive building bulks. Many consultees agreed that a maximum domestic plot ratio of about 6.5 would be acceptable for next-generation new towns. In fact, with our existing concentrated development pattern, we have enjoyed having the most cost-effective and efficient infrastructure and relatively short travel distances, the advantage of mixed development, the availability of community facilities in the neighbourhood, as well as the side-benefit of a large amount of countryside at our doorstep, which have, together, made Hong Kong one of the most sustainable cities in the world. Therefore, we believe that our future approach should not be to uniformly cut back on development intensity, but rather to consider measures to address specifically those older districts with obsolete site layouts. At the same time, more attention should be paid to improving the aesthetics of the townscape through better urban design, as well as to provide a variety of housing choices to meet different aspirations and needs. Our previous approach to concentrate development around transport nodes will still be a main thrust in our land use plans.

(c) Environment- and People-Friendly Communities

An issue closely related to development densities and urban townscape is the creation of people-oriented communities which also give due respect to
environmental protection. We need to plan for environmentally friendly neighbourhoods which can help us reduce the use of vehicles (thus saving on energy resources) and improve environmental quality (which has a direct impact on our health). This may incur the planning for cleaner forms of transport, better pedestrian and cycling access, more closely knitted communities with integrated land uses as well as more greening. Care should also be given to the needs of different sectors of our community to ensure “barrier-free” access of facilities to all. Our future communities should provide not only a healthy living environment, but also convenience and comfort, a sense of space yet maintaining a sense of security, pleasing aesthetics and ample opportunities for social interaction.

16. Many of the issues regarding the above concepts have been separately examined under other studies. For example, the Government is actively reviewing the nature conservation policy and the cultural heritage policy. As regards urban design, the Planning Department has recently completed the “Study on Urban Design Guidelines for Hong Kong” which provides a broad framework and more detailed principles to guide the preparation of plans and development proposals at the macro and micro levels.
PURPOSE

1. The purpose of this note is to set out the major assumptions adopted in the Reference Scenario of the HK2030 Study regarding the long-term development of Hong Kong’s economy and to highlight the possible strategic land use implications.

INTRODUCTION

2. The economy of Hong Kong has been restructuring over the past decades. Its long-term development, to a large extent, hinges on the success of the structural changes of the local economy in the context of globalization and its integration with the Pearl River Delta Region (See Annex A for details).

3. In 2000, the Commission on Strategic Development identified those sectors that would drive the changes of the economy of Hong Kong and which are expected to lead Hong Kong into its long-term development. These sectors include:

(a) financial and business services;
(b) regional headquarters of multinational corporations;
(c) information services and telecommunications;
(d) innovation and technology;
(e) trade, transportation and logistics;
(f) creative and cultural activities; and
(g) tourism

4. The Chief Executive stated in his 2003 Policy Address that our direction is to build Hong Kong as Asia’s World City, consolidate and develop our position as an international financial center, a producer services center, a hub for information services and logistics, and a premier tourist destination. In other words, finance, producer services, logistics and tourism are the four main sectors of our economy which need to be strengthened. To stay competitive, the Financial Secretary further emphasized in his 2003-04 Budget Speech the importance of the enhancement of these four core industries.
5. While there are many ways to ensure sustainable growth of Hong Kong’s economy, providing adequate land in a timely manner to meet the demand of the key economic activities is one of the prime concerns of strategic land use planning. Other considerations such as providing efficient infrastructure to support growth of our economic functions have been dealt with in Annex A and will not be repeated here. This note focuses on the former aspect, i.e. spatial dimension in meeting the economic needs.

FACILITATING ECONOMIC DEVELOPMENT

Land Provision

6. Forecasting economic land is no simple task. Given our very open economy, it is difficult to predict with certainty the future economic growth and development (factors such as the degree of integration with the Mainland, the development of information technology and cost of economic land, etc. could affect the economic land demand). Our long-term plan should therefore be able to indicate the broad requirements and location of lands for our future economic development. In parallel, there must be a vigilant monitoring system to track market movements for the formulation of and review of development and land disposal programme so that economic land could be injected into the market in a timely and flexible manner.

7. Under the HK2030 Study, a new and simplified land use typology is developed to allow flexibility of land to meet the long-term requirements of modern business activities. This new land use typology includes a category on “Employment use” land, which comprises land of three sub-categories: (i) CBD Grade A offices; (ii) general business and (iii) industrial land with special environmental requirements. Together they cover all market-driven employment-related land requirements arising from private office, private industrial/office, private flatted factories, private storage and private specialised factories (i.e. industrial estates, science parks and business parks). Land requirements for high technology industries (such as biological and material science) as well as recycling activities are covered under sub-category (iii) above. On the other hand, policy-driven land requirements will be dealt with under separate studies and consultations with relevant Bureaux, and the results

---

28 Please refer to Information Note on “Models and Results of the Employment Use Floorspace Demand Forecast for Reference Scenario”.

- 26 -
and recommendations, where appropriate, will be duly considered in the main study.

Finance and business services

8. As mentioned earlier, forecasting of the “Employment use” land demand for prime offices and general business was carried out under the HK2030 Study. The Reference Scenario of the HK2030 Study has taken into account the forecasted results (about 46 million m$^2$ GFA by 2030) and will ensure an adequate supply of employment use land to support the expansion of our finance and business services sectors. There are 236 licensed banks/deposit-taking companies and 3,119 regional headquarters/offices in Hong Kong in 2002. With the rapid growth of the Mainland’s economy and the improvement of our business environment (quality living environment as well), it is envisaged that international corporations and quality companies would be attracted to set up their regional headquarters here and in turn further consolidate Hong Kong’s status as an international financial center and a regional business operation center. Therefore, we must plan ahead for expansion of prime offices, general businesses and other special industries so as to seize the business opportunities as they come.

Logistics

9. Hong Kong has a competitive edge to become a logistic hub of Asia. In 2002, our port ranked first in the World with a throughput of 19.1 million TEUs (twenty-foot equivalent units) of containers, representing 7.4% increase over 2001. Our airport has also been ranked first in the world since 1996 in terms of international air cargo volume. In 2002, it handled 2.48 million tonnes, representing 19.6% increase over 2001.

10. To further sharpen our competitive edge in the longer-term, demand for additional port facilities is assessed under the Study on Hong Kong Port - Master Plan 2020 (HKP2020 Study). In this respect, four possible sites, namely Tuen Mun West, Lantau Northwest, Lantau East and Tsing Yi Southwest, have been identified and considered. The findings of the HKP2020 Study will be duly incorporated in the HK 2030 Study.

---

28 Forecasted results are listed out in Working Paper No. 25 on “Reference Scenario – Quantitative Parameters”.
29 As at 19 April 2002 (source: InvestHK website)
11. In 2001, the Airport Authority Hong Kong (AA) formulated a new master plan (known as Master Plan 2020) to take the Hong Kong International Airport (HKIA) forward in the next twenty years. Various improvements and enhancements are proposed to enhance Hong Kong’s position as a regional logistics and cargo hub. These include development of off-airport logistics parks at North Lantau, construction of additional air cargo handling facilities in the Midfield Area of HKIA, enhancement of the airport’s accessibility through the provision of multi-modal transport including direct and efficient air, land and sea links between the HKIA and the Mainland, in particular the PRD and strengthening co-operation with other airports in the PRD so as to help expand the HKIA’s catchment area, including development of multi-modal links.

12. However, given the growth trends in air traffic flows and our vision that Hong Kong should become the aviation hub of Southern China, it is possible that the capacity of the existing two runways could become saturated in about 2020. There may be a need for an additional runway and transport infrastructure beyond this time frame. Early discussions are needed on how additional facilities should be provided to tie in with the long-term airport development.

13. To support our core industry of logistics, the Reference Scenario also assumes a number of logistics parks to be provided, including:

- Air-cargo logistics facilities at Chek Lap Kok and Tai Ho; and
- Port-cargo logistics facilities adjacent to Container Terminal Number 9 at Tsing Yi.

14. Apart from reserving adequate land, we would facilitate movements of people and goods between the Pearl River Delta and our port/airport to reinforce our role as the regional transportation and logistic hub. We must therefore ensure goods can be brought in/to the PRD in the most efficient manner. Discussion on the cross-boundary infrastructural proposals and means to strengthening links with the Mainland is detailed in *Annex A.*
Tourism

15. Tourism has become one of the fastest-growth sectors of the Hong Kong economy. The total visitor arrivals have reached 16.57 million in 2002, about 21% increase over 2001. To foster the development of tourism, it is important to ensure an adequate provision of tourist attractions such as theme parks, cultural, recreational, heritage and arts facilities, districts with local character etc.

16. In the medium to long term, tourism developments in different parts of the territory, together with existing facilities and projects in progress, will contribute to the creation of new clusters of attractions. Ocean Park will be the nucleus of the Hong Kong Island South tourism node. The Hong Kong Disneyland, the Tung Chung Cable Car System as well as other facilities being planned would make Lantau the focus of tourism and recreational facilities in Hong Kong. The proposed West Kowloon Cultural District, enhancements to existing facilities along the Tsim Sha Tsui waterfront and the new cruise terminal at the former Kai Tak Airport will contribute to making Kowloon another major tourist cluster.

17. Apart from tourist attractions, hotels of various scales and grades at different locations are also required to support the industry. The supply of visitor accommodation will be regularly reviewed to ensure that relevant Government policies and the land use planning framework could facilitate a timely response to the needs of visitor by the market.

18. Increasingly, the quality of life factors (common concern for air, water and noise conditions; protection of the natural assets including countryside and cultural heritage; enhancement for sporting and recreational facilities, etc) help to build up Hong Kong as Asia’s World City and at the same time our tourism development. The HK2030 Study would integrate the consideration of environmental factors at an early stage with a view not only to avoid environmental degradation but also to incorporate solutions for improvements.