

**The Development of
Western Pearl River Delta Region
and its
Prospects for Collaboration with
Hong Kong**

(TRANSLATION)

**Greater Pearl River Delta Business Council
Task group on Western Pearl River Delta Development
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This is an English translation of the Chinese report on “The Development of Western Pearl River Delta Region and its Prospects for Collaboration with Hong Kong”. If there is any inconsistency or conflict between the English and Chinese versions, the Chinese version shall prevail.

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1. Objectives of this study

The Guangdong provincial government has in recent years been actively promoting development in the Western Pearl River Delta (PRD), at the same time continually upgrading infrastructures within the region, improving its communication links with Hong Kong, Macao, and the Eastern PRD; for instance, the planned construction of the Hong Kong-Zhuhai-Macao Bridge, Guangzhou-Zhuhai railway, and the coastal motorways, etc. The Western PRD is expected to move into top-gear development in the near future, giving rise to consequent higher economic prosperity.

The development of the Western PRD is bound to bring opportunities and challenges to Hong Kong. The objectives of this study is to get a handle on the orientation of future development in the Western PRD and its likely impact on Hong Kong, to explore appropriate policy options for Hong Kong, in order to take full advantage of the business opportunities, and keep in step with developments in the region.

2. Backgrounds to the Guangdong initiative to vigorously promoting development in Western PRD Region

2.1 Geographical coverage of Western PRD

In all, there are nine metropolitan municipalities above the district administration level in the PRD; these are the cities of Guangzhou, Dongguan, Shenzhen, Huizhou, Zhuhai, Zhongshan, Jiangmen, Foshan, and Zhaoqing. According to current research studies, a generally accepted scheme for drawing up the geographical boundaries of the eastern region (or the east banks of the Pearl River), the western region (or the west banks of the Pearl River), and the central region of the PRD is yet to be agreed upon (see Chart 1). In its official document titled “Special Planning for Urbanization in the PRD” issued in 2003, and the 2004 document “The Plan for the Coordinated Development of the PRD Township 2004-2020”, the Guangdong provincial government divided the PRD into west bank metropolitan areas (including the 3 cities of Zhuhai, Zhongshan, and Jiangmen), central region metropolitan areas (including the 3 cities of Guangzhou, Foshan, and Zhaoqing), and east bank metropolitan areas (including the 3 cities of Shenzhen, Dongguan, and Huizhou). General Transportation Research Institute of State Development and Reform Commission’s “Research Study on Transportation Links Between Hong Kong and the Western Banks of Pearl River (Final Report)”, completed in July 2003, also made use of this scheme in defining the geographical area of the PRD. In contrast, the research study by Michael J. Enright et al, and in other works such as that of Professor Yeung Yue-man of the Hong Kong Chinese University which regarded Guangzhou as the centre of PRD, the areas to the east of Guangzhou as Eastern PRD (i.e., the 3 cities of Shenzhen, Dongguan, and Huizhou), the areas west of Guangzhou the Western PRD (i.e., the cities of Zhuhai, Zhongshan, Jiangmen, Foshan, and parts of Zhaoqing)¹. Studies conducted by the One Country Two Systems Research Institute also have a different way of drawing up the geographical boundaries of PRD, in which, the cities of Zhuhai, Zhongshan, Jiangmen, Shunde (now incorporated into the city of Foshan) are regarded as Western PRD cities². But then again, there are some studies that merely divide the PRD into east-bank and west-bank regions, with Zhuhai, Zhongshan, Jiangmen, Foshan, and Zhaoqing on the west-bank, and other cities on the east-bank³; there are

¹ Viz., “The Greater PRD & the Rise of China” by Michael J. Enright, Edith E. Scott and Ka-Mun Chang – (Joint Publishing (Hong Kong) Company Limited. May 2005); and Yeung Yue-Man, Shen Jianfa and Zhang Li (2004): Hong Kong and the Western PRD Cooperative. Development from a Cross-boundary Perspective, Hong Kong Institute of Asia-Pacific Studies, The Chinese University of Hong Kong, 2004, all made use of such a boundary scheme.

² See “Common Grounds and Differences on the Guangdong-Hong Kong-Macao Bridge” by Shao Shanbo and Yang Chun (One Country Two Systems Research Institute-2002).

³ See for example, the “Case Study Report 2: Economic Analysis Of Land And Water Crossing Transportation Between Hong Kong, Zhuhai, And Macao” forming part of the “Research Study On Transportation Links Between Hong Kong and The Western Banks of Pearl River” by the General Transportation Research Institute of State Development and Reform Commission which also uses this scheme in drawing up PRD regions’ boundaries.

yet more studies that define areas in western Guangdong province and the metropolitan centres in south-western China provinces such as Sichuan, Yunnan, Guizhou, Guangxi, Hainan, etc., as west-bank areas of the Pearl River⁴.

As this research study discusses the strategy, planning schemes, and relevant policy measures of the Guangdong provincial government in promoting developments in Western PRD, hence this paper makes use of the same definitions with respect to drawing up the geographical boundaries of western (west bank), central, and eastern (east bank) regions as that appearing on the various Guangdong provincial government planning schemes, or put in another ways, the 3 cities of Zhuhai, Zhongshan, and Jiangmen will be regarded as Western PRD. In view of the potentials of the two cities of Foshan and Zhaoqing in future development, this background study also covers these two cities.

⁴ See for example, the Case study report 1: “Existing transportation between Hong Kong and the west bank of Pearl River and future development” and case study report 3: “Projections of Passenger and Goods Traffic Volumes Between Hong Kong and the West Bank of Pearl River” in “Study Of Transportation Links Between Hong Kong and The Western Banks of Pearl River” by the General Transportation Research Institute of State Development and Reform Commission which also use this scheme in drawing up PRD regions’ boundaries.

Chart 1: Geographical coverage of Western PRD Region

	Western PRD	Central PRD	Eastern PRD
Guangdong Province “Special Planning for Urbanization in the PRD”	Zhuhai, Zhongshan, Jiangmen	Guangzhou, Foshan, Zhaoqing	Shenzhen, Dongguan, Huizhou
Guangdong Province the “PRD Coordinated Development Plan 2004-2020”			
“Research Study on Transportation Links Between Hong Kong and the Western Banks of Pearl River (Final Report)” by the General Transportation Research Institute of State Development and Reform Commission.			
“The Greater PRD & the Rise of China” by Michael J. Enright et al - Singapore John Wiley & Sons, 2005 .	Zhuhai, Zhongshan, Jiangmen, Foshan, and Zhaoqing	Guangzhou	Shenzhen, Dongguan, Huizhou
“Hong Kong and the Western PRD Cooperative Development from a Cross-boundary Perspective” by Yeung Yue-man et al.			
“Common Grounds and Differences on the Guangdong-Hong Kong-Macao Bridge” - One Country Two Systems Research Institute.	Zhuhai, Zhongshan, Jiangmen, Shunde		
Case study report 2: “Economic Analysis of Land and Water Crossing Transportation Between Hong Kong, Zhuhai, and Macao” in “Study of Transportation Links Between Hong Kong and the Western Banks of Pearl River” by the General Transportation Research Institute of State Development and Reform Commission.	Zhuhai, Zhongshan, Jiangmen, Foshan, and Zhaoqing		Guangzhou, Shenzhen, Dongguan, Huizhou
Case study report 1: “Existing Transportation Between Hong Kong and the West Bank of Pearl River And Future Development” and case study report 3: “Projections of Passenger and Goods Traffic Volumes Between Hong Kong and the West Bank of Pearl River” in “Study of Transportation Links Between Hong Kong and the Western Banks of Pearl River” by the General Transportation Research Institute of State Development and Reform Commission	Zhuhai, Zhongshan, Jiangmen, Foshan, Zhaoqing, western Guangdong province, and such south-western China provinces and cities as Sichuan, Yunnan, Guizhou, Guangxi, Hainan, etc.		
This study report	The 3 cities of Zhuhai, Zhongshan, Jiangmen, plus the 2 cities of Foshan and Zhaoqing	Guangzhou, Foshan, Zhaoqing	Shenzhen, Dongguan, Huizhou

2.2 Disparity of development level and diversity of development models for different regions within PRD

Since the Mainland embarked upon its drive of reform and opening to the outside world, PRD has been reaching out to the global production network through Hong Kong, which in turn has greatly spurred the process of urbanization and industrialization in the region, turning the PRD into one of the most important manufacturing base in the world, one of the country's fastest growing and most affluent regions.

These facts notwithstanding, disparities remain in development in different regions within the PRD (refer to Chart 2). At the start of the implementation of reform and opening, economic development in eastern and western parts of the PRD was largely head to head, with the industry base in the western region even slightly ahead of that in the east. In 1980, the combined annual GDP in the three west bank cities of Zhuhai, Zhongshan, and Jiangmen was three times that in the two eastern cities of Shenzhen and Dongguan put together. By 1988, annual GDP in the three west bank cities and the two eastern cities drew level. However, by 2005, annual GDP in the two eastern cities surpassed the three west bank cities by over 2 times the amount. In terms of growth rate, the 2 eastern cities had expanded by more than 700 folds while GDP total in the 3 west bank cities only increased by approximately 80 times for the period from 1980 to 2005. Growth rate in the western region is by far lagging behind that of the eastern region, with an inevitable eastward shift of economic centre.

Chart 2: Comparison of GDP totals in central, eastern, and western regions of PRD

		GDP (¥'00m, at historical prices)					
		1980	1990	2002	2003	2004	2005
Central	Guangzhou*	58	320	3204	3759	4451	5116
	Foshan	17	137	1329	1578	1918	2380
	Zhaoqing	11	57	294	328	391	454
	Total	86	514	4826	5665	6759	7949
Eastern	Shenzhen	3	172	2970	3586	4282	4927
	Dongguan	7	65	1187	1453	1806	2182
	Huizhou*	8	49	527	586	686	804
	Total	18	286	4683	5625	6775	7913
Western	Zhuhai	3	41	409	477	552	635
	Zhongshan	7	51	470	572	704	818
	Jiangmen*	19	101	566	618	696	802

	Total	29	193	1445	1667	1952	2254
PRD Total		133	993	10954	12957	15485	18117

*: Inclusive of municipal districts and county townships.

Source: Guangdong Statistical Overview 2006, various municipal statistics gazettes and relevant statistics websites.

It can be seen from a comparison between the 3 central, eastern, and western cities of Guangzhou, Shenzhen, and Zhuhai that, indicators such as per capita GDP, fiscal revenue, industrial output, incoming foreign investment and so on in Guangzhou and Shenzhen are rather similar while the economic clout of Zhuhai is obviously only playing second fiddle to Shenzhen and Guangzhou, its capacity in providing a leadership role in the development of other western cities also cannot be compared to that of Guangzhou and Shenzhen (refer to Chart 3).

Chart 3: City Comparisons in PRD Central, Eastern, and Western Regions (2005).

	Central			Eastern			Western		
	Guangzhou	Foshan	Zhaoqing	Shenzhen	Dongguan	Huizhou	Zhuhai	Zhongshan	Jiangmen
Census population ('0,000)	994	534	337	701	645	322	124	236	396
GDP (¥'00m)	5116	2380	454	4927	2182	804	635	818	802
GDP(¥) Per capita GDP (¥)	---	41031	---	60507	---	21911	45258	33631	19600
Fiscal revenues (¥'00m)	371	131	20	412	104	35	49	54	42
Committed FDI (US\$'00m)	26	9	6	30	15	10	7	7	6
Output from large-scale industry (¥'00m)	6032	4740	320	9568	3813	1412	1562	2217	1443

* : Large-scale industry includes all state owned enterprises and private industrial companies with annual sale revenues of RMB 5 million or over.

Source: Guangdong Statistical Overview 2006 and statistics gazettes of various municipal administrations.

There is also key difference in the development model for central, western and eastern cities. The PRD has long been characterized as a place with “foreign investment driven industrialization and urbanization” and an “export oriented economy”. However, in relative terms, foreign investment and outward looking export oriented processing activities are principally concentrating around the central and eastern regions of Guangzhou, Shenzhen and Dongguan (refer to Chart 4). In contrast, a comparatively higher proportion of the investment for the manufacturing industry in western regions originates from domestic sources, than is the case in eastern regions, serving mainly the domestic markets.

Chart 4: Comparison of incoming foreign investment and export in central, eastern, and Western PRD cities (2005).

		Realised FDI (US\$'00m)	% breakdown in PRD	Export (US\$'00m)	% breakdown in PRD
Central	Guangzhou	26	22.9%	267	11.7%
	Foshan	9	8.0%	171	7.5%
	Zhaoqing	6	5.2%	14	0.6%
	Total	42	36.1%	452	19.9%
Eastern	Shenzhen	30	25.6%	1015	44.7%
	Dongguan	15	12.7%	409	18.0%
	Huizhou	10	9.0%	107	4.7%
	Total	55	47.3%	1531	67.4%
Western	Zhuhai	7	5.7%	108	4.7%
	Zhongshan	7	5.6%	122	5.4%
	Jiangmen	6	5.2%	60	2.7%
	Total	19	16.6%	290	12.8%
Total in PRD		116	100%	2273	100%

Source: Guangdong Statistical Overview 2006 and statistics gazettes of various municipal administrations.

Chart 4 shows the disparity in absorbing foreign investment, growth in export processing industry, and developing the export-driven local economy. In 2005, foreign investment attracted by the three western cities accounted for 16.6% of PRD total. In contrast, actual utilised foreign investment in the three eastern cities commanded a sizeable 47.3% of PRD total.

The scale of incoming foreign investment also varies between the eastern and western shores of the Pearl River, resulting in a widening gap in export

volumes in these two locations. In 2005, 67.4% of PRD export originated from the three eastern cities, but only just 12.8% were produced in the three western cities, or less than 19% of the volume shipped from the three eastern cities. Foreign investors are pouring into the east in droves, fuelling a rapid growth in total industrial output and external trade volumes in this region, and allowing economic development and technological innovation in the eastern region to leapfrog ahead of the western region.

2.3 Factors limiting Western PRD to realize its full development potentials

While foreign investment is a powerful mover spurring on the industrialization and urbanization process in eastern and central regions, cities in Western PRD, which are receiving a relatively smaller impact from external influencing factors, has yet to realize full development. The ultimate cause of which is manifold, but one factor is that the communication link between Hong Kong and Western PRD is not as close as that between Hong Kong and Eastern and Central PRD.

In the more than two decades of reform and opening in China, the PRD has witnessed sustained rapid development of its economy, using mainly foreign investment as a driver for its export oriented economic development. Hong Kong is one of these external driving forces and has played a crucial role in the industrialization and urbanization process in the PRD. The degree of integration with Hong Kong has to a certain extent affected the level of economic development on both shores of the Pearl River, and the transportation link is in turn a very crucial factor determining the level of integration. Hong Kong investors in PRD often use the yardstick of whether it would be possible to travel to the PRD factory site in less than 3 hours to decide whether to invest to build factories, procure materials, and provide services. The eastern sector of the PRD is directly connected to Hong Kong with very convenient land transport linkage. The infrastructure in Eastern PRD is also better than that of its Western PRD cousins⁵, hence attracting large number of Hong Kong investors, taking up a significant portion of the work migrated across the boundary as a result of the industrial restructuring of Hong Kong, and giving impetus to social and economic development in the whole region.

In contrast, Western PRD is at some distance from Hong Kong, and it suffers from a relatively weaker infrastructure. For example, Western PRD has in the past 25 years mainly constructed certain “feeder hubs” for transshipment goods, and the construction of the port of Gaolan has fallen behind schedule. The eastern sector of the Guangzhou-Zhuhai highway is yet to become fully

⁵ Not only is there the existing KCR railway line in the eastern shores of the Pearl River, a Kowloon-Canton express rail link, Yantian Port, Shekou Port, Xinsha Port, as well as the Guangzhou-Shenzhen motorway, Shenzhen-Shantou motorway, Shenzhen-Dongguan motorway have also been built since the launch of reform and open drive, etc.

operational, while the western sector of Guangzhou-Zhuhai highway and the construction of the Guangzhou-Zhuhai rail link are far behind schedule. Moreover, the Hong Kong-Zhuhai-Macao Bridge is still in the planning stage. For these reasons, the communication links between Hong Kong and Western PRD remain inadequate, with an over-reliance on water transport links. Road transport must follow a roundabout route by going through Shenzhen, then over the Humen Bridge spanning the Pearl River, adding over one hour of extra travel time, putting Western PRD cities beyond the “3-hour economic circle” of Hong Kong, thereby dampening the eagerness of Hong Kong investors to start business in Western PRD.

The somewhat slower pace of structural adjustment of industry in Western PRD compared to Eastern PRD is yet another reason hampering the western region to fully realize its development potentials. Comparing industry structures in eastern, central, and western regions, it is clear that reasonably comprehensive integrated industry chains have been developed in eastern and central regions, with new, up and coming industries accounting for a higher proportion in the makeup of the manufacturing sector. The development scale of the traditional industry is by far much lower than the new industry both in absolute numbers and in relative proportion, showing a trend towards continuing upgrading of new technology-led industry structure. On the other hand, not only is the level of development in the west remaining lower than that of the east and central regions in terms of economic volume, the strength of the up and coming enterprises in its industry structure is not particularly outstanding either, with such traditional manufacturing as electrical appliance, pottery and ceramics, garment apparels, hardware, etc still accounting for the largest proportion. In 2002, the total output of rising industries in the west accounted for 43.3% of total industrial output of the region, lower than the province-wide average of 47.6%; traditional industry in the region accounted for 22.0% of total industry output, higher than the province-wide average of 18.6%⁶. As the knowledge and technological economies develop, the positive impact of traditional industry on the overall economy is reducing. Industry upgrade, technology and management innovation are necessary for the achievement of a sustainable industrial, sectoral, and regional development.

2.4 The importance of accelerating Western PRD development

2.4.1 Western PRD is the portal connecting the PRD to the hinterland

PRD's development has encountered many challenges in recent years. Apart from competitions from ASEAN countries, it also faces the rivalry of several other economic zones in the domestic front. The Yangtze Delta Region has been on a rapid ascend since 1990s. The region's well-developed industry chains, ample port facilities, a stable business

⁶ Data sourced from “Recommendations Regarding Accelerating Development in the Western Shores of the Pearl River” by Huang Ze Chu – Guangdong province committee of the China People's Alliance, Feb 2004.

environment, plus a concerted positive response from many provinces and cities in the adjacent regions to the leadership of Shanghai, have collectively borne out the overall strength and significant development potentials of the Yangtze Delta. The administrative authorities in Beijing, Tianjin, and Hebei province have now reached consensus on the establishment of an institutional system of joint committee of provincial governors and municipal mayors. At the same time, a group of seven provincial and municipal administrations in the Bohai Rim region have signed a framework agreement on inter-regional collaboration, setting up a so-called “5 plus 2” cooperation mechanism. In addition, Chongqing, the economic centre of up stream of the Yangtze River, has at time entered into framework agreements with the provinces of Sichuan and Guizhou, envisaging the development of a “Western Yangtze River Delta Economic Zone”. No doubt, rivalry between these different major economic zones is inevitable.

In its effort to counter the inroads by other economic zones, Guangdong has introduced the concept of pan-PRD cooperation⁷. Guangdong province is expecting to further expand its development hinterland by pan-PRD cooperation, and to become one of the two major growth engines of the country alongside the Yangtze Delta Region. In this respect, Western PRD is the portal to western Guangdong province, and the inland of the pan-PRD region. Western PRD is adjacent to Guangxi, Yunnan, Guizhou, and Sichuan, viz the four provinces of the southwestern region of Pan-PRD, with a large population, an enormous market and abundant energy and mineral resources, which strongly complements the economies of Guangdong province, Hong Kong and Macao; the four Southwestern provinces are also a region pivotal to the national policy of development of the western territory and a buffer zone for China-ASEAN operation. In order to kick-start the development of western Guangdong province and the Southwest provinces of pan-PRD region, Guangdong must accelerate the development of the Western PRD Region.

2.4.2 With the development of the eastern regions at a crossroad, expansion into the western region is a necessity

The development of the PRD in the past 25 years is basically founded on low-cost factors of production (such as land, energy, and labour). After years of growth, Eastern PRD is facing the problems of rapid cost escalation, dwindling land and energy supplies, and labour shortage and so on. Further growth and upgrade of the manufacturing industry is also facing a bottleneck. As a matter of fact, most of the cities in Eastern PRD have almost used up all their usable land reserves and the problem has

⁷ Pan-PRD is the economic sphere encompassing the nine provinces and region of Guangdong, Guangxi, Hunan, Hainan, Yunnan, Guizhou, Jiangxi, Fujian, and Sichuan, plus the two SARs of Hong Kong, and Macao.

become so acute that some investment projects are languishing in the embarrassing dilemma of being unable to obtain land allocation⁸. Hence expanding development space has become an issue of urgency for the continued development of Guangdong province. With much resources and space remaining untapped in regions of Western PRD, the regions can become the powerhouse providing new impetus and rooms for further development of PRD. For this reason, development of Western PRD has become strategically pivotal to the further development in Guangdong.

⁸ E.g., Li Hong Zhong, the former mayor of Shenzhen has stated on record in 2005 that future development of the city faces four “intractable issues”: land and space, energy and water, population growth, and the strain on the environment.

3. The strategies, plans, and relevant policies of Guangdong provincial government aimed at promoting development in Western PRD

3.1 The future economic development in the PRD

Due to its close proximity to Hong Kong and Macao, Guangdong was already a step ahead at the onset of the country's reform and opening drive, achieving rapid economic development and transforming itself from a poor province at the fringe of the country into a major economic powerhouse. In the first two decades after the launch of the country's reform and opening drive (1979 - 1998), Guangdong scored an average annual GDP increase of some 14%, exceeding the national average in the same period by 4.4%. The year 1992 saw the GDP of Guangdong overtake both Shandong and Jiangsu for the first time, and thereafter, retaining national top ranking for a whole decade. Guangdong's current GDP accounts for one ninth of the national total.

However, as full implementation of reform and opening unfurled in the rest of the country, the advantages of the PRD arising from various preferential policies have by and large been eroded. Coupled with this has been a whole series of difficult problems faced by the PRD in its economic development, such as rising costs, land and energy shortages, environmental degradation, and labour shortages, etc. There have been signs of a slow down in the economic development of Guangdong in the past four years, seen as an easing of the growth of manufacturing output, and rapid scaling back on foreign investment. The issue of future economic development of the PRD has become a pressing concern for Guangdong in formulating its development strategies.

3.2 Two-prong strategy for development in the PRD: Spatial strategy + Industry strategy

In an effort to strengthen the competitiveness of the PRD, the Guangdong provincial government has formulated a series of major development strategies, of which, two most important are **Spatial Strategy**, and **Industry Strategy**. Spatial strategy entails rigorously promoting development in the Western PRD, while industry strategy deals with promoting industrial restructuring, actively fostering the development of heavy industry, high-tech/new-tech industry, and service industry. It is noteworthy these two strategies operate in tandem and are mutually complementary: industry development must be reflected in terms of spatial expansion, while spatial expansion necessitates the support and input from industry. These two go hand in hand forming an integral part of an overall strategy.

3.3 The relevant plans for driving development in Western PRD

Amongst the development plans already released by the Guangdong provincial government there are yet no specific plans for Western PRD. However, around the time of CEPA implementation, Guangdong Province redrafted the layout of township clusters in the PRD, introducing several important plans, including the 2003 “Special Planning for Urbanization in the PRD”, “Special Planning for PRD Infrastructure”, “Special Planning for Information Highway in the PRD”, and “The Plan for the Coordinated Development of the PRD Township 2004-2020” (hereinafter called “PRD Coordinated Development Plan”)⁹ jointly formulated by the Ministry of Construction and the Guangdong provincial government in September 2004. Of these, the content of the “PRD Coordinated Development Plan” is the most up-to-date, comprehensive and has largely included the preceding plans. The plan has passed through the scrutiny by the People’s Congress and local legislative processes in Guangdong. At the moment, the “PRD Coordinated Development Plan” has the effect of local by-law, become the action guideline for co-ordinated development of township clusters in the PRD, and the legal basis for various relevant industries planning, special projects planning and the overall town planning within the region. Although all municipalities in the PRD are currently formulating new strategic planning schemes, the overall spatial strategy for development in the PRD and the positioning of each city would not deviate significantly from the “PRD Coordinated Development Plan”. Henceforth, the relevant details with respect to Western PRD in the “PRD Coordinated Development Plan” may reflect the strategies, planning schemes and relevant policy measures of the Guangdong government in promoting development in Western PRD. Details of the “PRD Coordinated Development Plan” relating to Western PRD development are summarized in the ensuing paragraphs:

3.3.1 The spatial strategy of “promoting the west bank, optimizing the east bank”

The “PRD Coordinated Development Plan” formally sets out the objectives of coordinated development of city and township clusters in the PRD, i.e. building the PRD into a “world class manufacturing base and world class cluster of townships”. To achieve this goal, the “PRD Coordinated Development Plan” envisages “promoting the west bank, optimizing the east bank” in its spatial strategy, i.e., fine-tune the general environment for development, strengthen the core functions, and accelerate the accumulation of factors for industrialization in Western PRD region; and in the eastern regions, continue to give full reign to the market force in driving resource allocation, improve the environment in towns and country, optimize the layout of township and industry, facilitates transformation from a crude development model to an intensive

⁹ In addition, see also the “pan-PRD Municipal and Satellite Township Co-ordinated Development Plan”, which included Hong Kong and Macao, which is still in the early stages of being formulated.

development model. As the 2003 “Special Planning for Urbanization in the PRD” also stated, “in order to implement coordinated development, wider collaboration and exchange with western Guangdong and the Greater Southwest should be established fostering common prosperity, through developing the Western PRD; in the future, higher priority will be accorded to the western region in infrastructure development, macro industry planning and so on.”¹⁰

3.3.2 An inverted “V”-shaped area to serve as a development “backbone”

According to the “PRD Coordinated Development Plan”, the “backbone” is the centrepiece of the overall scheme of intra-regional spatial layout; its function is to integrate the core function of the region. In the interim draft of the “PRD Coordinated Development Plan” released on February 2004, “backbone” refers to metropolitan Guangzhou, the Nansha and Humen districts of Dongguan, Qianhai of Shenzhen, metropolitan Shenzhen, and all the way southward to areas around Central in Hong Kong. Such a “backbone” running from Guangzhou to Hong Kong via Shenzhen takes in the most highly developed cities, industry parks, and the most important transport communication facilities. However, in a final draft submitted in September 2004, the “PRD Coordinated Development Plan” revised its definition of “backbone”: the Guangzhou-Shenzhen-Hong Kong “backbone” became an inverted “V” with another corridor running through Zhuhai and Macao. The new eastern sector now starts from the city of Huadu (site of the new Baiyun International Airport), running through metropolitan Guangzhou, Nansha, Humen districts of Dongguan, Qianhai of Shenzhen, metropolitan Shenzhen, then southward to Central in Hong Kong; the new western sector forks off at Nansha, then extends towards Zhongshan, Zhuhai, and Macao along the western banks of the Pearl River Estuary.

In its first attempt at planning for PRD economic zones and townships in 1994, Guangzhou-Shenzhen and Guangzhou-Zhuhai had been regarded as two pivotal corridors in the eastern and western sectors in the general overall scheme for development in the PRD, with Guangzhou, Shenzhen, and Zhuhai also considered as a troika of central metropolis in three respective regions. However, due to an increasingly widening gap of economic clout between Zhuhai and the other two cities, and that the economic influence of central and eastern cities is significantly ahead of their western region counterparts, Guangdong has gradually shifted its economic centre of gravity towards the central and eastern sectors of the PRD, with a consequent gradual de-emphasis of the western development corridor.

¹⁰ “Special Planning for Urbanization in the PRD” also stated, “... for this reason, there is the need to strengthen the communication links between west bank development zones and various port cities; special attention is to be devoted to improving river transport communication and the facilities at border crossings, allowing goods freight to reach and the various export shipping ports directly.”

The fact the “PRD Coordinated Development Plan” changed the solitary “backbone” into an inverted “V” by adding an extra corridor is a reflection whilst recognising the importance of the Guangzhou-Shenzhen-Hong Kong “backbone”, Guangdong is at the same time paying due attention to the development of Western PRD, and valuing the importance of the positive impact Zhuhai and Macao would have on the western region. It is apparent that the “PRD Coordinated Development Plan” has not completely abandoned its mid-1990s thinking with regard to the planning scheme for townships, the outlines of the design formed by the trio of central metropolitan cities of Guangzhou, Shenzhen, and Zhuhai have to a certain extent been carried over to the new planning arrangement. Guangdong has begun to re-emphasize the development of the western region.

3.3.3 Strategy for development of the western region: Not a simple repeat of the process for the eastern region

At present, the whole context to the development of the Western PRD is very different from that of Guangdong’s development at the inception of the country’s reform and opening programme. In the early days of country’s reform and opening, Guangdong needed a speedy urbanization and industrialization process to build up its industry bases in the cities. However, in today’s environment, the development potentials of Western PRD cities have not been fully realized, yet industry development has already reached a plateau. As an example, an integrated industrial base spearheaded by the high-tech/new-tech industry and complemented by a balanced development of commerce and trade, tourism, finance, real estate, IT, logistics, agriculture and fishery etc, has been gradually taking shape in Zhuhai. Zhongshan is leveraging on its strength on specialized township industries and processing zones, making an active effort in exploring new avenues for industrialization, developing its five pillar industries of electronics and IT, textile apparel, electrical and mechanical equipment, chemical products, and hardware products, building up economy of scale from industry concentrations, stepping up construction of industry zones - 40 of which have already been built. Jiangmen has established a reasonably comprehensive export oriented industry base that extends from traditional processing manufacturing to high-tech/new-tech industry. The city boasts integrated design, fabrication and manufacturing capabilities for over 5000 industrial products, with production and distribution volumes for more than 20 products ranking first province-wide or nation-wide, it is one of the main national manufacturing bases for such products as textile apparel, synthetic fibre, leather goods, foodstuff, paper ware, and so on. Of these, the city’s production capacity for motor bikes accounts for 10% of national total, taking a market share of just over 6%; its synthetic fibre products command an 80% market share in

Guangdong; output of washing machines is 43% of total production in Guangdong.

The strategy adopted by Guangdong for promoting development in Western PRD is not to simply repeat the development process of the east. The western part will be leveraging on its role of absorbing the work migration generated by industry restructuring in the eastern part. In other words, a certain proportion of traditional industry in the eastern part would migrate to the west due to limitations in such areas as land availability and energy supply. Yet, the task of setting in motion the transformation of Guangdong industry into heavy industry, high-tech/ new-tech industry, and service industry is not only borne by eastern and central cities in the PRD. As mentioned previously, the spatial strategy and industry strategy are two integral parts of for Guangdong's development, to the extent that the rise of the west will offer room required by industrial restructuring, so much as if requiring the momentum generated by industrial restructuring.

Besides, the problems in land, resources, and the environment faced by eastern cities in their development process are lessons for western cities. In other words, while the west tackles the industry transfer from the east, it will upgrade its own industry structure rather than going down the path of "high speed, high energy consumption, high pollution".

3.3.4 Industry orientation for Western PRD cities

The "PRD Coordinated Development Plan" divides the PRD into central metropolitan region, eastern metropolitan region, and western metropolitan region. The central region, comprising the 3 cities of Guangzhou, Foshan, and Zhaoqing, should be concentrating on such general service function as finance, commerce and trade, culture, education, scientific research, conference and exhibition, logistics, telecommunication, information and consulting, tourism and entertainment, and so on, accelerating the development of heavy equipment manufacture, high-tech/new-tech industry, and logistics; turning itself into an integrated service centre with the greatest impact around the PRD, and one of the industrial centres with the strongest international competitiveness.

The 3 eastern cities of Shenzhen, Dongguan, and Huizhou should, while maintaining their strengths in the processing manufacturing industry, also work to foster the harbour front infrastructure industry, actively develop high-tech/new-tech industry spearheaded by electronics and IT, putting an emphasis on development of such tertiary industries as finance, commerce and trade, conference and exhibition, and tourism; improving the overall quality of the ecological environment and resource utility efficiency,

building these areas into modern manufacturing production bases and production service centres of international renown.

The 3 western cities of Zhuhai, Zhongshan, and Jiangmen should seize the opportunity of the construction of the Hong Kong-Zhuhai-Macao Bridge to actively leverage on their comparative advantages in resources and environment, accord high priority to developing the general inner city service function and port industries supported by harbour transportation facilities, e.g., energy, heavy engineering and chemical engineering, mechanical engineering, and high-tech based pharmaceutical microbiological engineering. They should steadily expand tertiary industries such as tourism, logistics, and harbour trade mainly based on freight forwarding, and enhance the clustering and radiation functions of the township industries, so as to become key future regions of accelerated development in the PRD.

In terms of specific industry positioning, the “PRD Coordinated Development Plan” has set aside three major processing manufacturing cluster areas, i.e. the central construction material cluster area, the eastern electronics and electrical equipment cluster area, and the western home appliance, hardware, and textile cluster area. Of these, the western home appliance, hardware, and textile cluster area is situated in the northwest districts of Zhongshan, along state highway route 325 near Jiangmen, as well as in Foshan, and Shunde, with an emphasis on developing new product ranges. At the same time, the “PRD Coordinated Development Plan” delineated two major harbour front infrastructure industry cluster areas, one of which is situated in the western districts of Zhuhai and the Yinzhou Lake district of Jiangmen. The latter cluster area is supported by the port of Gaolan, and mainly focuses on petrochemicals, iron and steel smelting, and paper making. For high-tech/new-tech industry, the “PRD Coordinated Development Plan” envisages a total of three cluster areas, one of which is situated in the west, including the Zhongshan Torchlight Development Zone-Zhuhai University Park-Zhuhai High-tech/new-tech Zone corridor, the emphasis is to develop such high-tech/new-tech industries as electronics and IT, bio-science, and so on. For logistics, the “PRD Coordinated Development Plan” envisages three major international logistics bases, one of which is the Zhuhai logistics base, situated in the western districts of Zhuhai, Sanzao, and Hengqin. In addition, the Western PRD also included agricultural production areas and specialty tourism areas (refer to Appendices 1, 2, and 3 for details).

In summary, it can be seen that the industrial restructuring of the PRD will go on in the central region, the eastern region and the western region. While the west is absorbing the migration work generated by industrial restructuring in the east, it also takes on all-new industry development roles, working in step with the PRD to actively develop its heavy industry,

high-tech/new-tech industry and service industry. Put in another way, the development of the Western PRD is not a simple repeat of the former industrialization process of the eastern region. As stated in the municipal strategic plan of Zhuhai, Zhuhai will embark upon a path with a “new industrialization model”.

3.3.5 Functional positioning of Western PRD cities

As to the functional positioning of specific cities, the “PRD Coordinated Development Plan” defines Guangzhou and Shenzhen as main regional centres, leading the development of PRD and the whole pan-PRD region. It defines Zhuhai as a supporting regional centre, acting as role model for the western region. Zhuhai will be leveraging on its special economic zone status, to strengthen Zhuhai-Macao collaboration and resource protection by exploiting the two major transport hub infrastructure facilities of the central port of Gaolan and Zhuhai international airport, and to accelerate the formation of innovation bases that draws together commercial product development, education and research, as well as high value-added merchandise export and foreign exchange earning bases. It also aims at building a sub-tropical seaside garden city and seaside scenic tourism resort of international renown; developing the city into a modern key metropolis that lead the development of the Western PRD.

The remainder 6 district level municipal administrations in the PRD are to serve as respective district centres. Of these, Jiangmen will be concentrating in renewing its traditional industries, actively promoting development of light manufacturing, commerce and trade, logistics, and tourism so as to develop the city into an outer-tier PRD service centre and one of the key portals for out reaching into western Guangdong from the PRD. The city of Zhongshan, on the other hand, will be fully exploiting its international recognition as “Dr. Sun Yat Sen’s hometown” to intensify international and domestic collaboration, and to develop high-tech/new-tech, light manufacturing, commercial trade, and logistics industries, implementing a balanced economic, social, and ecological development strategy and building a “model city with balanced economic and social development”. Furthermore, in accordance with the target objective of building the “3rd major metropolis”, Foshan will be actively developing its light industries spearheaded by the high-tech/new-tech industry, giving due emphasis to the development of tertiary industries, complementing and rendering mutual support to Guangzhou, fulfilling district centre functions in commerce trade, R&D, and service support, progressively building the city into a modern metropolis for the PRD to reach out and expand into western Guangdong and the West River catchments valley area. Zhaoqing will place emphasis on construction of its main inner city suburbs, including the districts of Ruizhou, Dinghu, and Gaoyao, accelerates intensive metropolitan development and industry renewal, strengthening its status as a nationally renown historic and cultural

heritage city and an outstanding tourism resort destination; develops itself into an outer-tier kernel of economic and social development, and one of the portals for the PRD to outreach into southwest Guangdong and further afield to Greater Southwest China (refer to Appendix 4: PRD municipal and township hub-centre systems development directive).

3.3.6 Strategies for development of key transport facilities

The “PRD Coordinated Development Plan” envisages six strategies for development of regional transport facilities:

- Strengthen external transport links. Build up a multi-mode, multi-tier transportation network connecting the “Pan-PRD” hinterland and other economic zones in the country, while strengthening transport links with Southeast Asia and the rest of the world.
- Strengthen the integration of transport systems with Hong Kong and Macao. Through cooperation on construction and management of rail, highway, inland waterway transportation, aviation traffic facilities between Guangdong, Hong Kong, and Macao, bring about full integration of Guangdong-Hong Kong-Macao transportation system.
- Improve the efficiency of the transportation system within Guangdong province. Improve the efficiency of the transportation system between the PRD and other regions within Guangdong province, creating a “3-hour commuting radius” between PRD and other regions within the province.
- Link up the east and west banks. Take an active role in initiating project construction work on the Hong Kong-Zhuhai-Macao Bridge, and at the opportune time, initiate construction project for a second sea-crossing passageway between the east and west banks and Pearl River Estuary crossing inter-city rail link, promoting communication interaction and coordinated development between the east and west banks of the Pearl River.
- Improve inter-city transport. Accelerate construction of inter-city rail transport, forming a network of inter-city transport links and traffic hub facilities matching the overall spatial disposition of the townships within PRD, placing emphasis on strengthening passenger traffic routes between key regional transport hubs and each municipal and township centre with the PRD.

- Enhance the transport hub centres. By putting refinements to the network of rail transport and express highways, strengthen the communication between each service centre in “backbone” regions and key junctions, while building up an express transport network that reaches out from central hubs and junction points to the east and west banks, strengthening transport communication between hub districts and other areas

Specific development plans relating to Western PRD and Foshan and Zhaoqing are as follow:

- **Aviation traffic.** Strengthen Zhuhai airport’s trunk airport service function for western sector districts of Guangdong, when the time is ripe, construct a feeder airport in Zhaoqing, and to promote business collaboration between the main airports within the PRD, and with airports in Hong Kong and Macao through de-regulation of air traffic rights and business franchise right for airport operation, integrate aviation resources covering the “Greater PRD”.
- **Waterway transportation.** Place emphasis on the development of the deep water harbour in Gaolan Port of Zhuhai, strengthen the communication between such feeder ports as Foshan, Jiangmen, Zhongshan, Zhaoqing and each main deepwater ports; develop an inland waterway transportation network mainly covering the West River, with spur links running to the North River and the East River.
- **Express highway.** Build a “2-ring plus 8-transverse plus 13-north-south” express highway transport network grid (refer to Appendix 6 for details).
- **Railway.** Build a “3-transverse plus 7-north-south” trunk line rail network: construct a Guangzhou-Maoming line via Zhaoqing to Wuzhou and **Liuzhou** of Guangxi province, as well as a Zhaoqing-Huizhou northerly line, linking up the Greater Southwest region; construct the Guangzhou-Zhuhai line, offering a new sea port route in the Greater Southwest region, facilitating development of metropolitan regions in the west; construct a Guangzhou-Maoming line via Xinxing to Kaiping, Nanwan, opening a new sea port corridor for metropolitan regions in the southwest (refer to Appendix 6 for details).
- **Inter-city rail link.** Accelerate the construction of the Guangzhou-Zhuhai inter-city rail link, building up a rapid transit public transport network.

- **Transport hubs.** Metropolitan Zhuhai (Tangjia, Hengqin) and Gaolan harbour which is one of the category-1 transport hub districts in the PRD with the highest traffic connectivity; metropolitan Foshan, metropolitan Jiangmen, metropolitan Zhongshan, eastern districts of Zhongshan, metropolitan Zhaoqing and so forth form the next lower tier transport hub districts.

In general, the above infrastructure planning will strengthen transport system integration with Hong Kong and Macao in Western PRD, strengthen the transport links between east and west PRD, and strengthen transport link up with other provinces. The future development of these transport infrastructures will undoubtedly bring enormous growth opportunities to each of the Western PRD cities.

4. Comparative strengths and limitations of Western PRD

4.1 The Western PRD will become new focus of growth

In the advent of CEPA implementation, acceleration of Guangdong-Hong Kong-Macao integration and the commissioning of the Hong Kong-Zhuhai-Macao Bridge, Western PRD will become a new focal point of growth on the PRD region. The Hong Kong-Zhuhai-Macao bridge, once completed, will significantly reduce the distance between Hong Kong and the western cities. Guangzhou is also actively seeking out space for expansion and steadily improving transport links with western cities. Such measures enable the western cities like Zhuhai, Zhongshan, Shunde to directly benefit from the economic reach of Hong Kong, Macao, and Guangzhou. Moreover, with the construction of the PRD inter-city rail transport link and the highway network connecting through to western Guangdong, Western PRD will be well positioned for developing heavy industry and infrastructure industry. It will inevitably become a popular destination for industry migration from the east and central regions, and for foreign investment.

More importantly, Western PRD is the “spring board” for the Greater PRD to connect with western Guangdong and the southwest of China. The Western PRD is also situated in close proximity to such ASEAN countries as Vietnam and Cambodia. Promoting development in Western PRD is significant for ensuring a balanced development between the east and the west of Guangdong, expanding the Greater PRD hinterland, as well as facilitating Sino-ASEAN cooperation. Hence, the development of Western PRD will receive much attention.

4.2 Overall strengths of the Western PRD

4.2.1 Strength in natural resources

After 25 years of rapid development, land utilization in the PRD has dramatically changed. In order to attract external investment, local authorities in the PRD tended to offer drastic cuts on land lease fees. The area of town land in Guangzhou and the eastern cities where there is a higher concentration of foreign investment has ballooned in the past 20 years. Weng (2002)¹¹ used satellite remote sensing technology to study metropolitan expansion and loss of agriculture lands in PRD cities from 1989 to 1997. The results showed that the change in land use in the PRD was mainly concentrated in cities in the east or near Guangzhou during the period.

¹¹ See Weng Q, 2002, Land use change analysis in the Zhujiang Delta of China using satellite remote sensing, GIS and stochastic modelling, *Journal of Environmental Management*, 64, 273-284.

In fact, most cities in the eastern region have almost completely exhausted their developable land reserves. On the other hand, rapid development and rising average per capita income have resulted in a rapid escalation of labour costs in places such as Eastern PRD and Guangzhou. Coupled with the shortage in water, electricity, energy, and environmental degradation etc, bottlenecks for further development and product upgrade and renewal of the manufacturing industry are created.

Compared to the eastern region, the western region has relatively abundant land resources, hence significant development potentials remain in this locality. One example is the Doumen district of Zhuhai and Jiangmen which still have sufficient reserves of land that can be used for future development, thus giving the PRD more space for further development.

4.2.2 Strength in labour resources

In respect of labour costs, studies indicate that compared to the eastern region, the western region of PRD has reasonably sufficient and relatively cheaper manpower. The site studies and inspection visits conducted by Yeung Yue-man and others indicated due to lower level of development in the western region, the labour cost there is 20% to 30% lower than that in Eastern PRD¹².

4.2.3 Speciality township clusters

The current situations of industry clustering are: new industries such as electronics and IT are concentrated in Guangzhou and the eastern region while traditional industries such as home appliance, hardware machinery, etc are concentrated in the western region, where townships specializing in home appliance, hardware machinery, and pottery and ceramic have evolved. In addition, there remains ample room for developing tourism, commerce and trade, processing manufacturing industry, harbour and port facilities, and aviation service in the western region.

¹² Yeung Yue-Man, Shen Jianfa and Zhang Li (2004): Hong Kong and the Western PRD Cooperative. Development from a Cross-boundary Perspective, Hong Kong Institute of Asia-Pacific Studies, The Chinese University of Hong Kong, 2004. however, a study by the consulate of the Netherlands in Guangzhou has indicated, in terms of human resources on an across-the-board basis, the Western PRD has no obvious advantage over other places (see Appendix 5: A Comparison Of HR Costs At Each Level Across PRD Cities).

4.2.4 A well-developed private sector economy, with strong proprietary innovation capability

In terms of economic structure, the eastern region is mainly characterized by foreign investment driven urbanization and industrialization. The economies of Guangzhou and Foshan in the central region are driven by both internal and external forces, while the western region is largely supported by domestic resources, with a well-developed private sector and strong capability in proprietary innovation. Recently, the Mainland has been actively boosting development of the private sector economy which the Western PRD has a greater potential. In addition, the eastern region is top heavy on foreign trade while the western region on domestic trade. With a continuously expanding domestic market, the existing market basis of the western region is certainly conducive to its further expansion.

4.2.5 Strength in policy measures

According to the “PRD Urbanisation Plan”, Guangdong will in future implement preference policies for the western region in such areas as infrastructure investment, industry macro planning. The government’s preferential policies will undoubtedly full the development in Western PRD region.

4.3 Limitations of Western PRD

4.3.1 Infrastructure building is inadequate to meet the requirements of economic development

The input into infrastructure building in cities of the Western PRD is inadequate to fully respond to the needs of economic development. For instance, in the past 25 years, the Western PRD has mainly developed certain “feeder ports” for goods freight needing transshipment, yet the building of the port of Gaolan is behind schedule; the eastern section of the Guangzhou-Zhuhai express highway is still not fully operational to this day, and the building of the western section of the Guangzhou-Zhuhai express highway and the Guangzhou-Zhuhai rail are both far behind schedule. As a metropolitan centre in the western region, Zhuhai still has no rail link to the outside. For express highway transport, Zhuhai is mainly relying on state highway route 105 for land transport link to the outside; the Beijing-Zhuhai express highway is only just reaching Jinding to the far north of Zhuhai, with little effect on improving the overall transportation network in metropolitan areas of Zhuhai. Although Zhuhai is well endowed with harbour facilities, inadequacies in its land transport links have hampered the full utilization of the harbour and airport of Zhuhai. In addition, the construction of the Hong Kong-Zhuhai-Macao Bridge has not formally started, so the cities in Western PRD remain out of reach from

the 3-hour commuting zone, thus putting a damper on the enthusiasm of foreign investors to set up in Western PRD.

4.3.2 Untimely industrial structural adjustment and inadequate R&D capability

A comparison of the industry structure in Eastern and Western PRD readily shows that the east has evolved a reasonably broad-base critical mass of industries, with new industry firms accounting for a relatively large proportion of the manufacturing industry. Compared to those new industries, traditional industry is less in number and in proportion, giving rise to a new-technology dominated industry structure continually upgrading and moving up-market. The development of the western region not only lags behind the east in quantitative terms, the strength of the new industries as reflected in the overall industry structure is also not particularly outstanding, with home appliance, pottery ceramic, garment apparel, hardware, etc accounting for the biggest share. Moreover, R&D capability of Western PRD cities is weak, neither is there supply of production service and professional service at international standards.

With the development of the knowledge and technological economy, the leading role of traditional industries in the overall economy is diminishing. If R&D capability is not strengthened to bring about industry renewal, technological and management innovation, it would be very difficult to achieve industrial, sectoral, and regional sustainable development.

4.3.3 Insufficient effort in resources integration

Furthermore, insufficient effort in resources integration is also another factor hampering the development of the Western PRD. Of the 3 Eastern PRD cities, Shenzhen's economic clout gives it an obvious edge over other cities, and its close proximity to the economic centre of Hong Kong, confers upon it the natural attributes as a central city. The cities of Huizhou and Dongguan are also seemingly content with Shenzhen's status as a central city, and quite willing to cooperate with Shenzhen.

In comparison, there is relatively less attention paid to resource integration in the Western PRD. There remains a general lack of coherence in industrial planning, infrastructure building, and the building of public amenities. Unfettered free exchange and coordination, collaboration and mutual support in such areas as developing the investment environment, planning industry structure, information dissemination, marketing promotion and so forth between the western cities will be conducive to fostering their common overall interests.

4.4 Analysis of comparative strengths of each Western PRD city

4.4.1 Zhuhai: A special economic zone on the west bank of the Pearl River

Zhuhai is situated in south Guangdong, perched on the western shore of the Pearl River estuary and adjacent to Macao. The city of Zhuhai was formally founded in 1979, and became one of the earliest special economic zones in China in 1980. Total population in the city gradually rose from just over 300,000 in 1980 to 1,420,000 in 2005.

Zhuhai is well renowned for city planning and greening; it is a national environmentally friendly city and a garden city, and has been awarded accolades like “National Environment Friendly City” for several years in a row. It was also granted “Dubai International Award for Best Practices in Improving the Living Environment” by the United Nations Centre for Human Settlements, and received the award of “National Technology Leadership City” in recent year.

Sea-borne, land-based, and aviation transport infrastructures

Zhuhai is a harbour city with a fairly extensive shoreline. It has 5 category-1 customs ports, of which, the port of Gaolan is a major hub in coastal China, and the only deepwater berthing harbour in the west bank of the Pearl River. Zhuhai enjoys convenient and frequent waterway transport services linking it with Shenzhen and Hong Kong, with over 30 scheduled direct express ferry services each day.

For road transport, Zhuhai has a network of express highways reaching out in all directions. Journey time for travelling between Zhuhai to any PRD destination does not exceed 2 hours, and the Beijing-Zhuhai express highway makes the connection between Zhuhai and other places in the country even more convenient and direct. Upon completion of the Guangzhou-Zhuhai inter-city rail link, travelling from Guangzhou to Zhuhai would only require 40 minutes. In addition, Zhuhai has a designed airport, where there are daily scheduled flights to and from major domestic cities such as Beijing and Shanghai; enabling Zhuhai to have a comprehensive sea-borne, land, and air transport system.

Industry structure shifting into high value-added

Zhuhai has evolved an industry structure spearheaded by IT and electrical machinery manufacturing with increasing proportion of high-tech/new-tech firms. The ten leading industries in Zhuhai are electronics and telecommunication, electrical machinery, power generation and town gas, precision instrument, textile apparel, plastic and metal, pharmaceuticals, foodstuff and beverage, chemicals, and papermaking. In recent years, the Zhuhai Municipal Government has agreed to support the development of the five major industries of electronics and telecommunication, electrical machinery, petrochemicals, bioscience pharmaceuticals, and software.

The natural deepwater port in Zhuhai is a major asset for the city to develop petrochemical industry. The Guangdong government has plans to develop Zhuhai into a third major petrochemical manufacturing base after Guangzhou, and Huizhou. At this moment, Zhuhai has a total of nine petrochemical terminals, and more are being planned. Plentiful supplies of water and electricity and an abundance of land reserve resources can support development of logistics warehouse, and are advantages for the city to develop its chemical industry. In addition, domestic industrial development is sustaining a buoyant demand for such petrochemical raw materials as m-phthalic acid (PTA), which is greatly bolstering the development of this industry. The British BP Group and Eternal Group from Taiwan and others have invested and built factories in Zhuhai. The city is expected to develop into the main PTA and polymer-resin manufacturing base in China,

Zhuhai is also the third major pharmaceuticals manufacturing base in the PRD after Guangzhou and Shenzhen, with its output value of bioscience pharmaceuticals accounting for a rising proportion of total output value in Guangdong. In addition, Zhuhai has obtained the approval of Ministry of Science and Technology to become one of the national software production bases in 2004¹³. The output value of software products has been increasing in recent years by a compound rate of 50%; currently the city has approximately 500 software houses, with the software industry entering a rapid and stable development phase.

The tertiary industry of Zhuhai is also maintaining a healthy development trend. The leading industries of commercial trade, and tourism have sustained strong growth, the real estate industry has maintained a steady growth path, with credits to the success of the government's macro-economic control adjustment measures for this industry. Such modern service industries as finance and insurance, warehousing and freight forwarding, postal telecommunication, and logistics have been

¹³ Currently in China, there are the 11 national software production bases of Beijing, Shanghai, Dalian, Chengdu, Xi'an, Jinan, Hangzhou, Guangzhou, Changsha, Nanjing, and Zhuhai.

experiencing rapid and buoyant growth. Zhuhai will place emphasis on the development of the three industries of tourism, logistics, and conferencing in the future,

Leveraging the advantage of geographical location to seek out opportunities

Zhuhai not only has long shorelines, but also endowed with the natural asset of riverbanks and being in a transition zone of sea and fresh water. It is an aqua-cultural production base. Some of the city's research projects aiming at improving aqua-cultural production technology and efficiency also obtained support from the state's high-tech research development programme (the "863 Programme"). Therefore, the aqua-cultural industry, particularly farming production of fish and prawn fries, has quite significant scope for development. The Wanshan oceanic development and experiment zone of Zhuhai is the only oceanic economic development zone in the country. It is expected to continuously enhance the scale, product range and quality, and value-added of the aqua-cultural production industry through utilization of Zhuhai's natural assets in conjunction with new cultivation technology.

In order to build up a sufficient reserve of management and technical expertise to support industry development, Zhuhai has planned for a university park. Ten academic institutions are brought into the project, including the Sun Yat Sen University Zhuhai Campus, Tsinghua University Zhuhai Science and Technology Park, New Economic Resources Development Base of Harbin Institute of Technology, and Software College of Jilin University. The Hong Kong Baptist University also joined hands with the Beijing Normal University in establishing a Union College.

The Hong Kong-Zhuhai-Macao Bridge will alter the entire local environment of Zhuhai

The construction of the Hong Kong-Zhuhai-Macao Bridge is set to dramatically raise the profile of Zhuhai, making it the only city on the Mainland to be directly linked up with Hong Kong and Macao. This would also imply the present-day PRD transport routes terminating at Zhuhai will become the forefront for Guangdong-Hong Kong-Macao cooperation. More importantly, Western PRD is the "spring board" for the Greater PRD to connect with western Guangdong and Southwest China. Through the western Guangdong coastal highway, such western Guangdong regions as Yangjiang, Yunfu, Zhanjiang are easily accessible from Zhuhai. Now, these localities are coveting to become the foster grounds for crucial extension and economic reach of the industry clusters in the PRD, making themselves ready for receiving the migrating PRD industries. Furthermore, the economic reaches of the Greater PRD can even spread to Guangxi,

Hainan, Yunnan, Guizhou, Sichuan, and so on. In this way, with Zhuhai as the “springboard”, the hinterland of the Greater PRD will become vastly expansive; its market potential is also quite immense.

The government’s development plans

The Zhuhai municipal government is of the opinion that acceleration of integration of PRD cities, the initiatives of “Greater PRD” and “pan-PRD” regional economic cooperation, furthering the close collaboration between Guangdong and Hong Kong and Macao, and the full implementation CEPA, have all borne out the important regional status of Zhuhai. The initiation and implementation of the series of such key transport infrastructure projects as harbour and port, railway, and express highways will strengthen Zhuhai’s capacity for hosting industries and creating economic impact. Therefore, Zhuhai needs to strengthen Zhuhai-Hong Kong-Macao cooperation. In the industry development front, Zhuhai should seize the opportunity created by major development of the build-up of heavy and equipment industries in Guangdong, bringing into play its assets of an excellent deepwater harbour, ample energy supply, and a vast interior hinterland and so on, to actively develop such harbour front heavy industries as heavy engineering, equipment repairs and fabrication, and energy industry. At the same time, full utilization should be made of the existing infrastructure by continuing to accelerate the development of such mainstay industries as electronics and telecommunication equipment manufacturing, electrical equipment fabrication, computer software, pharmaceuticals and medical equipment and so forth, bringing about parallel growth of light and heavy industries, turning Zhuhai into a distinguished manufacturing base.

4.4.2 Zhongshan: A new star in the PRD

The city of Zhongshan is situated in the area north of Zhuhai and south of Guangzhou. Zhongshan industry has been undergoing rapid growth in recent years, and is one of the fast-developing manufacturing bases of PRD. Zhongshan’s high output values industries include electronics and telecommunication equipment, electrical machinery, textiles, metal products, and plastic ware. Apart from businesses serving the domestic markets, Zhongshan also has a large number of export re-processing companies.

Under the municipal administration of Zhongshan are a number of specialised town, each engaging in developing a different pillar industry; and enjoying recognition in their respective fields. Guzhen has since grown into the largest manufacturing base for light fitting and fixture in the country. The total output value of the city’s lighting fixture products represents roughly some 50% of the market in this country, hence the nickname title “Lighting fixture capital of China” for Zhongshan. The

township of Xiaolan is known for producing locks, metal hardware, and related products. Approximately a quarter of locks in this country's market are produced in Xiaolan, and is known as the "Southern lock city". The township of Dayong, on the other hand, is well known for producing redwood furniture and jean garments.

Zhongshan is also an important manufacturing base for home electrical appliance, particularly in manufacturing air conditioner and colour television. Many well-known labels such as TCL and Changhong of China, Shunyi Air Conditioner, the largest air conditioner and sub-assemblies maker from Taiwan, and the Taiwan based computer giant Acer, as well as Toshiba of Japan, all have established production and processing bases in Zhongshan.

Active support by foreign investors

Whilst domestic companies dominate the industry in Zhongshan, the Zhongshan municipal government is always keen to attract foreign investors to take part in developing the local economy, and foreign investors have made highly valuable contribution to economy of the city.

Hong Kong investors have always been the single largest group of foreign investors in Zhongshan, whose investment account for over 50% of total investment inflow into the city. Taiwanese and Japanese investors are also important to Zhongshan. Recently, they have further stepped up their investment and expansion in the development of Zhongshan.

To summarize, the city of Zhongshan has vast land reserves available for sustained development, and that as the transport communication links connecting it to other PRD cities and Hong Kong continue to improve, there is still very significant room for development for the local industry.

4.4.3 Jiangmen : The central city on the west bank of the Pearl River

The city of Jiangmen faces the South China Sea and is adjacent to Hong Kong and Macao, only 95 nautical miles from Hong Kong by ferry, and it is one of the central cities on the west bank of the Pearl River. There are six airports in the areas surrounding Jiangmen, the city has 22 category-1 border crossing or customs ports, and six fully operational direct passenger ferry services connecting the city to Hong Kong and Macao. The city covers a land area of some 9451 square kilometres, total population in the year 2005 was 4.1 million, with more than 3 million local residents having some overseas relations scattering across more than 100 countries and

regions around the world, and it is a much-famed “overseas Chinese hometown”.

Jiangmen is an APEC designated pilot project city for the Regional Sustainable Development Action Programme, national pilot project city for information highway, an outstanding tourism city of China, and a national garden landscape city.

Rapid economic growth

Jiangmen has made it into the top 50 cities in the country with the highest general ratings. Jiangmen’s commerce is predominantly domestic trade, but it is also one of the most important customs ports and re-processing and manufacturing bases for the export trade in Guangdong province.

In an effort to refine its investment environment, Jiangmen has established the offices of General Government Administrative Affairs Bureau, Merchant Affairs Bureau, Foreign Investment Bureau, creating a “one-stop-shop” service body which incorporated such functions as investment consulting, investor relations, joint approval, general service support, etc, with which all business relating to official formalities for investment can be completed in one single building. Moreover, the municipal government has been the first in Guangdong province to introduce the “People’s government of the city of Jiangmen online administrative procedure approval system”, offering a quick and convenient “one-stop” or “one-website” service. Furthermore, the city has established a total of 73 high tech/new tech development zones and industry zones of various descriptions, which are complete with sound infrastructure facilities; and has been devoting major efforts to implement a “lower entry barrier” policy.

Industry development and comparative strengths

Total industry output of Jiangmen has been growing at double-digit rate in the past few years. The volume scales of such industrial products such as motorbike, household appliance, computer printer, and textile, and synthetic fibres, papermaking, foodstuff, shipping container, stainless steel utensil, etc., are occupying top ranking positions nationally or province-wide. The output of household washing machines from Jiangmen accounts for approximately 45% of total production in Guangdong. Jiangmen is the largest manufacturing base for motorbikes amongst cities at the district administration level, its output accounts for approximately 40% of output from the whole of Guangdong. In addition, the output of textile and synthetic fibres accounts for approximately 45% of output from the whole of Guangdong, and is the largest manufacturing base of textile and synthetic fibres in Guangdong province.

Apart from a sizeable industrial output volume, Jiangmen also plays host to numerous well-known brands. The country's largest household napkin manufacturing base, operated by Vinda (Guangdong) Co., LTD, is located in Jiangmen, this company is the first in its category to win the award of "China Well-Known Mark" for its largest domestic marque of "Vinda". In addition, the "Jinling" brand of washing machines produced by the Jinling Group and the "Haojue" brand of HJ125 series of motorbikes made by the Grand River Group, both in Jiangmen, were granted the honoured award of "China Top Brand Product", representing 2 of the total of 57 such brands in China,

4.4.4 Foshan: Will grow into the third largest metropolis in Guangdong

Foshan is situated in the central south region of Guangdong province and the total municipal area of Foshan is about 3848.48 square kilometres. Industrial and commercial centres as Guangzhou, Zhongshan, Jiangmen, Zhuhai, Zhaoqing, Dongguan, Qingyuan, etc., are all no more than 50 kilometres away from Foshan, and even Hong Kong and Macao are only about 100 kilometres or so to the south. Foshan has two county level equivalent districts under its administration (the municipal district of Foshan, and Shiwan district), and four county level equivalent township cities under its provisional administration (the cities of Nanhai, Shunde, Sanshui and Gaoming).

The city of Foshan has transport links radiating out in all directions. The city has already developed a road network with the Guangzhou-Zhuhai, Guangzhou-Zhanjiang, Guangzhou-Zhaoqing highways as its backbone, and has built the Guangzhou-Foshan, and the Foshan-Kaiping express highways. In addition, Foshan airport has started regular services to more than 20 medium to large domestic cities like Beijing, Hangzhou, and Nanjing. For waterway transport, Foshan has 17 entry/exit ports linking it to the outside world; and its highly developed water transport is rounding off an excellent environment for economic development.

Foshan is a pilot-project city for building the Guangdong information highway. Its information infrastructure is at the forefront in this country, with three major backbone infrastructure networks, namely, telephony communication, data communication WAN, and cable television covering the whole of the municipal district and the surrounding countryside. In addition, one of the four major software development parks is also located in the city of Foshan.

Scale of Economic development second only to Guangzhou and Shenzhen

Since the country's reform and opening programme, Foshan's economy has been growing rapidly, its GDP ranks third in Guangdong, second only to Guangzhou and Shenzhen. The Guangdong Government is in the process of putting together plans to build Foshan into the third largest metropolis in Guangdong.

Meanwhile, the scale of Foshan's external trade is also continuing to expand, its total export earnings are continuing to grow, of which, the export value of engineering and electronics products account for 60% of total export earnings. Foshan is also an important base for processing manufacturing and trade.

The commerce and trade of Foshan is well developed; there are over 300 specialist and wholesales markets of all descriptions. Motor vehicle, pottery ceramics, textile fabrics, and stainless steel markets in the inner cities and the farm produce, light textiles, lingerie, ferrous metals, and motorcycles markets of Nanhai, as well as the household furniture market in Shunde have large capacities in turning over enormous volumes of merchandise.

Industry development and comparative strengths

Foshan's economic development is mainly driven by its industrial companies. It is the third largest manufacturing base in the PRD. The industry in the city has evolved a backbone structure of textile, electronics, pottery ceramics, plastic, electrical goods, construction materials, foodstuff and beverage, and mechanical engineering. The main industry structure in each township district varies somewhat, the details of which as follow:

Foshan municipal districts: electronics, pottery ceramics, and textile.

Nanhai city: ferrous metal processing, ceramics construction material, textile garment and decoration material .

Sanshui city: beverage, construction material, electronics, apparel, and household electrical appliance.

Gaoming city: Shoes, stationery, construction material, and timepiece.

Shunde city: House electrical appliance, house furniture, and flower and pot plant.

Amongst the numerous industrial products of Foshan, the best known are the household electrical appliances produced by its suburban city of Shunde. Shunde is the largest manufacturing base for household electrical appliance in the country, its household electrical appliance output value accounts for over half of total industrial output value of the whole of Foshan, or approximately 15% of the total output value of household electrical appliance for the whole country.

Shunde not only produces a large volume of household electrical appliances, it also plays host to the biggest number of well-known brand names of such products in the country. Amongst the 16 “China Well-Known Mark” labels designated by the State Administration of Industry and Commerce, Shunde has five, these are Rongsheng (refrigerator), Midea (electrical fan, air conditioner), Wanjiale (gas appliance), Kelon (air conditioner), and Galanz (microwave oven). In addition, taking note of the domestic and international marketing model and development trend for automobile, the Chancheng district of Foshan has decided to expand its automobile sales city, turning it into the largest automobile sales city in the PRD.

4.4.5 Zhaoqing : China’s famous scenic tourism city

The city of Zhaoqing is situated in the central west of Guangdong. The city currently has 8 counties and/or municipal districts under its administration, namely, Ruizhou, Dinghu, Gaoyao, Sihui, Guangning, Deqing, Fengkai, and Huaiji, plus the Dawang general economic development zone. Zhaoqing municipal centre is 100 km from Guangzhou, over 200 km from Shenzhen, and the waterway distance to Hong Kong is 142 nautical miles. It is an important transport hub linking the highly developed coastal areas to the provinces in Southwest China. Several sections of the Guangzhou-Zhaoqing express highway are already operational; journey time to Guangzhou is now only 70 minutes.

Zhaoqing is one of the first group of cities awarded the coveted title of Outstanding China Tourism City. It has an endowment of abundant natural resources, plus the lowest average wage in PRD cities, its developable land reserve is relatively plentiful and transport network connecting to other PRD cities and Hong Kong is improving and becoming more convenient. In sum, Zhaoqing has much development potentials.

A steady pace of economic development

Zhaoqing has rich endowment of natural resources, both land and labour costs are the lowest in the PRD region. Coupled with highly attractive official policy terms and custom-tailored services provided by the local government, the city is very alluring to foreign investors. Apart from being situated in a strategic location for reaching out to western Guangdong, it is also a key transport corridor linking to Guangxi, Yunnan, Guizhou, and the Greater Southwest. Therefore, the city is also a favourable investment location for companies which are keen to enter into the Southwest markets or even exporting to Southeast Asia.

Hong Kong has always been the biggest investor in Zhaoqing. Many Hong Kong investors are developing industrial projects, high value-added farming, dairy husbandry, hospitality businesses, and other ventures in Zhaoqing. Furthermore, Hong Kong investors are also quite active in infrastructure construction and real estate development in Zhaoqing, one example is the billion-plus investment made by the New World Group in the 500 km class-1 city ring road in Zhaoqing.

While carrying out a general upgrade of the city's IT infrastructure and the traditional industry, Zhaoqing is sparing no efforts to attract foreign investment into its high-tech industry. The Dawang high-tech/new-tech development zone of Zhaoqing, newly established last year, represents an important initiative in kick starting local industry development. Land prices as low as RMB42 per square metre in the high-tech/new-tech development zone is preciously hard to come by in the PRD.

Industry development and comparative strengths

Zhaoqing is an up and coming industrial city. Although its existing scale of industrial production and foreign investment had a late start compared to such cities as Shenzhen and Dongguan, Zhaoqing has to a large extent managed to develop such pillar industries as foodstuff and beverage, construction material, electronics, microbiological engineering, chemical engineering, mechanical engineering, precision instrument, textile, household light industrial product, food supplements processing, pharmaceutical, household furniture, and so on.

In addition, Zhaoqing also established several industry parks with annual output value of between RMB5 billion to RMB10 billion, making the city the economic development focus in the local area. Zhaoqing is hosting a group of key enterprises such as Fenghua Group, Star Lake Group, Blue Ribbon Group, etc, and a extensive portfolio of recognized brand labels like Blue Ribbon Beer, Star Lake brand maltol, Piaohua brand bottled

distilled water, Kanlan brand medium density fibre board, and Huagong brand sweet mandarin and so on.

5. Hong Kong's Link with Western PRD

5.1 Hong Kong's economic interaction with the PRD is heavily concentrated on the eastern and central regions

Hong Kong's economic collaboration with the Mainland goes back to the formative days of the country's reform and opening programme and rapidly expanded in the 1980s and 1990s. After Hong Kong's reunification in 1997, the *mélange* of the two economic entities became even more intimate; and became each other's biggest source of foreign investment and one of the most important trading partners. In the advent of CEPA implementation started in 2004, economic integration between the two places have evolved from being a private sector invitation to becoming a government-to-government, institutionalized collaboration, ushering in an all-new era of cooperation with much greater scope, and to much in-depth levels.

As the most direct hinterland of Hong Kong, Guangdong (particularly the PRD) is undoubtedly a region with the closest links to Hong Kong. Towards the end of the 1970s, Hong Kong started to migrate its export-oriented processing manufacturing en masse to the PRD, making use of its cheap production factor resources and labour, with Hong Kong providing finance, technology, management, as well as assuming the responsibility for distribution and export sales of the end products. This "front shop, back factory" model of manufacturing had greatly stimulated the industrialisation and urbanization process in the PRD region, allowing the PRD to become one of the fastest growing and one of the most affluent regions in the country. At the same time, Hong Kong's economy also transferred from an export manufacturing base to one with a predominantly service orientation.

After the reunification, the process of economic integration between Hong Kong and the Mainland picked up pace, and the scope of collaboration also broadened. Following the footsteps of the manufacturing industry, certain service industries such as retail, leisure entertainment, and backroom administrative support for banking institutions, as well as some trade related service outfits and others also started a fresh round of cross-boundary migration. Moreover, CEPA further provided an institutional platform for integration between the two places. Today, the economic integration of "Greater PRD" region has become a common purpose of Guangdong, Hong Kong, and Macao.

Nevertheless, the spatial distribution of Hong Kong's interaction with the PRD is lopsided; with the majority of the interactions in investment, trade, logistics, and personnel exchange highly concentrated in the central and eastern regions of the PRD. Like the other regions of the PRD, Hong Kong is also the biggest offshore investor in Western PRD, with over 70% of the

international trade of the Western PRD transacted through Hong Kong. However, much remains to be done in further broadening the scope of economic, social dealings between the two places.

5.2 Hong Kong investment in Western PRD

When compiling statistics on external investment, the Guangdong government normally lump Hong Kong, Macao and Taiwan into a single category. For this reason, specific data on Hong Kong investment in Western PRD is difficult to come by. Nevertheless, reviewing the combined figures for Hong Kong, Macao and Taiwan investment in Western PRD cities can, to a certain extent shed some light on the scale of Hong Kong investment in, and its contribution to the industry output from these locations.

Looking at the number of firms, in 2004, 46.8% of Hong Kong, Macao and Taiwan companies investing in PRD are located in the 3 cities of the eastern region, 31.0% are in the 3 cities in the central region, and merely 22.2% are in the 3 western region cities of Zhuhai, Zhongshan, and Jiangmen (refer to Chart 5).

Looking at the figures for total output value from companies established by Hong Kong, Macao and Taiwan investment in PRD, 55.3% is attributable to companies located in the 3 eastern cities, 29.1% is attributable to companies located in the 3 central cities, and only 15.6% is attributable to companies located in the 3 western cities (refer to Chart 6).

Chart 5: Large-scale industrial enterprises* funded by Hong Kong, Macao and Taiwan investment in PRD (2004)

		No. of industrial enterprises							
		Total no. of firms		Domestic firms		Hong Kong, Macao and Taiwan firms		Other foreign investment firms	
		No. of firms	As a % of total	No. of firms	As a % of all domestic firms	No. of firms	As a % of all HK, Macao and Taiwan firms	No. of firms	As a % of all FDI firms
Central	Guangzhou	3657	21.0%	2079	23.6%	1120	16.5%	458	26.2%
	Foshan	4078	23.5%	2991	33.9%	929	13.7%	158	9.0%
	Zhaoqing	177	1.0%	92	1.0%	58	0.9%	27	1.5%
	Total	7912	45.5%	5162	58.6%	2107	31.0%	643	36.7%

Eastern	Shenzhen	2355	13.5%	505	5.7%	1495	22.0%	355	20.3%
	Dongguan	2049	11.8%	415	4.7%	1346	19.8%	288	16.4%
	Huizhou	593	3.4%	131	1.5%	332**	4.9%	92**	5.3%
	Total	4997	28.7%	1051	11.9%	3173	46.8%	735	42.0%
Western	Zhuhai	847	4.9%	254	2.9%	453	6.7%	140	8.0%
	Zhongshan	2542	14.6%	1585	18.0%	787	11.6%	170	9.7%
	Jiangmen	1092	6.3%	763	8.7%	266	3.9%	63	3.6%
	Total	4481	25.8%	2602	29.5%	1506	22.2%	373	21.3%
PRD Overall		17390	100.0%	8815	100.0%	6786	100.0%	1751	100.0%

*: Large-scale industry is defined as all state enterprises and private companies with annual sale revenues of RMB 5 million and more.

** : 2003 data.

Source of data: Guangdong statistics year book 2004, and 2005.

Chart 6: Total output value from large-scale enterprises funded by Hong Kong, Macao and Taiwan investment in PRD (2004)

		Total value of industrial (historical prices, RMB '00m)							
		All firms		Domestic firms		HK, Macao & Taiwan firms		Other FDI firms	
		Total output	As % of all firms	Total output	As % of all domestic firms	Total output	As % of all HK, Macao and Taiwan firms	Total output	As % of all FDI firms
central	Guangzhou	4433.57	20.5%	1432.92	22.2%	1172.29	15.1%	1828.36	25.0%
	Foshan	3331.31	15.4%	1959.44	30.4%	1065.86	13.8%	306.01	4.2%
	Zhaoqing	146.02	0.7%	59.35	0.9%	18.69	0.2%	38.19	0.5%
	Total	7910.9	36.6%	3451.71	53.5%	2256.84	29.1%	2172.56	29.7%
Eastern	Shenzhen	6509.27	30.1%	1358.03	21.0%	2472.08	31.9%	2679.16	36.6%
	Dongguan	2583.22	11.9%	373.45	5.8%	1325.58	17.1%	884.19	12.1%
	Huizhou	970.33	4.5%	44.21	0.7%	481.67**	6.2%	365.04**	5.0%
	Total	10062.82	46.5%	1775.69	27.5%	4279.33	55.3%	3928.39	53.7%

Western	Zhuhai	1262.67	5.8%	270.86	4.2%	332.92	4.3%	658.88	9.0%
	Zhongshan	1694.71	7.8%	614.53	9.5%	726.87	9.4%	353.31	4.8%
	Jiangmen	692.00	3.2%	342.52	5.3%	148.46	1.9%	201.02	2.7%
	Total	3649.38	16.9%	1227.91	19.0%	1208.25	15.6%	1213.21	16.6%
PRD overall		21623.1	100.0%	6455.31	100.0%	7744.42	100.0%	7314.16	100.0%

** : Using 2003 data.

Source of data: Guangdong statistics year book 2004, and 2005.

5.3 Hong Kong's role in the export of Western PRD cities

Chart 7 shows the share of the of Guangdong's export by Hong Kong FDI firms. It is note that the export value contributed by Hong Kong FDI companies as a proportion of total export value of all companies rose from 18.8% in 2000 to 25.0% in 2004. When expressed as a proportion of export value of all FDI companies, it rose from 34.9 % in 2000 to 39.3% in 2004. At the moment, there are no specific figures showing the proportion of export produced by Hong Kong FDI companies in each PRD city, however, the aggregate data for Guangdong province may give a general hint of the state of play in some of these PRD cities.

In addition to contributing to the export of Western PRD cities by direct investment in the manufacturing industry, Hong Kong also assumes the role of intermediary agent in the import and export of these cities by providing logistics, port and trade services, thus taking part in the trading activities of these cities. Hong Kong has always been the main channel for import and export merchandise for South China. Back in the 1990's when China did not operate international shipping services, 95% of China's containers must pass through Hong Kong. Many of the ports in PRD, particularly Western PRD ports, have developed into transshipment ports moving goods to Hong Kong (YEUNG Yue-Man et al, 2003). It can be seen that Hong Kong is playing a pivotal role in the export of Western PRD cities. However, as more and more Mainland ports are built and as international direct shipping services are made available, the reliance of the Mainland's import/export shipments on the port of Hong Kong is starting to decline¹⁴.

¹⁴ Due to geographical factors, goods exported from the 3 cities of Western PRD still rely to a great extent the harbour and port facilities in Western PRD and the port of Hong Kong. This reflects harbour development in Hong Kong and the PRD is in need of the establishment of an appropriate coordination and collaboration mechanism, working in concert to win external shipping traffic flows, avoiding self-defeating vicious competitions.

Chart 7: Import-export indicator for Guangdong firms (US\$'00m)

	2000		2002		2003		2004	
	Export	Import	Export	Import	Export	Import	Export	Import
All firms	919.19	781.87	1184.58	1026.34	1528.48	1306.74	1915.69	1655.60
All FDI firms	495.09	425.27	696.21	589.79	953.73	793.03	1217.21	1048.09
HK FDI firms	172.95	27.00	272.14	26.83	364.85	27.80	478.09	28.77
HK FDI firms as % of all firms	18.8%	3.5%	23.0%	2.6%	23.9%	2.1%	25.0%	1.7%
HK FDI firms as % of all FDI firms	34.9%	6.3%	39.1%	4.5%	38.3%	3.5%	39.3%	2.7%

Source of data: Guangdong statistics year book 2004, and 2005.

5.4 Transport links between Hong Kong and Western PRD

Land transport is of utmost importance in everyday industry collaboration and economic interactions. The lack of direct transport links between Hong Kong and the Western PRD has been a longstanding problem, making it necessary to travel around the eastern region. Hence, the western cities are at an obvious disadvantage when compared to eastern cities.

As land transport link between Hong Kong and Western PRD need to go via the eastern sector, transport links between the eastern and western region has a direct impact on the transport link between Hong Kong and the western region. The completion and full operation in 1987 of the vehicle ferry service built with investment outlaid by the Hon Henry FOK Ying-Tung, GBM, has alleviated to some extent the transportation bottleneck between the eastern and western regions of the PRD. Since then, travelling from the eastern region to Zhuhai, Zhongshan, and so forth in the western region no longer have to go via Guangzhou, significantly shortening the journey time. After the Humen Bridge became operational in 1997, transport link between the east and the west was further strengthened. However, daily traffic volume in the Humen Bridge has now reached saturation level; its further scope in meeting the demand of increasing traffic in the region is thus limited. Moreover, transport from Hong Kong to southerly sectors of the western region of Zhuhai, Jiangmen, and even such western Guangdong locations as Maoming, Zhanjiang, and so on must go via Shenzhen, passing through the Humen Bridge, adding over an hour of extra journey time, significantly increasing transport costs, seriously dampening the enthusiasm of businessmen to invest in the western region. According to data released by the Guangdong provincial transport department, historically, approximately 70% of highway transport traffic between Hong Kong and PRD terminate at

eastern and central PRD, and only 30% go through to cities in western regions. After the Guangzhou-Shenzhen express highway became operational, this trend has not changed.

For waterway transport, goods shipped through waterway from the main ports in the PRD to Hong Kong would require a minimum of 24 hours (including time taken for container loading and unloading). Moreover, the freighters coming down the Pearl River to Hong Kong would have to rely on transfers at inland-water wharf in Hong Kong, adding on extra wharfage and stevedoring charges at the inland-water wharf as well as the costs of road transfers by container trucks from inland-water quayside to container terminal. In addition, the Da Chan waterway customs inspection zone for marine transport does not operate in an on-demand basis, but rather, it inspects of the coastal shipping by batches at intervals of time, putting further restraints on the operation and turnaround time of the water freight.

Contrasting this with the movement of passenger traffic (refer to Chart 8), journey times from Hong Kong to Western PRD destinations vary from one hour to one hour thirty minutes, the shortest journey time is in the route to Zhongshan and Zhuhai. Yet, waterway transport has many constraints, it is by far not as flexible and convenient as road transport, therefore 80% of Hong Kong passengers travelling to PRD for business, shopping, leisure, and the like are crowding into such eastern and central PRD areas as Guangzhou, Shenzhen, and Dongguan (refer to Chart 9).

Chart 8: Journey time from Hong Kong to various PRD metropolitan cities

Destination cities		Transport method	Journey time
Central	Guangzhou	Train	1 hour 35 minutes
	Foshan	Train	2 hours 35 minutes
	Zhaoqing	Ferry	4 hours 15 minutes
Eastern	Shenzhen	Train	45 minutes
	Dongguan	Train	1 hour 10 minutes
	Huizhou	Road	3 hours 30 minutes
Western	Zhuhai	Ferry	1 hour 10 minutes
	Zhongshan	Ferry	1 hour 30 minutes
	Jiangmen	Ferry	2 hours 30 minutes
Macao		Ferry	1 hour

Source: “Hong Kong and the Western PRD Cooperative. Development from a Cross-boundary Perspective” by Yeung Yue-man, Shen Jianfa, Zhang Li (Hong Kong Institute of Asia-Pacific Studies, The Chinese University of Hong Kong, 2004).

Chart 9: Breakdown of activities conducted by Hong Kong travellers in PRD

Activity	Shenzhen	Dongguan	Guangzhou	Other areas
Business	38%	23%	14%	25%
Shopping/ leisure	91%	4%	2%	3%
Visiting	59%	14%	8%	19%

Source: Case study report 2: “Economic analysis of land and water crossing transportation between Hong Kong, Zhuhai, and Macao” in “Study of transportation links between Hong Kong and the western banks of Pearl River” by the General Transportation Research Institute of State Development and Reform Commission. July, 2003

In summary, waterway transport linkage between Hong Kong and the Western PRD is weak and is constraining the social and economic interactions between the two places. This not only affected the build-up of general economic strength in the western regions, but also directly impact upon the improvement of the quality of economic integration and business operation in the whole of Greater PRD region.

5.5 Likely impacts of the Hong Kong-Zhuhai-Macao Bridge

The government of Hong Kong and Guangdong province announced after the 9th plenary of the Hong Kong/Guangdong Co-operation Joint Conference the various parties involved have consented to employ the “separate locations of boundary crossing facilities” model for the Hong Kong-Zhuhai-Macao Bridge. It was also agreed that construction would commence approved by the central government.

The completion of the bridge will improve the situation whereby Hong Kong is relying solely on waterway transport to link up with the two major destinations of Macao and Zhuhai. The bridge will also shorten the road travel distance from Hong Kong to these two localities to 30 km, bringing down journey by car to less than 30 minutes. Reducing the time and spatial divide will bring the Western PRD within the reachable radius of the 3-hour journey centring on Hong Kong.

The change in transport infrastructure will have positive impact on the social and economic development of Western PRD cities, as it can strengthen the transport links between Western PRD, western Guangdong, Guangxi, Hainan, and the Southwest region and Hong Kong, allowing these regions to

benefit from the economic reach and influence of Hong Kong, thus more rigorously promoting regional development and socio-economic growth. In addition, the bridge will join-up the three core centres of Hong Kong-Shenzhen, Zhuhai-Macao, and Guangzhou-Foshan in the PRD, facilitating interaction initiatives between these three core centres, bringing about balanced development in the PRD. At the same time, the building of the bridge would expand the economic hinterland of Hong Kong, and beneficial to the tourism, logistics, finance and trade industries of Hong Kong, would strengthen Hong Kong's status as a international air transport, and aviation centre. It will provide a significant impetus to economic resurgence in Hong Kong.

6. The effects of Western PRD development on Hong Kong

6.1 Effects on Hong Kong's investment in Guangdong

The PRD has been undergoing rapid development in the past decades and is now at the crossroad of quantitative and qualitative change. Against this backdrop and the Guangdong government's current initiative to implement its spatial strategy and industry strategy, they have created enormous impacts on Hong Kong's investment in Guangdong. This is shown in three respects, namely, investment model, target industry, and spatial distribution of investment portfolio.

6.1.1 Investment model: "front shop, back factory" model put under strains in new development environment

Hong Kong investment in Guangdong is highly concentrated in manufacturing industries, especially of the labour-intensive, export re-processing category. According to statistics, the PRD in the past 25 year has been hosting 80% of the manufacturing industry migrated from Hong Kong.

The manufacturing industry investment from Hong Kong is principally based on the "front shop, back factory" model, i.e., with the PRD providing land, manpower, assuming responsibilities for product assembly, and Hong Kong supplying the capital, machinery equipment, technical know-how, management, and taking up such high value-added facets as product distribution and export. This kind of collaborative ventures is in effect a typical model for supply-chain arrangement that puts each element of the supply chain in places that derive the greatest benefits. Hong Kong's strength in high value-added areas enables Hong Kong to successfully transform itself into a service-oriented economy by utilizing this type of supply-chain arrangement, bringing about Hong Kong's development in leaps and bounds since the 80's.

As a result of changes in the domestic and international environments, a rapid rise in the economic affluence of the PRD, and the evolution of the interaction model in the two territories, the integration of Hong Kong and the PRD has by all practical intent and purpose moved beyond the "front shop, back factory" model. In the year 2002, Guangdong's GDP reached RMB1350.2 billion, approaching that of Hong Kong's; in 2003, the GDP of Guangdong started to overtake Hong Kong, then in 2005, Guangdong's GDP broke through RMB2000 billion. Along with the rapid rise of the townships in PRD, the GDP of the PRD is accounting for close to 80% of the GDP for Guangdong. More importantly, the rise of economic affluence implies a rise in the status in the regional value-chain. During the past 25

year, when it fulfilled the “workshop” function, PRD’s role as a “shop” was also on the increase. Its industry structure also moved up the value-chain, and began to venture into the traditional competitive industries of Hong Kong such as logistics, financial service, intermediary service, etc, in head-on competition with Hong Kong.

Against this backdrop, change is taking place in the structure of the industry-chain within the Greater PRD: the PRD is not longer merely a low-value workshop behind Hong Kong. Instead, it is constantly moving up to higher value-added industries, some of which were previously undertaken by Hong Kong, and can now be independently carried out in the PRD. PRD’s direct export is on the increase and in some areas along the value-chain, it even managed to “squeeze out” Hong Kong. It transpires that the old “front shop, back workshop” model of collaboration between Hong Kong and PRD is straining to cope in the new development environment.

Faced with such a change, the two places urgently need a new collaboration model. For its part, Hong Kong must re-position itself, identify the competitive advantages and areas with potential in the value-chain, bolster its existing natural comparative advantage in such areas as logistics, financial service, intermediary service, professional service etc, create new areas of comparative advantage to realise its original role of “front shop” so as to keep up with PRD development. Otherwise, Hong Kong will be unable to win a place for itself when a new value-chain is forged in the Greater PRD.

6.1.2 Target industries for investment: The importance of light manufacturing gradually on the decline

Hong Kong investment in PRD is mainly concentrated in light manufacturing, and past rapid development of Guangdong province also benefited from the light manufacturing industry. However, as more and more regions are competing in the light manufacturing industry, the supply is larger than the demand, thus putting increasing squeeze on product profitability. In addition, most light manufacturing are land, labour, and resource intensive, hence becoming less in line with the development trend in the PRD.

Under such circumstances, Guangdong introduced the strategy for industry restructuring¹⁵:

- Leveraging the coastal heavy industry, rigorously promote the automobile, petrochemical, iron and steel, shipbuilding, and equipment assembly industries. In recent years, Guangdong has been steadily shifting away from the emphasis on the light industry, resulting in increasing emphasis on the role of the heavy industry¹⁶.
- Rigorously promote the high-tech/new-tech industry. Since the 1990's, the high-tech/new-tech industry has gradually become one of the pillar industries for Guangdong's economic development¹⁷. The PRD, has also gradually evolved into an industry cluster region spearheaded by high-tech/new-tech industries such as electronics, telecommunication, and computer and calculator manufacturing.
- Rigorously promote service industries particularly modern service industries. The main development direction is: bolstering the 5 industries of transport, tourism, real estate, finance, wholesales and retail that enjoy nation-wide comparative advantages; encouraging the development of the 3 production service industries of business service, logistics, and conference and exhibition; enabling the rapid growth of the 3 major rising service industries of information service, technical service and cultural enterprise; consolidating the two home economics industries of domestic service, catering and hospitality. The Guangdong government hopes to raise the share of the service industry in total GDP to 45% by 2010, and envisages for the first time to expand export of service, building Guangdong into a major service-

¹⁵ Summarized from "Recommendations Regarding Accelerating the Development and Reform of the Service Industry in Guangdong Province" released in 4 April 2005. "Nine Key Sectors Industry Development Plan for Guangdong Province (2006 - 2010)" released in Feb 2005. "Synopsis Extract Of The 11th 5-Year Plan for Domestic Economic Development in Guangdong Province", and the "PRD Coordinated Development Plan" promulgated in Feb 2006.

¹⁶ In 2002, Guangdong heavy industry's growth rate and total value added exceeded the light industry for the first time. The province as a whole had total value added to the tune of some ¥5233.21 billion, up 13.3% from a year ago; of which, value added accrued by the light industry was ¥187.80 billion, up 13.2% from a year ago; value added accrued by the heavy industry was ¥234.66 billion, up 16.9% from a year ago; the ratio of value added between light and heavy industry was 45.4 to 55.5. The same ratio in 2003 was 47.7 to 52.3, and 2004 was 44.0 to 56.0.

¹⁷ In 2003, Guangdong's output from the high-tech/new-tech industry was ¥644.11 billion, up 37.1% a year ago, accounting for 23.5% of total industrial output. High-tech/new-tech industry export retained a national first ranking, earning US\$48.17 billion, up 55.6% a year ago. The high-tech/new-tech industry's total value added as a proportion of GDP rose dramatically from 3.8% in 1995 to 11.5% in 2003. Guangdong has 26 electronics and IT companies made it into the fortune-100 list in this country, of those fortune-100 companies earning sales revenues of ¥10 billion or more, 16 are Guangdong domiciled.

exporting province and facilitating direct outward investment by the service industry.

It is clear the importance of the light manufacturing industry in Guangdong' industry structure will diminish in the future. Hong Kong must broaden its investment in Guangdong, changing from the traditional approach of concentrating on the manufacturing industry, taking full advantage of CEPA to expand investment within industry sectors where Hong Kong has comparative advantage (such as financial service, production service, logistics service, information service, etc.), actively coordinating with and taking full advantage of Guangdong's industrial restructuring, accurately positioning itself in the industry chain of the Greater PRD. Those Hong Kong-backed light manufacturing companies already established in the PRD would face the decisions of spatial relocation and product upgrade and renewal.

6.1.3 Spatial distribution of investment: The eastern region faces transformation

To this date, Hong Kong investments in Guangdong have been clustered around PRD, particularly in the eastern region, and these are in turn heavily concentrated in the light processing manufacturing sector. However, the eastern region has encountered rising production costs, environmental degradation, and land and energy resources shortages, etc. In addition, the industry structure of Guangdong is undergoing profound changes, and such changes are uneven in their spatial distribution as different industries have different spatial clustering. Confronted by these two factors, Hong Kong's investment in Guangdong must be re-position itself spatially.

In the beginning of 2005, as part of the target objective of building Guangdong into a world class key manufacturing base, the Guangdong government introduced a blueprint for province-wide spatial layout for local industry:

- Capital intensive, fast growth, high return as well as high risk industries such as electronics and IT, automobile, mechanical engineering, pharmaceutical, etc will be mainly distributed around the PRD region;
- Petrochemicals, and papermaking production bases would require the support of ports, hence mainly distributed along the coast;

- Such traditional industries as household electrical appliance, textile, foodstuff, construction materials, etc., would need to gradually migrate into the eastern and westward sectors and into mountainous region¹⁸.

No doubt, the old spatial distribution of Hong Kong's investment in the PRD, i.e., by concentrating the light industry into the eastern region, is no longer appropriate in the new scheme of spatial planning for Guangdong industry. Hong Kong's new investment projects in Guangdong in the future must be based on Guangdong's new industry spatial blueprint; and for existing investment, upgrade and spatial relocation has become a matter of necessity.

In a process of catching up, and with much latent development potentials, the Western PRD will shortly have to face a new round of industry reshuffle. This has strategic significance for Hong Kong to further reach out to the hinterland areas of western Guangdong, the Greater Southwest or even to ASEAN countries, and the Western PRD should become a new focus for Hong Kong investment in the PRD. Hong Kong should take proactive actions by paying attention to specific industry positioning and the relevant spatial cluster areas (processing clustering areas, harbour front infrastructure industry clustering areas, high-tech/new-tech industry clustering areas, and international logistics and distribution bases) in Western PRD.

6.2 Effects on cross-boundary flow of people and goods

The factors affecting cross-boundary personnel and goods flow between Western PRD and Hong Kong mainly included:

¹⁸ The eastern and western regions of Guangdong include the 4 cities of district level equivalent administration of Shantou, Shanwei, Jieyang, and Chaozhou of eastern Guangdong and the 3 cities of district level equivalent administration of Yangjiang, Zhanjiang, and Maoming of western Guangdong. Mountainous region is defined as the northwest region; including the 5 cities of district level equivalent administration of Shaoguan, Heyuan, Meizhou, Qingyuan, and Yunfu. Mountainous region in the eastern and western regions and mountainous region of Guangdong are richly endowed with low cost natural resources: with land lease royalty is only 1/3 to 2/3 of that in PRD, labour cost is only 2/3 of PRD, electricity supply is plentiful and cheap, while infrastructure is continuing to improve. For development plans in eastern and western regions of Guangdong province, refer to "Development Planning Recommendations for Eastern and Western Sectors of Guangdong Province (2005 - 2010)", "Special Planning Scheme For Energy Infrastructure Construction In Eastern And Western Regions Of Guangdong Province (2005 - 2010)", "Special Planning Scheme For Transport Infrastructure Construction In Eastern And Western Regions Of Guangdong Province (2005 - 2010)", "Special Planning Scheme For Water Resources Infrastructure Construction In Eastern And Western Regions Of Guangdong Province (2005 - 2010)", "Special Planning Scheme For Industrialization In Eastern And Western Regions Of Guangdong Province (2005 - 2010)", and "Special Planning Scheme For Urbanization In Eastern And Western Regions Of Guangdong Province (2005 - 2010)".

- Development level and development strategy of the Western PRD;
- Construction of the Hong Kong-Zhuhai-Macao Bridge;
- Construction of port facilities within the Greater PRD;
- Construction of airports within the Greater PRD region, and;
- Construction of other transport infrastructures within the Greater PRD region.

6.2.1 Development level and development strategy of the Western PRD

Economic development directly affects the demand and structure for the movement of people and goods. With the Eastern PRD facing a bottleneck, Guangdong proposing a strategy to “promote the west bank”, the impending start of the construction of the Hong Kong-Zhuhai-Macao Bridge, as well as the gradual commissioning of a series of major infrastructure projects, the Western PRD may become a new growth area in the PRD. This will add great impetus to the flows of personnel, goods, finance, and information with the outside world in the Western PRD.

Undoubtedly the strategy to “promote the west bank” in Guangdong will put Hong Kong in an important position. Guangdong is expected to apply the “external impetus strategy” making use of the expertise, finance, and service of Hong Kong to raise the western region. At the same time, Hong Kong could expand into the western economic hinterland, and make use of this “spring board” to expand Hong Kong’s hinterland to southwest China or even ASEAN countries. It is anticipated that the economic and social dealings between Hong Kong and Western PRD will step up in the future, thereby promoting cross-boundary personnel and good flows in the two territories.

From the perspective of the Western PRD development, it has been outlined in the “PRD Coordinated Development Plan” that the 3 cities of Western PRD will devote attention to fostering harbour front industries supported by port facilities (such as energy, heavy engineering, mechanical engineering) and high-tech/new-tech industry, steadily developing tertiary industries such as tourism, logistics, and logistics based shipping trade, whilst promoting the processing manufacturing industry.

The Hong Kong's financial service, professional service, information service etc are at international standard and can assist the harbour front industry's development in the Western PRD, and invigorate the growth of personnel, finance, and information flows between the two places. Such tertiary industries as tourism, logistics, and shipping trade are industries that Hong Kong has comparative advantage. These are in line with the Western PRD development strategy, and drive the cross-boundary personnel and goods movement. In the development of high-tech/new-tech industry and the upgrading of the processing manufacturing industry, Hong Kong may maintain direct investment on the one hand, and on the other, may also render various value added services. In addition, Hong Kong can play a very important role in assisting the private sector in cities in Western PRD in its "going out" drive to take its business to the international arena.

Clearly there is rather good prospect for Hong Kong to collaborate with the western region of the PRD in the future, which would further boost the growth in cross-boundary personnel and goods flows between the two places.

6.2.2 Construction of the Hong Kong-Zhuhai-Macao Bridge

The construction of the Hong Kong-Zhuhai-Macao Bridge will certainly alter the playing field for movement of personnel and goods in the PRD, creating far-reaching impact on the general disposition of industries within the region.

The Hong Kong-Zhuhai-Macao Bridge completes the loop in the transport network of the Greater PRD, offering another fast, convenient, and high volume land transport link connecting eastern and the western regions. Land passenger and goods traffic between Hong Kong and Western PRD will be direct and do not have to travel via Humen Bridge and Shenzhen, thereby bringing Western PRD cities within the "3-hour commuting radius" of Hong Kong. This would directly reinvigorate Hong Kong's investors' interest in setting up in Western PRD cities, boosting the flow of people and goods between Hong Kong and Western PRD cities.

Furthermore, goods originating in southwest provinces are previously shipped by rail freight directly to Shenzhen, a relatively convenient transit, costing less than direct shipment to Hong Kong. Hence, Mainland traders would normally choose to ship their merchandise to Shenzhen. Upon the commissioning of the Hong Kong-Zhuhai-Macao Bridge, these goods could be conveniently shipped to Hong Kong, and the status of Hong Kong's seaport and airport will also be raised.

In short, the construction of the Hong Kong-Zhuhai-Macao Bridge will very significantly expand Hong Kong's reach westward, and attracting large volumes of passenger and goods traffic flowing in and out of Hong Kong.

6.2.3 Construction of port facilities within the Greater PRD

The fact that Hong Kong can become an international logistics centre and consistently hold a global second ranking in container throughput volume in its port owes much to the supply of goods from the PRD - the world factory. Before the mid-1990s, container port facilities in the PRD were critically inadequate. At that time, most import and export containers are trucked through land boundary crossings to the container terminus in Hong Kong for loading, or else are transported to Hong Kong via the feeding ports in the PRD, with very little shipment loaded directly from PRD quaysides.

However, port infrastructures in the PRD have significantly improved in the past 10 years, with rapidly expanding container handling capacities in the region's terminals. Coupled with low costs, PRD ports are beginning to join in the fray, gaining a greater market share. The port development in Shenzhen is particularly rapid. Container berths in Yantian to the east of the city, and Shekou and Chiwan in the west have grown from 7 in 1997 to 17 in 2004, with a corresponding strong increase in handling capacity. Although Nansha in Guangzhou, and Gaolan of Zhuhai remain largely feeding ports for Hong Kong's container wharfs, the growth of their handling capacity in the past 10 years cannot be neglected.

Hong Kong's container terminals only recorded minor growth in handling capacity during this period. From 1995 to 2004, only the Container Terminal 9 has added 6 additional berthing slots, bringing Hong Kong's tally in container berthing slots to 24, although these new berthing only became operational in 2004.

Moreover, shipping a container by land to Hong Kong costs US\$300 more than transporting it to Shenzhen; of this extra charge, road freight accounts for approximately US\$200. Consistently high road freight charges and low efficiency of customs clearance at boundary control points are the main drawbacks for Hong Kong ports.

The disparity in the growth of wharf handling capacities, coupled with the freight charge difference, is eroding Hong Kong terminals' absolute advantage. For export shipment, direct oceanic shipments loaded from PRD quaysides as a proportion of total seas freights loaded from PRD ports rose from 21.55% in 1995 to 65.23% in 2004. In addition, the

proportion of shipments transiting via Hong Kong in the same period dropped from 78.46% to 34.77%. For imports, sea freight goods coming in through Hong Kong as a proportion of all imported goods landing in PRD ports dropped from 82.42% in 1995 to 58.43% in 2004.

In accordance with the development plans for container terminals in the region, the number of international container berths in the PRD is expected to increase from 51 in 2005 to 71 by 2010, rising further to 89 in 2015. In this period, the ocean-going container handling capacity of Hong Kong as percentage share of the international container handling capacity of Greater PRD terminals will continue to decline, rapidly falling from 55% in 2005 to 35% in 2010, and 31% in 2015. Although Hong Kong remains an container logistics hub of international trade for Greater PRD, Shenzhen has already developed into another container logistics centre of the Greater PRD, while the Nansha port of Guangzhou is on a rapid ascend path, and the port of Gaolan in Zhuhai is also expected to join the competition in the region for business after 2010.

The potential new source of goods traffic deriving from development of the Western PRD will unquestionably be contested by a number of major new ports in the region. Zhuhai is without doubt the most geographically advantaged location, as it is the most convenient location for sea loading; Guangzhou, on the other hand, enjoys the status as the PRD central city. Coupled with its close proximity to Foshan as well as convenient road transport links with Western PRD cities, Guangzhou is making an earnest effort in seeking out further traffic from western regions; the fast rising Shenzhen port with its comparative advantage in handling capacity is also busily courting clienteles in western regions. Nevertheless, Hong Kong may benefit from its traditional comparative advantages (such as high efficiency, high reliability, using inland waterways to tranship cargos to Hong Kong container terminals is cheaper than directly using the Yantian terminal, etc) and the operation of Hong Kong-Zhuhai-Macao Bridge. However, the major PRD ports must cooperate and coordinate with each other, joining hands to expand traffic source in Greater PRD region, so as to compete with other outside regions.

6.2.4 Construction of airports within the Greater PRD region

In terms of airport facilities, the Greater PRD is the most densely served region in the country; it currently has a total of 5 international airports, including Hong Kong airport, Macao airport, Shenzhen international airport, new Baiyun international airport in Guangzhou, and Zhuhai airport (the last of these is yet to open to international carriers).

In the past 20 years, the rise of the Greater PRD region has generated enormous volumes of airfreight cargo for the aviation industry within the

region. Taking the opportunity, Hong Kong airport has been actively developing itself into an international aviation hub; its cargo-handling volume has grown from 1.63 million tonnes in 1998 to 3.4 million tonnes in 2005, which puts Hong Kong into global front rankings. Of this, over 70% of Hong Kong's cargo traffics originated in the PRD (with the other 30% representing mainly international transshipment).

The strength of Hong Kong airport lies in international cargo freight, its international route structure, flight schedule frequency, route coverage, etc. are all ahead of the other airports in the Greater PRD. All air cargo handled by Hong Kong are international freight; whereas Guangzhou and Shenzhen airports are excelling at serving domestic routes. The latter two are commanding sizeable volumes of domestic trade airfreight cargos (accounting for approximately 80 to 90 per cent of total cargo volume). Hence, Hong Kong's status as an international air-cargo logistics centre remains unassailable by Guangzhou and Shenzhen. In 2004, Hong Kong airport's market share accounted for 95% of the total freight volume handled by international cargo airports in the Greater PRD. This shows the peerless commanding position of Hong Kong in international air freight logistics in the Greater PRD.

However, Hong Kong's strength is under the threat of being eroded by airports in the surrounding region. First, Guangzhou is jockeying to make Baiyun international airport the hub in Southeast Asia and the Asia Pacific region, in head-on competition with Hong Kong. Guangzhou airport is one of the three major domestic hub airports in the key planning scheme of the China Civil Aviation Authority, but its development has been hampered lately by inadequacies in infrastructure. However, this situation has improved somewhat after the commissioning of the new Baiyun international airport in 2004. New Baiyun international airport is the biggest, and functionally the most comprehensive civil aviation hub in the country, built with an investment of 19.8 billion dollars, representing the largest single infrastructural project investment in the history of civil aviation in the Mainland. Phase 2 of this project has started in October 2004, with expected completion in 2010. When completed, new Baiyun international airport will have a total of 5 runways, 200 aircraft parking slots, and an annual cargo handling capacity of some 2.5 million tonnes. At present, new Baiyun international airport is aggressively expanding its international air freight logistics business, actively approaching multinational companies as strategic investment partners. The presence of such top logistics companies as UPS and FedEx has significantly raised the profile of new Baiyun international airport in the international air-cargo industry. Meanwhile, in order to attract more domestic airlines to serve New Baiyun airport, the operator has indicated its willingness to reduce landing fee and aircraft parking charges to the greatest possible extent, competing with Hong Kong in flight routes, ticket prices, and the markets etc.

Shenzhen is the only airport in the Mainland to offer combined sea freight, road transport, and air freight services. It is also the only airport in the Mainland that can offer transit shipment for cargo freight and has the distinct advantage to develop passenger and cargo air transportation, its current passenger traffic and air freight cargo volumes are second only to Guangzhou airport in the PRD. The current market positioning of Shenzhen airport is the “cargo airport portal for South China”, with the objective of becoming one of the global top 30 cargo airports before 2010, and eventually a predominantly cargo freight airport before 2015. The air cargo handling capacity of Shenzhen airport is 250,000 tonnes. Currently, which will be increased to 600,000 tonnes after completion of the logistics park at the airport in 2006. Shenzhen airport is currently planning to expand, including the addition of a second runway, a new cargo terminal, and a separate passenger terminal building for domestic passengers. The ultimate annual cargo handling capacity at 2.5 million tonnes.

Macao airport is the main passenger transit airport between the Mainland and Taiwan, with Taiwan being its prime source of passenger and air cargo freight, followed closely by the Mainland. Currently, over 90% of the flight services are between Taiwan and the Mainland, connecting the Taiwan straits seems to be the main current function of Macao airport. However, if direct flights across the straits were to start, Macao airport will lose its current biggest source of passenger and cargo traffic. For this reason, Macao airport is actively working to expand its aviation network, strengthening cooperation with nearby airports in order to broaden its development space. Macao airport is currently positioning itself as one of the transit centres within the region; it also has expressed its long-term goal of developing into an international air cargo hub.

Since its commissioning, Zhuhai airport's operation has not been satisfactory. Its actual utilization is less than 6% of design capacity and has been held back from launching international service. Nevertheless, Zhuhai airport is fully confident about its future development prospects, and has envisaged, in order to keep up with continuous growth in cargo volumes in the PRD, to endeavour to develop itself into a logistics centre and an international hub for cargo freight within the region. Under the good prospect of the impending commissioning of the Hong Kong-Zhuhai-Macao Bridge, Zhuhai airport is setting about to build an air-cargo logistics park, with a view to becoming an international express freight airport, and has been in liaison and negotiation with several international logistics conglomerates for collaboration.

In the short term, the other airports in Greater PRD should not pose a threat to the international aviation hub status of Hong Kong airport. In the longer term and as the Greater PRD airports are serving the same customer

base, fierce competition will ensue which is not conducive to the overall interest of the Greater PRD. The Greater PRD airports should not focus only on the market inside the region. In fact, Beijing's capital airport, Pudong and Hongqiao airports in Shanghai, are drawing up strategies to compete for business within a broader geographical region through forming regional network of airports with operators in the surrounding region, and are showing strong development momentum. Only through collaborative endeavour can airports in the Greater PRD quickly capture market share and achieve win-for-all for all five operators.

Cooperation between airport operators in Greater PRD made another stride recently. It was announced at the ninth plenary meeting of the Hong Kong/Guangdong Co-operation Joint Conference on 2 August 2006 that the central government has endorsed the collaboration agreement between Zhuhai's State-owned Assets Supervision and Administration Commission of Zhuhai Municipal People's Government and the Hong Kong Airport Authority to jointly manage Zhuhai airport. Zhuhai-Hong Kong Airport Management Company Limited, which would pay a franchise fee for the exclusive right to manage and operate Zhuhai Airport.

The collaboration between Hong Kong airport and Zhuhai airport will impact on the general overall organization of air-cargo logistics business in the PRD. On the one hand, Hong Kong airport may make use of the abundant infrastructure facilities in Zhuhai airport to divert a portion of its traffic flow ; on the other hand, Hong Kong as an international hub centre with abundant international cargo traffic, is favourable to the Zhuhai airport in its development into an international express airport.

6.2.5 Construction of other transport infrastructures within the Greater PRD region

Currently, the PRD cities are mainly linked by express highways, arterial state highway network, and the four rail lines of Beijing-Guangzhou, Beijing-Kowloon, Guangzhou-Shenzhen, and Guangzhou-Maoming. According to "Synopsis extract of the 11th 5-year plan for domestic economic development in Guangdong province", Guangdong will make an investment of ¥432 billion during the period of the 11th 5-year plan (2006 - 2010) for 62 large-scale integrated transport infrastructure projects. In addition to airport and port construction, Guangdong will spare no efforts in building up its inter-city rapid transit rail link system for passengers, rail network for freights, as well as express highway network. The construction of these infrastructure facilities will significantly enhance the link between PRD cities, and will certainly create an impact on cross-bordary people and goods movements between Hong Kong and the Western PRD.

According to the “Plan of the Pearl River Delta Intercity-city High Speed Rail (2005-2020)”, the PRD inter-city rapid transit rail link transport system will be based in Guangzhou serving passengers, with a view to creating an one-hour commuting radius centring on Guangzhou. Its expected completion date is 2020. The main routes will be:

- Two main trunk routes based on Guangzhou-Shenzhen (with interchange connecting Hong Kong), and Guangzhou-Zhuhai (with interchange connection with Hong Kong);
- Three spoke lines of Guangzhou-Zhaoqing, Zhongshan(Xiaolan)-Jiangmen, and Dongguan-Huizhou;
- Two lines of Shunde-Panyu-Dongguan and Zhongshan-Humen, connecting the two main trunks of Guangzhou-Shenzhen and Guangzhou-Zhuhai.

Currently, construction has started on the Guangzhou-Zhuhai main trunk, via Zhongshan and Jiangmen, which links Guangzhou with Western PRD cities. The expected completion date is around 2008, by which travelling between Guangzhou and Zhuhai will only require 40 minutes, greatly extending the hinterland of Guangzhou.

The construction of the main freight-carrying Guangzhou-Zhuhai railway project, which starts off in Guangzhou at the northern end, via Foshan, Nanhai, Shunde, Heshan, Jiangmen, Zhongshan, and terminating in Zhuhai, has started. This railway is principally carrying cargo freight for the Western PRD, extending Guangzhou’s reach to goods source into the western region.

Meanwhile, Guangdong province and the Ministry of Construction have joined hands to build a pan-PRD fast railway transport network with Guangzhou as the centre. By 2020 when the project is completed, travelling from Guangzhou to cities in the provinces (regions) of Fujian, Jiangxi, Hunan, and Hainan can become a “morning departure, evening arrival” trip; that from Guangzhou to individual major cities of Guangxi will be “overnight” trip; that from Guangzhou to the main cities in the provinces (regions) of Sichuan, Yunnan, and Guizhou etc will be a “24-hour” trip¹⁹.

¹⁹ See People’s Daily report on the first meeting of the “Pan-PRD Region Cooperation And Development Forum” titled “Pan-PRD Regional Cooperation, A Future Of Common Prosperity For The Nine-Province Region, Hong Kong And Macao”, 2 June 2004
<http://www.southcn.com/panprd/news/deep/200406020279.htm>

According to the latest “Guangdong Province Expressway Network Plan (2004 - 2030)” released on 1 June 2006, by 2030, Guangdong’s express highway network will be centred on Guangzhou, having a “9-north-south plus 5-transverse plus 2-ring” topology at its backbone, supplemented with inter-linking lines and over-linking lines, forming a roadway grid with the PRD as kernel, flanked by the coastal regions with the coastal ports (cities) as the dragon head radiating towards the mountainous and interior provinces (regions). Among which, total distance in the “9-north-south plus 5-transverse plus 2-ring” network will be 7000 km, making a province-wide “one-day commuting radius” a reality, viz., any two cities in the province are reachable in one day, and that a same-day-return trip covers the provincial capital and any other city within the province.

Guangdong’s ambitious transport network development will connect the eastern and western shores of the Pearl River, the eastern and western regions of the province, the mountainous region, and the rest of the pan-PRD into an express transport network. A convenient transport network will undoubtedly create an excellent investment environment for Hong Kong. The strengthened transport links between PRD and western Guangdong, as well as the southwest provinces are also beneficial for Hong Kong to expand its hinterland deep into the interior.

6.3 Effects on infrastructure development in Hong Kong

Construction of ports, airport, and other major infrastructure facilities in Western PRD and the rest of the PRD and their integration into the international market will cause an impact on the status of Hong Kong as a supply-chain hub, affecting such Hong Kong infrastructure facilities as ports, airports etc. (See paragraph 6.2 for an analysis of the effects on ports, and airports.)

6.4 Effects on the service industry of Hong Kong

6.4.1 The main direction of the development of Guangdong’s service industry

In its 2005 No.1 Official Document titled “Recommendations regarding accelerating the development and reform of the service industry in Guangdong province” (hereinafter called “Recommendations”), the Guangdong government set out a series of policy measures to deal with the problems of insufficient volume, poor quality standards, inadequate economy of scale, structural imbalance, sluggish innovation, etc in the service industry of Guangdong province. According to the “Recommendations”, economic development in Guangdong province as a whole is at the intermediate stage of industrialization, while the PRD has

entered the post-intermediate stage of industrialization. Along with intensifying specialization and the increasingly widespread practice of contracting ²⁰ professional service, the competitiveness of the manufacturing industry is increasingly reliant on the support of such commercial services as design planning, technology research and development, and logistics. In the process of accelerating the development of its manufacturing industry, Guangdong province needs to pay attention to the integration of the manufacturing industry and the service industry, putting the task of strengthening the collaboration endeavour of the manufacturing industries and the service industry as an important facet of improving the general economic competitiveness of Guangdong province.

According to the “Recommendations”, the development goal of Guangdong’s service industry is: during the “11-5” period, accelerate the development of the service industry, progressively fine-tune the industry structure, further strengthen innovation potential, and strive to grow the value added by Guangdong service industry to reach 45% of GDP by the end of the “11-5” period in 2010; the value added by service industry to grow to around 50% of GDP by 2020 ²¹, essentially reaching the development level of medium-income countries, making the service industry the main engine of development, with the modernization and internationalization of the service industry leading the country, forming a socialization-based service institution that is firmly established in Guangdong, serving the whole country, freely interacting with Guangdong, Hong Kong, Macao, and the ASEAN.

The “Recommendations” envisage the main development direction of Guangdong’s service industry as:

- Significantly expand the 5 service industries of transportation, tourism, real estate, finance, wholesales and retail that have national comparative advantage;
- Encourage the development of the 3 service industries of commercial service, logistics, and conference and exhibition;
- Promote the rapid development of the 3 major rising service industries of information service, technical service, and cultural enterprise;

²⁰ This is otherwise known as “outsourcing”.

²¹ In 2003, the tertiary industry of Guangdong province accounted for 38.4% of GDP; of this, PRD’s portion was 43.5%, Guangzhou’s share was 53.9%, and the slice for Shenzhen was 39.9%.

- Consolidate and grow the two home economics industries of domestic service, catering and hospitality.

The “Recommendations” also suggested Guangzhou and Shenzhen to serve as the service industry development centres for Guangdong province, and proposed the expansion of service products export to the pan-PRD region and ASEAN countries as the main target, striving to build Guangdong into a major service-exporting province, while facilitating direct outward investment by the service industry.

The growth of Hong Kong’s service industry owes much to its value in providing financial service, manufacturing support service, trade and logistics, and various professional services to the manufacturing activities in the PRD. However, as the manufacturing industry of Guangdong is gradually maturing, it inevitably drives the growth of the local service industry which will in turn compete with Hong Kong. In the short to medium term, Hong Kong’s edge on these areas will not be easily surpassed. Guangdong’s development in these areas needs to leverage Hong Kong and to strengthen cooperation with Hong Kong, in so doing bringing business opportunities to Hong Kong; but from a longer term perspective, the advance of the development level of Guangdong’s service industry will directly threaten Hong Kong’s status as regional service base, and Hong Kong should get prepared.

6.4.2 Effects on Hong Kong’s logistics industry

The logistics industry is one of the pillar industries of Hong Kong. The most obvious advantage for Hong Kong to develop its logistics industry is its geographical location, internationally first-rate logistics infrastructure facilities, high quality and highly efficient service institutions, and its status as an entrepot.

The development of Hong Kong’s logistics industry benefited from the rise of PRD as a global manufacturing base. The enormous demand for logistics in the PRD provided development opportunities for Hong Kong’s logistics industry. As South China’s international transit hub for logistics and with global top-ranking airport and port handling capacities, Hong Kong’s logistics industry saw unprecedented growth, especially before the PRD develops direct international trade.

However, as PRD’s development of logistics infrastructure (such as ports and airports, see details in section 6.2), logistics service and the supporting trades becoming more mature, as direct international trade of the PRD continues to grow, the proportion of import and export going through Hong Kong is steadily declining; all the while, Guangdong is actively

encouraging the development of its own logistics industry, several major cities in the PRD are simultaneously positioning for the objective of becoming “international logistics hub city”, which will no doubt have an profound effect on Hong Kong’s status as an international logistics hub centre.

Against background of globalization, the multinationals are busily deploying their supply chains around the world, placing each individual element in the best place to reap the maximum benefit, and leveraging on investment finance, information, and the global flow of goods to achieve optimization of the supply chain. In this process, enormous volumes of international trade and demand for logistics are generated. Today’s international logistics is largely a product of the international supply chains arrangement of the multinationals.

For this reason, the most crucial factor for the development of Hong Kong’s logistics industry should be to keep its advantageous position in the supply chain, endeavouring to become a part of the multinational’s supply chain. Apart from a sound logistics infrastructure and policy support, factors affecting Hong Kong’s general business environment such as Hong Kong’s excellent service industry, entrepot status, well-developed legal institutions etc are all closely linked to the logistics industry.

Moreover, as competition between companies turns into competition between supply chains, competition between cities also gradually transforms into competition between clusters of cities. Hong Kong must form alliance with PRD cities or even join with other cities in much wider geographical regions to create shared pool of comparative advantage, to become a key player in the international supply chain and to expand traffic source in concerted efforts to achieve shared success.

6.4.3 Effects on Hong Kong’s conference and exhibition industry

The conference and exhibition industry is a particularly lucrative industry. A well-developed and mature conference and exhibition industry may generate powerful stimulating effects on the regional industry chain, spurring rapid development of such industries as tourism, catering, transportation, real estate, and so on, and hence boosting regional economic power. In recent years, the conference and exhibition industry has been rapidly developing on the Mainland. It has been likening to one of China’s future top-ten major industries with the greatest potential. Currently within the PRD, an intra-regional conference corridor centring in Guangzhou and Shenzhen has evolved.

Guangdong is one of the biggest conference and exhibition bases in the country. Statistics show that the income of Guangdong's conference and exhibition industry reached RMB3.2 billion in 2004, accounting for one third of total conferencing income in the country. The province has now formed a PRD conference belt centring in Guangzhou, Shenzhen, and Dongguan and including Foshan, Zhuhai. In Guangzhou, Shenzhen, and Dongguan alone there are 500,000 square metres of conference and exhibition floor space. Large-scale conference venues included the Guangdong Modern International Exhibition Centre, Guangzhou Pazhou International Exhibition and Convention Centre, Shenzhen international conference centre, and the Zhuhai (Guangdong) China International Aviation and Aerospace Exhibition Centre etc.

Since the 1990s, the Guangdong's conference and exhibition industry has been growing at an average rate of between 20 to 30 per cent. Guangdong has now become the largest conference and exhibition base in the country, with some 2000 companies in the conferencing business, and over 1000 large-scale conferences and exhibitions staged each year. Apart from the famous exhibitions such as the Canton Fair, Shenzhen High-Tech Fair and Zhuhai Air Show which are large-scale, well recognized and having high impact and high international participation, other cities and regions are clamoring to leverage their regional economic development to organize specialised conferences and exhibitions, examples of which are the International Computer, Communication and Consumer Electronics Products Exposition of Dongguan, China Shunde International Exposition for Household Electrical Appliances of Shunde, China (Humen) International Garments Fair, China (Zhongshan) International Electronic Information Products & Technologies Exhibition, etc., They have all become conferences and exhibitions with certain market impact that are also showcases of economic development of distinctive local flavour.

Considering the powerful economic impact of the conference and exhibition industry, the government of Guangdong province has accorded high priority to the development and regulatory oversight of the conference and exhibition industry. The provincial authority has made clear that the development of modern service industry focusing on servicing the manufacturing industry should be accelerated. It would encourage the development of three manufacturing service sectors of commercial service, logistics, and conference and exhibition service, intensify efforts in technology renewal for the service industry by encouraging the introduction of advanced technological know-how. At the present time, such rules as the "Recommendations regarding strengthening the protection of intellectual property rights in the conference and exhibition industry" have been put in place; the vetting procedures have been revamped and fine-tuned by changing the system of official approval to a registration system and simplifying the procedural formalities involved in staging conference and exhibition.

However, over-provision and mediocrity are problems in the conference and exhibition scene in Guangdong. Entry barrier to the industry in the Mainland is set extraordinarily low; ¥100,000 is sufficient for registering a conference and exhibition company. Over 1100 such companies are registered with the Guangdong provincial administrative authorities, of which, companies registered as carrying on solely “conference and exhibition” business numbered over 200. Conference and exhibition companies are ubiquitous and widely scattered, with poor economy of scale and duplication. There are an excessive number of conferences of the same or similar nature and too many “recycled” shows. According to available figures, more than 1000 various conferences and exhibitions are staged in Guangdong each year, or, on average 3 a day, often on the same theme, or different “versions” of the same kind of show taking place in different places around the province. For example, Guangdong’s furniture exposition is sizeable by national standard, a total of six shows were once staged in Guangzhou, Shenzhen, and Dongguan within a single week. Car show is also a focus of contention for PRD cities, Guangzhou and Shenzhen each has an annual show, Dongguan even has two each year, and both of which are positioned as international shows.

In addition, major cities in Guangdong province are jockeying around to invest heavily in large-scale modern conference and exhibition venues, but there is a lack of overall planning and organization. Certain regions are oblivious to costs concerns, indiscriminate investment and unwarranted project duplications, etc., have become serious problems. In some instances, a small to medium city would have up to five or six large venues, some are able to attract no more than a handful of events in a whole year; facility utilization is perennially low, creating serious waste.

Furthermore, all large cities in the PRD are jostling to become the regional conference and exhibition centre. Guangzhou has leveraged on its “premier fair of China” to build Guangzhou into an international city for conference and exhibition, Shenzhen will also put international conference and exhibition in its sight, Dongguan also announced the intention to establish itself as a regional central city for conference and exhibition.

In the conference and exhibition industry, brand name is the most important intangible asset. Looking at the strengths of Hong Kong’s conference and exhibition industry, over 300 high level international conferences and exhibitions are staged annually, and 70 large-scale international professional seminars are held regularly in Hong Kong. Such numbers rank first in Asia brand name in making Hong Kong the top conference and exhibition in Asia, beyond the comparison of any Mainland cities. Nevertheless, the unstructured development, overlapping infrastructure and vicious competition etc in the conference and exhibition

industry in the PRD undoubtedly would adversely affect the development of the conference and exhibition industry in the whole of the Greater PRD.

Currently, international conference and exhibition firms are not allowed to establish wholly owned conference and exhibition company nor to apply for permission to stage conference and exhibition in the Mainland. They are only allowed to set up joint-venture with domestic firms, and hold conference and exhibition with domestic conference and exhibition companies or organizations. Yet, CEPA allows Hong Kong companies to independently provide conference and exhibition service in the Mainland which undoubtedly helps the development of the Hong Kong conference and exhibition industry in the Mainland. As envisaged in the “Recommendations”, the conference and exhibition industry in Guangdong province must strengthen cooperation with its Hong Kong counterpart introducing the latter’s modern management practices and business philosophy. Hong Kong’s conference and exhibition industry should leverage on the advantage of Hong Kong’s brand name to enter the PRD through joint-venture, equity investment, merger and acquisition etc, to re-integrate conference and exhibition resources in the Greater PRD, as well as to expand business opportunities in the expansive market of the the pan-PRD hinterland.

6.4.4 Effects on Hong Kong’s financial service industry, commercial service industry, and other professional service industries

Guangdong provincial government’s “Recommendations” emphasizes leveraging the power of Hong Kong and Macao, by encouraging their participation, to help in reform and development in such areas as financial service, commercial service, etc in Guangdong. In financial services, “Recommendations” set out that Guangdong should strengthen cooperation with Hong Kong to drive globalization in finance and build a highly efficient and open financial service and regulatory mechanism. On the basis of fully leveraging the function of Hong Kong as a centre of international finance, it should progressively refine the division of functions of the financial service industry with Guangzhou and Shenzhen as the centres supported by medium sized cities; improve capital allocation efficiency and the quality of financial service; create the environment for attracting more overseas financial institutions to establish in Guangdong or set up branch organizations, while facilitate local financial institutions which have demonstrable economic power to establish branch organizations in Hong Kong. In the area of commercial service, the “Recommendations” require Guangdong to actively develop such intermediary commercial services as legal, accounting, auditing, information, consulting, rental and lease, and advertising; expand the scope of market opening, to lower the entry requirements for the service industry, to facilitate the use of wholly-owned, joint-venture, and collaborative models to introduce a sizeable contingent of well-reputed

international intermediary organizations, and to foster the development of a cluster of excellent intermediary entities which are capable of undertaking international projects, with a view to fundamentally changing the present “small, scattered, and weak” state of affairs in the local industry and raising its overall professional competence.

In the medium to short term, Hong Kong’s role in high-end service business is inimitable by Mainland cities. CEPA implementation and the strategy of Guangdong in leveraging Hong Kong’s economic power to actively developing such service industries as financial service, commercial service, etc has brought immense investment opportunities for development of Hong Kong’s own service industry.

Nevertheless, the goals and plans for development of the service industry in Guangdong province are ambitious. The upgrading of Guangdong’s service industry would imply the loss of Hong Kong’s comparative advantage. Therefore, while the service industry of Guangdong is on the ascend, Hong Kong must upgrade and adjust its own industry structure, consolidate, improve, and innovate on its own comparative advantages, and dedicate itself to the high value added sections in the supply chain, thus creating new economic growth focuses.

7. How can Hong Kong keep in step with the development of Western Greater PRD?

7.1 Hong Kong's investment in Western Greater PRD

As aforementioned, Hong Kong's investment in the whole PRD is facing challenge in the three areas of investment model, investment target sectors, and spatial disposition of investment. In future, Hong Kong will need to implement a series of transformation measures in the above three areas for its investment in Guangdong province.

7.1.1 Investment model: Exploring new models of collaboration between the two territories

The former “front shop, back workshop” model of collaboration between Hong Kong and Guangdong province is straining to cope with the new development environment. In the process to explore new collaborative relationship, Hong Kong must clearly recognize the new outlook of the PRD (include Western PRD), and in light of this, to reassess and re-establish its own bearing. From an analysis of the general trend of the evolution of the interacting relation between the two places it can be concluded that the “complementary strengths”, “factory showroom” models will be the wave of the future in collaboration between Hong Kong and cities in Western PRD, and even with the whole of the PRD.

Hong Kong is a tiny place, and both its past and future cannot be divorced from the hinterland of PRD. The development of the PRD in the past cannot come about without Hong Kong's finance, technology, and various services. But today, the PRD is no longer simply a processing factory for Hong Kong, relying on Hong Kong for high value added services. Rather, it has now amassed a certain level of technological expertise and service competence, gradually accruing and building up its own competitiveness, and no longer is it in perennial dire need of capitals, as before. With the gap in general level of affluence between the two places closing up, Hong Kong can no longer regard itself as the "dragon head" in the region. Hong Kong needs to re-evaluate the present and future needs of the PRD (including Western PRD), and in turn, ask what can Hong Kong provide, so as to redefine a new position for itself, with which to win itself a place in the Greater PRD.

From an analysis of the present state of play, Hong Kong's unique international status is something no other mainland cities can replace. The maturity of its service industry is also far ahead of all mainland counterparts. This is the “pre-emptive edge” of Hong Kong. As the PRD is gradually catching up, Hong Kong must enhance its existing comparative

advantages, and create new comparative advantages that complement the development of PRD. The two places should make use of the combined strengths of the industry chains within the region to create “complementary strengths” and “factory showroom” collaboration models, working in concert to fashion regional comparative advantages for the Greater PRD, taking part in nation-wide and global competition.

7.1.2 Investment target sectors: Expand investment in sectors with comparative advantage

Focus on expanding finance, logistics, and various manufacturing and professional services

As the importance of the light processing manufacturing industry declines in Guangdong province’s future industry structure, the PRD cities including those in Western PRD have all raised the bar for attracting foreign investment. Hong Kong must change its target sectors for investment in the region, changing the previous state of affairs whereby there was an overwhelming concentration of light processing manufacturing industry.

Hong Kong’s main comparative advantages lie in its position as an international finance centre, a trade centre, a shipping centre, and an entrepot; its strengths in tourism, logistics, professional service areas and its wide contacts with the world. Hong Kong’s investment in PRD has expanded into finance, commerce and trade, and tourism in recent years. Nevertheless, collaboration in such service business areas as commercial retailing, logistics, finance, science and technology, IT, and legal practice is still limited. This state of affairs has hampered bringing the comparative advantages of Hong Kong to Guangdong.

Currently Guangdong province has made explicit intent to actively develop its service industries. Guangdong province requires Hong Kong’s assistance in various service sectors, particularly in the manufacturing servicing sector. Guangdong province suggested to make use of Hong Kong’s modern service industry to create the three major service platforms of economic and trade collaboration, financial service, and intermediary service. This has undoubtedly provided investment opportunities for Hong Kong in its forte industries. In addition, the signing of CEPA also provided an institutional basis for collaboration between Hong Kong and Guangdong in the service industry area. Hong Kong ought to make full use of CEPA, actively expand its investment in comparative advantage industries.

Moreover, the private sector in Western PRD is well developed. Yet, the private sector in general on the Mainland faces a series of problems such

as capital financing, risk management, market expansion, etc in its effort to further expand economy of scale, implementing good management practices, and even reaching out into the international arena. Hong Kong's comparative advantages in these areas can be aptly put into good use, assisting the development of the private sector in Western PRD (see next section for details).

In the industrial sector, such key industries targeted by Western PRD for development as heavy industry, iron and steel, car manufacturing etc are not areas of strength for Hong Kong. However, Hong Kong's financial service, corporate management, free flow of information and various professional service areas can respectively find their niches, to actively support the development of the aforementioned industries in the Western PRD. In addition, in high-tech/new-tech areas, Hong Kong and the Western PRD each have their own specialties, and there is also further room for expansion. Hong Kong may assist the Western PRD to adopt new technology, and can help international high-tech/new-tech companies to invest in Western PRD.

Extending the comparative advantage of brand name in the manufacturing industries of Hong Kong

Furthermore, in certain areas within the manufacturing industry, "Made in Hong Kong" is still having very strong appeals in Mainland markets. A typical example is the food processing business. The Mainland is continuously being hit by food safety scandals jeopardizing public health, which has been causing wide public concerns. It is generally recognized the lack of "trustworthiness" has seriously tainted the image of Mainland brands and eroded public confidence in the food industry in general on the Mainland. In addition, Hong Kong's sound social institutions, legal system, and our core values of "integrity" have enabled Hong Kong brands and Hong Kong manufacturers to enjoy higher reputation in the Mainland food processing industry. For instance, there has been a Hong Kong food processing manufacturer taking advantage of the comparative strengths of Western PRD (government policy supports, quality standard compliant water resources and a stable electricity supply, etc.), and successfully built a Western PRD manufacturing base to develop Hong Kong brand name products to serve the Mainland markets.

In addition to food processing, other Hong Kong industries as watch making, jewellery, and pharmaceuticals and so on are all strong in brand names. These industries can fully leverage on the recognition by the Mainland market for Hong Kong's espousing "trustworthiness" values and their confidence in Hong Kong brand names to extend the brand name comparative advantages of Hong Kong's manufacturing industry, building up manufacturing bases in Western PRD or other regions, actively developing Mainland markets.

7.1.3 Spatial deposition in investment

Confronted with a new spatial planning scheme for industries in Guangdong province, Hong Kong's investment in Guangdong province must be re-designed in its overall spatial organization.

Hong Kong investors planning new investment projects in Guangdong may take stock of the following issues:

- Some Eastern PRD cities have significantly raised the bar on the entry of foreign investment, raising the requirements in such aspects as the unit land utilization of investment layout to output intensity, environmental protection, technology sophistication, and so forth for foreign investors. Labour and resources intensive industries are no longer targeted by PRD including the Western PRD for inward investment.
- In order to improve the investment environment in the eastern and western sectors and the mountainous region in Guangdong, the government has set up migration industry parks in these areas to facilitate the formation of industry clusters, and has actively improved infrastructure. Those Hong Kong investors who are intending to establish labour intensive production industries (such as textile, building materials, etc), may give priority to consider moving to the mountainous region and the eastern and western sectors of Guangdong. However, these categories of investment projects ought not to overlook other regions outside Guangdong province, such as the pan-PRD or even various other regions in China.
- Those Hong Kong investors who are planning to invest in technology and capital intensive projects, due to the need for technology support, managerial personnel, as well as various associated service industries, should choose PRD to be the base of operation. Yet, as the Western PRD is on the verge of releasing its latent potentials, and has strengths in such areas as resources, development prospects are quite good. In addition, because the local governments are actively supporting the development of technology based industries, Hong Kong investors may like to give some serious consideration.
- Hong Kong investors may also choose to station those parts of the production process that are more demanding in terms of people expertise and equipment facilities and those parts that are producing

higher value added in the PRD, while locating the labour and resources intensive production bases in other regions outside the PRD.

Hong Kong investors already operating in PRD may like to consider the follow issues:

- Some of the labour and resources intensive light processing manufacturing companies operated by Hong Kong investors are in fact finding it difficult to survive in the PRD. Companies in this category must undertake industry upgrade, improve their own competence and quality by improving the value added of their products. Apart from this, spatial relocation may also be considered.
- Hong Kong companies which are considering spatial relocation may give priority in considering relocating to the mountainous region, the eastern and western sectors of Guangdong. In so doing, they must weigh up their companies business specialty, development plans, and development requirements, along with the combined effect of various factors like resources disposition, socio-economic conditions, infrastructure facilities, industry development planning, and relevant policy measures etc, of the relocation destination, before deciding on whether and where to relocate. Although such facets as labour, land, resources, and so on in the less developed regions may offset the shortcomings in the PRD, these regions are at a distinct disadvantage when it comes to managerial expertise, manufacturing support facilities, etc. In addition, when choosing relocation destination, consideration should not be restricted to Guangdong province, rather, it should be judged from a perspective of pan-PRD, the whole of China, or even wider afield.
- Hong Kong investors may also consider some alternative relocation strategies, i.e., progressively transferring the production base to lower costs regions, but allowing the processes with higher technology content, more demanding environmental requirements to remain in the PRD.
- The question of whether or not to relocate aside, the fact remains that Guangdong's industry structure is in the process of moving higher up the value chain. Hong Kong investment in Guangdong must undergo technology upgrade and renewal, proactively keeping in step with Guangdong's industrial restructuring.

In short, Hong Kong investors should carry out a thorough analysis of the relative strengths and weaknesses of Western PRD or even the whole PRD, the mountainous region of Guangdong and the eastern and western sectors, pan-PRD, or other regions in the whole country, judiciously selecting investment location from the standpoint of the long term development prospects and development requirements of the company, avoid joining the stampede in a headlong dash into Western PRD or, for that matter, any other locations, in the process overlooking development in an even wider geographical region.

7.2 Development of transport infrastructure and logistics

7.2.1 Expanding the traffic capacity and traveller processing efficiency of the land border crossings

Port and customs processing efficiency is one of the main factors affecting the shipper's decision in using a port. Moving goods from Hong Kong's main merchandise source – the PRD – to Hong Kong's wharf side can be done by road transport, or the inland waterway transport system between the two places. Regardless of which transport mode is used, port and customs processing efficiency in the two places will affect the overall efficiency for goods shipped through Hong Kong.

At present, customs clearance procedures in Mainland ports are still relatively complex and lacking in transparency. In comparison, Hong Kong's customs clearance is much more efficient. Furthermore, customs clearance at land boundary crossings on the Mainland takes only 15 to 30 minutes while the same formality would require one to two days in Mainland ports, therefore, those shipments that demand higher time efficiency usually need to be transported by container trucks through land boundary crossing to Hong Kong wharf for loading onto ships.

However, using land boundary crossing to transport goods to Hong Kong for shipping will have to face the problem of traffic congestions at boundary crossings. In recent years, due to inadequate handling capacity at lands boundary crossings coupled with efficiency reasons, the problem of long queuing time at boundary crossings has become more serious, affecting the efficiency of Hong Kong's logistics industry. In contrast, customs clearance efficiency has been improving at Mainland ports, coupled with lower costs, more and more shippers are choosing Mainland ports for direct shipment, which poses a threat to development of Hong Kong's logistics industry.

Of course, the expected opening of the Hong Kong-Shenzhen Western Corridor will be beneficial in relieving the problem of traffic jams at land

boundary crossings. Improving the efficiencies of land boundary crossings in the two places is beneficial to Hong Kong's port logistics industry. Considerations may be given to opening additional boundary crossings at strategic locations (such as the Liantang-Heung Yuen Wai crossing under study), to expand traffic handling capacity at land boundary crossings on the one hand, and on the other, to improve the handling efficiency at existing crossings by measures such as abolishing border checkpoints, putting in place electronic customs clearance procedures, enhancing flexibilities, etc, may be implemented.

In addition, there are signs of an increase in the shipment of goods through PRD inland waterway to Hong Kong for loading in recent years. River transport has the advantage of low cost, minimal environmental impact etc. Therefore, the Hong Kong government should actively support the calls to dredging and clearing the PRD inland waterways, to encourage the development of a river barge transshipping industry.

7.2.2 Reducing road transport and port handling costs

Comparing with PRD ports, the port of Hong Kong has such advantages as high efficiency, timely and accurate information, superior service quality, wide choice of shipping schedules, and the status of an entrepot. Yet, its drawbacks in costs and cross-boundary transportation remain.

In terms of costs, exporting a container from Hong Kong by transporting it via land boundary crossing is US\$300 more than transporting it to Shenzhen and directly exporting from there. Of the extra cost, road transport cost accounts for approximately US\$200, and port handling charges account for approximately US\$100. In the past five years, there is an on-going tendency of narrowing difference of port handling charges in Hong Kong and Shenzhen. Port-handling charges in the two places are expected to converge as this trend continues. However, the persistent high cost for road transport trailer is a distinct disadvantage for Hong Kong. Therefore, lowering the costs for road transport trailer will be beneficial to bolstering the attractiveness of the port of Hong Kong.

7.2.3 Development of Hong Kong airport

Comparing with several other major airports in the PRD, Hong Kong airport has strengths in areas of route structure, service frequency, destination coverage, service quality etc for international air cargo. Guangzhou and Shenzhen airports, on the other hand, have strengthened serving domestic routes. While the cargos handled by Hong Kong airport are mainly international freights, Guangzhou and Shenzhen are mainly carrying cargo merchandise destined for the domestic trade.

The cargo handling facilities of Hong Kong airport's are comparatively more advanced, and are expected to meet continuous growth in the next 5 to 10 years, which is conducive to its competing for market share in air cargo logistics.

Nevertheless, the future development of Hong Kong airport also faces a number of unfavourable factors such as inadequacies in Mainland routes, over-complicated customs clearance procedures in the two places etc, as well as competitions from Guangzhou airport, Shenzhen airport, and other PRD airports. Forming strategic alliance with Mainland airports will be an approach for Hong Kong to make up for its shortcomings in these areas. The acquisition of 35% equity stake in Xiaoshan airport in Hangzhou by the Hong Kong airport of 2 billion yuan is the first step in this direction. Together with the recent approval of central government for the collaborative agreement between Hong Kong airport and Zhuhai airport, full scale collaboration is progressively taking place. Against the background of impending construction of the Hong Kong-Zhuhai-Macao Bridge, collaboration between Hong Kong airport and Zhuhai airport will help Hong Kong to vie for aviation resources in the Western PRD, consolidating Hong Kong's status as an aviation hub in Greater PRD.

In addition, geographical proximity of Shenzhen airport to Hong Kong means the two can complement each other. The feasibility of offering Hong Kong-Shenzhen combined air transportation services by interlinking ports and highways, and developing express air transport shuttle service between the two airports, can be considered. Shenzhen airport can become the window for Hong Kong airport in the eastern shores of the Pearl River, and Hong Kong airport, on the other hand, will become the international portal airport for the eastern shores of the Pearl River, facilitating mutually beneficial development in the two territories.

7.3 Encourage Western PRD companies to invest in Hong Kong

Each region in the PRD has individual qualities in their development model. The Eastern PRD is mainly characterized by urbanization and industrialization driven by external investment. The eastern region and the two cities of Guangzhou and Foshan are driven by both domestic and foreign investment. The western region, on the other hand, is an economy with mainly local capital backings, a well developed private sector and strong proprietary innovation capabilities, and has evolved a group of industry specialty townships which are clustering around the core industries of household electrical appliance, hardware machinery, pottery and ceramics.

Economic development in Western PRD is currently entering a new phase. As the private sector economy gathers clout, more and more private companies with a certain level of financial strength are beginning to adopt good management practice and international oriented business operation, attempting to expand into the international arenas. The Guangdong government also made clear that it supports the development of private sector economy and encourages private companies to embark on “going out” into the international arenas.

One study²², jointly commissioned by the Guangdong provincial government Research Institute with the Central Policy Unit of the Hong Kong SAR government indicated that the difficulties faced by private sector companies in “going out” included financing problems, unfamiliarity with the investment approval process, lacking international expertise and so forth. With its well-developed finance market and commercial service as well as rich international experience, Hong Kong is in a perfect position to serve as the bridgehead in Mainland industries’ drive to expand into international markets.

Nevertheless, the same study also indicated, in using Hong Kong as pivot for international expansions, the private sector companies face problems such as excessive operating costs, fierce competition, as well as unfamiliarity with Hong Kong’s industry and commercial practices, etc. In addition, the study also found Guangdong private sector companies lack awareness of Hong Kong’s comparative advantages, and do not have clear ideas of what Hong Kong can offer for them to further expand international markets.

The study concluded with the following recommendations for the Hong Kong government in attracting Mainland private sector companies:

- Take the cultural traits of the Mainland companies into full consideration, wherever practicable, use a follow-up method that is tailored to individual company requirements, proactively assist the companies, offer them with individualized service and allow them to adapt to growing in Hong Kong;
- Employ various measures to proactively promote Hong Kong, e.g., considerations may be given to initiating consultations with such government departments looking after medium to small enterprises and departments of foreign trade and economic cooperation, and to establishing information platforms on the websites of these

²² “Industry Research Report On Encouraging Guangdong Private Sector Companies To Expand In Hong Kong” – Joint study group of Guangdong Provincial Government Research Institute, Hong Kong SAR Government Central Policy Unit. Sept 2005

organizations to help answer inquiries by private enterprise. In addition, to conduct promotion and public relations activities in cities of Guangdong provinces by joining hands with the Trade Development Council, Hong Kong Stock Exchange, major industry associations, intermediary agency etc;

- Carry out intensive promotion to targeted individual private companies which have a higher likelihood of investing in Hong Kong;
- Publicise success cases through various media channels.

To sum up, using Hong Kong as a platform to go global is an important avenue for Guangdong private enterprises to develop and grow. It is also valuable for the development of such Hong Kong industries as finance, logistics, commercial trade etc and is good for raising Hong Kong's international profile. This is unquestionably a win-win situation.

In addition, the Hong Kong Trade Development Council and the various industry associations may also consider conducting briefing exercises to Hong Kong companies on the speciality of PRD townships in the western region, thus assisting them to invest, trade, and develop service industries in these places.

7.4 Technical, education, and training collaboration

Guangdong's industrial restructuring has created, to a certain extent, opportunities for Hong Kong to become an international Centre of Education Excellence. In the longer term, the PRD has no shortage of low skill human resources, but the demand for different types of managerial expertise (including high calibre technical, semi-technical, and professional expertise) is rather acute. Hong Kong can drive the development of the service industry of PRD from the perspectives of education and training. Moreover, it may also introduce to Guangdong province the contacts and standards of such Hong Kong international professional bodies as that in finance, trade, shipping and logistics, tourism, etc, and promoting such value-system training as that in international law, intellectual property rights, brand name reputation, through education and training. More specifically, governments in Guangdong and Hong Kong may consider the following recommendations:

Reaching agreements for human resources cooperation and development for the Greater PRD at the earliest opportunity.

Applying the principles of regional economic and trade integration as well as the strategic blueprint of implementation of closer cooperation in Greater

PRD, Hong Kong should be accorded national treatment as soon as possible, and participate in intra-regional human resources development and cooperation as a member of the Greater PRD Region. Currently, “Agreement to Cooperate in the Integrated Development of Human Resources”²³ and “Agreement to Cooperate in Human Resource Services among the 9 Pan-PRD Provinces/Regions” have taken effect; this will have a positive effect on breaking down barriers on entry of professional expertise in the region and needs to be intensified. However, an appropriate proposal on cooperation in human resources development is yet to be put forward within the Greater PRD to resolve the increasing problem of personnel expertise dislocation faced by the two places. From a strategic perspective, it is imperative for Guangdong and Hong Kong to put the relevant arrangements in place in the earliest opportunity.

Appropriately bringing forward the timetable for mutual opening of HR training in Guangdong and Hong Kong

Further breakthrough advances in personnel training between Guangdong and Hong Kong should be sought, so as to provide HR support for the next phase of Guangdong-Hong Kong economic collaboration as quickly as possible. The two governments ought to adopt a more open policy in screening and regulations of education and training institutions, encouraging education institutions in the two places to maintain mutual presence and undertake investment. The Guangdong government may consider screening and vetting of Hong Kong HR training courses and the entry of training organizations according to such regulatory provisions as the “Privately funded education act” as well as that for initiating approval procedures for HR training courses etc. Under WTO and CEPA framework principles, the entry of Hong Kong HR training courses and training organizations into Guangdong should be duly brought forward.

Progressively introducing high quality Hong Kong training resources en mass

The evaluation and accreditation of Hong Kong HR resources and personnel training organizations qualifications along with market opening for Hong Kong training courses may be implemented in a stage-by-stage, progressive manner, by firstly selecting courses related to CEPA business industries from the eight major Hong Kong institutions and the Open University who already

²³ In Jan 2005, the municipal labour bureaux of the eight cities of Guangzhou, Shenzhen, Zhuhai, Foshan, Huizhou, Dongguan, Zhongshan, and Jiangmen signed the “PRD Human Resources Development Integration And Collaboration Agreement”, stipulating human resources development integration and collaboration between the eight cities includes mutual recognition of occupational qualifications, information sharing on professional resources exchange, jointly staging PRD recruitment fairs, and so on, and to establish unified code of practice across PRD cities, a highly effective share professional resources exchange platform, creating the conditions for the ultimate goal of free flow of professional expertise, and an unhindered environment for starting business within the region.

have proven forte in brand name and excellent training resources, for planned and en mass introduction.

Overall coordination of HR resources development in the two territories

Collaboration in HR training involves many areas and policies have to be formulated from regional perspectives. All factors should be considered from the perspective of facilitating the realization the comparative advantages of the two places, and to attain mutually complementary resources utilization, breaking the impasse situation of compartmentalization, further instil the conception of PRD and even pan-PRD “economic sphere”, ensuring institutional systems, policies measures are all fully implemented and are bearing full effectiveness. HR development requires cross-disciplinary coordination, engaging the relevant administrative bodies in jointly develop and foster HR resources.

Encouraging multi-modal investment in training resources

Various education resources should be integrated in response to the requirements of the learning society, so as to encourage governments, organizations, and individuals to invest in education. The role of the government should shift from the traditional one of heavily focusing on financial assistance to one that is more upfront in encouraging the development of self-financing projects on the basis of traditional financial support, thereby promoting multi-modal investment.

Non-profit market operation model

HR training collaboration between the two places should be founded on a principle of non-profit making, mutually beneficial and complementary, and that it ought to operate on a market-viable cost model, avoiding increasing financial burdens to governments in the two places.

Establishing information sharing cooperation mechanism in the two places

The Hong Kong-Guangdong education and HR data sharing cooperation mechanism should be established at the earliest opportunity. Collaboration between community organizations with support from governments in the two territories should be encouraged. The Greater PRD education and HR information centre should be built with the setting up of relevant professional expertise databases and the provision of key baseline data for government decision making in the two places in the areas of population and HR planning.

Human resources dislocation in the PRD is critical. Should the above measures be implemented, it may create an environment encouraging Hong Kong HR training organizations to strengthen cooperation with education institutions in the PRD. Hong Kong HR training organizations may also quickly offer various occupation training and degree courses in the Mainland that are relevant to Greater PRD development in the near term, thereby playing an active and pre-eminent role in developing a large reserve of personnel expertise.

8. Prospects of Hong Kong's Collaboration with PRD cities

8.1 Hong Kong should proactively “look westward”, seizing the opportunity of the moment

Along with CEPA implementation, intensifying economic integration in Guangdong-Hong Kong-Macao, and initiation of the Hong Kong-Zhuhai-Macao Bridge project, Western PRD may become a new focus of growth in the PRD. When the Hong Kong-Zhuhai-Macao Bridge is completed, the distance between Hong Kong and Western PRD will be reduced, that at the same time will bring enormous development opportunities to Western PRD cities, and expand Hong Kong's economic hinterland in the PRD and room for development. More importantly, Western PRD is the portal closely linking Greater PRD to western Guangdong and the southwestern region of China, the latter is also in very close proximity to Vietnam, Cambodia, and other ASEAN countries. Therefore, Hong Kong should seize the opportunity of the development of Western PRD, using it as “springboard” to expand Hong Kong's economic hinterland to the south-western region of China and even to ASEAN countries. Under Guangdong government's strategy of “promoting the west”, Hong Kong should proactively “look westward”, seizing the opportunity of the moment.

As mentioned previously, the “PRD Coordinated Development Plan” provided for Western PRD to foster development of the general service function and the harbour front industries (e.g., energy, heavy engineering and chemical engineering, mechanical engineering, and high-tech based pharmaceutical microbiological engineering), steadily expand such tertiary industries as tourism, logistics, and harbour commerce that are mainly based on freight forwarding. The comparative advantages of Hong Kong in such areas as financing, logistics, tourism, etc may lend weight to the development strategy for the west. The prospects for collaboration between the two places are diverse and wide-ranging. On the other hand, the private sector economy in the Western PRD is well developed, with a concentration of private enterprises. The government of Guangdong province is implementing measures to encourage the private sector companies to “go out”, and Hong Kong is in fact the best route for these industries to enter the international arenas. Hong Kong may leverage its position as a regional centre of information, an international financial centre, a trading centre and a shipping centre, thereby playing an important role in assisting Western PRD private enterprises to expand into the international arenas to develop their business.

8.2 Prospects of Hong Kong's collaboration with Zhuhai

Zhuhai has put forward five major strategies in its development plans, one of which is “outward driven strategy”, i.e., active integration into the Greater PRD economic sphere, taking the initiative to absorb the economic impact of such central cities as Hong Kong, Macao, Guangzhou, and Shenzhen, and intensifying economic collaboration with Hong Kong and Macao. As a financial service centre for the PRD, Hong Kong can assist companies investing in Zhuhai, particularly for large-scale projects such as petrochemical etc, to obtain financing, and Zhuhai industries may make use of Hong Kong as a trading platform to take their businesses to the international stage. In industries such as software development, the professional and business acumen of Hong Kong could complement Zhuhai companies in commercial development and project management, to the mutual benefit of both places. As an efficient and reliable logistics centre, Hong Kong may also offer logistics service for the export of Zhuhai's high-end products such as pharmaceutical and aqua-cultural products. In addition, the two places may also collaborate in such areas as cross-boundary infrastructure construction, science and education, environmental protection, etc. In the near term, Hong Kong may initiate active collaboration with Zhuhai airport.

8.3 Prospects of Hong Kong's collaboration with Zhongshan

With its development plans leveraging the support of the service industry in Hong Kong and Macao and the central cities in the surrounding region, Zhongshan is set to actively develop manufacturing industries of its own local quality and actively develop high-tech/new-tech industry, fostering the “local characters” of its industries.

As Zhongshan has abundant land for development, and that its transport links with other cities in the PRD are continuously being improved, there is plenty of room for development for the local industries. As the city's biggest source of external investment, Hong Kong companies have gained the first mover advantage in Zhongshan. With CEPA, Hong Kong is able to use its strengths in modern service industry to complement Zhongshan's forte in manufacturing, facilitating the upgrading of the city's traditional industries and development of its high-tech/new-tech industries. Multinationals can also leverage on the experience of Hong Kong's management expertise and Mainland exposure to effectively reduce investment and management risks, and make use of Hong Kong as a international service centre to provide various high quality professional services such as international accounting, legal consulting, and money management etc, as well as to make use of Hong Kong's money market, merchant banking and finance service to obtain funding capital, in order to expand their businesses in the Mainland.

Another quality of Zhongshan's economy is its sizeable private sector dominated industry clusters. The expected rapid development of such a large group of industries will not only create an increased demand for banking and finance service, it will also become a patron of Hong Kong's high quality financial service to raise capital funds to continue to expand the scale of its industries. The industry of Zhongshan can even use Hong Kong as a bridgehead, drawing on the international perspective and sharp business acumen of Hong Kong companies and personnel expertise to assist it to expand overseas markets.

8.4 Prospects of Hong Kong's collaboration with Jiangmen

For quite some time Hong Kong has been the biggest source of investment, the most important trading partner, and the main re-export market for Jiangmen. After the completion of the Hong Kong-Zhuhai-Macao Bridge, Jiangmen will become the hub linking western Guangdong with the PRD, creating good development opportunities for logistics industry. Jiangmen has envisaged taking advantage of CEPA in its development plans; giving reign to its distinguished strengths as an overseas Chinese hometown, continuing to devote efforts in attracting investment, building Jiangmen as the biggest logistics base in PRD. To this end, Hong Kong investors can enter into full participation in areas such as transport service, logistics, corporate financing, and various other services; by applying Hong Kong's strength as logistics centre, encourage the Hong Kong logistics industry to collaborate with Jiangmen, providing sophisticated coordinated combined transport service for Jiangmen, reducing its logistics overheads and increasing its export capacity. Jiangmen has various speciality markets, which include markets for motorbikes, household electrical appliance, stainless steel, construction material etc. For these, Hong Kong would be in a position to assist foreign buyers to conduct procurement activities in Jiangmen. Furthermore, Hong Kong can also fully act out its role as intermediary agent and conduit by introducing advanced international technology and equipment for Jiangmen, improving the city's industry. Apart from this, Jiangmen is endowed with abundant natural scenic resources, which means Hong Kong has the prospect of strengthening cooperation with the city in tourism.

8.5 Prospects of Hong Kong's collaboration with Foshan

As laid out in Foshan's development plans, the city will invest in infrastructure on a massive scale and embark on accelerated development over a periods of time, which requires some 192 billion dollars in capital for its ten major development projects, striving to enable the city to take on an nascent form of a large metropolis within 5 years. Infrastructure construction in Foshan should bring many investment opportunities for Hong Kong and Hong Kong should take an active stance in participation.

Moreover, Foshan has also envisaged opening its service industry at trendsetting pace. In fact, Hong Kong has intimate commercial and trading relations with Foshan. Hong Kong is the biggest source of external investment, with Foshan's Hong Kong backed companies numbering over 400. Hong Kong investors are also involved in Foshan's large-scale enterprises through subsidiary holdings or collaborative partnerships. However, Hong Kong's collaboration with Foshan is mainly concentrating in investment in manufacturing. Collaboration in other areas as agency arrangements, distribution, logistics, etc is not significant. These forte areas of Hong Kong can in fact help Foshan's companies, products and brand names to seek out international business opportunities. Foshan has built various speciality markets, and various main industries such as household electrical appliance, pottery and ceramics, and household furniture etc also have sound supply chains. Hong Kong may establish comprehensive nationwide agency distribution centres in Foshan. It may also assist Foshan to seek inward investment and make use of Hong Kong's strength as a duty-free entrepot to expand Foshan's export; equally, Hong Kong may also assist Foshan to improve and develop its service industry.

Because Hong Kong has a reserve of professional expertise that are familiar with dealing with the Mainland, many world-famous multinationals are investing in Foshan through subsidiary vehicles in Hong Kong, examples of which are Tamron of Japan, and Premier Image Technology Corp of Taiwan and so on. Hong Kong as an international finance centre, trading port, and logistics centre may be in a position to offer such quality professional services as capital financing, logistics, and trade support to overseas companies in Foshan.

8.6 Prospects of Hong Kong's collaboration with Zhaoqing

As a key tourism destination city, Zhaoqing proposes to build the city into "a scenic city of garden landscape that is the best tourist destination", and "the city with the best living environment and ecology" in its development plans, and is sparing no efforts to develop the leisure travelling. Hong Kong has rich experience in the tourism industry, particularly the hospitality service industry. It could enhance personnel training in the tourism industry of Zhaoqing as well as making investment in Zhaoqing to develop the city's tourism infrastructures.

Zhaoqing is also proposing accelerated development of its high-tech/new-tech industries, scientific research and education and cultural industries, and trade and logistics industries. Hong Kong can apply its strengths in service industry to render manufacturing support services such as product design, financing, marketing promotion, management consulting, and other related services for Zhaoqing, driving the development of the local industry and improving the market competitiveness of its products. In addition, Hong

Kong may assist Zhaoqing in attracting inward investment, and establishing international networks of merchandise distributors.

9. Summary

Starting from the end of 1970s, Hong Kong has transferred its export oriented manufacturing industry to PRD en mass to take advantage of the cheap resources and low-cost labour force, while providing capital, technology, management expertise, as well as assuming responsibility for product sales distribution and export. Hong Kong restructured its economy and re-positioned itself from an export oriented manufacturing base to a tertiary industry driven service economy.

The targets for migration of Hong Kong manufacturing industries are the near-by eastern and central cities such as Shenzhen and Dongguan. As the PRD experienced rapid growth in the years that follow, the eastern and central regions have run into a host of problems such as scarcity of land and expansion space, energy shortage and escalating labour costs. Further development of the manufacturing industry faced a bottleneck. Under such circumstances, Hong Kong must proactively expand its development hinterland. Although the growth rate of Western PRD in the past was not quite in the same league as that of the eastern and central PRD, much resources and space remain virtually untapped. Aided by infrastructural development and policy support, the opportunity is ripe to initiate more in-depth, and broader collaboration with Western PRD cities. Hong Kong ought to positively respond in strengthening economic interactions with Western PRD, and leverage the region as “springboard” to expand the economic reaches of Hong Kong, carrying it deep into such southwestern regions as Guangxi, Guizhou, Sichuan, and Yunnan, and even further afield to ASEAN countries.

However, the backdrop for Hong Kong’s further collaboration with the Western PRD is much different to that over 20 years ago. In 2004, the GDP of Guangdong began to overtake Hong Kong, while in 2005, the GDP of Guangdong broke through the 2,200 billion yuan barrier, with net community savings of some one trillion yuan. The Mainland's demand for foreign investment is not as acute as that 25 years ago. Furthermore, Guangdong province has been relentlessly marching towards the higher end of the value chain. Certain functions previously undertaken by Hong Kong can now be independently carried out in the PRD. The former “front shop, back factory” model of collaboration between the two places is straining to cope in the new development environment.

In addition, Western PRD cities have individual qualities and strengths (such as well developed private sectors, significant domestic trade, strong proprietary innovation capability, and clusters of speciality townships, etc), and are expected to shun the “high speed, high growth rate, high energy consumption, high pollution” development model. In so doing, the cities significantly raised entry requirements for foreign investment, setting out conditions for unit land utilization of investment to output ratio, environmental

protection, technology sophistication, and so forth for foreign investment, labour and resources intensive types of production are no longer targeted by Western PRD cities.

Facing such fundamental change, Hong Kong must adjust its investment and collaboration strategies in Western PRD. It should proactively explore new models of collaborative rapport between the two places on the one hand, and on the other, devote serious efforts to expanding investment in industries with comparative advantages (such as finance, logistics, and various manufacturing and professional support services), expanding Hong Kong's brand name strength, and assisting private sector enterprise in Western PRD to venture into the international arena to develop overseas markets. Hong Kong can also play a positive role in collaborating with Guangdong in such areas as technology, education, and personnel training.

In summing up the above analysis, this study has the following recommendations for the Hong Kong SAR government, the Guangdong provincial government, and the Hong Kong business community:

Hong Kong SAR government

- To comprehend and disseminate such relevant information as that relating to economic, social, and cultural spheres in a timely fashion, analyze their likely impact as well as the accompanying opportunity and challenge for Hong Kong. To understand the business environment in Western PRD uncovering opportunities, and provide guidance for the actions of the business community (the government can, for example, consider holding briefings on Western PRD developments and disseminate information to Hong Kong companies);
- To proactively seek out and take part in various PRD development projects or project formulation; and to play an active role in driving regional economic integration;
- To proactively promote infrastructure projects that link up Hong Kong with the Western PRD;
- To proactively liaise with local governments and the business communities in the Western PRD cities, encourage the Hong Kong companies to take part in interaction (for example, the Trade Development Council and business councils might take the lead in organizing Hong Kong companies to visit the PRD to conduct exchange with the local government and business leaders in these cities at regular intervals);

- To assist the Hong Kong business community to obtain information on the Western PRD companies, such as the company name, business speciality, capital base, and trading volumes, future development plans, service support requirements, etc;
- To help the Mainland industry to increase its awareness of the strengths of the Hong Kong service industry, as well as the Hong Kong services available to Mainland companies (including private sector companies).
- To establish a service centre in PRD, playing a conduit role in actively promoting Hong Kong, while providing service to Hong Kong companies stationed in PRD.
- To keep in close liaison with members of the People's Congress in Hong Kong in order to strengthen communication between Hong Kong and the PRD, as well as between Hong Kong and the pan-PRD.

Guangdong provincial government

- To construct a government services platform, raise the efficiency and quality of government services (for example, to provide “one-stop” service to investors in real sense of the word, rather than merely housing the different departments in the same office building);
- To proactively drive the development of infrastructure projects linking the Western PRD with Hong Kong;
- To strengthen the transparency of the relevant planning, strategies and policies for the Western PRD development. To enhance the accuracy, timeliness, and scope of the official release of relevant information;
- To provide clear guidance to external investment;
- To coordinate and manage the development of each Western PRD city;
- To render assistance to the Mainland companies and community to learn the strengths of Hong Kong services and be acquainted with the range of service offered by Hong Kong to Mainland business (including private sector business), as well as to facilitate the development of Hong Kong service industry in Western PRD.

Hong Kong business community

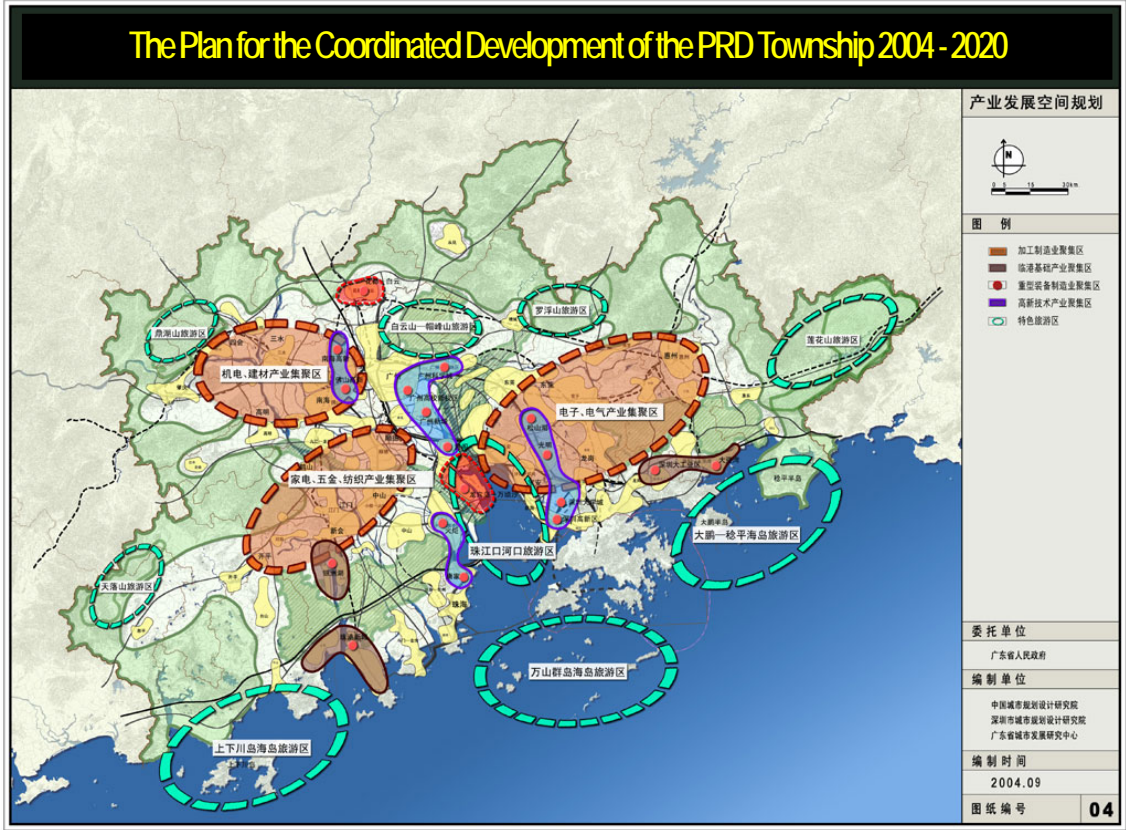
- In the areas of investment, to devote more efforts to uncovering the development potentials of the Western PRD, western Guangdong, and the Greater Southwest;
- To proactively search out and understand the comparative advantages of Western PRD through various channels, proactively get acquainted with the local development planning schemes, plans, strategies as well as policy measures for attracting foreign investment, so as to formulate effective specific investment strategy;
- In the areas of investment, to proactively promote the brand name of Hong Kong and to devote more intensive efforts in stepping up Hong Kong investment in areas with comparative advantage such as finance, logistics, manufacturing and professional services, etc, and to provide customer tailored solutions according to the requirements of the Western PRD cities;
- To actively maintain contact with the private sector in Western PRD, familiarize with its characteristics, development plans, issues of concern, and support service requirements etc. To apply Hong Kong's strengths to assist Western PRD private sector enterprise to expand into overseas markets;
- To collaborate in such areas as science and technology, education and personnel training, etc with Western PRD cities.

As aforementioned, the opportunity is ripe for Hong Kong to embark upon more in-depth and broader collaboration with the Western PRD. However, it should be made clear that the objective of this research report is to provide background analysis for driving further collaboration between Guangdong and Hong Kong, rather than to call upon the Hong Kong business community to make investment in any particular region. Certainly, Hong Kong companies should analyse the strengths and weaknesses of the Western PRD, the whole of PRD, the mountainous region and the eastern and western sectors of Guangdong, the pan-PRD, and even each different region elsewhere in China. Hong Kong companies should take into account their own long term development prospects and requirements, and choose the most suitable investment location based on their own business consideration.

Appendix 1: The Plan for the Coordinated Development of the PRD Township 2004-2020 – General planning schema



Appendix 2: The Plan for the Coordinated Development of the PRD Township 2004-2020 – Spatial Organization Planning Schema for Industry Development



Source: “The Plan for the Coordinated Development of the PRD Township 2004-2020”

Appendix 3: PRD Major Industry Cluster Zones Development Directive

Category		City/region	Development requirements
Mainly agri-business production zones	Speciality agri-product bases	Foshan aqua-cultural base, Guangzhou, and Foshan flower & pot-plant nurseries, Huizhou, Zhaoqing vegetable farms.	Focus in cultivation, dairy farming & animal husbandry.
	Suburban metropolitan agri-production bases	Inner suburbs of first tier metropolitan areas.	Focus in developing suburban eco-agriculture & economic-tourism.
	Modern forestry production bases	Outer tier mountainous region.	General environmental protection zones & regional greenery reserves development; actively develop commercial forests and economic plantations.
	Agri-business modernization demonstration zones	A totals of 10 agri-business modernization demonstration zones, including the Provincial zone, Guangzhou, Shenzhen, Zhuhai, Foshan, Jiangmen, Dongguan, Zhongshan, Huizhou, and Zhaoqing.	Applying advanced modern technology, material science to restructure & equip the agri-business; applying modern management in agri-business; providing agri-business modernization development experience & prototype projects.
Processing manufacturing clusters	Electronics, building materials clustering central region	Foshan/Nanhai high-tech zone, Sanshui, Gaoming, and Zhaoqing	Focus in production environment improvement & de-silting canals & drainage systems
	Eastern shore electronics, electrical clusters	The city of Dongguan, the Longgang and Bao'an districts of Shenzhen, and southwestern districts of Huizhou.	Focus in enhancing industry upgrade and spatial integration.
	Western shore household electrical, hardware, & textile clusters	Foshan/Shunde, north-western districts of Zhongshan, along state highway route 325 in Jiangmen.	Focus in new product development, & further industry expansion.
Harbour front industry clusters	Huizhou.Huiyang – Daya Bay clusters	Main industrial districts of Shenzhen, Huizhou/Huiyang – Daya Bay petrochemical bases	Support by the port of Daya Bay, focusing on petrochemicals, steel, & copper smelting.
	Western Zhuhai districts – Jiangmen Yinzhouhu clusters	The port of Zhuhai – port of Gaolan, Yinzhouhu district of Jiangmen, and Nanwan-Doumen.	Support by the port of Gaolan, focusing on petrochemicals, iron & steel, and papermaking.
Heavy equipment fabrication clusters	Guangzhou/ Nansha clusters	Wanqingsha of Nansha-Guangzhou, Dragon Cave isl., and Huangge district.	Supported by the port of Nansha, focusing on automobile, & shipbuilding.
	Guangzhou/Huadu – Baiyun clusters	Areas surrounding the new Baiyun international airport in Guangzhou.	Support by the near-by infrastructure of railway & airport, focusing on automobile, electrical engineering, electronics & telecomm gears manufacturing.

High-tech/new-tech clusters	Central region clusters	Guangzhou scientific city - Guangzhou university town - Guangzhou ecological island - Guangzhou Newtown	Focus in developing IT products & software, electronics information & life-science industries.
		Foshan high-tech zone	◦ Focusing in high value added products
	Eastern shore clusters	Dongguan/Songshanhu – Shenzhen/Guangming-Shenzhen university town- Shenzhen high-tech zone	Focusing in high-technology application industries.
	Western shore clusters	Zhongshan Touch-bear development zone – Zhuhai university town – Huizhou high-tech zone	Focusing in information science, life science & similar high technology.
International logistics bases	Guangzhou logistics bases	Guangzhou.Nansha, Huadu-Baiyun, Huangpu.	Based on regional logistics, emphasis on international reach, supplemented by municipal logistics distribution.
	Shenzhen logistics bases	Shenzhen Qianhai – Bao'an, Pinghu, Yantian.	
	Zhuhai logistics bases	Western Zhuhai, Sanzao, Hengqin	
Special scenic tourism zones	Famous nature scenic tourism zones	Baiyun & Maofeng mountains in Guangzhou; Huangyang & Phoenix mountains in Zhuhai; Xiqiaoshan in Foshan; Guifengshan, Gudoushan, & Tianlushan in Jiangmen; Dalingshan in Dongguan; Wuguishan in Zhongshan; Luofushan in Huizhou; plus Lotus flower Mountains, Zhaoqing, etc.	Actively foster development of tourism infrastructure based around scenic & heritage areas, and forest parks.
	Coastal leisure vacation belt	Pearl River Estuary districts, Shenzhen's Dapeng peninsula – Huizhou's Nianping peninsula, Wanshan isl. of Zhuhai, Chuanshan isl. in Jiangmen, etc.	Focus in controlling/ protecting coastal scenic tourism resources.
	Historical & cultural heritage touring route	Historic Guangzhou heritage areas, Hakka districts in eastern shores, & overseas Chinese hometowns in Jiangmen, etc.	Fostering local resources & speciality tourism in the context of cultural heritage surroundings.

Source: “The Plan for the Coordinated Development of the PRD Township 2004-2020”

Appendix 4: PRD Municipal and Township Hub-Centre Systems Development Directive

Centre cities		Functional orientations
Regional centres	Guangzhou	Fully utilize the city's function as a political, economic, cultural, and transportation centre, with emphasis on the regional impact effect of and service function in such areas as finance, commerce and trade, conference and exhibition, tourism, agency intermediary, logistics, information service, transport, training, education and cultural affairs, high-tech R&D, and so on; with the strengthening of the city's overall competitiveness as a pivotal objective, initiate across-the-board efforts to promote new model of industrialization, information highway, globalization; dedicate focused attention to create an economic centre, cultural heritage city, and city of natural scenery; develop Guangzhou into a modern international metropolis that has leadership position province wide, impacting southeast China, and influence in Southeast Asia.
	Shenzhen	Devote major efforts to technical innovation, institutional innovation, and environmental renewal; fully exploit the leadership role model value of special economic zone; strengthen the city's regional opening portal functions, progressively refine functional complement with Hong Kong, promote cross-border developments in Hong Kong and Shenzhen; devote key efforts to development of such high-end general service industries as finance, international trade, and conference and exhibition; develop the city into an regional central metropolis with outward-looking perspective and international orientation that has key influence and strong leadership impact on the township clusters in PRD.
Regional supporting centre	Zhuhai	Exploit the strength of the special economic zone in the city, strengthen Zhuhai-Macao collaboration and resources conservation, exploit the two major transport hub infrastructure facilities of the central port of Gaolan and Zhuhai international airport to accelerate building innovation bases that integrate commercial product, academia, and R&D which can generate high value-added, export merchandise and earn foreign exchange, that has strong potential to reach economy of scale, in addition, build a sub-tropical seaside garden city and seaside scenic tourism resort of international renown; develop the city into a modern key metropolis with leadership influence on the development of the west banks of the PRD.
District main centres	Foshan	In accordance with the "3rd major metropolis" target objective, Foshan will be actively developing its light industry spearheaded by high-tech/new-tech industry, giving due emphasis to developing tertiary industry, complementing and rendering mutual support with Guangzhou, fulfilling district centre functions in commerce trade, R&D, and service support, gradually building the city into a modern metropolis for the PRD to reach out and expand into western Guangdong and the West River catchments valley area.
	Jiangmen	Devote major efforts to renew traditional industry, actively promote development of light manufacturing, commerce and trade, logistics, and tourism; and develop the city into an outer-tier PRD service centre and one of the key portals for out reaching into western Guangdong from the PRD.
	Dongguan	Build a metropolitan area that integrates the trio district of "Dongguan inner city-Tongsha-Songshanhu", promote industry renewal and structural adjustment, enhance the desirability and service functions of the city, develop the city into an outward looking and high-tech industry driven modern manufacturing city.

	Zhongshan	Fully exploit the city's its international recognition as "Dr. Sun Yat Sen's hometown" to intensify international and domestic collaboration, making concentrated effort to develop high-tech/new-tech, light manufacturing, commercial trade, and logistics industries, implement a balanced economic, social, and ecological development strategy, build a "model city with balanced economic and social development".
	Huizhou	Augment the ranks of industries in such forte areas as electronics and IT, electrical equipment, textile garment, foodstuff and beverage, etc, enhance the city's value as district centre, develop it into a key scenic tourism city, a petrochemical production base, and a portal for PRD to reach out into the eastern and north eastern regions of Guangdong.
	Zhaoqing	Focus on reconstruction development of its main inner city suburbs, including the districts of Ruizhou, Dinghu, and Gaoyao, accelerate intensive development of the metropolitan areas and industry renewal, strengthen its status as a nationally renown historic and cultural heritage city and an outstanding tourism resort destination; develop the city into an outer-tier kernel of economic and social development and one of the portals for the PRD to outreach into southwest Guangdong and further afield to Greater Southwest China.

Source: "The Plan for the Coordinated Development of the PRD Township 2004-2020"

Appendix 5: Comparison of Human Resources Costs in PRD Cities (2002)

		Monthly wage (RMB)			
		Middle level manager	Charge personnel	Skilled worker	Unskilled worker
Central	Guangzhou	3000-5000	1500-2000	1000-1400	600-800
	Foshan	3000-5000	1500-2000	800-1200	400-800
Eastern	Shenzhen	3000-5000	2000-3000	1500-2000	800-900
	Dongguan	3000-5000	2000-3000	800-1500	500-800
	Huizhou	2000-3000	1500-2000	1000-1500	500-700
Western	Zhuhai	3000-5000	1500-2000	800-1500	400-600
	Jiangmen	3000-5000	1500-2000	1000-1500	600-800
	Zhongshan	3000-5000	1500-2000	1000-1500	600-800

Source: Consulate Guangzhou of the Kingdom of the Netherlands <http://www.cgguangzhou.org/>

Appendix 6: PRD Inter-City Transport Artery Planning Directive

Transport artery			Route corridor & interchange node
Express highway	2-ring	PRD ring motorway	Sanshui - East Guangzhou - Metropolitan Guangzhou Jiujiang, Longjiang.
		Guangzhou outer ring	Metropolitan Guangzhou - Eastern Guangzhou
	8-transverse	PRD north motorway	Metropolitan Zhaoqing – Sihui, Dawang – Huadu, Baiyun-Zengcheng-Boluo-Metropolitan Zhuhai (candidate route)
		Guangzhou – Hezhou motorway	Guangxi/Hezhou – Huaiji, Guangning-Sihui, Dawang-Sanshui-Nanhai High Tech Zone-Guangzhou Outer Ring.
		Guangzhou – Wuzhou motorway	Guangxi/Wuzhou-Yunfu-Zengcheng Metropolitan-Zhuhai City Ring-Road
		Guangzhou-Huizhou Motorway	PRD Ring Motorway-Zengcheng-Boluo-Zhuhai Metropolitan-Huizhou East
		Central PRD motorway	Guangxi-Yunfu-Gaoming-Jiujiang, Longjiang-Shunde-Nansha-Humen, Changan-Changan/Humen motorway-Guangdong/Huizhou motorway-Huizhou East-Jieyang-Fujian (candidate route).
		Jiangmen-Zhongshan motorway	Gonghe-Jiangmen Metropolitan-Zhongshan Metropolitan-Shenzhen East-Nansha
		Coastal motorway	Guangxi, Nanhai-Western Coastal Motorway-Nansha-Qianhai & Bao'an of Shenzhen –Shenzhen Airport –Hezhou Motorway-Shenzhen/Shantou Motorway-Fujian (candidate route)
		Zhongshan-Huizhou motorway	Yantian port-Huiyang, Daya Bay-Nanshan
	13-north&south	Guangzhou –Zhanjiang motorway	Guangzhou metropolitan-Guangzhou /Foshan Motorway-Foshan/Kaiping Motorway-Kaiping/Yangjiang Motorway-Zhanjiang
		Xinhui-Taishan motorway	Siqian, Daze-Taishan-Nanwan.Doumen
		Jiangmen-Zhaoqing motorway	Zhaoqing Metropolitan-Gaoming-Taishan-Hezhou-Jiangmen metropolitan-Yinzhouhu-Jinwan,Doumen-Hengqin-Macao.
		Guangzhou-Zhuhai (via Tai'ao) motorway	Guangzhou outer ring-Shunde-Xiaolan, Guzhen-Sanxiang, Danzhou-Zhuhai metropolitan-Macao.
		Guangzhou-Qingyuan (northern extension) motorway	Guangzhou outer ring-Huadu, Baiyun-Qingyuan, Shaoguan-Hunan.
		Beijing-Zhuhai motorway	Beijing, Hunan-Shaoguan, Qingyuan-PRD ring-Guangzhou metropolitan-Zhongshan east-Zhuhai metropolitan-Macao.
		Guangzhou-Conghua (northern extension) motorway	Guangzhou metropolitan-Conghua-Xinfeng-Jiangxi.
		Guangzhou-Shenzhen coastal motorway	Guangzhou East-Humen, Chang'an-Shajing, Songgang-Shenzhen Qianhai & Bao'an-Shenzhen western corridor-Hong Kong (candidate route).
		Guangzhou-Shenzhen motorway	Guangzhou east-Humen, Chang'an-Shajing, Songgang-Shenzhen Qianhai & Bao'an-Shenzhen metropolitan.

Railway		Zengcheng-Shenzhen motorway	Zengcheng-Dongguan metropolitan-Dongguan-Shenzhen motorway-Shenzhen metropolitan.
		Boluo-Shenzhen (northern by-pass) motorway	Yantian-Changpiing, Hengli-Boluo-Longmen, Xinfeng –Jiangxi.
		Guangdong-Ganzhou motorway	Shenzhen metropolitan-Shenzhen/Huizhou motorway-Huizhou metropolitan-Huizhou/Hezhou motorway-Jiangxi.
		Huizhou-Ling'ao motorway	Huizhou-Daya bay
	3-transverse	Zhaoqing-Huizhou (north line) railway	Guangxi Liuzhou, Wuzhou-Zhaoqing metropolitan-Sihui, Dawang-Sanshui-Foshan metropolitan-Huadu, Baiyun-Zengcheng-Huizhou metropolitan-Heyuan, Meizhou-Fujian/Longyan, Jiangxi/Ganzhou (candidate route).
		Guangzhou-Maoming, Guangzhou-Meizhou & Shantou railway	Guangxi, Hainan-western Guangdong coastal-Zhaoqing metro-Sihui, Dawang-Sanshui-Foshan metro-Guangzhou metro-Guangzhou east-Changping, Hengli-Huizhou metro-Heyuan, Meizhou, Shantou.
		State coastal express passenger rail	Guangxi, Zhuhai-west Guangdong coastal-Yinzhouhu-Zhugang Newtown-Zhuhai metropolitan-Shenzhen Qianhai & Bao'an-Longhua, Guanlan-Huiyang, Daya Bay- coastal east Guangdong-coastal southeast China.
	7-horth & south	Xinxing-Nanwan railway	Xinxing-Kaiping-Taishan-Nanwan, Dumen.
		Guangzhou-Zhuhai railway	Huadu, Baiyun-Nanhai high tech zone-Foshan metropolitan-Jiujiang, Longjiang-Jiangmen metropolitan-Yinzhouhu-Zhugang Newtown-Gaolan wharf.
		Guangzhou/Nansha spur line railway	Guangzhou metropolitan-Nansha wharfs.
		Beijing-Guangzhou passenger rail (southern by-pass)	Beijing, Hunan-Shaoguan, Qingyuan -Huadu, Baiyun-Guangzhou metropolitan-nansha-Humen,Changan-Shajing,Songgang-Longhua,Guanlan-Shenzhen metropolitan-Hong Kong.
		Guangzhou-Shenzhen railway	Guangzhou metropolitan -Shilong-Changping, Hengli-Zhangmutou-Pinghu-Shenzhen metropolitan.
		Beijing-Kowloon railway	Beijing, Jiangxi-Heyuan-Huizhou Metropolitan-Changping, Hengli-Shenzhen metropolitan-Hong Kong.
		Daya bay goods rail line	Huizhou metropolitan-Huiyang, Daya Bay.
Inter-city express rail link	4-transverse	Foshan-Zhaoqing Inter-city link	Foshan metropolitan-Sanshui-Zhaoqing metropolitan.
		Shunde-Guangdong Inter-city link	Shunde-Guangzhou Newtown-Dongguan metropolitan.
		Jiangmen-Huizhou Inter-city link	Jiangmen metropolitan-Xiaolan, Guzhen-Zhongshan East-Nansha-Humen,Changan-Dongguan-Xieshan-Changping,Hengli-Zhongkai high tech zone-Huizhou metropolitan.
		Shenzhen-Zhuhai express Inter-city link	Shenzhen metropolitan-Shenzhen Qianhai, Bao'an-Tangjia-Zhuhai metropolitan.

4-north & south	Guangzhou-Zhuhai Inter-city link	A.) Lijiao Guangzhou-Guangzhou new passenger terminal-Shunde-Xiaolan, Guzhen-Zhongshan metropolitan-Sanxiang, Danzhou-Zhuhai metropolitan (proposed by Ministry of Railways et al). B.) Guangzhou metropolitan-Foshan metropolitan-Shunde-Xiaolan, Guzhen-Zhongshan metropolitan-Zhongshan east-Tangjia-Zhuhai metropolitan-Hengqin-Zhuhai airport (proposal by this research study).
	Guangzhou-Zhuhai express Inter-city link	Guangzhou metropolitan-Nansha-Zhongshan east-Tangjia-Zhuhai metropolitan-Hengqin-Zhuhai airport (proposal by this research study).
	Guangzhou-Hong Kong express Inter- city link (Guangzhou-Hong Kong express railway)	A.) Guangzhou new railway passenger terminal-Guangzhou Newtown-Humen, Changan-Longhua, Guanlan-Huanggang Shenzhen-Hong Kong (proposed by Ministry of Railways et al). B.) Guangzhou new Baiyun International Airport-Guangzhou metropolitan-Guangzhou new railway passenger terminal-Guangzhou Newtown-Humen, Changan-Shenzhen Qianhai, Bao'an-Hong Kong (proposal by this research study).
	Guangzhou-Shenzhen Inter-city link	Guangzhou metropolitan-Guangzhou east-Dongguan metropolitan-Longhua, Guanlan-Huanggang Shenzhen-Hong Kong.

Note: “Candidate route” in this form refers to recommended additional or adjudgment route suggested on the basis of relevant special planning scheme, and according to general overall organization of the township clusters.

Source: “Special Planning for Urbanization in the PRD (2004-2020)”

Main references

1. “Research Study on Transportation Links between Hong Kong and the Western Banks of Pearl River” by the General Transportation Research Institute of State Development and Reform Commission. July, 2003.
2. “Hong Kong and the Western PRD Cooperative. Development from a Cross-boundary Perspective” by Yeung Yue-man, Shen Jianfa, Zhang Li (Hong Kong Institute of Asia-Pacific Studies, The Chinese University of Hong Kong, Jan. 2004).
3. “Common Grounds And Differences On The Guangdong-Hong Kong-Macao Bridge” – by Zhao Shanbo, Yang Chun, One Country Two Systems Research Institute, 2002.
4. “Background Information On The Guangdong-Hong Kong-Macao Bridge - Common Grounds And Differences” - by Zhao Shanbo, Yang Chun, One Country Two Systems Research Institute, Sept 2002.
5. “Policy Discussions and Recommendations on Cross-Border Travel by Mainland and Hong Kong Small Private Vehicles” - Zhao Shanbo, Li Xuan, Jul 2003.
6. “Research Study on the Competitiveness of the Hong Kong Barge Shipping Trade” – One Port Company Limited (commissioned by Hong Kong Container Terminal Operators Association Limited - ‘HKCTOA’).
7. “The Greater PRD & the Rise of China” by Michael J. Enright et al - Singapore John Wiley & Sons, 2005.
8. “Special Planning for Urbanization in the PRD”, Guangdong provincial government, 2003.
9. “The Plan for the Coordinated Development of the PRD Township 2004-2020”, Guangdong provincial government, July 2004.
10. “Inside PRD” new-letter feature column, Hong Kong Trade Development Council, 2000 - 2004 issues.
11. “Research Study On Raising The International Competitiveness Of Greater PRD” – edited by Chen Guangqun, Zhou Yunyuan, Ye Jia’An, & Xue Fengxuan, Sun Yat Sen University Press, Aug 2003.
12. “Research Report on Development Strategy of Hong Kong’s Modern Logistics Industry” – Hong Kong & Macao research unit of the state council development research centre, Beijing-Hong Kong economic research centre, March 2003.
13. Guangdong Statistics Year Books 2001, 2003, 2004 and 2005.