Strategic Planning for
Employment-related Land Uses and
Strategic Transport Network in Hong Kong
After the Opening of the Hong Kong-Zhuhai-Macao Bridge

Final Report
April 2018
Executive Summary

The Hong Kong-Zhuhai-Macao Bridge (HZMB), scheduled to open in 2018, is regarded to be of importance to strengthen the spatial connection and socio-economic cooperation in the Guangdong-Hong Kong-Macao Greater Bay Area (GBA), particularly between Hong Kong and other cities in the Western Pearl River Delta (PRD).

Taking into consideration the international experiences, spatial planning in selected GBA cities viz. Macao, Zhuhai and Zhongshan, as well as the opportunities and challenges brought by the HZMB, it is identified that sectors in Hong Kong will be able to benefit from the bridgehead opportunity, but at the same time they may face keen competition with our neighbouring cities. This Study will further look into the key planning issues in the employment-related land uses (ERLU) and strategic transport network (STN) in Hong Kong, and propose holistic spatial strategy and supporting policy recommendations to capture the opportunities and embrace the challenges.

In view of our strategic location connecting the Mainland and the world as well as well-developed financial and legal system, to leverage our comparative advantages, Hong Kong needs to reinforce its position as an international gateway and capitalise on bridgehead opportunities from the Greater Bay Area by creating capacity for sustainable growth.

Based on three overarching guiding principles of (i) providing adequate supply of ERLU, (ii) ensuring high connectivity between the HZMB, major ERLU areas and workforce population, and (iii) facilitating smooth and timely implementation of conceptual spatial strategy with supporting policies, a holistic seven-pronged conceptual spatial strategy is formulated, consists of:

**Logistics**
- *Aviation Logistics Cluster* that develops a land-air transhipment hub at HKIA;
- *Integrated Logistics Belt* that supports logistics cluster in Tuen Mun West;

**Tourism**
- *Northeast Lantau Tourism Hub* which enriches “all-for-one” tourism experiences;
- *South Lantau Ecological Recreation Belt* which emphasises sustainable eco-tourism;
- *Western MICE Core* which enhances the capacity for Convention & Exhibition (C&E);

**Innovation and Technology**
- *Southern Financial Innovation Belt* which produces synergic effect to the Core Urban Area;
- *Eastern Research Innovation Belt* which capitalises on the cooperation opportunities on knowledge and technology.

Supporting policies promoting regional collaboration, talent attraction, capacity building and comprehensive planning will facilitate the implementation of the proposed spatial strategy. Building on top of the proposal, several prioritized actions on these areas which are worthwhile for special attention after the opening of the HZMB are suggested to first reinforce the capacity of Hong Kong to face the upcoming opportunities and challenges.

The proposed conceptual spatial strategy will enhance the competitive edge and positioning of sectors in Hong Kong by embracing the challenges and seizing the bridgehead opportunities, while providing capacity for the sustainable development. The Study eventually targets to further promote Hong Kong as a comprehensive and efficient international gateway in the GBA.
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# Abbreviations and Acronyms

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<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>ASMTP</td>
<td>Admission Scheme for Mainland Talents and Professionals</td>
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<tr>
<td>AWE</td>
<td>AsiaWorld-Expo</td>
</tr>
<tr>
<td>B2B</td>
<td>Business-to-Business</td>
</tr>
<tr>
<td>B2C</td>
<td>Business-to-Consumer</td>
</tr>
<tr>
<td>BART</td>
<td>Bay Area Rapid Transit</td>
</tr>
<tr>
<td>C&amp;E</td>
<td>Convention and Exhibition</td>
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<tr>
<td>CBD</td>
<td>Core Business District</td>
</tr>
<tr>
<td>CBD1</td>
<td>First Core Business District</td>
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<tr>
<td>CBD2</td>
<td>Second Core Business District</td>
</tr>
<tr>
<td>CBD3</td>
<td>Third Core Business District</td>
</tr>
<tr>
<td>CCI</td>
<td>Cultural and Creative Industries</td>
</tr>
<tr>
<td>CEDD</td>
<td>Civil Engineering and Development Department</td>
</tr>
<tr>
<td>CEPA</td>
<td>Mainland and Hong Kong Closer Economic Partnership Arrangement</td>
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<tr>
<td>EFLS</td>
<td>Environmentally-friendly Linkage System</td>
</tr>
<tr>
<td>EIA</td>
<td>Environmental Impact Assessment</td>
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<tr>
<td>ELM</td>
<td>East Lantau Metropolis</td>
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<tr>
<td>EOI</td>
<td>Expression of Interest</td>
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<tr>
<td>ERLU</td>
<td>Employment-related Land Uses</td>
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<tr>
<td>FTA</td>
<td>Free Trade Agreements</td>
</tr>
<tr>
<td>GBA</td>
<td>Guangdong-Hong Kong-Macao Greater Bay Area</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>HK2030+</td>
<td>Hong Kong 2030+: Towards a Planning Vision and Strategy Transcending 2030</td>
</tr>
<tr>
<td>HKBCF</td>
<td>Hong Kong Boundary Crossing Facilities</td>
</tr>
<tr>
<td>HKCEC</td>
<td>Hong Kong Convention and Exhibition Centre</td>
</tr>
<tr>
<td>HKIA</td>
<td>Hong Kong International Airport</td>
</tr>
<tr>
<td>HKP</td>
<td>Hong Kong Port</td>
</tr>
<tr>
<td>HKTDC</td>
<td>Hong Kong Trade Development Council</td>
</tr>
<tr>
<td>HZMB</td>
<td>Hong Kong-Zhuhai-Macao Bridge</td>
</tr>
<tr>
<td>I&amp;T</td>
<td>Innovation and Technology</td>
</tr>
<tr>
<td>IANG</td>
<td>Immigration Arrangements for Non-local Graduates</td>
</tr>
<tr>
<td>IE</td>
<td>Import/Export</td>
</tr>
<tr>
<td>MBCF</td>
<td>Macao Boundary Crossing Facilities</td>
</tr>
<tr>
<td>MICE</td>
<td>Meetings, Incentives, Conferences and Exhibitions</td>
</tr>
<tr>
<td>MSAR</td>
<td>Macao Special Administrative Region</td>
</tr>
<tr>
<td>NCD</td>
<td>North Commercial District</td>
</tr>
<tr>
<td>NTN</td>
<td>New Territories North</td>
</tr>
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NWNT-Lantau-Metro Transport Corridor

OD Origins / Destinations
PBU Port Back-up
PlanD Planning Department
PRD Pearl River Delta
R&D Research and Development
RDE Retail / Dining / Entertainment
RMB Renminbi
RTT River Trade Terminal
SCVA Strategic Cavern Area
SEZ Special Economic Zone
SSSI Site of Special Scientific Interest
STI Strategic Transport Infrastructure
STN Strategic Transport Network
TCNTE Tung Chung New Town Extension
TEU Twenty-foot Equivalent Unit

The Study / This Study
Strategic Planning for Employment-related Land Uses and Strategic Transport Network in Hong Kong After the Opening of the Hong Kong-Zhuhai-Macao Bridge

TM-CLKL Tuen Mun – Chek Lap Kok Link
1 Introduction

1.1 Study Background

1.1.1 The coordinated and cooperative development between Hong Kong and the Pearl River Delta (PRD) has been promulgated as a national strategy since the Outline Plan for the Reform and Development of the Pearl River Delta in 2009. Subsequently its strategic importance was further heightened in the National 13th Five-Year Plan, in which the central government put forth the development of the Guangdong-Hong Kong-Macao Greater Bay Area (GBA) with an aim to leverage the combined advantages of the whole region.

1.1.2 Echoing the national strategy, the Framework Agreement on Deepening Guangdong-Hong Kong-Macao Cooperation in the Development of the Bay Area was reached in 2017, which established the overarching principle of "complementary cooperation" for the GBA development.

1.1.3 In the face of regional competitions and global economic slowdown, the challenges for Hong Kong is increasing rapidly. With the opportunities brought by the Belt and Road initiatives and the GBA development, new impetus will be generated for Hong Kong's economic development. Embracing the new opportunities and leveraging the existing advantages, Hong Kong can strive to further develop high-value added and diversified economy.

1.1.4 Nevertheless, many considerations have been put into the enhancement of cross boundary transport network between Hong Kong and the GBA. In the Planning Study on the Coordinated Development of the Greater Pearl River Delta Townships announced by the Planning Department in October 2009, the concept "one-hour inter-city commuting circle" was introduced. This concept aims to improve the mobility of passengers and cargo within the region enhancing the spatial organisation.

1.1.5 The Hong Kong-Zhuhai-Macao Bridge (HZMB) is scheduled to open this year. It is regarded to be of importance to strengthen the spatial connection and socio-economic cooperation in the GBA, particularly between Hong Kong and other cities in the Western PRD.

1.1.6 In relation to strategic planning in Hong Kong, the HZMB will be connected to the Western Economic Corridor promulgated under the Conceptual Spatial Framework of Hong Kong 2030+: Towards a Planning Vision and Strategy Transcending 2030 (HK2030+), which stimulates economic development in the northern Lantau as well as the proposed East Lantau Metropolis (ELM).

1.2 Study Purpose

1.2.1 The HZMB is expected to bring about changes in the spatial and socio-economic development in the GBA. It is therefore necessary for Hong Kong to review its future strategic planning on employment-related land uses (ERLU) and regional integration with the GBA after the opening of the HZMB.

1.2.2 Considering the aforementioned background, STAR Planning (the Study Team) was commissioned to undertake a 4-month consultancy study regarding the “Strategic Planning for Employment-related Land Uses and Strategic Transport Network in Hong
1.3 Study Goal and Objectives

1.3.1 The overarching goal of this Study is to formulate holistic spatial planning strategy and supporting policy for the ERLU and STN of Hong Kong in the light of the HZMB as a supplement to HK2030+.

1.3.2 A list of objectives is put forward to help achieve the study goal, taking into account the requirements stipulated in the Study Brief:

I. Identify the key strategic planning issues of Hong Kong’s cross-boundary infrastructure, ERLU and regional integration, in response to the opening of the HZMB;

II. Explore and review international experiences in maximising synergy between ERLU and STN planning for Hong Kong’s regional integration with the GBA;

III. Evaluate the implications of Zhuhai, Zhongshan and Macao’s spatial strategies and policies on the planning of ERLU and STN of Hong Kong;

IV. Understand the aspirations of relevant sectoral stakeholders in the development of ERLU and STN in the light of the HZMB;

V. Analyse the opportunities and challenges in sustaining growth and development of ERLU and STN in Hong Kong in the light of the HZMB; and

VI. Formulate appropriate spatial planning strategy and policy for ERLU and STN of Hong Kong in the light of the HZMB as a supplement to HK2030+.

1.4 Study Process and Methodology

1.4.1 To achieve the study goal and objectives set out in Section 1.3, a systematic study process comprising three stages is formulated. The Study commences with Stage 1 Baseline Study and International Review, followed by Stage 2 Sectoral Study. The Study will be consolidated with Stage 3 Recommendation.

1.4.2 A total of eight key tasks are developed in the three stages. Figure 1.1 below maps out the sequential flow of key tasks in the respective study stages and the study objectives referred, as the colours indicate.
Strategic Planning for Employment-related Land Uses and Strategic Transport Network in Hong Kong
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Stage 1 – Baseline Study and International Review

1.4.3 Task 1 – Literature Review defined relevant key concepts and established their theoretical relationship to formulate a holistic conceptual framework which captures the dynamic relationship between strategic transport infrastructure (STI) and ERLU changes, taking into account the contribution of the regional context. A wide range of literature such as academic journals, research reports from government departments and other organisations has been reviewed.

1.4.4 Task 2 – Review of Spatial Strategy and Policy of Hong Kong reviewed the current spatial planning strategy and policy of Hong Kong at local level. Comprehensive desk research is conducted to identify relevant spatial strategy and policy with respect to (i) strategic transport and cross-boundary infrastructures, (ii) ERLU, and (iii) regional integration.

1.4.5 Task 3 – International Review drew on an extensive research of academic journals and government documents. The emphasis of this task is on the major takeaways of the international experiences, which are grouped as (i) leveraging comparative advantages and economic integration, (ii) bridgehead economy and boundary opportunity, and (iii) spillover effect and agglomeration economy.
Stage 2 – Sectoral Study

1.4.6 Task 4A – Policy Review of Strategic Planning in Zhuhai reviewed the spatial and economic development policies in Zhuhai and analyse the implications on Hong Kong’s spatial and socio-economic development. Archival study on the policy documents of Zhuhai and interview with scholars specialising in economic and transport network development and regional economic competition in the PRD region was conducted.

1.4.7 A site visit to Zhuhai Housing and Urban-Rural Planning Bureau, HZMB Management Bureau, Hengqin New Area Management Authorities and some Hong Kong businesses in Zhuhai was arranged between January 23 and 24, 2018.

1.4.8 Task 4B – Policy Review of Strategic Planning in Zhongshan and Task 4C – Policy Review of Strategic Planning in Macao has appointed UP Studio and DADA’s to provide sub-consultancy services for Task 4B and Task 4C respectively.

1.4.9 Task 5 – Sectoral Investigation of Relevant Stakeholders of Hong Kong investigated the aspirations, particularly spatial needs, of the relevant stakeholders involved in the planning of ERLU and STN after the opening of the HZMB.

1.4.10 Relevant stakeholders regarding the planning of ERLU and STN, i.e. representatives from each of the above shortlisted sectors / industries, as well as institutions and academia were invited for semi-structured interviews. Please refer to Appendix 2 for this gist of the interviews.

Stage 3 – Recommendations

1.4.11 Task 6 – SWOT Analysis summarised, consolidated and analysed the findings collected from Stage 1 and 2 (including the working papers done by the sub-consultants) to identify major factors of Hong Kong’s future spatial planning in light of the HZMB.

1.4.12 The strengths (defined as “the comparative advantages of sectors/industries of Hong Kong which are out-performing other neighbouring cities in the GBA region after the opening of the HZMB”) and weaknesses (defined as “the comparative disadvantages of sectors/industries of Hong Kong which are out-performed by other neighbouring cities in the GBA region”) from the aspects of economic development, spatial planning strategies and regional integration policies are examined. The opportunities (defined as “external socioeconomic and political environment after the opening of the HZMB that favours sustainable growth of Hong Kong”) and threats (defined as “external socioeconomic and political environment after the opening of the HZMB that impedes sustainable growth of Hong Kong”) are also evaluated in this task.

1.4.13 Task 7 – Recommended Spatial Strategy and Policy formulated the spatial strategies with supporting policy for ERLU and STN as a supplement to HK2030+ Building Block 2. With the consideration of insights from Task 6 SWOT Analysis, a vision statement first was established. The guiding planning principles and approaches were then identified to facilitate the subsequent spatial strategy.

1.4.14 A Phasing Programme was established in respect to a list of key considerations. Prioritised actions, which will be firstly implemented in the near term, were identified. Meanwhile, other proposed key actions will be implemented in medium to long term. Following the phasing programme of land supply options done by the Task Force on Land
Supply which also serves as the additional input for HK2030+, the phasing programme of this Study is defined as follows.

- **Short-to-Medium Options**: Implemented in around 10 years’ time; and
- **Medium-to-Long Term Options**: Implemented in around 10 to 30 years’ time.

### 1.4.15 Task 8 – Implications of Recommendations

Task 8 – Implications of Recommendations evaluated the implications of the recommendations proposed in Task 7 on the key stakeholders. Key stakeholders include but not limited to the government and major private sectors might affected by the recommendations.

#### Deliverables

1.4.16 The Inception Report was submitted on 5 March 2018 to conclude the works in Stage 1 of the Study. The Working Paper, which documents the findings in Stage 2, was subsequently completed on 3 April 2018. Two working papers were submitted by the two sub-consultants respectively on the same day.

1.4.17 This Final Report, completed on 30 April 2018, builds on the previous deliverables and consolidates the analysis, assessments and recommendation of the Study Team. A public seminar is scheduled on 5 May 2018 at the City Gallery, Central, Hong Kong to present our key findings to the general public.

### 1.5 Study Management

1.5.1 The study programme is summarized and visualized by a Gantt chart in Appendix 1.

1.5.2 STAR Planning is an international consulting firm providing various professional service on spatial, territorial and regional planning, including policy review, data analysis, regional strategies consulting and advisory services.

1.5.3 A study team with a wide variety expertise and professions from fields of urban planning, transport and traffic engineering, sustainability, public relations, public policies etc. with over 10 years relevant experience has been formed to provide comprehensive analysis of findings for the Study. Figure 1.2 shows the key staffs that will be involved in this study and describes the staff organisation.

**Figure 1.2 Staff organisation**

Source: Study Team
1.6 Structure of the Report

1.6.1 Incorporating the analysis and findings of Inception Report and Working Papers, this Final Report is structured into eight chapters in addition to this introductory chapter:

- **Chapter 2** illustrates the key concepts of the Study through literature review and formulates a conceptual framework;
- **Chapter 3** reviews international experiences and highlights the key takeaways for Hong Kong;
- **Chapter 4** provides an overview on the spatial strategies and policy of Hong Kong, Zhuhai, Macao and Zhongshan and analyses the significance of the GBA cities to Hong Kong;
- **Chapter 5** investigates the opportunities and challenges of Hong Kong in light of the HZMB in the perspective of six shortlisted industries, with an emphasis on (i) Tourism, Recreation and Retail, (ii) Logistics, and (iii) Innovation and Technology (I&T) industries;
- **Chapter 6** introduces the planning approach of the proposed spatial strategies including the vision statement, guiding principles and approaches;
- **Chapter 7** proposes the spatial strategies with supporting policy for three industries, (i) Tourism, (ii) Logistics and (iii) I&T, and analyses their implications for stakeholders;
- **Chapter 8** presents the action plan for implementation and prioritised actions with elaboration of the key considerations; and
- **Chapter 9** concludes the study with key takeaways.
2 Literature Review

2.1 Transport – Land Use Interaction

Key Definitions

2.1.1 STI can be defined as “major international gateways and their key inland connections (and hubs)” with an aim to facilitate movement of production factors viz. people, goods, capital and information in the region (OECD, 2011). The three-tier hierarchy of STI is explained in Table 2.1 below.

Table 2.1 Hierarchy of STI

<table>
<thead>
<tr>
<th>Scale</th>
<th>Explanation</th>
<th>Example</th>
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<tr>
<td>National</td>
<td>Gateway and Hubs connecting mega-regions with the aim of facilitating investment, trade and production</td>
<td>International air and maritime ports</td>
</tr>
<tr>
<td>Regional</td>
<td>Links between metropolitan areas, backbone of the urban system</td>
<td>Transtate highways / railways / canals</td>
</tr>
<tr>
<td>Local</td>
<td>Road and transit mainly served for commuting purpose and employment / commercial related activities</td>
<td>City subway system</td>
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</table>

Source: Rodrigue et al. (2016)

2.1.2 In a broad sense, ERLU are economic land uses which generates employment. Major activities include offices, commercial / general businesses and industrial uses. In the context of Hong Kong, four major types of ERLU are identified in HK2030+, namely Grade A Offices (including Core Business District (CBD) and Non-CBD Grade A Offices), General Business, Industries, and Special Industries (PlanD, 2016).

Strategic Transport Infrastructure – Land Use Interaction

2.1.3 Regional- and local-scale STI play relatively important role in affecting ERLU, as local connection is rather emphasised in ERLU. In the scope of Hong Kong, regional STI (e.g. the HZMB and Hong Kong-Shenzhen Western Corridor) and local STI (e.g. Northern Link) would result in a shift in accessibility and mobility, which are factors of land value increment (Todes, 2012). Land value increment and economic opportunity thus modify the ERLU.

2.1.4 There are two general typologies of STI-derived ERLU, namely Employment Zone and Attraction Zone (Rodrique et al., 2016). The first one is cluster of diversified businesses created from motorisation and improved accessibility from STI to districts located far away from the residential zones, while the latter one is created by taking advantages from both synergistic effect of hierarchy of services and improvement of accessibility. Their characteristics are outlined in Table 2.2.

2.1.5 The interactions could be summarised conceptually as a cycle shown in Figure 2.1. The cycle is market-driven, with speed of flows in each part differs from each other. Viewed from the top, transport infrastructure would create a direct and immediate impact to the accessibility. With change in accessibility, the two driving forces of attractiveness of land: (i) transportation cost and (ii) buyer’s desire of space (in terms of the improvement in economies of scale) are altered, leading to changes in the final land use. The flows are changed slowly, with variations between types of land use.
Table 2.2  General typology of STI-derived ERLU

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
<th>Process of how STI derives the zone</th>
<th>Example in Hong Kong</th>
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<tbody>
<tr>
<td>Employment Zone</td>
<td>Areas having cluster of diversified businesses</td>
<td>STI promotes transport with higher time-efficiency, making longer commuting trips possible</td>
<td>• Tung Chung New Town Extension</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• East Lantau Metropolis (ELM)</td>
</tr>
<tr>
<td>Attraction Zone</td>
<td>Areas linked directly to STI, providing specialised services that attracts citizen traveling to the zone</td>
<td>STI directly improves accessibility, allowing industries with lower hierarchy located outside CBD while still enjoying high accessibility</td>
<td>• Lok Ma Chau Loop HK-SZ Innovation &amp; Technology Park</td>
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<td></td>
<td></td>
<td>• Hong Kong International Airport (HKIA) North Commercial District</td>
</tr>
</tbody>
</table>

Source: Rodrigue et al. (2016)

2.1.6 The right-hand side of the cycle is a slow process that the use of land firstly affects economic activities due to the alternation of spatial structure of land users. In the end, the changes of choice in route and destination affects demand for various STI.

2.1.7 Empirical studies usually focus on the left-hand side of the flow. Even though part of the studies directly focuses on how transport infrastructure affected ERLU instead of taking accessibility changes into part of the studies, those study papers could provide a basic and preliminary understanding to how the effect varies from different ERLU.

Figure 2.1  Transport – Land Use Cycle
Source: Study Team, synthesised from Bertolini (2012) and Wegener (2004)

2.2  Leveraging Synergy in the Regional Context

Strategic Transport Infrastructure and Economic Development

2.2.1 New economic geography acknowledges the decisive role of transportation cost in international and regional trades (Krugman, 1991; Duan et al., 2010). STI is the key to
initiate economic growth by promoting physical proximity and attracting agglomeration of firms, and thus mobile factors of production such as capital and talents. This “centripetal force” results in a self-reinforcing mechanism that helps strengthen the “second-nature” locational advantage of a region, which is given by agglomeration economies rather than natural resources endowment (Schmutzler, 1999).

2.2.2 Early investment in STI can secure regional competitiveness and contribute to the long-term agglomeration of economic activities, as suggested by Krugman’s proposition of path dependence. With the completion of the HZMB, Hong Kong enjoys unparalleled first-mover advantage in the GBA development, despite the potential competition with cross-river expressways such as the Shenzhen Link in the near future.

2.2.3 The establishment of new STI also creates spatial spillover effect on both STN and ERLU; such effect is not only generative (related to the creation of economic synergy) but also distributive (López, 2009; van Exel et al., 2002). The improved connectivity and efficiency in STN create “network synergy” with complementary transport links, as well as economic land uses (network effect) (Capello & Rietveld, 1998). In addition, with the reduced transportation cost, STI may generate substantial redistribution effect on economic sectors and regions (distribution effect) (Rietveld & Nijkamp, 1993). The juxtaposition of these two effects influences the spatial pattern of regional development.

2.2.4 Spillover effect can be both positive and negative, which is associated with the relative competitiveness of regions and migration of production factors (van Exel et al., 2002). It is evidenced by the cross-region STN in the Mainland and the European Union (Yu et al., 2013; Arbués et al., 2015) where establishment of new STI facilitated the outbound mobility of production factors. Hong Kong should therefore seek to strengthen its hub functions and comparative advantages to counteract the potential negative spillover effect arising from the HZMB.

Comparative Advantages of Regions

2.2.5 The comparative advantages of regions can be analysed by the Porter Diamond, comprising four broad determinants which are conducive to sectoral development in the face of international and regional competition (Porter, 1990):

- **Factor conditions**: Factors of production which are necessary to compete in a particular industry;
- **Demand conditions**: Home demand for the industry’s product or service, which could be from neighbouring areas;
- **Related and supporting industries**: Supplier and related industries which are internationally competitive; and
- **Firm strategy, structure, and rivalry**: The context governing how companies are created, organized, and managed, and the nature of domestic rivalry.

2.2.6 The Porter Diamond is a mutually reinforcing system which leads to success in industries, and thus regions, when the synergy between the attributes is maximised. Whilst the advantage in one determinant can strengthen or upgrade the advantages in others, its effect is also contingent upon one another.

2.2.7 Factor conditions are most relevant to strategic spatial planning among other determinants, as it seeks to support sectoral development by allocating sufficient land
resources and providing supporting infrastructure in response to market needs. **Table 2.3** summarises the five broad categories of production factors, which offers a systematic framework for understanding the spatial needs and requirements of economic sectors.

**Table 2.3  Broad categories of factor conditions**

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Resources</td>
<td>Quantity, skills, cost of personnel, etc.</td>
</tr>
</tbody>
</table>
| Physical Resources   | • Relative location and accessibility to suppliers or market (in the GBA and the globe)  
                       | • Abundance, quality and cost of land for the industry                     |
| Knowledge Resources  | Stock of scientific, technical & market knowledge                           |
| Capital Resources    | Amount and cost of capital available to finance the industry                |
| Infrastructure       | Type, quality and user cost of infrastructure, including transportation and telecommunication system |

Source: Porter (1990, pp. 74-75)

2.2.8 STI, as a basic factor of production, is necessary but not sufficient to generate sustainable comparative advantages for industries; nevertheless, it serves as the foundation to create advanced/specialised factors which require sophisticated technological and human resources input. Modern infrastructure such as advanced transportation, logistics and telecommunications plays a pivotal role in upgrading industries (Porter, 1990).

2.2.9 The Porter Diamond sheds two important insights into the strategic planning of Hong Kong:

- **Principle of clustering**: Clusters of related and supporting industries should be developed rather than having isolated ones.
- **Development priorities**: Industries with basic factor advantages can first be developed as initial centres of economic development, then stimulate the development of related industries by concentrating investment of infrastructure in these industries, taking into consideration the demand from hinterland in the GBA.

**Boundary Effect and Bridgehead Economy**

2.2.10 Boundary region has high potential to a frontier for regional economic cooperation and integration. In theory, its capacity to foster cross-boundary interaction is shaped by the dynamic between shield effect and agent effect (Li, 2004; Song, Liu & Li, 2016):

- **Shield effect** are factors that hinder the spatial interaction between boundary, such as politics, ethnicity, history and culture.
- **Agent effect** refers to the mediating function of boundary area to facilitate interaction of regions in economic, social and cultural aspects. It is more significant in regions with closer geographical proximity, greater size of hinterland economy and higher demand for cross-boundary travel.

2.2.11 With the closer socio-economic interaction and enhanced connectivity between Hong Kong and the Mainland, Hong Kong can seize the agent effect to capture development potential of adjoining areas in the Western PRD by transforming peripheral areas such as Lantau and New Territories North (NTN) into new economic interfaces. The HZMB will enable Hong Kong to achieve deeper economic integration with the GBA by improving spatial accessibility to/from the Western PRD.
2.2.12 This is related to the emerging concept of bridgehead economy. Bridgehead refers to “a strategic frontier springboard with the ability to control, develop and influence the flow of people, goods, capital and information” (Development Bureau, 2015). The three STI-enabled capacities (Figure 2.2) together bring us new development opportunity in the regional context, which is called bridgehead opportunity.

![Figure 2.2 Concept of bridgehead economy](source: Study Team, summarised from Liu (2013))

2.2.13 Multimodal transportation hub at strategic locations (e.g. area close to cross-boundary STI) exaggerates locational advantage as well as development potential, which helps transform the “bridgehead” into hubs of business, commerce, logistics and tourism, etc., taking into consideration the comparative advantages of Hong Kong and market demands in the territory and the GBA as a whole. Bridgehead economy shares a pivotal role in regional economic integration, as it not only benefits the landing points of STI but also the surrounding areas of influence (Fang, Gong & Yang, 2015).

2.3 Conceptual Framework

2.3.1 The conceptual framework (Figure 2.3) intrinsically captures the dynamic relationship between STI and ERLU (inner circle), taking into account the contribution of exogenous factors of STI and ERLU to the demand for accessibility and economic development potential (the outer circle). This conceptual framework serves as a foundation for the strategic planning of ERLU and STN for Hong Kong.

![Figure 2.3 Conceptual Framework](source: Study Team)
3 International Experience

3.1 Case Selection

3.1.1 With reference to Chapter 2, STI is classified into different scales according to the three-tier system. Considering one of the study objectives is to plan local STN in response to the opening of the HZMB, international cases for both cross-boundary / jurisdiction and non-cross boundary / jurisdiction STI are selected to gain comprehensive insights from international experiences review. Three cases are chosen to fit into each of the three STI scale:

- **National level**: The Second Link connecting Singapore and Malaysia;
- **Regional level**: The Bay Area Rapid Transit (BART) Transbay Tube linking up San Francisco and the East Bay; and
- **Local level**: Rail transport joining London Dockland and the City of London

3.1.2 International experiences shed light on the recommendation of ERLU, STN and supporting policy for the later stage.

3.2 San Francisco

3.2.1 San Francisco and Oakland are two of the dominant cities in the San Francisco Bay Area. They were first connected by the San Francisco-Oakland Bay Bridge in 1937. In 1965, Bay Area Rapid Transit, another bay-crossing STI, together with a Transbay Tube was being authorized with the purpose of easing congestion on the Bay Bridge and enhancing bay crossing efficiency (Adler, 1988). After its opening in 1974, the development of ERLU in San Francisco rose due to better connection with the East Bay. From 1965 to 1993, around 50 million square feet of non-residential building area are provided around the stations (**Figure 3.1**) (Cevero, 1995).

![Figure 3.1 Changes in non-residential building area around 25 BART stations, 1965-1993](image)

Source: Cevero (1995)

3.2.2 Economic growth in San Francisco Bay is a product of clustering and agglomeration economy where each metropolitan area clearly identified their comparative advantages, as well as their economic positioning in the Bay Area (Walke & Schafran, 2015). San
Francisco and the East Bay have different economic structure. San Francisco flourishes in the professional sectors including financial and business services, research and development in high technology, and tourism due to the well-developed professional labour market contributed by the local experts, new immigrants and the existence of higher education institutions; the East Bay concentrates on light manufacturing due to low market cost and rent (Walke & Schafran, 2015; BACEI, 2016; SFPD, 2017).

3.2.3 By connecting the two metropolitan areas, tertiary industries in San Francisco are supported by the manufacturing located in East Bay by regional corporation. Moreover, additional professional labours are attracted from the East Bay to San Francisco. This shed light on the potential implications brought by HZMB to Hong Kong. As a financial hub in the GBA, it is possible that Hong Kong will attract more professional labours and economic cooperation opportunities from the surrounding GBA cities by regional economic integration. It is important for Hong Kong to capture the comparative advantages on tertiary industries amongst other GBA cities after the opening of the HZMB.

3.2.4 Moreover, it is necessary to optimize the bridgehead economy brought by STI. The first four BART stations in San Francisco immediately after crossing the harbour lies in Downtown San Francisco which served as the “bridgehead” of the BART Transbay Tube. As shown in Figure 3.2, the employment density of Downtown San Francisco was the highest among the BART corridor in 1990 (Wu, 1994). Considering the connection to the East Bay, the north-eastern border districts were reserved for commercial use, while the Southeast waterfront were remaining as industrial use (Figure 3.3) (SFPD, 2017). Similarly, development of Lantau and Western part of Hong Kong should be prioritized to utilize bridgehead potential.

![Figure 3.2 3-D Employment Density Model for the core of the San Francisco Bay Area, 1990](source: Wu (1994))
3.2.5 Since BART did not only provide bay-crossing transportation but spread towards the inner part of San Francisco and connect to other existing ERLU, Hong Kong should also strengthen the transportation connection linking up the STI with other parts to expand the STN coverage. However, due to the swollen economic opportunities, San Francisco proposed the second BART Transbay Tube in 2016 to cope with the increasing bay-crossing demand (BACEI, 2016). Thus, Hong Kong should also consider the derived demand for new STN generated from the proposed ERLU.

3.3 London Dockland

3.3.1 Located at East London, London Docklands used to be a hub for import, export and manufacturing, but due to technological changes and the failure in supporting containerised cargo, many of the docks lost their competitiveness and started to close down, which led to unemployment and isolation of the district (London Development Agency, 2011). With reference to Figure 3.4, multiple STI like Docklands Light Railway (DLR) and extension of Jubilee Line were opened from 1980s to 2000s. With the construction of STI as shown in Figure 3.5, both accessibility and connectivity were significantly improved. Most of the industrial land use was rezoned as commercial land use as illustrated by the increase in office area in Figure 3.6. With the continuous success of redevelopment, further development of STI such as Crossrail Link and extension of DLR will be carried out in future, which demonstrated the close relationship between STI and ERLU (London Development Agency, 2011).

Figure 3.3 Generalized Commercial and Industrial Land Use Plan, 2010
Source: SFPD (2017)

Figure 3.4 Timeline of the development of different STI projects in London Docklands
Source: London Development Agency (2011)
3.3.2 London Docklands has been enjoying comparative advantages in terms of accessibility with well-developed strategic transport infrastructure, proximity to the City of London as well as government support. Its accessibility was greatly improved after the opening of DLR and Jubilee Line which helped connect London Docklands to the rest of London as shown in Figure 3.7. The construction of London City Airport also strengthened the connectivity of London Docklands to other UK and European cities which helped to encourage companies to set up their offices in London Docklands and attract more global investment, and thus the development of ERLU was facilitated. (London Development
In view of its strengthened comparative advantages, Canary Wharf is able to capitalise the agglomeration economies in the City of London, and is now recognised as the second CBD in London.

Figure 3.7  Key connections from Canary Wharf
Source: Pagano (2017)

3.3.3 In addition, the importance of strategic economic policies is also highlighted in this case. In view of the economic growth in China and India with a focus on manufacturing, London Docklands forms a key part in providing professional services and acting as a financial cluster (Greater London Authority, 2008). The designation of Enterprise Zones allows corporates to enjoy tax relief, capital allowances and special planning consideration. To attract business from the I&T industry in Asia, the Royal Docks Enterprise Zone will consist the Europe’s largest Asian Business Park to leverage its strategic position in the region. As a result, more economic opportunities can be provided for the continuous development of ERLU.

3.4 Singapore

3.4.1 The bridge (1.92 km long) connecting Tuas in Singapore and Johor in Malaysia is the second cross border infrastructure between the two countries after the causeway (1st link) and it is known as the second link, although officially has their own names on two sides of the country. It is opened to traffic in 1998 envisaged to ease the traffic congestion at the first link, however, it did not happen to the extent as expected mainly because of the difference in the toll fee. Recently the levy for commercial vehicles and toll charge at 2nd link is reduced and with this the traffic at 1st link is expected to reduce by 40% (LTA, Singapore, 2018).

Comparative advantage and economic integration

3.4.2 Singapore and Malaysia stand at different economic positions with their own comparative advantages in varying perspectives such as abundant capital and professional resources for Singapore while Malaysia has abundant land and labour. However, their resources are complimentary to one another and thus the concept of economic integration evolved, popularly known as the SIJORI growth triangle (Figure 3.8).
3.4.3 Capturing the bridgehead economy of the 2nd link, there came up with numerous major developments closer to the bridge such as the 'Jurong Lake District' which in the future will be Singapore’s 2nd CBD and 'Iskander' on Malaysia side. The bridge also provides an opportunity for cross-border economic cooperation such as storefront in Singapore but much of the works done across the border.

3.4.4 Besides the enhanced accessibility brought about the bridge there are also other impacts such as diverting the FDIs to the cross-border areas due to significant difference in the cost of both land and labour on the two sides of the border towns. With the enhanced cross-border accessibility, there is significant use of cross-border facilities such as the Singapore International Airport because of its comparative advantages of direct flight to more destinations.

3.5 Chapter Conclusion: Lesson to Hong Kong

3.5.1 Table 3.1 summarizes the international experiences and its insights as a digest. Singapore and San Francisco demonstrated that STI is an effective tool to leverage economic development outwards from the bridgehead of STI to the inner part of the metropolitan area along the transport corridor. Meanwhile, London Docklands illustrated the effectiveness of rail in promoting accessibility, connectivity and hence economic integration.

3.5.2 In short term, the STN of the western economic corridor, serving as western gateway to Hong Kong from PRD and the world, should be well-planned to enhance its connection with the HZMB. Especially for the ELM, in view of its strategic location and future development, rail network connecting it and HZMB shall be taken into consideration to leverage the bridgehead opportunities brought by HZMB. In long term, transport planning in Hong Kong should consider the derived boundary-crossing transport demand from the ERLU growth driven by the opening of the HZMB.
3.5.3 As illustrated by all three cases, the opening of the STI has significant effect on the ERLU. It favours the decentralization of population and job opportunities from the clustered urban core and gives rise to new urban centres along the main transportation spines. The San Francisco case showed that STI particularly promotes the economic development of ERLU located at the bridgehead.

3.5.4 Applying them into local context, it is expected that the development of ERLU in NTN and ELM will be reinforced by the improved connectivity brought by the HZMB. Meanwhile, the development of Lantau and the Western part of Hong Kong should be prioritized to leverage the bridgehead potential of the HZMB.

3.5.5 Similar to San Francisco and London Docklands, Hong Kong enjoys comparative advantages in terms of STI, professional services and talented labours. Hence, it is suggested that Hong Kong can make use of its comparative advantage to develop I&T industry with a focus on R&D and act as a “super-connector” between regional companies and the mainland. Therefore, it would be beneficial for Hong Kong to provide more land with other specified uses which can satisfy the specific office requirement from I&T industry.

3.5.6 Apart from that, Hong Kong is also the financial and business hub of the GBA where more office land use should be reserved for professional sectors especially at the bridgehead, which is already identified as the CBD3 in the HK2030+. If new transportation network is proposed to link up the bridgehead with the Western or other part of Hong Kong, it is also necessary to cogitate about the provision of employment related land use along the transport corridor.

3.5.7 The success of economic development is usually related to the economic policy that lies behind, to guide through various development strategies. In this context, there are several policy insights from three different case studies which Hong Kong might consider for emulation, such as:

- Economic cooperation with other parts of the GBA and beyond, strategized through their resource complementarity approach;
- Formation of working groups or joint committees and signing of MoU with counterparts of the GBA and beyond;
- Efficient and robust cross-boundary arrangements: Immigration and customs clearance, toll tax, traffic controls, etc; and
- Economic development capitalizing on its comparative advantage: Capital intensive industries such as financial hub and R&D.
**Table 3.1 Summary of International Experiences**

<table>
<thead>
<tr>
<th>Nation/Region/City</th>
<th>STI Provided</th>
<th>ERLU Involved</th>
<th>Insights from International Experiences analyzed by Study Team</th>
<th>Implications to Hong Kong</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Singapore and Malaysia</strong></td>
<td>Bridge Capital intensive land use (Singapore) Labor intensive land use (Malaysia)</td>
<td>• Seize the bilateral economic opportunities and competitive advantage through ERLU planning and supporting policies</td>
<td>• Should appreciate the bridgehead economic positions and strategic planning policies in the region (the GBA) • Develop business areas near strategic boundary area with appropriate supporting policies to stimulate local competitive advantage and cross-border economic cooperation.</td>
<td></td>
</tr>
<tr>
<td><strong>San Francisco and the East Bay</strong></td>
<td>Subway Office Land Use</td>
<td>• Plan ERLU and bridgehead economy in proximity to STI • Out spread development by linking the inner city and STI by transport corridor • Foresee long term spillover effect to the connected city causing decrease in demand of ERLU</td>
<td>• Development of Lantau and Western part of Hong Kong should be prioritized to utilize bridgehead potential • Strengthen the transportation connection linking up other part of Hong Kong to provide ERLU along transport corridor • Should consider the derived demand for new STN generated from the proposed ERLU • Avoid spillover effect by ensuring sufficient provision of ERLU in Hong Kong and economic incentives for businesses</td>
<td></td>
</tr>
<tr>
<td><strong>Dockland and the City of London</strong></td>
<td>Railways and Airport Office Land Use (mainly for financial, innovation and technology industry)</td>
<td>• Enhanced connectivity and accessibility through STI for the development of ERLU • Government support is important to strengthen the interaction between STI and ERLU • Economic integration at regional and global level shall be taken into consideration when planning STI and ERLU</td>
<td>• Hong Kong should establish a STN to link up various strategic ERLU • It is beneficial for Hong Kong to make use of its comparative advantages to establish another Science Park which targets regional companies in innovation and technology industry • Hong Kong should consider acting as a “super-connector” between regional companies and the Mainland and seize its own existing competitive edge</td>
<td></td>
</tr>
</tbody>
</table>

Source: Study Team
4 Understanding Spatial Development of Selected Cities in the Greater Bay Area

4.1 Overview of GBA Cities

4.1.1 The Belt and Road Initiative and the development of the GBA are the two overarching national strategies that significantly affect policy direction of economic growth, transport development and ERLU of Hong Kong. While the Belt and Road Initiative sets the vision and goals of development, the GBA Initiative perhaps focuses more on actual opportunities generated to Hong Kong in relation to regional development (HKSAR Government, 2017). In the light of recent national policies (such as the National 13th Five-Year Plan and the 19th National Congress of the Communist Party of China), development of the megacity region GBA, including two special administrative regions (Hong Kong and Macao) and nine PRD cities, aims to be more dynamic, co-ordinated and competitive. The Framework Agreement on Deepening Guangdong-Hong Kong-Macao Cooperation in the Development of the Bay Area signed in 2017 outlines the overall development areas and framework agreed by the Guangdong Province, Hong Kong Special Administrative Region and Macao Special Administrative Region governments.

4.1.2 The following diagram shows more details about the positioning of various cities in the GBA based on literature review and publication of respective government authorities (Figure 4.1). It should be noted that the implementation details of the GBA Initiative and the official positioning of respective cities in the GBA has not been released by the time of report submission therefore details of the diagram is subject to further changes.

![Figure 4.1 Positioning of 11 GBA cities and major transport infrastructure in the GBA](image)

Source: Study Team, consolidated from People's Government of the Guangdong Province (2016), Zhuhai Housing, Urban–Rural Planning and Development Bureau (2016a)

4.1.3 Key facts to be highlighted in the diagram include the two special administrative regions (Hong Kong and Macao), three pilot free trade zones (Nansha, Hengqin and Qianhai, Shekou), five major airports and major ports. Presence of special administrative regions implies the difference of political systems among Hong Kong, Macao and mainland cities, which is generally believe as one of the challenging areas for regional integration.

4.1.4 In terms of economic development, the three pilot free trade zones in GBA aims to act as new platforms to further attract foreign investment and talents hence upgrade industries...
with the provision of preferential policies approved by the central government (People's Government of the Guangdong Province, 2016). The pilot free trade zones is especially important to the development of Hong Kong as it would affect ERLU of various industries in Hong Kong, mobility patterns of local talents and regional cooperation policies of various industries.

4.1.5 Key infrastructures such as major ports and airports are also highlighted in Figure 4.1 as the location of these infrastructures would often indicate the positioning of cities among the region and indicate the openness of cities. Furthermore, the logistics and tourism sectors are among the selected industries to be analysed in this report. It is believed that the locations of these infrastructures create great impact to the two industries.

4.2 **Spatial Strategy and Policy of Hong Kong**

**National and Regional Policy Influence**

4.2.1 The Hong Kong government identified the significance and opportunities of the GBA development in several key aspects including “two markets”, “land resources” and “Innovation and Technology industries” (HKSAR Government, 2018). In light of the Belt and Road Initiative and the GBA development, Hong Kong is positioned as a “super-connector”, fostering the flow of information, capital, talents and opportunities between China and the global market. In addition, Hong Kong will continue to position as an international and regional finance, logistics and trading centre with an increasing focus on the development of I&T (HKSAR Government, 2017).

**Hong Kong 2030+**

4.2.2 HK2030+ is the latest territorial-level strategic plan, which sets the conceptual spatial framework of local land and infrastructure development beyond 2030. The underlying vision of the plan is to develop Hong Kong as “Asia’s World City” with three major planning goals related to liveability, economic competitiveness and sustainable growth (Planning Department, 2016).

4.2.3 In relation to the scope of this project, spatial development in the western and northwestern part of Hong Kong is the major focus. The Metropolitan Business Core, Western Economic Corridor, development of NTN and the Northern Economic Belt are the major territorial spatial planning strategies that are reviewed in relation to regional development, ERLU as well as strategic transport and cross-boundary Infrastructures.

**Strategic Transport Infrastructure**

4.2.4 Three main transport corridors, namely Northwest New Territories (NWNT)-Lantau-Metro Transport Corridor, North-South Transport Corridor and Extended North-South Transport Corridor, have been proposed in HK2030+ (Planning Department, 2016). The NWNT-Lantau-Metro Transport Corridor is particularly important in this study as it is where the regional STI, i.e. HZMB, directly connects with the local transport network and largely overlaps with the Western Economic Corridor.

4.2.5 In addition, the ELM and a number of New Development Areas such as Hung Shui Kiu, Yuen Long South and Tung Chung New Town Extension (TCNTE) are also located along this transport corridor. According to HK2030+, urban mobility along the NWNT-Lantau-Metro Transport Corridor is hoping to be enhanced, connectivity between the CBD and
the Lantau Island will be improved and alternative route connecting NWNT and HKIA is to be provided. Major regional and local transport infrastructure in the western part of Hong Kong are as follows (Figure 4.2):

**Figure 4.2** Major transport corridor and selected transport infrastructure projects in the western part of Hong Kong

Source: Study Team, consolidated from Planning Department (2016) & AAHK (2017)

**Employment-related Land Uses**

4.2.6 Focusing on conceptual spatial development in the western part of Hong Kong in relation to bridgehead economy brought about by the HZMB, the Third CBD (at the proposed ELM), strategic growth areas of NTN as well as the Western Economic Corridor are the focuses (Figure 4.3).

**Figure 4.3** Major development corridors and SGAs focused in this study

Source: Study Team, edited from Planning Department (2016) & AAHK (2017)
4.2.7 According to HK2030+, four types of market-driven economic land uses are identified: Grade A offices, general business, industries and special industries. Existing clusters of Grade A offices are observed in traditional CBD and the Second Core Business District (CBD2) in Kowloon East. For general business, clusters are also found in traditional CBD, CBD2 as well as Cheung Sha Wan and Kwai Chung (Figure 4.4).

4.2.8 Concentration of industries can be found in Tuen Mun, Tsuen Wan, Kwai Tsing, Kwun Tong and Fo Tan, mainly away from the Metropolitan Business Core area of Hong Kong 2030+. Lastly, special industries are mainly located near Tsing Yi and Kwai Tsing (Figure 4.4). Estimated demand of future market-driven economic land uses and land supply is shown as follows (Table 4.1):

Table 4.1  Supply and demand assessment of market-driven economic land uses after considering planned supplies

<table>
<thead>
<tr>
<th>Land Uses</th>
<th>New Land Required by 2041 (ha)</th>
<th>Short Term (by 2023)</th>
<th>Medium Term (by 2033)</th>
<th>Long Term (by 2041)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade A Offices (CBD)</td>
<td>27</td>
<td>Deficit: 4ha</td>
<td>Deficit: 2.6ha</td>
<td>Deficit: 8.9ha</td>
</tr>
<tr>
<td>Grade A Offices (Non-CBD)</td>
<td>15</td>
<td>Surplus: 4.6ha</td>
<td>Surplus: 15.1ha</td>
<td>Surplus: 10.5ha</td>
</tr>
<tr>
<td>General Business</td>
<td>-17</td>
<td>Surplus: 12.9ha</td>
<td>Surplus: 27.1ha</td>
<td>Surplus: 32.3ha</td>
</tr>
<tr>
<td>Industries</td>
<td>37</td>
<td>Deficit: 8.6ha</td>
<td>Deficit: 38ha</td>
<td>Deficit: 53.6ha</td>
</tr>
<tr>
<td>Special Industries</td>
<td>137</td>
<td>Deficit: 84.6ha</td>
<td>Deficit: 70ha</td>
<td>Deficit: 17.4ha</td>
</tr>
<tr>
<td>Total</td>
<td>201</td>
<td>Deficit: 97 ha</td>
<td>Deficit: 110.6ha</td>
<td>Deficit: 79.9ha</td>
</tr>
</tbody>
</table>

Source: Planning Department (2016)

4.2.9 Focusing on the western part of Hong Kong, all four types of market driven economic land uses have been planned and addressed along the Western Economic Corridor either in NDAs, Topside Development at Hong Kong Boundary Crossing Facilities (HKBCF), ELM or TCNTE in order to fulfil the future land use demand.
4.3 Spatial Strategy and Policy of Zhuhai

4.3.1 As a gateway for the western shore of the PRD, Zhuhai is one of the first four Special Economic Zones (SEZs) in China and long serves as a testing ground for economic reform policies, strategic area to attract talents and window to observe and connect with the global market. Emphasizing environmental protection and sustainable development, Zhuhai implemented sets of environmental protection regulations in early 1990s and efforts have been made to protect rivers and the landscape.

4.3.2 In response to recent national strategy in promoting high-tech and high value-added manufacturing industries, together with the city’s development history, Zhuhai’s future economy development strategy emphasis on innovation. Development of new and high-tech industries, modern industries, eco-agriculture and marine economy are placed in high priority (HKTDC, 2017b; Zhuhai Statistics Information Network, 2017).

4.3.3 The Zhuhai City Master Plan (2001–2020) outlines the conceptual spatial development framework of the city with different levels of core areas and functional zones focusing on the development of different industries. The core area is located on the eastern side of the city comprises of the Xiangzhou Area and Nanwan Area (the traditional urban core) and Hengqin New Area. Development of leisure, culture and tourism services is the focus in Xiangzhou Area, while Nanwan Area focuses on business, convention and exhibition, government services and modern logistics. The four district-level cores include Doumen and Jinwan (centres of the Western ecological new area), New Xiangzhou and Houhuan. Other development areas include Fushan area, Gaolan Port area, Western ecological new area and Tangjiawan high-tech area (Figure 4.5).
Figure 4.5  Highlights in the Zhuhai City Masterplan (2001 – 2020)
Source: Zhuhai Housing, Urban–Rural Planning and Development Bureau (2016a)

4.3.4  Spatial distribution of key industries and major industrial parks can be mainly categorized into four functional zones of high-end manufacturing, eco-agriculture, high-end services and high-tech industries (Figure 4.6). The eastern part of the city focuses on high-end services and high-tech industries while the western side of the city emphasize on the development of eco-agriculture and high-end manufacturing industries.

Figure 4.6  Major functional zones and key industrial parks highlighted in the Zhuhai City Masterplan
**Road Transportation**

4.3.5 Zhuhai envisioned to optimize its internal transportation network by adopting the principle of “5 Horizontal (East-West) and 9 Vertical (South-North) Transport Corridors” (Zhuhai Transport Bureau, 2018) (Figure 4.7). A permeable highway network is planned. The horizontal transport corridors aim at connecting the East and West Zhuhai while the vertical linkages focus on intercity connections.

![Figure 4.7 Highway network planning in Zhuhai](image)

Source: Study Team, consolidated from: 9 Verticals (South-North) and 5 Horizontals (East-West) Transport Corridors, Zhuhai Housing, Zhuhai Transport Bureau (2018)

**Rail Transportation**

4.3.6 Under the transportation plan, a total of 7 lines (refer to Figure 4.8) would be opened by the time of 2060 (Zhuahai Housing, Urban-Rural Planning and Development Bureau, 2016b). Similarly, Zhuhai promoted North-South and East-West corridor as the backbone of intracity railway system. Line 1 spanning through Jiuzhougang, Jinwan and Zhuhai Airport and Line 2 bridging up Tangjiawan and Zhuhai Artificial Island would form a shape of “十” (a Chinese word means “ten”) and performed as the railway backbone. The 7 railway lines would link up different parts of Zhuhai as a whole.
Strategic Planning for Employment-related Land Uses and Strategic Transport Network in Hong Kong After the Opening of the Hong Kong-Zhuhai-Macao Bridge

Figure 4.8  Zhuhai Metro Network Plan 2060
Source: Study Team, consolidated from: Future Vision (2060) Railway Development Network Plan, Zhuhai Housing, Urban-Rural Planning and Development Bureau (2016b)

**Sea Infrastructure**

4.3.7 With sea transports connecting to Hong Kong, Gaolan Port in South Zhuhai is a core seaport in Zhuhai. It is also the only deep-water port in the Western PRD. As Zhuhai is repositioning the Gaolan Port Area as a base for high-value added industry and a potential second bonded industrial area in the city, integration between Hong Kong and Zhuhai in sea transport is more than raw material storage and infrastructure manufacturing. The current cross-border industrial area in East Zhuhai is emphasizing Zhuhai’s economic integration with Macau due to proximity. Nevertheless, the opening of the HZMB could effectively enhance Hong Kong’s land transportation connections with the Zhuhai ports and open up Western PRD hinterlands so as to enhance the pivotal port capacity in Hong Kong.

**Land Use**

4.3.8 Land use and transportation planning in Zhuhai are interrelated to achieve a comprehensive development. Zhuhai’s development is divided into 3 phases (Zhuhai Housing, Urban-Rural Planning and Development Bureau, 2018). In the first phase (2013 to 2020), Zhuhai is developing another CBD in West Zhuhai, while the second phase (2021-2040) is concentrating on the development of Hengqin Free Trade Zone and High-Tech District so as to form a triangular commuting structure connecting Hengqin, East and West Zhuhai. The last phase (2041-2060) aimed at Planning for the future CBD in Hezhou and proposing a radial structure of travel to guide development in the boundary areas while Hezhou is performing as the core area. Transportation and land use are planned according to this sequence. The “5 Horizontal (East-West) and 9 Vertical (South-North) Transport Corridors” provided a permeable network to travel from the core area to every part of Zhuhai.
4.4 Spatial Strategy and Policy of Macao

Background

4.4.1 Macao is a SAR, which was leased to Portugal from 1557 and its sovereignty was returned to China in 1999, is a SAR located on the Western shore of PRD and adjacent to Zhuhai. Tourism and gambling are the pillar industry supporting 48% of the total GDP of Macao. Among the 32.6 million arrival visitors in 2017, over 90% is from the Mainland China.

Key Development Directions

4.4.2 The Five-year Development Plan of the MSAR (2016-2020) (Macao Five-year Plan) serves as the strategic planning and development policy agenda at the highest level. Following the national policy direction, viz the 12th National Five-year Plan, 13th National Five-year Plan and series of GBA and ‘Belt and Road’ development initiatives since 2015, Macao targets to develop into ‘a world tourism and leisure centre’ (Macao Five-year Plan, 2016). Building on this grand vision, eight development strategy and deployment were devised, as shown in Figure 4.9, to first strengthen the competitiveness of Macao as a city with rich and cultural resources, and also riding on its historical Portuguese governance to become a springboard of GBA and China to trade and cooperate with Portuguese-speaking Countries.

Figure 4.9 Eight strategic development direction of Macao
Source: Study Team, consolidated from Macao Five-year Plan, 2016

4.4.3 Tourism diversification of shifting the existing reliance on gambling industry to development of leisure, business and cultural tourism is the key insights obtained from the ‘Study on the Development Blueprint of Macao’s Convention and Exhibition Industry’ and ‘Macao Tourism Development Master Plan’ both completed in 2017. The two studies concluded that with reference to the regional development context viz tourism development strategy of neighbouring cities and enhancing of new cross-border
Strategic Planning for Employment-related Land Uses and Strategic Transport Network in Hong Kong After the Opening of the Hong Kong-Zhuhai-Macao Bridge

Final Report

There is a foreseeable market trend demanding for **exceptional tourism and entertainment experiences and offerings and multi-destination travelling** in the region. Macao Government proposed the following strategic development actions in the three aspects where Macao are having strong competitive edge and developable assets as outlined in **Table 4.2**.

**Table 4.2** Three strategic development directions and actions in tourism sector of Macao

<table>
<thead>
<tr>
<th>Sub-sector</th>
<th>Strategic Policy Goals and Actions</th>
</tr>
</thead>
</table>
| **Leisure** | • Promotion of international sports events and competition and improvement of related sports facilities to a world-class standard;  
• Incorporation of waterfront tourism planning consideration in the new urban zone planning |
| **Business** | • Provision of conventions floorspace from 180,000 sqm in 2015 to some 210,000 sqm in 2020;  
• Establishment of stronger relationship between local conventions and services providers and international convention companies |
| **Culture** | • Conservation of the historic centre by devising the Plan for Protection and Management of the Historic Centre of Macao by 2020;  
• Exploration on “Cuisine Culture” resources from the SMEs by establishing carnivals, festival and tourism events celebration;  
• Development of new cultural tourism products by museums such as Plan for Nam Van Lakeside Teahouse and the Optimization Plan for Taipa Houses-Museum;  
• Cultivation of experts in the field through training and education |


4.4.4 Aiming to echo with the development pathway of ‘double gateway’ of internationalization of Chinese medicine suggested in the Belt and Road Initiatives, regional collaboration of emerging industry, in particular the Chinese Medicine sector, is another economic development strategy for Macao. With a significant increase in capital investment and resources in talent training from Macao, Guangdong-Macao Traditional Chinese Medicine Technology Industrial Park in Hengqin has been operating since 2017. **Table 4.3** outlines the key development actions of Macao in Chinese medicine industry.

**Table 4.3** Strategic Development Actions in Chinese medicine Sector of Macao

<table>
<thead>
<tr>
<th>Sector</th>
<th>Strategic Policy Goals and Actions</th>
</tr>
</thead>
</table>
| **Chinese medicine** | • Organize international forums, workshops on traditional Chinese medicine;  
• Organize quality training to attract more talents engage in the industry through the service platform and human resources provided by the industrial park |

Source: Sub-consultant Deliverable, consolidated from Five Year-plan (2017)

**Spatial Strategy**

Macao had not yet published any strategic spatial planning strategy in response to either the GBA development or the opening of HZMB, meanwhile the Strategic Planning Study...
of Macao is currently under preparation by tendering as at April 2018. The Five-year Plan and the New Urban Zone Overall Planning are the two latest policy agenda setting out spatial development direction. Figure 4.10 illustrated the two key on-going spatial development of Macao, which are internal connectivity enhancement between old and new areas (as arrows shown) and urban expansion projects.

Figure 4.10  STN and Development Nodes of Macau in relation to the opening of HZMB

Source: Study Team, consolidated from Stage 3 Public Engagement of New Urban Zone Overall Planning (2016), The Five-year Plan (2016)

**New Urban Area Development through Reclamation**

4.4.6 Serving as the backbone for economic growth, Macao is striving to create physical capacity by reclamation of six new urban zones and MBCF artificial island. As mentioned, Macao is currently lacking a strategic plan in guiding the overall spatial distribution of economic activities, as well as after the opening of HZMB. The latest proposed conceptual land use options, as presented by officials of MSAR Government during site visits, are mainly catering the internal housing shortage issues. Zone A, planned as a new residential district and located in between MBCF and Macao Peninsula, is undergoing planning and engineering study and reclamation works. Meanwhile Zone B to E are still under conceptual planning stage, business and leisure tourism nodes and office facilities are proposed to capture the future regional opportunities in tourism development of Macao. Refer to Table 4.4 for respective description.
Table 4.4  Functions and Planned Population of New Urban Zones

<table>
<thead>
<tr>
<th>New Urban Zone</th>
<th>Strategic Function</th>
<th>Size and Planned Residential Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zone A</td>
<td>Residential Clusters</td>
<td>1.38 ha / 96,000 population</td>
</tr>
<tr>
<td>Zone B</td>
<td>Waterfront Business Tourism and MICE</td>
<td>49 ha / 2,000 population</td>
</tr>
<tr>
<td>Zone C, D and E</td>
<td>Community Facilities</td>
<td>163 ha / 60,000 population</td>
</tr>
</tbody>
</table>

Source: Presentation by Macao Government Officials from DSSOPT (2018)

STN Development

4.4.7 The Five-year Plan stated that improvements in local transportation linkages is the prerequisite for ‘strengthening Macao’s competitiveness as a tourism centre’, and thus the regional connectivity (Macao Five-year Plan, 2016) because of the enhanced regional mobility enjoyed by tourists. Table 4.5 outlined the three key transport development areas of Macao, namely light rail, cross-harbour bridge and airport. These three means of transport infrastructure are strategically connected to Zone A and with the Macao Peninsula, the future residential hub with seamless connection to MBCF.

Table 4.5  Strategic actions of STN development of Macao

<table>
<thead>
<tr>
<th>STN</th>
<th>Strategic Actions</th>
<th>Connection with HZMB MBCF or other bridgehead cities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light Rail (LRT)</td>
<td>• Resume and speed up the construction of LRT linking the inner districts of Macao Peninsula, Taipa, Zone A and MBCF by 2019</td>
<td>• A dedicated spur line connecting the passenger terminal on MBCF to Macao Peninsula through Zone A</td>
</tr>
</tbody>
</table>
| Fourth Cross-harbour Route | • Conceptual alignment as shown as grey arrow in Figure 4.10  
• Convenient outer-ring connection with Zone A and Taipa by 2025 | • As a highway connecting to the MBCF-Zone A-Zone B corridor providing an alternative vehicular connection to Macao Peninsula |
| Airport              | • Expansion of Macao International Airport: passenger terminal capacity from 7 million to 15 million and cargo capacity from 34,000 to 58,000 | • NO further plan or transfer agreement to connect HKIA via HZMB                                   |

Source: Study Team, consolidated from Stage 3 Public Engagement of New Urban Zone Overall Planning (2016), The Five-year Plan (2016)

Summary

4.4.8 As a direct connected city by HZMB, Macao is currently lacking a comprehensive planning responding to the bridgehead opportunities and challenges after the opening of HZMB through such as updating land use planning, strategic development directions and distribution of economic activities. It is, however, foreseeable that regional collaboration with other GBA cities for some key industries viz. Chinese medicine and Convention and Exhibition will be more frequent with the close locational proximity and endorsement from the national-level policies and plans.

4.4.9 Hong Kong should be aware that Macao is keen on developing its tourism industry utilizing its competitive edge in terms of cultural and heritage assets. With the enhanced mobility of tourists after the opening of HZMB, cooperation between the two cities would be
significant after the opening of the HZMB, in particular it also brings opportunity for multi-venue and multi-stop convention activities in the GBA with the overall increment in MICE floorspace in both Hong Kong and Macao.

4.4.10 To avoid direct competition among cities, Hong Kong might have to consider a slightly different tourism offerings such as leisure and nature tourism, and enhance the capacity of the competitive field i.e. receiving capacity for business tourists.

4.5 Spatial Strategy and Policy of Zhongshan

Overview

4.5.1 Zhongshan is traditionally strong in light and low value-added manufacturing industry, contributing 52.4% of the GDP. It has a unique city-township administrative system with 24 towns, each specialising in one type of industry. In general, the “specialised towns” in the north mainly focus on domestic market supporting the industry chain of Shunde (to the immediate north of Zhongshan), while the manufacturing industries in the south are mostly export-oriented.

4.5.2 It is worthwhile to note that the unique city-township system (without county level) of Zhongshan impose a major constraint for the government to coordinate the state-owned land resources, resulting in fragmented urban development pattern with no strong urban core area.

Key Development Directions

4.5.3 In pursue of further economic progression under the GBA Initiative, Zhongshan identified five overarching development principles in its 13th Five-Year Plan for Economic and Social Development of Zhongshan, viz. innovation, coordination, green, opening up, and sharing, echoing the national strategy. The first two directions are more relevant to economic development:

- **Innovation: Industrial Upgrade** – Zhongshan intends to transform into a modern high-tech equipment manufacturing centre in accordance with the Made in China 2025 strategy.

- **Coordination: Regional Coordination** – Zhongshan plans to capitalise on the economic spillover from neighbouring cities, e.g. Shenzhen and Hong Kong, to strengthen its service industries such as finance and modern logistics.

Spatial Strategy

**STN Development**

4.5.4 New transport linkages are planned to enhance connectivity in the GBA. Leveraging the geographical proximity to Shenzhen, the Shenzhong Link is expected to open in 2024 to facilitate movement of talents between Zhongshan and the Eastern PRD. This strategic link will be extended westward to the traditional urban core of Zhongshan to reinforce the synergy between the two cities. New intercity expressways, strategic roads and national railways are also planned to establish convenient connection with other cities in the Western PRD, including Zhuhai to the south, Guangdong and Foshan to the north, and Jiangmen to the west, making Zhongshan as a major transport hub in the Western PRD.
4.5.5 With all these road-based STN development, two strategic economic circles will be formed: a half-hour circle between Zhongshan and Shenzhen, as well as a one-hour circle within the GBA.

4.5.6 It should be noted, however, that road-based connection to Hong Kong is not emphasised in the latest Master Plan of Zhongshan City (2010-2020) due to geographical distance. According to the GIS-aided analysis performed by our sub-consultant UP Studio\(^1\), the HZMB could only shorten the travelling time between Hong Kong and the southern part of Zhongshan, and the benefit to the central and northern parts would be minimal; the Shenzhen Link would rather have a larger impact on the development of Zhongshan.

**Optimisation of Spatial Configuration**

4.5.7 To reinforce regional coordination and industrial upgrade, the 24 “specialised towns” are grouped into four clusters specialising in different industries (Figure 4.11). Sub-centres providing supporting services for industries are established in each of the cluster. The clusters are conceptually connected by one north-south development axis linking the key “specialised towns” and neighbouring cities in Western PRD, and two belts linking the emerging development areas.

4.5.8 Future urban developments will be strategically established along the east-west development belt connecting to the Shenzhen Link to promote economic restructuring. Specifically, Cuiheng New Area (翠亨新區), located at the geographical centre of the GBA and the landing point of Shenzhen Link, is positioned to be a demonstration area of modern industries focusing on smart technologies, advanced manufacturing, etc. While Shenzhen will serve as the major source of talents and capital, Hong Kong could still play a supporting role in terms of financial and R&D support. Logistics industry in Hong Kong might not enjoy substantial benefit from Cuiheng New Area despite its export-oriented nature, because of the locational advantage of competitor ports in the Mainland; nonetheless, Hong Kong will serve as an alternative choice for Zhongshan manufacturers with its institutional advantages (further discussion in Chapter 5.2).

![Figure 4.11 Conceptual spatial framework of Zhongshan](image)

**Figure 4.11 Conceptual spatial framework of Zhongshan**

Source: Study Team, reproduced from Zhongshan Municipal Government (2015)

\(^1\) Details of the GIS-aided transportation cost analysis are documented in a separate Working Paper submitted by our sub-consultant UP Studio in 3 April 2018.
Tourism Planning

4.5.9 Zhongshan has rich natural and cultural assets such as Linnan Waterway Villages, former residence of Sun Yat-sen (in Cuiheng) and Wuguishan (五桂山) which are well conserved. Also, the natural coastline renders great potential for tourism development. Utilising its unique resources, Zhongshan positions itself as historic city and intends to develop cultural tourism, ecotourism and waterway tourism products to diversify its economy. Multi-destination travel is being promoted in collaboration with other cities in the GBA, including Hong Kong, which is made more viable with the completion of the HZMB.

Summary

4.5.10 Due to geographical distance between Zhongshan and Hong Kong, and the tendency for Zhongshan to strengthen its economic tie with Shenzhen rather than Hong Kong, further cooperation between the two cities would be limited after the opening of the HZMB. Whilst the HZMB might not be successful in attracting movement of goods from Zhongshan to Hong Kong, it brings opportunity for tourism cooperation, such as multi-destination travels in the GBA, and opening up tourism market from Zhongshan.

4.6 Chapter Conclusion: Significance of GBA Cities to Hong Kong

4.6.1 The key implications of the spatial strategy and policy in Zhuhai, Macao and Zhongshan on the industries of Hong Kong are tabulated in Table 4.6 to 4.8 respectively.

4.6.2 In general, the relative significance of the three cities to Hong Kong depends much on the geographical proximity. Zhuhai, with the Hengqin New Area which is positioned to be a “Hong Kong-Macao-prioritised demonstration area”, is expected to have the closest economic cooperation with Hong Kong in terms of tourism, I&T and logistics industries. Taking advantage of the preferential policy environment in Hengqin, Hong Kong can further expand its hinterland in Western PRD in close collaboration with Zhuhai.

4.6.3 Macao, on the other hand, would exhibit less area for cooperation with Hong Kong due to its tourism-led uniform economic structure and its tendency to cooperate with Hengqin rather than Hong Kong, even after the opening of the HZMB. The significance of Zhongshan to Hong Kong would be even less, as its strategic direction is to strengthen its physical and economic connections with Shenzhen in the light of the planned Shenzhong Link, and Hong Kong is only casted a supporting role in financial and R&D support.

4.6.4 Nevertheless, under the umbrella of the GBA Initiative, Hong Kong will still enjoy huge opportunity to complement the development in the Western PRD through professional services, R&D and multi-destination travel.
### Table 4.6: Summary of key implications of Zhuhai’s spatial strategy and policy on the industries in Hong Kong

<table>
<thead>
<tr>
<th>Key Implications</th>
<th>Manufacturing and Services</th>
<th>Tourism</th>
<th>Innovation and Technology</th>
<th>Logistics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Related Policy and Spatial Planning</strong></td>
<td><strong>Clearer Economic Positioning</strong></td>
<td><strong>Encouraging Multi-Destination Travel</strong></td>
<td><strong>Integration in R&amp;D and High Technology</strong></td>
<td><strong>Port Regionalization and Multimodal Transport</strong></td>
</tr>
<tr>
<td>• Hengqin New Area serve as the latest platform with preferential policies attracting foreign investment and talents</td>
<td>• Tourism is one of the key development industries in Hengqin New Area. Major tourist attractions on the island includes Chimelong International Ocean Tourist Resort and Novotown (under construction)</td>
<td>• HKSAR &amp; Zhuhai agreement on deepening cooperation I&amp;T</td>
<td>• Key industrial parks zones such as Hengqin Free Trade Zone, Zhuhai-Macao Cross-border Industrial Zone, Gaolan Port and Zhuhai Aviation Industrial Park promote the development of logistics industries</td>
<td></td>
</tr>
<tr>
<td>• Preferential policy and abundant land supply will foster high-end manufacturing development</td>
<td>• Provision of domestic flights at Zhuhai Airport</td>
<td>• Zhuhai National Hi-tech Industrial Development Zone (total area around 139 km²)</td>
<td>• The Gaolao Port economic district is developing into another bonded area to facilitate cross boundary shipment</td>
<td></td>
</tr>
<tr>
<td>• High-end manufacturing industrial parks are mostly concentrated on western part of the city</td>
<td></td>
<td>• Hengqin is developing into an ecotypic high technology industrial base</td>
<td>• Zhuhai’s strategy of promoting multimodal transport logistics</td>
<td></td>
</tr>
<tr>
<td>• Development of Zhuhai Aviation Industrial Park</td>
<td></td>
<td>• Preferential policies in Hengqin providing tax deduction for I&amp;T enterprises</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Insights for Hong Kong</strong></td>
<td>• Startups of manufacturing or other encouraged sectors in Zhuhai may seeks professional services or even set up headquarters and regional offices in Hong Kong</td>
<td>• “Multi-destination” travel as main travelling mode for long haul visitors in Hong Kong</td>
<td>• Key industrial parks zones such as Hengqin Free Trade Zone, Zhuhai-Macao Cross-border Industrial Zone, Gaolan Port and Zhuhai Aviation Industrial Park promote the development of logistics industries</td>
<td></td>
</tr>
<tr>
<td>• Comparative advantages thus economic roles of Zhuhai and Hong Kong in manufacturing and services sectors will become clearer through division of labour</td>
<td>• Tourism development in Zhuhai and enhanced transport linkage will further encourage “multi-destination” itineraries from Hong Kong</td>
<td>• Enhance the efficiency of the technology development process through strengthening linkage with intercity high-tech corridors</td>
<td>• The Gaolao Port economic district is developing into another bonded area to facilitate cross boundary shipment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Development of the Shizimen CBD shall provide more space for convention and exhibition, and thus synergistic cooperation and division of labor with Hong Kong</td>
<td>• Take the opportunity to further strengthen higher education and professional training in I&amp;T development</td>
<td>• Zhuhai’s strategy of promoting multimodal transport logistics</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Enhance port competitiveness through port regionalization and develop strong connections with feeder ports</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Cross-boundary e-commerce development</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Table 4.7 Summary of key implications of Macao’s spatial strategy and policy on the industries in Hong Kong

<table>
<thead>
<tr>
<th>Key Implications</th>
<th>Tourism</th>
<th>Innovation and Technology</th>
</tr>
</thead>
</table>
| **Promote Multi-Destination Travel in GBA Region** | • Macao targets to develop into ‘a world tourism and leisure center’ as stipulated in *Macao Five-year Plan* and strengthen the competitiveness of Macao as a city with rich and cultural resources  
• Tourism diversification of shifting the existing reliance on gambling industry to development of leisure, business and cultural tourism  
• Macao is striving to create physical capacity by reclamation of six new urban zones and MBCF artificial island to provide a total of 49ha Waterfront Business Tourism and MICE | • Guangdong-Macao Traditional Chinese Medicine Technology Industrial Park in Hengqin has been operating since 2017 aiming to echo with the development pathway of ‘double gateway’ of internationalization of Chinese medicine suggested in the Belt and Road Initiatives |
| **Provide R&D Support on Modern Industries** | | |
| **Insights for Hong Kong** | **Insights for Hong Kong** | **Possibility to activate regional collaboration of emerging I&T industry under the Belt and Road Initiatives** |
| • The rise of a foreseeable market trend demanding for exceptional tourism and entertainment experiences and offerings and multi-destination travelling in the region | • Brings opportunity for multi-venue and multi-stop convention activities in the GBA with the overall increment in MICE floorspace in both Hong Kong and Macao | |
| **Opportunities for MICE** | | |
| Source: Study Team | | |
### Table 4.8 Summary of key implications of Zhongshan’s spatial strategy and policy on the industries in Hong Kong

<table>
<thead>
<tr>
<th>Key Implications</th>
<th>Manufacturing and Services</th>
<th>Tourism</th>
<th>Innovation and Technology</th>
<th>Logistics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Clearer Economic Positioning</strong></td>
<td><strong>Promote Multi-Destination Travel in GBA Region</strong></td>
<td><strong>Provide R&amp;D Support on Modern Industries</strong></td>
<td><strong>Capture Multimodal Transport Opportunities</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Related Policy and Spatial Planning</strong></td>
<td>Traditionally strong in light and low value-added manufacturing industry with a unique city-township administrative system with 24 towns specializing in one type of industry each</td>
<td>Contains rich and well- conserved natural and cultural assets such as Linnan Waterway Villages, former residence of Sun Yat-sen (in Cuiheng) and Wuguishan (五桂山) with natural coastline for tourism development</td>
<td>Cuiheng New Area (翠亨新區), located at the geographical centre of the GBA and the landing point of Shenzhong Link is positioned to be a demonstration area of modern industries focusing on smart technologies, advanced manufacturing, etc.</td>
<td>Zhongshan plans to capitalize on the economic spillover from neighboring cities, e.g. Shenzhen and Hong Kong, through regional coordination to strengthen its service industries such as finance and modern logistics</td>
</tr>
<tr>
<td><strong>Insights for Hong Kong</strong></td>
<td>Possible to play a supporting role in terms of financial support to the modern industries focusing on smart technologies, advanced manufacturing, etc.</td>
<td>Brings opportunity for tourism cooperation, such as multi-destination travels through collaboration with Zhongshan and other cities in the GBA</td>
<td>Capture the potential to play a role in terms of R&amp;D support on the development of advanced and modern industries while Shenzhen will serve as the major source of talents and capital</td>
<td>Bring advantages for land cargos from Zhongshan for transshipment due to the shortened travelling time between Hong Kong and the southern part of Zhongshan brought by HZMB</td>
</tr>
<tr>
<td></td>
<td>Brings opportunity to strengthen comparative advantages thus economic roles of Zhongshan and Hong Kong in manufacturing and services sectors will become clearer through division of labour</td>
<td>Opening up tourism market from Zhongshan providing different tourism experiences to achieve “all-in-one” travel considering the enhanced connectivity with the provision of the HZMB</td>
<td></td>
<td>Hong Kong’s ports can serve as an alternative choice for Zhongshan manufacturers with its institutional advantages compared to mainland competitors</td>
</tr>
</tbody>
</table>

Source: Study Team
5 Opportunities and Challenges of Hong Kong in light of HZMB: A Sectoral Perspective

5.1 Strategic Approach on Sectors Selection

5.1.1 This chapter aims to investigate the aspirations, particularly spatial needs for ERLU and STN, of relevant stakeholders *in relation to the opening of the HZMB*. The aspiration of the selected sectors, constitutes a significant part of the spatial needs of Hong Kong to prosper economic growth, or in other words, the opportunities and challenges of economic challenges of sectors in Hong Kong after the opening of HZMB.

5.1.2 To echo the study goal which consists of planning of ERLU in Hong Kong, the Study Team preliminarily shortlists six sectors in respect to the four major types of economic land uses which are the major spatial development recommendations HK2030+ considered. Refer to Chapter 1.4 for the shortlisting consideration.

5.1.3 Considering the relevance of the HZMB in fostering the flow of production factors (i.e. people, goods, capital and information) required by the different sectors, it is decided to put *more emphasis on the three more locational/accessibility-sensitive industries* viz. (i) Tourism, Recreation and Retail, (ii) Logistics, and (iii) Innovation and Technology because the sectoral aspirations can be realised mainly through spatial planning strategy and spatial-wise supporting policy to facilitate the flow of people and goods.

5.1.4 The remaining three sectors including (i) Financial and Professional Services, (ii) Trading and Manufacturing, and (iii) Cultural and Creative are *more capital and information-intensive industries*, and the stakeholder aspirations might not be fully realised through spatial planning per se. Non-spatial socioeconomic policies, which are beyond the scope of this Study, such as economic exchanges, cooperation agreements or incentives would be more relevant to facilitate the flow of capital and information (as per advice from Interviewees I and O). Whilst these three sectors will still be covered in the sectoral investigation, they are given less attention for a more focused spatial recommendation in Chapter 7.

5.1.5 Figure 5.1 below illustrates the analytical approach for this task. From a logical sense, stakeholders’ spatial needs and aspirations for ERLU, STN and supporting policy in relation to the HZMB are attributed by three exogenous factors (shown in yellow boxes), which will be highlighted in the sectoral investigation. The action gap between the existing spatial strategy/ policy and the sectoral aspirations identified in this task will serve as a guiding input for next stage.
5.2 Logistics

General Profile

5.2.1 Logistics is another pillar industry supporting Hong Kong economy significantly. The trading and logistics sector contributed 19.8% of the total employment and 22.3% of the total real GDP in 2016 (Census and Statistics Department, 2017a). Hong Kong’s logistics relationship is closely related to the Mainland China – the second to the United States (Wong et al., 2016) with 8.9% of external trade of Mainland China was transacted bilaterally between Hong Kong and Mainland (Census and Statistics Department, 2017a). Approximately 50% of both import and export cargo of Hong Kong are associated with Mainland (Census and Statistics Department, 2016).

5.2.2 Hong Kong was the world’s largest container port from early 1987 until overtaken by Singapore in 2005, and Shenzhen Yantian Port in 2013. Container traffic experienced healthy growth before the Global Financial Crisis averaging 4.6% per annum from 2001-2008. The crisis and subsequent global recession saw the port volume slump by 14.1% in 2009, rebound by 12.6% in 2010, but then slow to modest growth and then contract by 5.2% in 2012 as the migration of Maersk’s volumes began to be felt. The downward trend has continued, with compound annual growth rate (CAGR) of -5.2% 2012-15 and volumes dropping to 20,073,000 by 2015 (Figure 5.2).

Figure 5.2 HKP Container Throughput, 2000-2015
Source: Maritime Department, 2016 (Notes: CAGR = 3.9% (2000-2008); -2.8% (2008-2015))
Market Trends and Sectoral Concerns

Land-Sea Transhipment of Western PRD Cargo

5.2.3 Hong Kong Container Ports (HKP), referring to Kwai Tsing Container Terminals (KTCT), River Trade Terminal (RTT) at Tuen Mun and Public Cargo Working Areas (PCWAs), had been serving for three distinct market segments (Interviewee J):

- **Hong Kong Import/Export (IE) cargo** – these are containers destined for or originating from Hong Kong. HKP is the sole provider of handling services for this market;
- **Transhipment (TS) of South China / PRD IE cargo** – these are containers destined for or originating from other parts of the PRD. HKP competes with ports within South China to provide container handling services for this market. Major competitor ports in PRD are Yantian, Shekou, Chiwan, Dachan Bay in Shenzhen in the Eastern PRD, and Jiuzhou, Gaolan, Donguan, Nansha and Guangzhou in the Western PRD.
- **International ocean vessel-to-ocean vessel transhipment** – HKP and other PRD ports compete for this market with a range of ports beyond South China, including Busan, Kaohsiung, Singapore, Shanghai, Klang, Tanjung Pelepas, Klang etc.

5.2.4 HKP is not only facing a continuous drop in terms of container throughput volume aforementioned, but also the competition by the neighbouring ports in the PRD, particularly Shenzhen and Guangzhou Ports. Refer to Figure 5.3, HKP is the only port recorded a negative figure (-2.8%) in CAGR of the total throughput since 2008 while Shenzhen and Guangzhou Ports has continued to enjoy impressive growth – Shenzhen Ports overtook HKP as the world’s third busier container port while Guangzhou Port has recorded a CAGR of +7.0% which is the highest in South China.

![Figure 5.3 South China Ports Throughput Growth Rates, 2001-15](source: China Port Year Book, 2017; Maritime Department, 2017)

5.2.5 Mainland South China competitor ports such as Yantian, Shekou and Nansha have undergone rapid development and secured rising throughput. One of the possible reasons is the major operators of those ports also operate at HKP (Hutchison Port Holdings and Modern Terminals Limited / China Merchants) and have brought their expertise in international operating standards to greenfield port developments that often enjoy better inland connectivity to the main cargo hinterlands (Interviewee K). Efficient port operation with wide international liner services coverage of HKP may no longer be the sole competitive edge by HKP and had been caught up by neighbouring deep-water ports,
resulting a direct call at other South China ports and bypassing need for intermodal transhipment at HKP (i.e. truck or barge between HKP and the PRD origins / destinations (OD)).

5.2.6 With the rapid development of the ports in the PRD, the most direct impact on HKP is revealed as a recorded continuous decrease in IE cargo share from South China for HK, symbolising its declining position of international transhipment gateway hub for PRD cities.

5.2.7 Figure 5.4 shows the share of total South China IE Volume shared by Hong Kong. In 1995, more than 95% of the South China IE cargo was routed via HKP, accommodating the rapid development of the manufacturing basin of Guangdong Province. In 2015, HKP only captured less than 40% of the South China IE cargo market by volume.

5.2.8 A logistic economist (Interviewee J) revealed that the loss in market share by HKP were mainly cargo from Western PRD cities including Zhongshan and Jiangmen, and now handled by Shenzhen Ports due to its connectivity enhancement in road transportation and infrastructure, port expansion and upgrade works, invitation of international shipping lines and resulted in an overall berth productivity enhancement.

5.2.9 Ports in Hong Kong, Eastern and Western PRD are all targeting to capture and capitalize the economic value of freight transportation from the Western PRD by direct IE (for ports in Mainland China) or transhipment (for HKP), through port productivity enhancement and expansion of inland road connectivity to facilitate land-sea freight flow. With the vicious regional competition, HKP is losing its market share of South China freight cargo. Table 5.1 further supplements and summarizes the general picture of the market trend of sea ports in PRD by three aspects, cargo hinterland, liner services and regional positioning.

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2 Berth Productivity is defined as the number of total container moves (on-load, off-load and re-positioning) divided by the number of hours during which the vessel is at berth by JOC. In 2014-2015 financial year, Yantian Port in Shenzhen recorded a productivity of 119 (3rd in the World) while HKP’s was 83 (9th in the World). (Interview J; JOC, 2016)
### Summary of Issues Facing and Positioning of Major Ports in PRD

<table>
<thead>
<tr>
<th>Port</th>
<th>Shenzhen</th>
<th>Guangzhou</th>
<th>Hong Kong</th>
</tr>
</thead>
</table>
| **Cargo OD Source** | • 72% of container originated from the Pearl Delta Area; 8% originated from other areas within the Guangdong Province; 6% from Hunan Province, Hubei Province, Guangxi Province, Yunnan Province and Guizhou Province; (China Port Yearbook, 2005)  
• 7% for international transhipment and 7% for domestic trade. (China Port Yearbook, 2015)  
• Western PRD cities e.g. will be the main OD with the completion of Humen Second Bridge and Shenzhen-Zhongshan Corridor | • The main source of goods comes from various cities within Central and West PRD; imported goods come from other coastal ports. Much of the throughput is domestic.  
• Increasing trend in handling International IE cargo instead of transhipment via HKP due to the competitive edge in low Terminal Handling Charge and Container Handling Charge | • Main source of containers comes from the PRD (West, Central and some East) with decreasing trend  
• International transhipment an important segment  
• The opening of HZMB may increase the proportion of Western PRD cargo but it may not be captured by sea logistics. It will be captured by air logistics |
| **Shipping Services** | • All the top 20 large liner companies have direct services to Shenzhen linking the port to worldwide destinations.  
• 90% of the services also call HKP yet it is foreseeable to be dropped | • Over Ten domestic and international routes across Pacific Oceans to America, Europe and South East Asia and domestic trading route along the coast.  
• Domestic / inland connections to Shenzhen, HKP a significant segment | • A major hub with about 340 container liner services per week connecting to about 470 destinations worldwide, but connectivity is declining.  
• The world’s fourth largest shipping register following Panama, Liberia and Marshall Islands. |
| **Port Positioning** | • Southern China international container gateway  
• International transhipment limited by cabotage | • Southern China container hub – large component of throughput is low revenue generating domestic  
• International transhipment limited by cabotage | • International container transhipment hub  
• Southern China international container gateway, but losing market share |

Source: Analysis of Study Team, consolidated from various interviewees, China Port Year Book (2015); Maritime Department (2015)

**Land-air or Sea-air Transhipment of Western PRD Cargo**

5.2.10 Land-air transhipment has not been a frequently used modal choice for freight from the Western PRD cities. Air cargo only contributes 1% (28.3 million tonnes) of the total cargo
volume handled in Hong Kong in 2016 (Airport Authority of Hong Kong, 2018b). It should also be noted that air cargo is a significant contributor of 41% to the total value of cargo trade, surpassing land (40%), ocean (16%) and river cargo (3%) (ibid).

5.2.11 Stakeholders generally state that land-air transhipment is a slow modal choice for time-sensitive, temperature-sensitive cargo such as cold-chain cargo with perishable fresh food products, pharmaceutical products and security-sensitive cargoes such as jewellery and art products (which are usually charged with high tariff in Mainland Ports). The trucking or barging prior to the flight normally take 1-3 extra days comparing with direct air cargo shipment. The air-associated transhipment involves double-handling (loading/unloading between truck and barge) cost and custom procedures which significantly increases the risks of mishandling of high-value cargo (Interviewees K, L).

5.2.12 The opening of the HZMB, with its landing point on Lantau Island, further shortens the travelling time for cargo trucking from the Western PRD cities to Hong Kong by one to two hours. For time-sensitive and international e-commerce cargo from/to the bridgehead cities in the Western PRD, shippers and Hong Kong freight forwarders generally hold a positive attitude that there may be significant potential growth for land-air cargo transhipment via HKIA, given the operational details of HZMB are clearly announced and well-acknowledged by the sector (Interviewees H, J, K). This will be discussed in the next section.

Economic Opportunities brought by the HZMB

5.2.13 The following discussion on the sectoral aspiration of the logistics industry will focus on the competitive edge, opportunities and concerns brought by the potential more frequent land-air transhipment after the opening of HZMB.

5.2.14 As discussed, the HZMB may contribute to the logistics industry by shifting Hong Kong ports’ position as a land-air transhipment hub to cater for freight from the Western PRD. However, logistics analyst, and representatives from a freight forwarder and logistics association (Interviewees H, J, K) reiterated that cost, customs and clearance arrangement, and handling facilities are the three pull factors that may hinder the new freight modal choice (i.e. taking Hong Kong as the inbound/outbound port) after HZMB opens.

5.2.15 Freight Transport Cost: The current trucking cost for general cargo from the Western PRD is significantly higher than river barging cost. Representatives from HKTDC and Logistics Association (Interviewees D, H) reported that regulatory controls on cross-boundary road haulage imposed by Hong Kong and Mainland authorities result in high cross-boundary road haulage costs. Recent industry consultations indicate that trucking costs from a factory in Dongguan to the port in Hong Kong were about USD 150 higher per Twenty-foot Equivalent Unit (TEU) than in Shenzhen (Interviewee J).

5.2.16 For time-sensitive cargo from the Western PRD moving to Hong Kong, trucking is still a preferable option due to the fact that it only takes 4-5 hours for trucking yet 2 working days for barging. HZMB further achieves the time-saving, yet toll pricing is another additional concern in the light of HZMB. The latest pricing arrangement announced by the Development and Reform Commission of Guangdong Province in December 2016, stated that the round-trip toll for container vehicle is proposed at RMB 330. Considering the limited vehicle quota using HZMB, and limited carrying capacity of road trucking that only take 2 TEU while barging can carry over 10 TEU at one time, the average trucking cost
taking HKIA via HZMB may further increase to USD 500-600 higher than taking Shenzhen Airport (Interviewee J).

5.2.17 Customs and Clearance Arrangement: Seamless, simple and smooth custom procedure is a key incentive for freight forwarder and shippers taking HZMB as a transhipment corridor. Freight forwarders generally concern the uncertain custom and clearance procedures facilitating a smooth land-air transhipment, particularly at the entry point on the HKBCF Island and the exit point of the HKIA.

5.2.18 Customs and Excise Department launched the Intermodal Transhipment Facilitation Scheme (ITFS). The scheme, in cooperation with Customs Administrations of Guangdong Province, makes use of the e-lock and GPS system for transhipment container trucks of ‘green-lane’ freight including general goods without licensing control, to avoid double inspection in entry and exit boundary control points. There is no certain information whether this voluntary scheme will be expanded to cover major types of freight e.g. fresh products, high-value dutiable goods, and the vehicles without PRC Licence Plate (with only Mainland or Hong Kong license), taking the HZMB (Interviewee B).

5.2.19 Handling Facilities: As mentioned, land-air transhipment from the Western PRD is mainly serving time, temperature and security sensitive, and e-commerce cargo. In the initial stage after the opening of HZMB, the industry generally reflected that there may be possible shortage of special-designed freight handling facilities such as cold-chain cargo storage on Lantau Island or Tuen Mun (Interviewee C). The modern logistics facilities planned in Hung Shui Kiu, Tuen Mun West and South Cargo Precinct at the Airport Island will only be completed earliest by 2021, a three-year time lag with the opening of the HZMB. This may undermine the confidence of the industry taking HKIA via the HZMB as the inbound/outbound port.

5.2.20 Despite the above-mentioned uncertainties and concerns, comparing with the neighbouring ports in the PRD, institutional advantage is the most significant push factor favouring the use of port in Hong Kong via HZMB other than the time saving effect. Hong Kong, underpinned by its free port with minimal customs intervention and zero duties charged, enjoys more efficient clearance procedures.

5.2.21 Relevant Spatial Strategy and Policy in PRD

Interviewees B and J summarized and reiterated the major development strategy of ports and airports in PRD is mainly on infrastructural capacity expansion, such as but not limited to expressways construction, expansion of Shenzhen Airport Terminal and Runways, Nansha Port Berths and Gaolan Port.

5.2.22 As Zhuhai Airport is currently serving domestic flights and freight, the further radiating, mostly westward expansion of regional highways in the Western PRD plays a vital role in enhancing regional land connectivity between Hong Kong and Western PRD, and thus capturing international land-air freight transhipment by Hong Kong, making use of HZMB and HKIA. Refer to Chapter 4.3 which discussed the recent spatial strategy and policy regarding sea and land transport in Zhuhai in detail.

5.2.23 Import tariff policy charging on various types of e-commerce cargo is the most significant policy affecting the choice of inbound port in the Mainland China. The Ministry of Finance, the General Administration of Customs and the State Administration of Taxation announced the ‘Circular on Tax Policies for Retail Import in Cross-Border E-Commerce’
on April 2016. For every retail import goods valued higher than RMB 2,000, a higher import tariff will be charged (Table 5.2). 40-60% and 15% import tariff are being charged for luxury goods and daily necessities respectively.

Table 5.2  Schedule of Import Tariff Rates for Entry Articles in Mainland China

<table>
<thead>
<tr>
<th>Before Adjustment</th>
<th>After Adjustment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cat.</td>
<td>Applicable Goods</td>
</tr>
<tr>
<td>2</td>
<td>Textiles, TV Cameras, Other Electrical Appliances, Bicycles, Watches, Clocks and their parts and Accessories</td>
</tr>
<tr>
<td>3</td>
<td>Golf Clubs and Equipment and High-end Watches Tobacco, Wine and Cosmetics</td>
</tr>
</tbody>
</table>

Source: Study Team, consolidated from HKTDC (2016)

5.2.24 Ten pilot cities, including but not limited to Shanghai and Shenzhen, are assigned as ‘Bonded Import’ or ‘Direct Purchase Import’ Cities (HKTDC, 2017b) with tariff-free arrangement for cross-border e-commerce retail cargo.

5.2.25 It should further be noted that these bonded cities are all clustering at the Eastern PRD region. Considering the opening of the HZMB which Hong Kong starts targeting the land-air transhipment for freight to/from the Western PRD, the high tax policy would be a significant disincentive, subject to the relaxation of the import-tax-free pilot cities coverage to create synergy with the Hungwan Bonded Logistics Cluster and Zhuhai FTZ which is tax-free for freight processing and storage.

Recent Spatial Strategy and Policy in Hong Kong

5.2.26 Stage 1 of the Study has reviewed the recent spatial strategy and policy facilitating the logistics development in Hong Kong. Table 5.3 summarized a policy overview.

Table 5.3  Overview of Logistics-related Hong Kong Policies

<table>
<thead>
<tr>
<th>Sub-sectors</th>
<th>Spatial Policies</th>
<th>Non-Spatial Policies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air</td>
<td>• the Third Runway System and HKIA Infrastructural and Cargo Handling System Improvement Works • Development of Modern Air Cargo Logistics Centre on the Airport Island by AAHK</td>
<td>• Coordinate Air Traffic in PRD; Memorandum of Co-operation was signed with Civil Aviation Administration of China and Civil Aviation Authority of Macao</td>
</tr>
</tbody>
</table>
5.2.27 From the investigation done by Study Team in Stage 1 and views reflected by the sectoral representatives, previous spatial strategy and policy actions of Hong Kong mainly focus on the land supply for modern logistics facilities with back-up yard area. As reflected by Interviewee I, the planned policy actions are in line with the market trend of Western PRD cargo yet there is a time lag in implementation before the opening of HZMB as discussed in paragraph 5.2.19.

### Sectoral Considerations and Aspirations in the light of the HZMB

5.2.28 The market trend, bridgehead opportunity and recent developments in Hong Kong and the GBA have together contributed to the spatial needs and aspirations of logistics industry.

**ERLU: Smart and Integrated Logistics Park realising the competitive edge of HKP and market trend in the Western PRD**

5.2.29 In general, stakeholders stressed the importance of division of ports’ functions and positioning in the GBA to facilitate regional synergetic cooperation and avoid direct competition, between sea ports and airports in Hong Kong, Shenzhen and Guangzhou.

5.2.30 Stakeholders, including analyst, freight forwarders, shippers and logistics association (Interviewee H, J, L), generally stated that the spatial needs for land-air transhipment specifically induced by HZMB are still uncertain without any further operational requirement and usage information. Only conceptual aspiration could be collected in this stage of the Study.

5.2.31 Maintaining the transhipment hub position of Hong Kong, at the same time capturing the potential time, temperature and security-sensitive air cargo from the Western PRD brought by HZMB, a smart logistics park is generally opted as a possible conceptual proposal by stakeholders. The smart logistics park can serve as the integrated clustering point for inbound cross-border e-commerce storage and cold-chain storage space awaiting for transhipment and consolidation without any tax imposed.

5.2.32 The air freight forwarder (Interviewee K) and logistics association (Interviewee H) particularly suggests the spatial configuration of the smart logistics park. The possible site location could be on North Lantau, Tuen Mun West (TMW), Hung Shui Kiu (HSK) and...
HKBCF Island with proximity to the Airport. For storage placing on a multi-storey buildings (MSB), the clear height for each floor should be sufficient for full-automatic storing and packaging facilities. The site should also be greater than 6 hectares to accommodate logistics-associated services such as car repairing in the lower levels, testing and certification, inspection and quarantine in the middle levels, education and training as well as trading facilitation in the higher levels within a MSB.

5.2.33 A land reserve of 20-25 hectare for dangerous and cold-chain freight handling facilities should also be considered in response to the medium-to-long-term market demand from the development of GBA, in particular the Western PRD region (Interviewee H).

**STN: Inter-districts Freight Corridor connecting Proposed Logistics Clusters**

5.2.34 The need on STN depends on the distribution of the proposed logistics facilities. A freight corridor linking the existing and planned PUB and open storage sites, the possible modern/smart logistics clusters, ELM, HKIA and HZMB BCF could be considered. The current ITFS could possibly expand from using a single e-lock on the transhipment vehicle to the inspection-free arrangement for vehicle using designated freight corridors (Interviewee I).

5.2.35 Foreseeing the increasing flow of container traffic in the areas with logistics facilities, road specification improvement works such as loading/unloading bays could be considered.

5.2.36 As freight transport cost is one of the major concern for taking Hong Kong as the inbound/outbound port for Western PRD freight, HZMB and the associated local STN should also charge a lower and competitive toll compare with the sea barging cost.

### 5.3 Tourism

**General Profile**

5.3.1 Tourism, being one of the four pillar industries, has been a driving force of the service economy of Hong Kong, contributing 4.7% of GDP (in terms of value-added) and 6.8% of total employment in 2016 (C&SD, 2017). For inbound tourism which shares 79.7% of the sectoral GDP, it comprises a number of related service domains including, inter alia, retail, dining and entertainment (RDE) services, as well as accommodation services.

5.3.2 The Mainland has been the largest visitor source market of Hong Kong, accounting for 76% of the total number of visitors in the past two years (C&SD, 2018). With reference to the latest statistics in 2015, most Mainland visitors were from the PRD region (86%), among which over 90% were contributed by Eastern PRD cities (Planning Department, 2017). The Western PRD remains an under-explored short-haul market for the tourism industry of Hong Kong.

5.3.3 In view of the diversified travelling purposes, a systematic approach is to classify the tourism sector into two sub-markets viz. (i) leisure tourism, and (ii) business tourism, which set different requirements on tourism infrastructure. Whilst the former demands high quality retail space and tourist attractions (including theme parks)\(^3\), the latter also depends

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\(^3\) In 2016, “shopping” (79%), “dining & sightseeing” (47%) and “visiting theme park” (24%) are the top three activities taken by overnight visitors. It should be noted, however, that Mainland visitors had less tendency to go sightseeing (36%) than visitors from other short- and long-haul markets (Hong Kong Tourism Board, 2017).
on adequate supply of convention and exhibition (C&E) spaces to support integrative Meetings, Incentives, Conferences and Exhibitions (MICE) travel. Both sub-markets are facing huge opportunities and, at the same time, challenges in recent years. The following key market trends are observed:

**Market Trends and Sectoral Concerns**

**MICE : Growth engine of tourism industry**

5.3.4 MICE travel, as a major component of business tourism, is the growth engine of tourism industry of Hong Kong. For the Mainland market, despite the fluctuating general visitor arrivals which saw a drastic decrease by 9.5% between 2014 and 2016, the number of overnight MICE visitors gained momentum over the years, which has increased by 35.9% in the past five years alongside the rapid economic growth (Figure 5.5). Similarly, MICE visitors from Macao also experienced substantial growth \(^4\), albeit in a smaller extent (+20.6%) (Hong Kong Tourism Board, 2018). A huge demand for MICE facilities is therefore anticipated in future.

![Overnight MICE Visitor Arrivals by Major Markets](image)

**Figure 5.5  Overnight MICE visitor arrivals by major markets**

Source: Study Team, consolidated from Hong Kong Tourism Board (various years)

**Retail: embracing changes and challenges**

5.3.5 For the retail sector, consumers’ preferences for brands have changed over the years. An economist in Hong Kong Trade Development Council (HKTDC) specialising in China consumer market (Interviewee D) revealed that more Mainland consumers are looking for “niche” local brands with unique stories rather than luxury foreign brands to showcase their personal tastes and characters. Therefore, there is concern from the industry that the high rental cost in Hong Kong would be an unfavourable condition for introducing these niche brands to meet the changing demand of Mainland consumers.

**Opportunities brought by the HZMB**

5.3.6 With the enhanced road connectivity, the HZMB is anticipated to open up new potential to capture the under-developed short-haul visitor arrival market in the Western PRD, particularly Zhuhai, Zhongshan and Jiangmen which only accounted for 4.4% of the total Mainland visitors to Hong Kong in 2015 (Planning Department, 2017). The convenient

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\(^4\) Despite the increasing trend, the number of overnight MICE visitors from Macao fluctuated strongly year-on-year in the past 10 years, which is probably due to the small market size.
public transport connection including cross-boundary shuttle bus, coach and hire car can also attract more visitors to travel to Hong Kong through Individual Visit Scheme more easily.

5.3.7 Leveraging its international strength, tourism industry in Hong Kong can also seize the opportunity to further develop multi-destination travel itinerary in the Western PRD and Maritime Silk Road tourism products for international outbound tourists, with Hong Kong as the starting point. A representative from travel agent (Interviewee E) agreed that the HZMB will allow more flexible arrangement in group tours as well as individual travel, and opted that they will be providing more short-haul tours to the further west of PRD and Guangdong Province since the new bridge would be less congested as compared to the existing Humen Bridge.

5.3.8 For business tourism, the industry will also see further MICE opportunity from corporations and traders in the Western PRD who wish to “go out” to the international market through Hong Kong, allowing Hong Kong to maintain its competitive edge in C&E in the GBA.

Strategic Significance of GBA Cities to Hong Kong

5.3.9 Cities in the PRD have already taken spatial strategies to embrace the GBA opportunity, taking advantage of their vast land resources. This carries implications to the development of tourism industry of Hong Kong after the opening of the HZMB.

MICE

5.3.10 For MICE tourism, neighbouring cities such as Zhuhai and Shenzhen are expanding their C&E capacity aggressively. Table 5.4 shows the existing and planned/committed rentable exhibition spaces in Hong Kong and other immediate neighbouring PRD cities. Specifically,

- **Zhuhai** positions itself as the “core C&E city in the Western PRD”. Particularly, convention services will be focused to foster the development of C&E industry as a whole (以會帶展), seizing the rich tourism resources in Zhuhai and Hengqin (Zhuhai Science, Technology, Industry and Information Technology Bureau, 2012).
- **Shenzhen**’s new business-to-business oriented Shenzhen International Convention and Exhibition Centre is scheduled to complete in September 2018, which will become the largest C&E centre in the world to complement the development of Qianhai Free Trade Zone.

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Hong Kong</th>
<th>Zhuhai</th>
<th>Macao</th>
<th>Shenzhen</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of dedicated exhibition venues</td>
<td>2</td>
<td>2</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>Existing rentable exhibition space (sqm)</td>
<td>161,500</td>
<td>73,120</td>
<td>93,500</td>
<td>105,000</td>
</tr>
<tr>
<td>Planned/Committed rentable exhibition space (sqm)</td>
<td>38,000</td>
<td>14,580</td>
<td>– *</td>
<td>400,000</td>
</tr>
<tr>
<td>Total rentable exhibition space (sqm)</td>
<td>199,500  (+19.0%)</td>
<td>87,700 (+16.6%)</td>
<td>93,500</td>
<td>505,000  (+79.2%)</td>
</tr>
</tbody>
</table>

Source: Study Team
* The major providers of exhibition capacity in Macao are private-led resort/casino developments, which are not coordinated by the government.
Leisure Tourism

5.3.11 Macao, Zhuhai and Zhongshan are determined to develop leisure and cultural tourism industry. Specifically,

- **Macao** is positioned to be a “World Centre of Tourism and Leisure”. According to the *Macao Tourism Industry Development Master Plan* in 2017, Macao seeks to broaden its selection of tourism products to diversify tourism experiences. Marine tourism would be one of the development strategies.

- **Zhuhai**, complementing Macao’s tourism development, is planning Hengqin New Area as an “international tourism and leisure island” with a focus of developing mega-scale theme parks and innovative experience-based tourism hubs\(^5\).

- **Zhongshan**, albeit not a traditional tourism city, is planned to develop cultural tourism and yacht tourism, taking advantage of its rich historic background and natural coastline.

5.3.12 Tourism cooperation in the GBA is made closer under the *Charter of Tourism Federation of Cities in Guangdong, Hong Kong and Macao Bay Area* signed in December 2017, with an aim to coordinate the diverse tourism resources in the eleven cities in the region, and to promote multi-destination travel in the GBA. Subsequently in April 2018, ten thematic multi-destination travel itineraries were conceptually formulated, with Hong Kong as the starting point in nine of the ten routes. Regional tourism collaboration will become more prominent in the future where Hong Kong could play a pivotal role.

Challenges to the Industry

5.3.13 The huge economic opportunity is also accompanied by challenges. Considering the ambitious strategies in other neighbouring cities (such as Zhuhai and Macao) to develop leisure and MICE tourism, Hong Kong needs to strengthen its comparative edge and unique position in order to avoid direct competition with other cities in the GBA.

5.3.14 While Hong Kong is not short of world-class tourism attractions such as the Hong Kong Disneyland Resort and Ocean Park, the tourism offerings are not unique and diverse enough which could be replicated in other cities. Future tourism development in Hong Kong is therefore advised to draw extensively on its local asset (e.g. natural and cultural resources) to add uniqueness to the tourism experience.

5.3.15 For MICE development, the insufficient supply of dedicated C&E space (in the Hong Kong Convention and Exhibition Centre (HKCEC) and the AsiaWorld-Expo (AWE)) impedes its capability to fulfil the strong future demand from the GBA. Based on a government-commissioned consultancy study, there would be a peak-season shortfall of C&E space of about 130,000 sqm by 2028 (HKTDC, 2017a). Therefore, stakeholders from the exhibition sector (Interviewee D) has expressed concerns on the extremely high utilisation rate of HKCEC.

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5 Examples include Chimelong International Ocean Resort, Xiangzhou Culture Street and the Novotown.
Recent Spatial Strategy and Policy in Hong Kong

5.3.16 In response to the regional opportunities and challenges, a number of spatial strategies are proposed or implemented by the Hong Kong Government, which are summarised in Table 3.2. The more important strategies are highlighted as follows:

**Expanding MICE Capacity**

5.3.17 The Policy Address 2017 pledged to maintain Hong Kong’s current position as an international C&E hub by announcing new convention and/or exhibition venues in Wan Chai North that will integrate with the existing HKCEC, providing an additional C&E floorspace supply of about 38,000 sqm. In addition to C&E facilities, complementary hotel facilities and Grade A office space are also planned on the topside. Feasibility of expanding other existing C&E venues such as AWE will also be considered. Nevertheless, the additional C&E space provision could only fulfil 30% of the peak-season shortfall in 2028, provided that the two projects will be completed by that time.

**Future Tourism Cluster in Lantau**

5.3.18 The Lantau is planned to be the future solution space to support tourism development of Hong Kong. In short-term (by 2023), the 25-ha SkyCity Development at the North Commercial District (NCD) of Airport Island will become the largest shopping complex in Hong Kong providing 350,000 sqm floorspace. It is positioned to be a “vibrant lifestyle hub” for tourists and locals offering unique RDE experiences (Airport Authority Hong Kong, 2018a).

5.3.19 The medium- and long-term tourism development are mapped on the Sustainable Lantau Blueprint, which promulgated the Northeast Lantau Tourism Gateway accommodating diversified leisure, sports, recreation, entertainment and tourism activities in the proposed Sunny Bay reclamation (of about 80 ha) to create synergy with the Hong Kong Disneyland Resort and other tourism developments in Lantau (ICF, 2017), whilst the rich natural asset in South Lantau will be utilised for sustainable leisure and recreational uses.

Table 5.5 Recent spatial strategy and policy for tourism industry in Hong Kong

<table>
<thead>
<tr>
<th>Sub-market</th>
<th>Spatial Policies</th>
<th>Non-Spatial Policies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leisure Tourism</td>
<td>• Expansion of Ocean Park and Hong Kong Disneyland Resort</td>
<td>• Signing of the Agreement on Further Enhancement of Tourism Co-operation between Mainland and Hong Kong with the China National Tourism Administration</td>
</tr>
<tr>
<td></td>
<td>• Development of SkyCity at North Commercial District of Airport Island as RDE destination</td>
<td>• Development of 10 multi-destination travel itineraries in collaboration with the Tourism Federation of Cities in GBA</td>
</tr>
<tr>
<td></td>
<td>• Tourism Gateway in Northeast Lantau for clustering development of leisure, entertainment and tourism uses</td>
<td>• Further development of local tourism products such as green tourism, heritage tourism, etc.</td>
</tr>
<tr>
<td></td>
<td>• Sustainable leisure and recreational uses in South Lantau</td>
<td></td>
</tr>
</tbody>
</table>
Strategic Planning for Employment-related Land Uses and Strategic Transport Network in Hong Kong
After the Opening of the Hong Kong-Zhuhai-Macao Bridge

### Sub-market Spatial Policies Non-Spatial Policies

| MICE | • Redevelopment of 3 government buildings in Wan Chai North next to the existing HKCEC for new C&E space (23,000 sqm) • Topside development at the future MTR Exhibition Station for convention use (15,000 sqm) | • Additional resources to HKTDC and Hong Kong Tourism Board for MICE promotion |

Source: Study Team, consolidated from Policy Address 2017, the 2018-19 Budget and Sustainable Lantau Blueprint

### Sectoral Considerations and Aspirations in the light of the HZMB

**ERLU : Complementary Developments to Western PRD**

5.3.20 In general, the stakeholders advocated for complementary tourism developments to the Western PRD through capitalising on the comparative strengths of Hong Kong. This echoes with the overarching principle of “complementary cooperation” for the GBA development. In identifying the comparative strengths, the existing/planned/committed tourism projects in other GBA cities should be considered thoroughly.

5.3.21 They also opted that holistic tourism resources planning is required to provide “all-for-one” leisure experience (全域旅遊) for visitors, which emphasises the integration of various local tourism resources (especially natural scenery which renders the uniqueness of the area) rather than having isolated attractions. In particular, a major theme park operator (Interviewee F) holds that the lush beauty of Lantau should be capitalised to add vitality to the proposed Tourism Gateway in Northeast Lantau.

5.3.22 Synergy and complementarity between existing and new tourism developments in the whole region is also a major concern of stakeholders. Specifically, the Airport Authority (operator of SkyCity) urged that unnecessary duplication of RDE developments should be avoided to maximise synergy between commercial developments in Lantau, such as Sunny Bay and the topside development at the Hong Kong Boundary Crossing Facilities (HKBCF), while the complementarity between the Disneyland Resort and Sunny Bay development is also stressed by the theme park operator.

5.3.23 Concerning MICE development, the economist from HKTDC (Interviewee D) reiterated the need to further expand the C&E capacity of Hong Kong (i.e. 92,000 sqm) in addition to the committed expansion projects in Wan Chai North, so that there will be sufficient C&E floorspace to accommodate the future peak-season demand.

**STN : Direct and Convenient Connection**

5.3.24 Stakeholders (Interviewee F) consider that direct, transit-free and stop-free transport links to the proposed Northeast Lantau Tourism Gateway from both urban centre and HKBCF Island is necessary to encourage visitors. Similarly, various transport options between the Tourism Gateway and other tourism infrastructure in North/South Lantau and other parts of Hong Kong should be provided to facilitate multi-day tourism experience.

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6 Some stakeholder aspirations and needs reported in this section are consolidated from their written submission to the Lantau Development Public Engagement exercise in 2016.
5.3.25 To attract local employment, direct point-to-point connectivity from Tung Chung (as a stable pool of Lantau employment) to various tourism developments in Lantau should be provided so as to reduce travelling time and enhance residents’ willingness to work in Lantau. In particular, the poor existing public transport connection between Tung Chung and Airport Island (travelling time possibly up to 40 minutes) has raised concerns by stakeholders including Airport Authority and AWE.

5.4 Innovation & Technology

General Profile

5.4.1 Innovation and Technology (I&T) sector has been one of the major economic areas supporting the economic growth. The government of Hong Kong has been investing in the sector through various means in the last two decades, including the spatial one like constructing I&T related infrastructure and the non-spatial one like funding support to the enterprises.

Market Trends

5.4.2 I&T sector constitutes for 0.9% of the total employment of Hong Kong. In 2015, 0.3% of GDP (HK$8 billion) are used as investment for in-house commercial R&D. Although the figure had risen 38.6% from 2010, the mean of investment percentage in developed economies is around 1% (Legislative Council Secretariat, 2017a). I&T sector is still a relatively trivial industry in Hong Kong. Huge development potential exists for I&T sector.

5.4.3 Negative spillover effect exists that I&T firms in Hong Kong are spilling over to Shenzhen. From 2013 to the end of 2016, Qianhai had sold 2.48 million sqm of office GFA to Hong Kong-invested enterprises. Around 4,100 enterprises with HK background had registered in the same period also (GovHK, 2017).

Sectoral Concerns

5.4.4 Another major concern pointed out by the expert in the I&T is the importance of relationship between research part and the product development part in the I&T production chain. Summarised from the view of Interviewee M, While Hong Kong has a strong background in conducting research, the “industrialisation” of the I&T sector is lagging behind. The basis and starting point of the I&T production chain is from the production and enterprise side, instead of the research side. I&T productions starts with the question “what should be developed”. The development concept is then carried to the research part of the whole industry and suitable technology is used to turn those concepts into real world application. Therefore, the ability to design those concepts are intrinsically different from how advance the research basis is. The deficiency in the development of industry section results in the ineffective industrialisation and the expansion of I&T sector.

Economic Opportunities brought by the HZMB

5.4.5 For I&T the sector, one obvious economic benefit brought by the HZMB is the indirect opportunity on the increase in the geographical mobility of workers in the I&T sector. Their

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7 The interviewee cited construction of building as a metaphor. Housing development started with design of building, with selection of building materials being the latter step. The developer will not be able to construct building only because they have some high-quality building materials is hand.
accessibility to travel inside PRD would be further enhanced. With coach services traveling along the HZMB going to be provided, citizens could enjoy another of travel between Eastern and Western PRD.

5.4.6 Even though there are already different types of transport modes for people to travel between Hong Kong and the west PRD (say, ferries and coaches), increasing the possible choice of routes for people indicates an increase in the accessibility. With the new coach route coming to operation after the opening of the HZMB, the geographical mobility is expected to be further improved. Workers travel frequently between two sides of PRD will be expected to benefit most.

Relevant Spatial Strategy and Policy in PRD

5.4.7 In PRD, both Hengqin and Shenzhen are investing massively for the development of I&T sector. Qianhai in Shenzhen is now generally perceived as the base for I&T sector in the PRD. In 2015, the total R&D investment in Shenzhen is RMB¥80 billion, which comprises of 4.2% of total GDP. Monetary support from the government and the investment from private firms incubates an “industry-led” (產業主導) applied research in the I&T production chain. In addition, special policies in favour of Hong Kong enterprises are established in the Qianhai area. One-third of the total land area are exclusively granted for HK enterprises to use. Those firms also enjoy tax reduction of total RMB¥80 million.

5.4.8 For Hengqin, detailed planning on I&T sector is explained in Chapter 2. In terms of spatial planning, 144.85 hectares of land in Hengqin (equals to 5% of the total built area in the masterplan) are reserved for I&T development. On the other hand, for regional spatial cooperation policies, Traditional Chinese Medicine Science and Technology Industrial Park of Co-operation between Guangdong and Macau was established in 2011. With the cover area of about 500,000 sqm, the Park aims to act as a land promotion strategy to Macau SAR. Hengqin provides a major land supply for I&T industries in PRD.

Recent Spatial Strategy and Policy in Hong Kong

5.4.9 Various projects proposed by the HKSAR are currently undergoing constructions. These projects are located on the Eastern Knowledge and Technology Corridor, as proposed in HK2030+, to seize the development potential of I&T sector (Innovation and Technology Bureau, 2017; Legislative Council Secretariat, 2017b). The following paragraphs give an overview for the major projects in Hong Kong that are currently carrying on, with Table 5.6 summarising these projects.
Table 5.6 Recent I&T infrastructure projects in Hong Kong

<table>
<thead>
<tr>
<th>I&amp;T Project</th>
<th>Project Details</th>
<th>Progress</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hong Kong-Shenzhen Innovation and Technology Park (HSITP)</td>
<td>• Provision of 1.2 million sqm GFA as a base for scientific research involving enterprises, research institutions and higher education institutions</td>
<td>• Detail development plan under study</td>
</tr>
<tr>
<td>Expansion of the Science Park</td>
<td>• 2 new 14-storey and 15-storey buildings providing 70,000 sqm GFA for office uses</td>
<td>• Expected to be completed in 2020</td>
</tr>
<tr>
<td>Re-industrialisation</td>
<td>• An Advanced Manufacturing Centre providing 108,600 sqm GFA, with smart production emphasised</td>
<td>• Expected to be completed in 2021/22</td>
</tr>
<tr>
<td></td>
<td>• A Data Technology Hub, providing GFA of about 27,000 sqm</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Total development cost of about HK$8.248 billion.</td>
<td></td>
</tr>
<tr>
<td>Liantang / Heung Yuen Wai Boundary Control Point</td>
<td>• Expected to provide mid and long-term land supply for research offices and factories</td>
<td>• Conducting preliminary planning study</td>
</tr>
</tbody>
</table>

Source: Study Team, consolidated from Legislative Council Secretariat (2017b)

Sectional Considerations and Aspirations in the light of the HZMB

5.4.10 The above concerns and the expected market trend and development in the future altogether contribute the spatial needs and aspirations of I&T sector. In line with the 2018-19 Budget, four focused I&T industries are selected, namely biotechnology, artificial intelligence, smart city and financial technologies.

ERLU: Fortify Industry-academic-research synergy benefits

5.4.11 The first desire from the I&T sector in ERLU is about the agglomeration of the industry, academia and research segment (產學研合一) in the sector. Emphasised by Interviewee M, the relationship between the industry and the research part in the production chain is essential for assembling a successful I&T sector. In light of the opening of the HZMB, agglomeration of these sectors in terms of land use planning would be critical. Treating these three parts as one could foster the development process and economic growth.

5.4.12 Developments similar to HSITP could be put as a consideration. The major aim of HSITP is to “creating a vibrant I&T ecosystem for various stakeholders in the government, industry, academic and research sector” (Innovation and Technology Bureau, 2017), thus able to cater various production part, from the enterprise side to the research side, in the whole sector. Agglomerating these two parts should be highlighted in planning I&T related land use. In other words, research laboratories and offices of the I&T firms needs to be located as close as possible.

5.4.13 Land with large size could be preferentially given for I&T development. Aspirations of the sector (from Interviewee N) also includes reserving a certain amount of land for I&T development in the HKBCF Island. This could, according to the interviewee, meet the spatial needs of the industry and grasp the opportunities generated by the bridgehead economy at the same time. In addition, since the island is located next to the airport,
entrepreneurs could schedule business meetings and travel to Western PRD within in a short period of time. As I&T industry needs to be highly adaptive to changes, locating their offices in the island could meet its demand.

**STN : Enhance internal connectivity**

5.4.14 As mentioned in paragraph 5.4.5, the opening of the HZMB would promote accessibility for workers traveling in the PRD. Therefore, internal accessibility of Hong Kong would be a concern for I&T workers, both from Hong Kong and Mainland, that may need to frequently travel from Hong Kong to other cities in PRD. The Internal connectivity of Hong Kong in terms of the connection from these boundary crossing facilities (including the HZMB) to the employment area of I&T workers.

5.4.15 Connectivity between I&T developments in the *Eastern knowledge and technology corridor* is one of the major concerns. With more and more I&T developments going to be completed in the near future, connections between I&T sites needs to be concerned. Intra-and inter-connectivity of the corridors would be a major concern in developing the strategic transport network.

5.5 **Other Key Sectors**

**Financial and Professional Services**

5.5.1 Financial Services as well as Professional Services and other Producer Services are two of the four pillar industries in Hong Kong contributing 30.2% share of GDP in 2016 (Census and Statistics Department, 2017a). New trends have been emerging particularly in Financial Services such as Green Finance and FinTech in response to the increase concerns on environmental issues and the development of new technology.

5.5.2 The regional integration between Hong Kong and PRD has been encouraged through various national and regional policy, such as Closer Economic Partnership Arrangement (CEPA), Framework Agreement on Hong Kong/Guangdong Cooperation, Framework Agreement on Deepening Guangdong-Hong Kong-Macao Cooperation in the Development of the Bay Area etc.

5.5.3 Hong Kong positions itself as a regional and global financial centre, international asset management centre, offshore Renminbi (RMB) business hub, talent hub and international legal and dispute resolution services centre. Various spatial and non-spatial policies have been proposed by the government as summarised in Table 5.7.

5.5.4 It is estimated that Grade A offices required in CBD by 2041 is around 27 ha. There will be a deficit of 8.9 ha by 2041 comparing with the planned land supplies (Planning Department, 2016).
### Table 5.7 Key local policies in Finance and Professional Services

<table>
<thead>
<tr>
<th>Sector/ Industry</th>
<th>Spatial Policies</th>
<th>Non-Spatial Policies</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Finance</strong></td>
<td>• Major proposed development sites of Grade A offices concentrated near traditional CBD and CBD2, such as the New Central Harbourfront, sites in Kowloon East, Kwun tong Town Centre</td>
<td>• Development of green finance, green bond will be issued in near future</td>
</tr>
<tr>
<td></td>
<td>• Development of green finance, green bond will be issued in near future</td>
<td>• Reinforce confidence of investors, establishment of Policy Holders’ Protection Scheme</td>
</tr>
<tr>
<td></td>
<td>• Reinforce confidence of investors, establishment of Policy Holders’ Protection Scheme</td>
<td>• Promotion of new financial technologies services and products, the Supervisory Sandbox has been launched</td>
</tr>
<tr>
<td></td>
<td>• Promotion of new financial technologies services and products, the Supervisory Sandbox has been launched</td>
<td>• Enhancing payment services, e.g. Faster Payment System</td>
</tr>
<tr>
<td><strong>Legal Service</strong></td>
<td>• West Wing of the former Central Government Offices and the former French Mission Building are under renovation to provide space for Legal Hub programme for international and local legal organizations</td>
<td>• Propose establishment of a Bay Area legal co-operation platform</td>
</tr>
</tbody>
</table>

Source: Study Team, edited from HKSAR Government (2017, 2018)

5.5.5 Most stakeholders hold optimistic views that the spatial connection of the HZMB can enhance the economic relationship between Hong Kong corporates and regional companies. They observed that the demand of professional services in the GBA is rapidly increasing due to the expansion of the regional corporates. The mainland manufacturers have been actively upgrading and restructuring their business strategies to maintain competitiveness. It may require professional services including brands development and marketing, services in legal, accounting, financing etc.

5.5.6 Referred to the interviewees from HKTDC (Interviewee D), there are 2 factors enabling the demands of professional services in Hong Kong: efficiency and reliability. There is a cluster of traders and supporting producer services in Hong Kong to manage the business deals. The HZMB further enhance the efficiency allowing the service providers to meet their clients in West PRD. On the other hand, the service quality of Hong Kong’s service providers is reliable due to the professional qualifications and the international business portfolios.

5.5.7 To embrace the economic opportunities brought by the HZMB, stakeholders suggested to establish a platform to support the free capital flow between local and mainland market and unify the financial regulatory framework to increase the efficiency of flow of capital and financial products. In order to promote the clustering effect, economic incentive can be provided to facilitate different service providers basing in Hong Kong.

5.5.8 In the meanwhile, Hong Kong can attract overseas enterprises reinforcing Hong Kong status as the international financial centre and connector between Mainland market and oversea market. To increase the reliability of Hong Kong, the interviewees urged the mutual recognition of professional qualifications in Hong Kong and the mainland.

5.5.9 Regarding the spatial needs on ERLU and STN, an interviewee (Interviewee O) concerned on the provision of grade A office particularly in the CBD in response to the
increasing number of mainland enterprises bought offices in the CBD. Other interviewees are more concerned on the policy than spatial planning.

Trading and Manufacturing

5.5.10 Hong Kong pursues a barrier free trade through free trade policy. There is no tariff charged on both import as well as export of the goods, except licensing for certain goods. In addition, there is strong legal services and world financial hub which altogether offers a favourable platform for any business.

5.5.11 Although the production activities of industrial enterprises are carried out outside Hong Kong, they are operated with their control centres/headquarters based in Hong Kong. Therefore, the economic value or the employment generated thereof locally is covered under the service sector.

5.5.12 Although the manufacturing sector contributes only 1.2% of the total GDP share (Census and Statistics Department, 2017b), the fact that SME accounts for more than 95% of it (HKSAR Government, 2017), is a concern when SMEs are faced with challenges such as rising overheads in Hong Kong which was expressed by more than 50% of the total SMEs surveyed (Hong Kong Management Association, 2015).

5.5.13 Hong Kong has signed several Free Trade Agreements (FTAs) with its trading partners to ensure favourable and business-friendly environment. CEPA is the first of its kind signed between Hong Kong and Mainland in 2003 followed by several others such as FTAs with New Zealand in 2010, Member States of the European Free Trade Association in 2011 and with Chile in 2012.

5.5.14 Recognizing the SMEs as the driving force for the economic development of Hong Kong, there are funding schemes to support the SMEs through Trade and Industry Department, HKSAR to enhance and expand its competitiveness and market respectively. The government also awards the recognition to the outstanding entrepreneurs of both manufacturing and service sectors in various categories such as customer service, innovation and creativity, productivity and quality, etc. to encourage or motivate SMEs to work harder (Hong Kong: The Facts, Trade and IndustryGovHK, 20176).GovHK, 2016).

5.5.15 In 2016, Mainland accounts for 51% of Hong Kong’s external trade and 60% of Hong Kong’s re-export were originated from the Mainland (HKTDC, 2017a). Similarly, 13% export and 16% import of Mainland were handled via Hong Kong (HKTDC, 2017a). Therefore, the existing trade relation between Hong Kong and Mainland will be further enhanced due to its much shorter land route connection brought about by the bridge, particularly with the western PRD region.

5.5.16 Interview with an official from HKTDC (Interviewee D) also provided with positive responses on the economic benefit which Hong Kong will gain from the bridge. The interviewee expressed that the bridge will enhance the complementarity functions of the different sectors of Hong Kong and western PRD region rather than competition, although competition is also something which one cannot avoid in the free market system. However, he also shared his concern about the smooth operation of the bridge.

Cultural and Creative

5.5.17 The Government of Hong Kong SAR recognizes cultural and creative industries (CCI) as one of the major industries of Hong Kong which plays a vital role in its economy, as early
as 2003 and it is identified as one of the six priority industries in 2009. Ever since then, CCI in Hong Kong has been the most dynamic sector, which are fundamentally based on creativity, knowledge and services comprising of 11 component domains.

5.5.18 The value added of CCI has the annual growth rate of 8.6% from 2005 to 2014 which is much higher than the annual GDP growth rate of 5.4% (Legislative Council Secretariat, HKSAR, 2017a). However, it reveals a stagnant (insignificant growth) in its share of GDP in the past 10 years at 3-5%, while the government’s expectation was as high as 15% (Xin Lin and Ray Poon, 2017). From this context, there are concerns over market saturation with a declining growth trend for CCI.

5.5.19 Create Hong Kong is an office established in 2009, dedicated to promoting the development of creative industries with the vision to make Hong Kong as ‘Asia’s Creative Capital’. In the same year, came up with Create Smart Initiative which later in 2011 also covered the design related projects which was in the earlier days funded by Design Smart Initiative. Others include Design Incubation Programme administered by Hong Kong Design Centre established in 2001 which works in collaboration with the Government. The West Kowloon Cultural District is proposed by the Government as an arts and culture landmark of Hong Kong and a cultural gateway of the PRD region.

5.5.20 Table 5.8 provides an overview of the current key policies actions and plans of the CCI.

<table>
<thead>
<tr>
<th>Sector/ Industry</th>
<th>Spatial Policies</th>
<th>Non-Spatial Policies</th>
</tr>
</thead>
</table>
| Creative Industries| • Hong Kong/Shenzhen Innovation and Technology Park (Lok Ma Chau Loop) provides space for development of creative industries  
• Construction of Qianhai HK-SZ Design Innovation Hub  
• InnoCentre lease work space and provide incubation programmes to design companies and start-ups, creating creative clusters | • Provide $1 billion to CreateSmart Initiative to strengthen design industry and nurture talents  
• Operation of the Film Development Fund will be reviewed  
• Strengthen Hong Kong’s role as regional intellectual property trading centre  
• Promote commercialization of intellectual property |
| Arts and Culture   | • The West Kowloon Cultural District, including M+ Museum, Xiqu Centre, the Freespace, the Art Park, the Lyric Theatre Complex and the Hong Kong Palace Museum  
• The New Territories East Cultural Centre and the Heritage Conservation and Resource Centre will be constructed within 10 years  
• Expansion of the Hong Kong Museum of History, Hong Kong Science Museum and Hong Kong City Hall  
• The Hong Kong Cultural Centre will be renovated | • $500 million will be allocated to Leisure and Cultural Services Department for holding exhibitions and acquisition of museum collections  
• From 2018-2019 onwards, additional recurrent provision of $55 million is provided to major performing arts groups and small and medium arts groups  
• Increase recurrent provision to support artists and arts groups from HK to perform overseas |
Since the expansion of CCI relies heavily on the Chinese market (Xin Lin and Ray Poon, 2017), the opening of HZMB will have a direct benefit in increasing its market size with the improved connectivity, thus addressing the CCI’s market saturation concern to a great extent.

As Hong Kong by its location is strategic in positioning itself as the window between Mainland and the rest of the world, the bridge will also enhance this leveraging role of Hong Kong in promoting CCI to the international market from Mainland or the western PRD region in particular.

5.6 Chapter Conclusion: Overall SWOT

5.6.1 The opportunities and challenges brought by the HZMB to logistics, tourism and I&T sectors are summarised in Table 5.9.

5.6.2 Hong Kong has long been providing a superior environment for business. It consists of a prime location, a level playing field, simple and low taxes, judicial independence, clean government, a safe and stable society and well-developed infrastructure. Not only have these strengths possessed by Hong Kong attracted various local sectors to start and develop their business here, they have also provided favourable conditions for multinational corporations and enterprises from PRD to establish their offices here.

5.6.3 However, in view of the intensification in inter-regional and intercity competition, the current advantages might not be adequate to cope with the upcoming challenges, hence there is room for improvement with regard to Hong Kong’s business environment. When compared to our neighbouring cities, our business costs in terms of rent and salary might be relatively high which are partly caused by land shortage. Besides, our current available talents may not fully meet the demands from various sectors, especially those with a focus on advanced technology. Thus, it is important for Hong Kong to further nurture and attract talents, in addition to improving our connectivity through STI. Apart from that, there is a need for Hong Kong to explore new market and opportunities by diversifying its economy and providing new destinations and experience for the visitors.

5.6.4 In light of HZMB, the connectivity and accessibility of Hong Kong will be greatly enhanced. These will bring numerous potential opportunities to various sectors in Hong Kong. In general, it is foreseeable that the local market will further integrate with the regional market from the Western PRD, and hence more potential customers, visitors, talents and entrepreneurs will be brought by the HZMB. Most sectors will be able to benefit from it and further expand their market to the PRD. At the same time, Hong Kong can also strengthen its role as a gateway to the global market, which will be utilised by sectors from PRD, and the chain reaction may bring benefits to our local sectors. Therefore, with the opening of the HZMB, Hong Kong can enjoy closer economic ties with different PRD cities and further make use of its comparative advantage to capitalise the potential opportunities.

5.6.5 Moreover, more efficient positioning will become possible with the new opportunities brought by HZMB. It is possible for different PRD cities to develop the same sectors, but it is essential to establish a complementary relationship among these cities to avoid unnecessary competition. With better connectivity, there will be interaction between Hong Kong and other western PRD cities and therefore more potentials for the whole region to
develop together. As a result, there could be positioning of each city to divide the work and best capture the possible gain from the HZMB according to its own comparative advantage. In this way, it is easier for Hong Kong to coordinate and collaborate with other western PRD cities with the establishment of the HZMB.

5.6.6 There will be greater flexibility after the opening of HZMB. It will provide more transport options for the flow of goods and people which include talents, visitors and businessmen. With the establishment of the HZMB, the efficiency and flexibility of land transport will be greatly enhanced since its required travel time and distance will be reduced. More people and goods may choose to reach Hong Kong by land, instead of by sea or air. Therefore, it is expected more frequent flow of goods and people will be brought by the HZMB, and it will further induce more business opportunities for different sectors in Hong Kong.

5.6.7 The opening of the HZMB may, however, bring some potential challenges to the economic development of Hong Kong. In addition to Hong Kong, some other western PRD cities including Macao and Zhuhai may also benefit from the opportunities brought by the HZMB. It is likely for these cities to focus on the strategic development of the same sectors such as tourism. As a result, there might be keen competition from the neighbouring cities of GBA, especially when Macao and Zhuhai may have relatively closer working relationship due to their geographical proximity and economic interdependence. Hence, it is critical for Hong Kong to maintain its comparative advantage and prosperity so that it can have its unique positioning among the neighbouring cities.

5.6.8 Besides, the effectiveness of the HZMB may be subject to its cost and efficiency. They can be critical to the users from various sectors in deciding whether to use the HZMB or not. At this stage, costs and policies associated with the HZMB may still remain uncertain, particularly with regard to the cross-border arrangement. These uncertainties may limit the possible opportunities to be enjoyed by the sectors in Hong Kong. Hence, it is illustrated that more efficient government will be needed to formulate favourable policies for further encouraging the sectors to capitalise the benefits brought by the HZMB.
### Table 5.9 Opportunities and challenges brought by the HZMB to logistics, tourism and I&T sectors

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Logistics</th>
<th>Tourism</th>
<th>I &amp;T</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prime location</td>
<td>• Level playing field</td>
<td>• Simple and low taxes</td>
<td>• Judicial independence</td>
</tr>
<tr>
<td>• Level playing field</td>
<td>• Safe and stable society</td>
<td>• Clean government</td>
<td>• Well-developed infrastructure</td>
</tr>
<tr>
<td>• Safe and stable society</td>
<td>• Judicial independence</td>
<td>• Clean government</td>
<td>• Well-developed infrastructure</td>
</tr>
<tr>
<td>• Judicial independence</td>
<td>• Clean government</td>
<td>• Well-developed infrastructure</td>
<td>• Well-developed infrastructure</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Area for improvement</th>
<th>Logistics</th>
<th>Tourism</th>
<th>I &amp;T</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Demand for lower business costs with regard to land supply and land rent</td>
<td>• Needs for new market and opportunities by diversifying economy and providing new experiences</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Opportunity: Market expansion</th>
<th>Logistics</th>
<th>Tourism</th>
<th>I &amp;T</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Capturing the potential flow of goods from the Western PRD</td>
<td>• New potential to capture the under-developed short-haul visitor arrival market in the Western PRD</td>
<td>• Increase in the geographical mobility of workers, and promotes the meeting between companies and clients</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Opportunity: More efficient positioning</th>
<th>Logistics</th>
<th>Tourism</th>
<th>I &amp;T</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Shifting Hong Kong ports’ position as a land-air transhipment hub to cater for freight from the Western PRD</td>
<td>• Tourism cooperation in the GBA is made closer by coordinating the diverse tourism resources to promote multi-destination travel in the GBA.</td>
<td>• Task Division and complementation of sectors in the I&amp;T industrial chain within GBA</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Opportunity: Greater flexibility</th>
<th>Logistics</th>
<th>Tourism</th>
<th>I &amp;T</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Enhancing freight flow through multi-modal choices catering to time-sensitive cargos from western PRD.</td>
<td>• Tourists and business travelers can enjoy a new way to travel between Hong Kong, Zhuhai and Macao</td>
<td>• With coach services traveling along the HZMB going to be provided, citizens could enjoy another of travel between Eastern and Western PRD</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Potential challenges</th>
<th>Logistics</th>
<th>Tourism</th>
<th>I &amp;T</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Keen competition from the neighboring cities</td>
<td>• Uncertainties in costs and cross-boundary arrangement which may limit the effectiveness of HZMB</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
6 Overall Planning Approach

6.1 Vision Statement

6.1.1 The overarching goal of the Study is to formulate holistic spatial planning strategy and policy for the ERLU and STN of Hong Kong after the opening of the HZMB under the framework of HK2030+. With the consideration of key issues in light of the HZMB presented in Section 5.6, it is believed that Hong Kong should take actions to facilitate the regional collaboration and realise the competitive edge to seize the bridgehead opportunities, while creating reserve for sustainable growth.

6.1.2 The vision of the proposed conceptual spatial framework has hence been developed as:

“To reinforce the Hong Kong’s position as an international gateway and capitalise bridgehead opportunities from the Greater Bay Area by creating capacity for sustainable growth”.

6.2 Planning Approach

6.2.1 The proposed conceptual framework adopted the following three guiding principles in addition to HK2030+:

1. Provide adequate supply with efficient use and compatible distribution of employment-related land uses;
2. Ensure high connectivity between HZMB, major ERLU areas and workforce population through provision of strategic transport network; and
3. Facilitate smooth and timely implementation of conceptual spatial strategy with supporting policies.

6.2.2 To formulate the strategic planning recommendations, the opportunities and challenges of the key sectors and their spatial needs after the opening of the HZMB were identified in the sectoral study in Stage 2. Through reviewing the spatial strategies and policy of the selected cities in the GBA, strategic significance of the GBA cities to Hong Kong of the key sectors was analysed. Comparing these two aspects with the current strategic planning and policies, the strategic policy gap of Hong Kong in light of the HZMB can be determined serving as the foundation of the strategic planning recommendations.

6.2.3 The strategic planning recommendations comprise three strategic directions with key actions, conceptual spatial strategies as well as supporting policy. It is served as a supplement of HK2030+ Building Block 2 – Embracing New Economic Challenges and Opportunities. Figure 6.1 shows the overview of the planning approach.
Figure 6.1 Planning Approach of the Strategic Planning Recommendations
Source: Study Team
7 Proposed Spatial Strategy, Policy and Implications

7.1 Strategic Direction

7.1.1 As mentioned in Section 5, logistic, tourism and I&T are more locational/accessibility-sensitive that the sectoral aspirations can be realised mainly through spatial planning strategy and spatial-wise supporting policy. The proposed conceptual spatial strategy emphasizes on three functions regarding to the three industries.

7.1.2 Three strategic directions are proposed for the three functions respectively:

1. To develop a land-air transhipment hub serving for high value-added freight as an international freight gateway to and from the Western PRD cities;

2. To create capacity for holistic tourism and MICE development and diversify tourism offerings for enhancing travel experience; and

3. To establish intercity, I&T co-operation incentives to optimize industry-academia-research synergy benefits with sound experience in legal and financial services

7.2 Overview of Proposed Conceptual Spatial Strategy

7.2.1 Figure 7.1 shows the overall proposed conceptual spatial framework. To capitalise the bridgehead opportunity, the conceptual spatial strategy mainly focuses on the western part of Hong Kong. Three ERLU clusters/cores are proposed and are conceptually connected with the major ERLU areas via four belts/corridors.

7.2.2 The proposed conceptual spatial strategy for the three directions is structured into five parts. Key actions are first identified to achieve the strategic directions. The conceptual spatial strategy for ERLU are proposed, followed by the STN to connect the proposed ERLU to the existing major areas. Its supporting policies are then investigated for implementation. The overall implications to key stakeholders for each industry are also analysed.
Figure 7.1 Proposed Conceptual Spatial Strategy

- Integrated Logistics Belt
- Northeast Lantau Tourism Hub
- Western MICE Core
- Aviation Logistics Cluster
- South Lantau Ecological Recreation Belt
- Eastern Research Innovation Belt
- Southern Financial Innovation Belt

Source: Study Team
7.3 Spatial Strategy and Supporting Policy for Logistics

**Key Actions**

7.3.1 With the strategic direction to develop a land-air transhipment hub serving for high value-added freight as an international freight gateway to and from the Western PRD cities, the following five key actions are proposed for the spatial planning on logistics industries in Hong Kong:

*To strengthen the Western Economic Corridor put forth in HK2030+ and further expand logistics capacity by reserving land for logistics-related uses in the western part of Hong Kong*

7.3.2 The Western Economic Corridor was introduced in HK2030+ with the aim of capitalizing on both the international and regional gateway, as well as the STI in the Western part of Hong Kong, with the close proximity to the Western PRD. By exploiting the increasing economic activities and ERLU in North Lantau and New Territories areas including Hung Shui Kiu, Tuen Mun and Yuen Long South, the Western Economic Corridor is going to support the economy of Hong Kong in the future. This proposal acts to reserves land resources along the Western Economic Corridor for logistic-related land uses in order to expand logistics capacity in Hong Kong vis-à-vis the Western PRD.

*To capture bridgehead land-air transhipment advantages brought by HZMB in the surrounding area of HKIA*

7.3.3 The HKIA is currently serving as the gateway of air cargos coming from or going to the international market. HZMB is strategically linking to the HKBCF Island near HKIA, which created great opportunities for land-air transhipment. Land cargos from the Western PRD can travel via HZMB to Hong Kong and catch the flight in HKIA timely. With this reason, bridgehead economy should be optimized in the area surrounding HKBCF and HKIA.

*To consolidate and expand the logistics cluster in Tuen Mun West*

7.3.4 The existing and planned logistic cluster in Tuen Mun West gathered along the Western Economic Corridor. This proposal acts to further expand the cluster and maximize the clustering effect on logistic sectors. More land will be allocated for logistic-related uses in Tuen Mun West so as to provide adequate spaces for comprehensive logistic development.

*To restructure the conventional logistics industries into modern and high value-added logistics with smart infrastructures and state-of-the-art operations*

7.3.5 The comparative advantages of logistic industries in Hong Kong lie on the value-added freights due to the availability of well-established professional services. Hence, Hong Kong has to reconstruct the conventional logistic industries into a high value-added logistics and focus on the transhipment of high-value goods or specialized cargos which required professional handling services. Smart premium infrastructure and advanced logistics operation would be imposed to enhance effectiveness and efficiency.

*To leverage intra-city circulation of freights among the logistics clusters for the promotion of multimodal transhipment*

7.3.6 Apart from inter-city connections contributed by the construction of HZMB, intra-city transportation network is to be upgraded to unleash the potential capacity of logistics
industry in Hong Kong. To cope with the increased amount of cargos coming from the regional and international market, it is also important to ensure the intra-city circulation of freights among logistic sites is smooth and efficient. The proposal acts to leverage the movement of goods through improvement on STN.

**Proposed Conceptual Spatial Strategy**

7.3.7 Building on the Western Economic Corridor introduced in HK2030+, an **Aviation Logistics Cluster** is proposed in the North Lantau and Chek Lap Kok (Figure 7.2). The objective of this cluster is to capture land-air transhipment advantages brought by HZMB in the surrounding area of HKIA. The second proposal is to create an **Integrated Logistics Belt** in Tuen Mun West in order to consolidate and expand the logistics cluster in Tuen Mun West. Road improvement work would be implemented along the Integrated Logistic Belt to expand the existing capacity of the STN. These two strategic logistic areas are expected to reinforce the Western Economic Corridor by reserving spaces for trading and logistics, which is one of the four pillar industries in Hong Kong.
**Aviation Logistics Cluster**

*Figure 7.3 Proposed Aviation Logistic Cluster*

Source: Study Team

7.3.8 The Aviation Logistics Cluster is located on the North Lantau and Chek Lap Kok, covering strategic areas including the HKIA, the Topside Development on the HKBCF Island, Siu Ho Wan and Sham Shui Kok (*Figure 7.3*) with the objective of capturing land-air transhipment advantages brought by HZMB in the surrounding area of HKIA.

7.3.9 The Aviation Logistics Cluster capitalises on the land-air transhipment advantage contributed by the proximity to HZMB and HKIA. The cluster acts as the regional gateway of land cargos with the fact that the HKBCF Island is the landing point of HZMB connecting to the Western PRD. It also performs as the international gateway of air cargo as HKIA is an international aviation hub and its world-class reputation is going to be further reinforced with its capacity expansion into a three-runway system (3RS) (HKIA, 2018).

7.3.10 HKBCF is situated at the northeast waters off the HKIA and they are connected by the Hong Kong Link Road (HKLR) which spans from the main bridge of HZMB at the HKSAR boundary. With great accessibility, the freights can be stored or go through special handling processes within the cluster and further undergo multimodal transhipment to their destinations. These advantages are especially crucial in transhipping those time-critical freights as timely transhipments can be ensured due to the excellent connectivity between HKIA and HZMB.

7.3.11 On the HKBCF Island, security-sensitive cargo services would be provided to serve the goods coming from the Western PRD by land transportation. Off-airport one-stop cargo security screening and consolidation facilities would be constructed to support immediate freight transhipment from HZMB to HKIA. Additionally, high-value specialized freight storage and handling services would also be available on the HKBCF Island for temporary storage and processing of goods before transhipment.

7.3.12 Another inherent opportunity of the Aviation Logistics Cluster is the abundant land supply for logistic development in the rock caverns. The Civil Engineering and Development
Department (CEDD) undertook the Cavern Feasibility Study, ("Enhanced Use of Underground Space in Hong Kong – Feasibility Study") in 2010 to explore the effective use of rock caverns as a sustainable land supply strategy so that the surface land can be reserved for other beneficial uses (TPB, 2016). Many Strategic Cavern Areas (SCVAs) were identified (see Figure 7.4). Sham Shui Kok (SCVA No. 43) and Siu Ho Wan (SCVA No. 44) were two of the SCVAs that have potential for logistics development, especially for e-commerce warehousing and distribution (CEDD, 2017a; CEDD, 2017b).

Figure 7.4   SCVAs in Lantau Island
Source: TPB (2016)

7.3.13 As Sham Shui Kok and Siu Ho Wan SCVAs are located at a strategic location proximate to HKBCF and HKIA and enabled regional and cross-boundary transport connections, serving with major trunk roads including North Lantau Highway, Tuen Mun-Chek Lap Kok Link and HZMB, they would be consolidated and reserved for construction of modern premium multi-storey logistics compound. Due to its convenience location for land cargo access, E-commerce distribution centre would also be built to well-utilize the favourable transport infrastructure. The ERLU in the SCVAs can working together and support the high value-added logistics development in HKBCF (CEDD, 2017a; CEDD, 2017b).

7.3.14 The Aviation Logistics Cluster is strategically planned to facilitate the development of North Lantau and Chek Lap Kok as a whole and capture the potential bridgehead opportunities brought by HZMB.
The Integrated Logistics Belt is situated in Tuen Mun West covering strategic areas including Lung Kwu Tan, Tuen Mun Area 38 & 49 and 40 & 46, River Trade Terminal (RTT) So Kwun Wat and Tai Lam Chung (see Figure 7.5) with the objective to consolidate the existing brownfields and expand the logistic cluster in Tuen Mun West in order to bring about clustering effect and opportunities.

The existing RTT is purpose-built for river trade cargos in handling the shipments within the PRD in 1999. It provides terminal services including container handling and storage of cold chain goods, dangerous goods and dutiable goods (Marine Department, 2017). In addition, Tuen Mun Area 38 & 49 and 40 & 46 are proposed to be developed into modern logistics site with distribution and packing centres and modern warehouse for handling high-value added freight (PlanD & CEDD, 2015). Moreover, many existing brownfield operations in Tuen Mun West (see Figure 7.6) is playing a significant backup role in logistics, such as open storage yards (Transport and Housing Bureau, 2016). Therefore, the cluster and its surrounding areas consist of the potential to develop into an Integrated Logistics Belt with integrated logistics services and facilities.
7.3.17 The Integrated Logistic Belt is located at favourable location which is at the middle point of North-South freight conveying route. It is connected to HKIA, HKBCF, HZMB and North Lantau by Tuen Mun-Check Lap Kok Link and Route 11 which are currently under planning. With Tuen Mun-Check Lap Kok Link, the traveling time from Tuen Mun South to HKIA will also be shortened to 10 minutes (Highway Department, 2018). Consequently, cargos from the Integrated Logistics Belt can be easily travelled to HKIA for land-air transhipment, and vice versa. Moreover, Tuen Mun Western Bypass and Route 11 will link to the Northern part with other proposed logistics ERLU such as those in Hung Sui Kiu New Development Area (HSK NDA) to create synergy. The Belt is also served with road linking to the Shenzhen Bay Bridge which allow land cargo transport to Shenzhen through Shenzhen Port.

7.3.18 With such favourable geographical location and transport linkage, it is proposed to optimize and consolidate the brownfield site in Lung Kwu Tan, So Kwun Wat and Tai Lam Chung for logistics development to create agglomeration effects. The building of modern Climate-controlling multi-storey warehouses and smart cold-chain cargo handling and management facilities for perishable goods would be encouraged for replacing those open storage yards to create synergy with the existing and planned modern logistic ERLU in the surrounding areas. Moreover, other land supply option, such as rock cavern along the Belt should also considered for logistics operation.

**Strategic Transport Network**

7.3.19 Apart from ERLU provision and infrastructure support, a comprehensive regional as well as local transportation network is important in the logistics operation as it enhance the efficiency through smooth movement of freights. Hence, one of the objective of this proposal is to leverage intra-city circulation of freights among the logistics clusters for the promotion of multimodal transhipment.

7.3.20 The regional transportation network will be improved with the opening of HZMB. Moreover, the connection between the Aviation Logistics Cluster and Integrated Logistics Belt is comprehended by the proposed Tuen Mun Western Bypass, Tuen Mun-Check Lap Kok Link and Route 11. With these up-coming transport infrastructure, it is expected the North-
South transportation corridor have sufficient capacity to deal with the extra traffic volume brought by the proposed new logistics ERLU.

7.3.21 The strategic areas in the Integrated Logistics Belt are currently served by Lung Mun Road, Lung Fu Road, Wong Chu Road and Tuen Mun Road. However, the traffic condition of Lung Mun Road and Tuen Mun Road is reaching their capacities (PlanD and CEDD, 2015). According to the Transport Department, the volume/capacity (V/C) ratio of Tuen Mun Road (Town Centre section) during the morning peak hours (7:00 a.m. to 9:00 a.m.) is 0.9 (Transport and Housing Bureau, 2015). Table 7.1 shows the traffic condition of major roads serving the Integrated Logistic Belt in 2026 with the planned Tuen Mun West logistic development (Transport and Housing Bureau, 2015). Together with ERLU newly proposed in the Integrated Logistic Belt, it is obvious that the transport network cannot withstand the additional traffic generated.

Table 7.1 Additional traffic generated from the planned logistics development

<table>
<thead>
<tr>
<th>Road Link</th>
<th>V/C Ratio during AM Peak Period in Year 2026</th>
<th>Percentage of the Road Link Traffic generated from the Proposed Logistics Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuen Mun Road (Fu Tei Section)</td>
<td>1.1</td>
<td>1%</td>
</tr>
<tr>
<td>Tuen Mun Road (Town Centre Section)</td>
<td>1.0</td>
<td>1%</td>
</tr>
<tr>
<td>Wong Chu Road</td>
<td>1.1</td>
<td>5%</td>
</tr>
<tr>
<td>Wong Chu Road (Slip Road from Tuen Mun Road southbound to Wong Chu Road westbound)</td>
<td>1.2</td>
<td>4%</td>
</tr>
<tr>
<td>Lung Fu Road</td>
<td>0.6</td>
<td>7%</td>
</tr>
<tr>
<td>Lung Mun Road (Mong Hau Shek Section)</td>
<td>0.8</td>
<td>13%</td>
</tr>
</tbody>
</table>

Source: Transport and Housing Bureau (2015)

7.3.22 To ensure efficient cargo movement, it is proposed to implement Roads and Juctions Improvement Scheme along the Integrated Logistics Belt (see Figure 7.7). For example, the method of control (MOC) of the traffic signals can be modified. The design of roundabout on junction can also be upgraded to optimize the capacity of the roads. Moreover, as Wong Chu Road and Tuen Mun Road are reaching their maximum capacity, it is proposed to explore on the feasibility of increasing freight traffic capacity by Road Widening Projects on the East-West bound roads. With capacity optimization treatments, it is expected to form a loop movement of freight linking up logistics yards with HKIA (see Figure 7.8) to facilitate efficient land-air transhipment without causing traffic congestions on the local transport network.
Supporting Policies

Effectiveness of the HZMB

7.3.23 It is expected that the bridge is more likely to be used by the high value-added goods considering it from the logistic perspective (HKTDC, 2015b). This is because the land route is much more efficient and convenient in transhipping the air cargos of HKIA to/from western PRD and also in view of the present demand situation of export orders relatively smaller in size yet time sensitive. The potential of the bridge is further reinforced by the
fact that there is growing trend of high-tech product exports from Zhongshan and Jiangmen in the recent years. However, the expected benefit of the bridge on the air freight export will still be subject to the efficiency of the bridge ultimately boiling down to the overall cost and travel time. Therefore, the bridge should be facilitated with an efficient customs and clearance arrangement along with reliable opening hours (24 hours if possible) so that there will be smooth flow of cross-border cargos. The toll fee should also be reasonable so that eventually the overall benefit of logistic facilities in Hong Kong is preferable over neighbouring cities.

**Capacity Building**

7.3.24 To catch up with the rapid advancing development trend, it is important that the employees in the logistic sector are kept up to date with the latest logistic technology. This will not only enhance the productivity but also accounts for maintaining the competency in the industry. Considering this, the Government has conducted major programmes such as IT Training Programme in 2009-10 to enhance their knowledge at par the development trend. Similarly, the Government should consider such initiatives in upgrading the manpower through such trainings. The training should not just be limited within the theoretical knowledge such as IT skills but also exposed to practical on field trainings such as internship programmes. Funding support is necessary for providing such trainings on regular basis and at the same time should carry out periodic review of the training course contents to ensure that it is meeting the market demand and advancing at par the latest development trend.

**Viable Framework/Regulation**

7.3.25 Logistic industry is faced with various difficulties such as shortage of labour supply and it is revealed that these problems are associated with poor working environment and the constrained recognition of the employees in the industry. Promotion of recognition and qualification framework could be one way out to attract the young talents to the industry because it will enhance in providing clear future prospect for the employees and heighten the outlook of the industry. Although the qualification framework established has gained support from number of professional bodies, it is faced with difficulties while implementing and therefore there is need to address the issue so that it will gain wider acceptance and recognition in the industry.

7.3.26 There should also be viable regulations to provide with enabling conditions for functioning of the industry. For instance, the tenancy arrangement should be such that it facilitates the operation of the open space land more feasibly. The government should review the logistic related policies periodically to meet the market demand and development trend so that Hong Kong is in the position to maintain its competing edge.

**Regional Integration**

7.3.27 For logistic industry of Hong Kong to prosper at greater height, it is crucial to consider regional cooperation with the PRD cities. With the focus on capturing high value-added products, Hong Kong with its competitive edge should consider regional cooperation to enjoy the complementarity with the neighbouring cities to avoid direct competition. This will facilitate with clearer positioning of Hong Kong’s logistic industry in the context of whole GBA or WPRD region.

7.3.28 Viewing from the air logistics, Hong Kong at present lacks cooperation with the airports of the western PRD. Although Hong Kong has competitive edge in the air logistics compared
to the neighbouring cities, cooperating with them will further reinforce the competitive edge. For instance, the HKIA has a limited domestic connectivity while it serves a wide range of direct international flights. Such difference in the position of HKIA which are in contrast to airports of Guangzhou and Shenzhen, provides a favourable platform for integration/cooperation so as to come up with clear division of labour (clearer positioning) among the airports in GBA.

7.3.29 The fact that the travel time from HKIA to western PRD will be greatly reduced by the opening of the HZMB and at the same time considering the growing trend of high-tech product exports from Zhongshan and Jiangmen in the recent years, Hong Kong should explore on how to leverage the benefits through cooperation with these cities.

7.3.30 It is also worth noting the complimentary logistic related resources between Hong Kong (experienced professionals) and other western PRD cities (land and labour). One can promote specialization through collaborating complimentary resources such as the joint venture between AAHK and Zhuhai Airport.

**Implications for Stakeholders**

7.3.31 The overall implication of the proposed spatial recommendations as well as the non-spatial policies on the stakeholders are generally beneficial besides the cost involved for implementing the recommendations. The strategies basically unleashes the potential growth of the high value added logistic facilities and enhances its competing edge in a more sustainable manner. Relating to the spatial recommendations in the earlier part of this chapter, it is expected that the logistic industry as a whole will have improved efficiency due to its clustering effect. Table 7.2 shows the summary of the stakeholder implications while the following paragraphs explain/describe the implications by each stakeholder.

**Government**

7.3.32 The government is responsible for the overall coordination in the functioning of the logistic industry. More focus should be on policy matters so that with viable logistic related policies, Hong Kong is in the position to maintain its competitive edge in all times to come and ensure the sustainable growth of the industry. The Government also takes care of the funding support and resource allocations for carrying out the trainings for capacity building of the manpower and review of all other related policies so that they are at par the latest technology or the development trend. There will be close communication with the neighbouring cities particularly those form the western PRD or the central Government to explore opportunities for cooperation so that each of the cities have clearer division of labour in the industry to avoid direct competition.

**Freight Forwarders**

7.3.33 With the opening of the bridge, the travel time between HKIA and western PRD will be greatly reduced thus providing better choice for land-air transshipment by the freight forwarders which will be further encouraged with the efficient cross-border clearance arrangement and reasonable toll fee. The processing efficiency of the freight forwarders will be improved with the specialized cargo handling facilities such as the centralized screening facilities.
SMEs

7.3.34 The competitiveness of the SMEs will be enhanced due to efficient operation of modern multi-storied consolidated facilities and also with the knowledge and skills of the labour gained through trainings provided. The employees will be up to date with the latest development trends in the industry and adequate IT knowledge to grapple with the smart logistics evolving recently with the technology advancement. More young talents will be attracted into the industry because of the improved working environment and better outlook of the industry. Also the workers will enjoy the benefits from receiving recognition and accreditation from widely accepted Qualification framework.

Nearby Residents

7.3.35 The expansion of logistic industry particularly in the western part of Hong Kong by strengthening the western economic corridor which is put forth in 2030+, it will be creating job opportunities for the nearby residents such as the residences of Tung Chung New Town Extension.

Airport Logistic Operators (AAHK)

7.3.36 With collaboration of HKIA with the airports of neighbouring cities not only ensure clear division of labour among the airports of GBA region to avoid direct competition, it also expands the catchment area for air logistics by capturing the market into further west with their specialized professionals through joint ventures. This will be further strengthened by the opening of HZMB due to more freight choice for land-air transshipment between HKIA and western PRD.

Warehouse Operators

7.3.37 With the advancement of technology, the traditional warehouses will be replaced by the modern warehouse where the operations will be mostly automated thereby increasing the operational efficiency by manifolds. With automation of most warehousing activities, less number of operators are required compared to traditional way of handling manually and this will also address the shortage of labour supply which the industry is facing at present.

Table 7.2 Implications for stakeholders in logistics sector

<table>
<thead>
<tr>
<th>Stakeholders</th>
<th>Potential Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government</td>
<td>• Funding support and resource allocations (trainings)</td>
</tr>
<tr>
<td></td>
<td>• Overall policy coordination and communicate with regional and central government for cooperation/collaboration</td>
</tr>
<tr>
<td>Freight forwarders</td>
<td>• Improved processing efficiency with specialized cargo handling facilities</td>
</tr>
<tr>
<td></td>
<td>• Better freight choice for land-air transshipment with reduced travel time and efficient cross-border arrangement at HZMB.</td>
</tr>
<tr>
<td>SMEs</td>
<td>• Enhanced competitiveness of SME with modern multi-storied consolidated facilities.</td>
</tr>
<tr>
<td></td>
<td>• Attract more young talents with improved working environment and better outlook of the industry (Qualification Framework).</td>
</tr>
<tr>
<td>Nearby residents</td>
<td>• Local employment opportunities</td>
</tr>
</tbody>
</table>
### Stakeholders and Potential Implications

<table>
<thead>
<tr>
<th>Stakeholders</th>
<th>Potential Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airport logistic operator (AAHK)</td>
<td>• Expanded cargo catchment area</td>
</tr>
<tr>
<td></td>
<td>• Clear positioning with division of labor through collaboration with the airports of neighboring cities.</td>
</tr>
<tr>
<td>Warehouse operators</td>
<td>• Increased operational efficiency with automation</td>
</tr>
<tr>
<td></td>
<td>• Address the shortage of labour supply</td>
</tr>
</tbody>
</table>

Source: Study Team

### 7.4 Spatial Strategy and Supporting Policy for Tourism

#### Key Actions

7.4.1 With the strategic direction identified in Chapter 7.1, i.e. creating capacity for holistic tourism and MICE development, and diversifying tourism offering for enhancing travel experience, three key actions are recommended to support sustainable growth of tourism industry:

*To promote “all-for-one” tourism through provision of new tourist attractions seizing on the uniqueness of Hong Kong*

7.4.2 Hong Kong is a famous destination for visitors which is not short of tourist attractions. However, these attractions neither exhibit strong local character of Hong Kong which can be easily replicated in other places (e.g. theme parks) nor attract longer stay of visitors due to limited scale and relation to other attractions (e.g. the Ladies’ Market and the Peak).

7.4.3 Appreciating the need for holistic tourism planning, “all-for-one” tourism intends to develop and integrate various tourism resources (including attractions, local people, nature and culture) in one region to deliver complete and authentic tourism experience for visitors, making experience itself as part of the journey. New tourist attractions should therefore draw on the uniqueness of the locality to strengthen Hong Kong’s attractiveness and competitiveness as a renowned tourism destination.

*To provide more C&E space and supporting facilities on the western side of Hong Kong in support of the GBA development*

7.4.4 Despite the aggressive expansion of C&E capacity in Zhuhai and Shenzhen (Chapter 5.3 refers), Hong Kong still enjoys comparative edge in the MICE industry with its institutional advantage and close connection to the global market.

7.4.5 In the face of huge shortfall in dedicated C&E space (i.e. 92,000 sqm) which impedes the sustainable growth of MICE industry in medium-to-long term, as well as the limited land supply in urban area for further expansion of the existing exhibition hub in Wan Chai North, additional C&E venue and supporting facilities (such as hotels) should be provided outside the traditional core urban area to expand capacity for the MICE industry.

7.4.6 Lantau, as the “double gateway” of Hong Kong connecting to the Western PRD and the world with the presence of HKIA and the HZMB, has high potential to become the future solution space of MICE development, allowing Hong Kong to fully capture the bridgehead opportunity and reinforce Hong Kong’s leading role in the GBA as an international convention and exhibition hub. It is also mutually beneficial to the development of the GBA by providing springboard for the Mainland traders to go global.
To enhance connectivity and complementarity with other major tourism developments in Hong Kong, Zhuhai and Macao

7.4.7 Tourism developments in Hong Kong should be better connected by convenient transport network to maximise synergy and support “all-for-one” tourism.

7.4.8 Complementarity with other major tourism developments in Hong Kong and the Western PRD (particularly Macao and Zhuhai) should also be achieved to avoid unnecessary inter-city competition, which is inconsistent with the overarching principle of “complementary cooperation” for the GBA development. Considering the position of Macao as a world-class historic, heritage and gaming tourism centre, Hengqin as a hub of mega theme parks and tech-experience, as well as the nature of existing/planned tourism projects in Hong Kong (e.g. the Hong Kong Disneyland Resort expansion and SkyCity), new tourism developments in Hong Kong is recommended to play a complementary role in the GBA, seizing the rich and accessible natural resources of Lantau to promote green tourism.

Proposed Conceptual Spatial Strategy

7.4.9 Building on the two strategic directions and the three key actions, a three-pronged conceptual spatial strategy for the tourism sector is formulated, as shown in Figure 7.9 below. Under the framework, Lantau is positioned to be a world-class destination for both leisure and business travel. Major developments, including Northeast Lantau Tourism Hub and Western MICE Core, are proposed to cluster in North Lantau to take advantage of the proximity to Western PRD with the completion of the HZMB, and to maximise synergy with the existing/planned/committed developments in Lantau. South Lantau, with high ecological importance, will remain its rustic character with compatible low-impact recreational activities under the proposed South Lantau Ecological Recreation Belt.

Figure 7.9 Conceptual Spatial Framework for tourism sector
Source: Study Team

Northeast Lantau Tourism Hub

7.4.10 Leveraging the existing Hong Kong Disneyland Resort, the Northeast Lantau (including Sunny Bay and Penny’s Bay) has huge potential to become an integrated leisure and recreational hub with unique themed RDE facilities to delivery “all-for-one” tourism
experience for visitors and attract longer stay of visitors. Considering that the Disneyland Resort focuses on the themes of magical experience, excitement and film-based amusement, tourism developments in Sunny Bay can complement to bring different experience for tourists seizing the local characters of Hong Kong and the lush beauty of Lantau.

7.4.11 While thematic leisure and entertainment activities can be explored in the proposed Tourism Hub, it should be emphasised that it is not intended for another gated mega theme park like the Disneyland Resort and the Ocean Park in order to avoid unnecessary repetition of tourism offerings. Comprehensive and integrated planning of different RDE facilities with the same theme would be critical to the success of the Tourism Hub. Therefore, the proposed Northeast Lantau Tourism Hub is expected to achieve synergy and complementarity with other tourism developments in Lantau (e.g. SkyCity, the Disneyland Resort and the proposed eco-tourism in South Lantau) and the Western PRD (e.g. Macao and Zhuhai), given their different focuses on tourism experiences.

7.4.12 Supporting facilities including hotels of different types (e.g. resort hotel and business-oriented hotel with convention/meeting spaces) and transport facilities will also be provided in the Tourism Hub to support the various proposed tourism and MICE developments in Lantau.

7.4.13 Subject to technical feasibility and result of Environmental Impact Assessment (EIA), the planned Sunny Bay reclamation will provide substantial developable area (approximately 80 ha) (ICF, 2017) to support tourism development of Hong Kong, which helps divert tourists from the congested urban centre and avoid overloading the receiving capacity of visitors in South Lantau by concentrating tourist footprint in Northeast Lantau.

7.4.14 To allow flexibility in development, inject creative idea and ensure viability of the Tourism Hub, it is advised to carry out an Expression of Interest (EOI) exercise on a non-committal basis similar to the EOI exercise for the planned tourism development at Kai Tak to probe business interest.

South Lantau Ecological Recreation Belt

7.4.15 With due respect to the rustic character and conservation interest of South Lantau, the Sustainable Lantau Blueprint established an overarching principle of "Conservation for the South" in response to the strong public opinion (CEDD, 2017c). According to the Blueprint, while the predominant part of Lantau is reserved for conservation purpose where major developments is avoided at sites with high ecological values, sustainable leisure and recreational uses can be explored in areas of lower environmental sensitivity. Figure 7.10 below maps the location of Country Parks, Green Belt and existing rural township in South Lantau.
7.4.16 In support of the conservation initiatives promulgated in the Blueprint, the proposed South Lantau Ecological Recreational Belt embraces the concept of "conservation first" and seeks to utilise the natural asset in the less ecologically sensitive areas of Lantau to promote eco-tourism and low-impact recreational activities, with an aim to complement the proposed Northeast Lantau Tourism Hub. Specifically, the proposed development in South Lantau will adhere to a three-zone conservation concept (Figure 7.10) to support sustainable eco-tourism:

- **Core Conservation Area** which covers areas with high ecological importance, such as the existing Country Parks, Conservation Areas and Sites of Special Scientific Interest (SSSI), remains intact. No tourism developments are proposed in this area. Meanwhile, appropriate habitat management measure, such as planting of native species are recommended to further enhance the ecological value of the Core Conservation Area.

- **Buffer Area** outside the Core Conservation Area, such as Green Belt near the built-up areas (where basic transport infrastructure is already in place), is proposed for eco-tourism activities with no or low tourism footprints, such as cultural tours and possibly eco-adventure (e.g. zipline canopy tour, subject to further studies). The proposed low-impact eco-tourism in Buffer Area will create invaluable experiential opportunity to enhance the environmental awareness of visitors, and, for the commercial eco-adventure, provide necessary resources to support active habitat management in the Core Conservation Area.

- **Main Tourist Area** in the existing rural township with direct access to public transport, such as Mui Wo, Pui O, Cheung Sha, Shui Hau and Tai O, is proposed for low-impact recreational activities, e.g. non-motorised water sport tourism, to minimise disturbance on the tranquillity and natural setting of South Lantau. Supporting tourism facilities such as eco-lodge are also recommended in the existing built-up area.

7.4.17 With the three-zone sustainable tourism strategy, the South Lantau Ecological Recreation Belt shall be able to create tourism development capacity, and simultaneously enhance environmental capacity, echoing Building Block 3 of the HK2030+ (i.e. creating capacity...
for sustainable growth). It also further heightens the strategic importance of conservation in the HK2030+.

7.4.18 Nevertheless, the extent of tourism development in South Lantau is subject to a number of factors, inter alia, result of detailed EIA (on ecological, water quality, landscape and visual impacts, etc.), receiving capacity of tourists and road capacity.

7.4.19 Traffic and transport has always been a major concern by the local stakeholders. Due to the constrained internal road capacity and the planning intention for natural conservation and passive recreation in South Lantau, all roads in South Lantau (e.g. South Lantau Road and Tung Chung Road south of Shek Mun Kap) are designated as closed roads since the 1970s (Transport Department, 2014). Considering the improving road conditions and transport facilities, the traffic restriction has been relaxed to promote tourism development in South Lantau with the introduction of “Driving on Lantau Island” scheme since 2016, allowing up to 25 private cars to enter the closed roads per day.

7.4.20 The proposed tourism development would unlikely generate substantial impact on the road network of South Lantau, especially Tung Chung Road which is currently the only connection to urban area in North Lantau. In order to support tourism development in South Lantau and maximise synergy between the Northeast Lantau Tourism Hub and the South Lantau Ecological Tourism Belt, a new road linking Mui Wo and Sunny Bay is proposed, which will serve as the major external connection. The proposed road will also be designated as closed road, only allowing limited access by franchised buses and some hop-on-hop-off coach buses and vehicles with Lantau Closed Road Permit. This can reduce the traffic volume in the existing Tung Chung Road. Complemented by the proposed waterborne transport between Sunny Bay and the rural townships in South Lantau⁸, adverse impacts to the internal roads of South Lantau would be kept minimal. Details of the proposed STI are provided in paragraphs 7.4.34 – 7.4.39 below.

**Western MICE Core**

7.4.21 MICE has become an increasingly important type of tourism in recent years. Many cities such as Shanghai and Singapore have been striving to develop as the major C&E hub of in the region with the provision of physical facilities and complementary policies (develop the industry in a “through-train” manner) (Information Services Department, 2012). This type of tourism has been the focus of development in many cities as it also promotes trade and businesses on top of creating demand for conventional hospitality services. In the case of Hong Kong, the government aims to develop the city as a capital for international MICE and a regional cruise hub (Information Services Department, 2012; HKSAR Government, 2017).

7.4.22 Based on a government-commissioned consultancy estimation, there would be a peak-season shortfall of C&E space of about 130,000 sqm by 2028 (HKTDC, 2017a). The government has therefore proposed the demolition and redevelopment of government buildings in Wan Chai North to provide new C&E venue with the close proximity to HKCEC (HKSAR Government, 2017). Despite the effort made, the proposal in Wan Chai North cannot make up for the C&E venue shortage. Therefore, the development of Western MICE Core is proposed to provide additional space for MICE industry.

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⁸ Subject to further studies to determine its operational mode, e.g. scheduled ferry or on-demand water taxi.
7.4.23 The Western MICE Core mainly refers to the development and concentration of MICE industries on the western part of Hong Kong with special attention to provision of additional C&E space on HKBCF Topside and expansion of AWE in response to increasing demand. Furthermore, seamless connection between HKBCF Topside Development and AWE is proposed, hoping to provide more C&E space in close proximity to existing and established clusters. Other supporting development such as hotels, service apartments and retail facilities, etc is expected to be concentrated in the Northeast Lantau Tourism Hub supported by road improvement works and development of new transport linkage (policy recommendation of STN) (Figure 7.11).

Figure 7.11 Proposed development of Western MICE Core
Source: Study Team

7.4.24 The locational choice of the Western MICE Core hopes to maximize bridgehead opportunities brought about by the HZMB and utilize the agglomeration advantage of existing C&E cluster in AWE. The opening of the HZMB is expected to induce an increase of MICE tourism and the demand for C&E venues will rise. Developing MICE on HKBCF Topside hopes to provide convenience to existing C&E clusters, make use of existing C&E facilities in AWE and attract new opportunities from Western PRD.

7.4.25 In addition, the locational advantage of Lantau as the “double gateway” of Hong Kong connecting to the Western PRD and the world further justify this proposal. Expansion of the existing cluster in AWE and the increase of airport capacity through the three-runway system can further reinforce Hong Kong’s status as a regional MICE hub. New tourism developments on Lantau proposed by the government are also expected to attract more incentive tourism opportunities and support the development of MICE industry.

7.4.26 Furthermore, development of supporting facilities and commercial space in TCNTE (327,000 m² GFA for retail use and 50,000 m² GFA for hotel use) enhance the feasibility of this proposal (AECOM, ARUP, CEDD & Development Bureau, 2018). On top of the proposed new development (i.e. TCNTE) on Lantau Island, the development of Western MICE Core is supported by the development of Northeast Lantau Tourism Hub. Calculation of the actual increase in the demand of services from MICE tourism after the opening of HZMB is not within the scope of this report, but the Northeast Lantau Tourism Hub provide the capacity to develop supporting facilities for the Western MICE Core.
7.4.27 Besides, the provision of reclaimed land on HKBCF Island also enhances feasibility of the proposal. As reclaimed land on HKBCF is owned by the government and is readily available, the development process is believed to be less complicated compared to development of same area of space in the urban core. This effectively responds to the lack of C&E venues.

**Strategic Transportation Network**

7.4.28 In order to maximize bridgehead opportunities of the HZMB, support the development proposed on Lantau Island and improve integration between the regional infrastructure with the local transport network, four strategic transportation projects are proposed.

**Earlier implementation of Road P1**

7.4.29 Earlier implementation of Road P1 along North Lantau (connecting Tung Chung, Tung Chung East, Siu Ho Wan and Sunny Bay) is proposed (Figure 7.12). The government has considered the implementation of Road P1 as a medium-term project (within around 15 years from 2016 onwards) in the broad timetable for Lantau development (Lantau Development Advisory Committee, 2016). However, considering the opening of HZMB will be in 2018, development of North Commercial District on Airport Island in short-term, first phase of population intake of TCNTE in early 2020s, development of Siu Ho Wan, and addition to our development proposals including Western MICE Core and Northeast Lantau Tourism Hub spans across short-to-medium term (Lantau Development Advisory Committee, 2016), earlier implementation of Road P1 is therefore suggested to cater for the increasing demand in short-to-medium term.

![Figure 7.12 Earlier Implementation of Road P1](image)

Source: Study Team

7.4.30 Road P1 is considered as a strategic project to enhance the overall robustness of the local transport network in Northern Lantau by providing an alternative route and improve integration between regional and local transport infrastructure. Earlier implementation is therefore suggested to cope with the rise of demand induced by short-term development and prevents congestion in Northern Lantau.
New connection between HKBCF Island and Tung Chung East

7.4.31 A new rail-based connection, in form of Environmentally-friendly Linkage System (EFLS), is proposed among AWE, HKBCF Island and Tung Chung East to the proposal of Western MICE Core. This aims to provide a more direct and reliable connection between the Western MICE Core, various proposed tourism developments and supporting facilities for MICE to maximise synergy of various developments in Northern Lantau and provide convenience to local residents and visitors (Figure 7.13).

![New connection between HKBCF Island and Tung Chung East](image)

*Figure 7.13  New connection between HKBCF Island and Tung Chung East*
*Source: Study Team*

7.4.32 The EFLS hopes to serve as the transport backbone between Western MICE Core and Northern Lantau and improve transport connectivity and reliance within the core and at intra-district level (Northern Lantau). With the proposed development of Western MICE Core, opening of HZMB, developments within Tung Chung New Town, TCNTE and various developments in North Lantau, it is predicted that there will be an upsurge of both employment and residential population, creating extra demand on existing transport network. Although the Airport Express connects AWE, Airport and Tung Chung, the fare is much more expensive compared to other MTR lines and alternative public transport options (i.e. buses), therefore in general does not consider it as transport service that cater for daily commuting trips of working population and residents.

7.4.33 In order to better support the development of North Lantau, the EFLS hopes to provide quick, reliable, sustainable and time-saving transport services targeted at local residents and employment population. It also aims to integrate with the existing MTR network and improve accessibility of the Western MICE Core.

New connection between Northeast Lantau Tourism Hub & Mui Wo

7.4.34 A new road-based strategic transport infrastructure along the coastline linking Northeast Lantau and Mui Wo is proposed. The proposal hopes to support the development of South Lantau Ecological Recreation Belt and improve linkage between the Northeast Lantau Tourism Hub and Mui Wo with the provision of an alternative route (Figure 7.14).
In order to respect the rural township, village settlement and existing low-to-medium-density developments in Mui Wo, limited RDE facilities are planned in Mui Wo. Instead, most of the tourist accommodation, retail and other supporting facilities and services will be concentrated in Northeast Lantau Tourism Hub.

Private car access via this new road connection is also restricted with limited quotas. Buses and minibuses operate on fixed routes and schedules will be arranged to cater for the increasing transport demand of tourists and residents with the development of South Lantau Ecological Recreation Belt. This arrangement takes into consideration the ecological value of South Lantau, minimize impact on existing environment, respect local character of Mui Wo and at the same time cater for the expected rise in transport demand after the proposed development.

In order to support the development of Southern Lantau Ecological Recreation Belt, a new water-way connection is proposed. Mui Wo, Pui O, Cheung Sha and Tai O are the four stops proposed for the water-way connection. This proposal aims to support sustainable eco-tourism in South Lantau without creating excess footprint in ecologically sensitive areas. The water-way connection also hopes to offer new tourism experience to visitors.
In response to consideration in protecting South Lantau and preserve ecological interest of the area, a new water-way connection is proposed instead of road-based connection in order to minimize environmental impact, conserve ecology in South Lantau and preserve sites of archaeological interest.

The four stops along the water-way connection is put forward according to proposed development by CEDD (2017c). Developed areas are found in Mui Wo and Tai O with proposed improvement works, therefore it is expected that the two areas shall provide more tourism facilities and generate more tourist flow. On the other hand, a resort and beach volleyball court are proposed near Cheung Sha; and a water sports centre and camping ground have been proposed in Pui O (CEDD, 2017c), therefore these two sites with proposed tourist attractions and accommodation facilities are also designated as stops along the water-way connection.

**Supporting Policies**

To ensure success in implementing the proposed conceptual spatial strategy, the following supporting policies would be required.

**Northeast Lantau Tourism Hub**

The proposed Northeast Lantau Tourism Hub is expected to create huge demand for talents engaging in tourism and hospitality services. Therefore, it is recommended to establish a dedicated vocational training institute in Tung Chung similar to the Institute for Tourism Studies in Macao to nurture talents and secure stable labour supply. In terms of location, a planned “G/IC” site in Tung Chung East intended for tertiary institutes would be suitable to accommodate the proposed vocational training institute.

Provision of direct, transit-free and affordable public transport connection from Tung Chung (as a stable pool of Lantau employment) to Sunny Bay and other various proposed tourism developments in Lantau is also a key to encourage local employment by reducing
daily commuting time, as per advice by some stakeholders of the tourism industry (Chapter 5.2 refers).

7.4.43 Further development of integrated tourism packages is also viable to attract longer stay and higher spending of both regional and international tourists. In particular, issue of “all-for-one” pass or tourist voucher, which allows visitors to enter the different attractions in the Tourism Hub with the same pass, could be explored to further enhance tourism experience.

**South Lantau Ecological Recreation Belt**

7.4.44 To affirm our commitment to ecological conservation, a holistic monitoring system should be established for benchmarking the environmental quality in South Lantau, including the proposed Core Conservation Area and Buffer Area. This shall contribute to a regular comprehensive review of the carrying and receiving capacity in the area, allowing the government to take necessary actions in a timely manner, for instance, limit tourist activities in Buffer Area when the environmental quality drops to a certain threshold level, to ensure sustainability of tourism developments in South Lantau. More resources should also be allocated for implementation of the proposed active habitat management in the Core Conservation Area with higher ecological interest.

7.4.45 With the improving road condition in South Lantau, it is recommended to review the existing transport and traffic policies to support tourism development while balancing the need for conservation in South Lantau. For example, further promotion of the “Driving on Lantau Island” scheme to electric vehicles with suitable supporting facilities e.g. charging stations, as well as a review on the public transport arrangement in Lantau.

7.4.46 To deliver authentic tourism experience for visitors and achieve successful ecological conservation, involvement of local residents plays an important role. Future tourism developments in South Lantau should collaborate closely with local residents by training local guides to receive visitors, so as to bring the unique cultural offerings to tourists. Besides, the interest of local residents should also be catered to incentivise them to protect (or avoid developing) the areas with high ecological value. For example, suitable relaxation of the Hotel and Guesthouse Accommodation Ordinance can be explored to facilitate the development of B&B guesthouses with strong rural uniqueness.

**Western MICE Core**

7.4.47 In order to support the development of Western MICE Core and achieve better outcomes from spatial development, a number of supporting non-spatial policies are proposed to complement spatial development, including promotion of regional cooperation, better coordination among existing C&E clusters, further promote “one show, two locations” policy and provision of supporting facilities.

7.4.48 Promotion of regional cooperation in trade fairs and exhibition among cities is important to explore potential market for C&E industries in Hong Kong. According to HKSAR Government (2017), additional resources are allocated to HKTDC and Hong Kong Tourism Board for MICE promotion. On top of that, encouragement of “One Fair, Multi-station” should be further explored and negotiation among mainland cities to further promote liberalisation measures for Hong Kong service suppliers (in addition to the Agreement on Trade in Services signed in 2015) should be continued as an on-going process.
Better coordination among C&E clusters is another key policy direction to support the development of C&E industry. From 2009 onwards, the “one show, two locations” policy has been adopted where free shuttle bus services are offered to improve connection between HKCEC and AWE. The policy has proven to be a success with respective growth rate recorded (HKTDC, 2017a). In respect of future development of Western MICE Core, better coordination between the C&E clusters in Wan Chai North (HKCEC) Northern Lantau should be further improved and the “one show, two locations” policy should be carried on to enhance the overall synergy of the C&E industry.

Development of supporting facilities (e.g. hotels, service apartments) is another major aspect in supporting the development Western MICE Core. In addition to commercial development in TCNTE, relevant development in Northeast Lantau Tourism Hub is also considered important for tourists and employment population.

Implications for Stakeholders

In general, stakeholders in tourism sector could be divided into three main categories: the government, service providers, as well as residents. A comprehensive approach is adopted to review spatial and non-spatial implications on stakeholders in respect of the opening of HZMB. Detailed review is elaborated in Table 7.3.

The government in general is mainly responsible for overall tourism planning, marketing and branding of Hong Kong, cooperate and negotiate with other government authorities, implement regulatory system, handle complains and monitor tourism industries. Elaborating on tourism planning, the government takes the role of establishing institutions to train manpower, establish relevant accreditation system for talents, keep track of market trends and change in demand of the industry, develop new tourist attractions and festivals as well as ensuring sufficient space for supporting facilities to develop.

General implication to residents is the increase of local commercial and employment opportunities in relation to the proposed new development. Greater environmental impact is expected to the living environment on South Lantau with the increase of tourists and visitors. For North Lantau, more convenient transport services are expected with various transport development proposals.

Implications to other stakeholders and service providers are mostly related to the expected rise of tourists and demand of services induced by proposed development. General implications include attracting more opportunities from Western PRD, develop new tourism products, review resource allocation of the company and diversify payment methods to cope with the demand of visitors and tourists.

Table 7.3 Implications for stakeholders in tourism sector

<table>
<thead>
<tr>
<th>Stakeholders</th>
<th>Potential Implications</th>
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| Government   | • Resource allocation in tourism planning, branding, marketing & promotion, management & coordination, and manpower training  
• Policy recommendation, coordination and negotiation among Hong Kong and other GBA cities  
• Establish regulatory system, mechanism to handle tourists’ complains and monitor tourism service providers |
Overall speaking, tourism industry will be benefited from the proposed development and the opening of HZMB. More economic opportunities will be provided to service providers, and local residents are benefited from improved transport connections and employment opportunities. In order to further maximize opportunities from proposed development, the Hong Kong government should take initiative to negotiate with mainland government authorities to further promote market liberalisation and cooperation among the GBA cities.

7.5 Spatial Strategy and Supporting Policy for Innovation & Technology

Key Actions

7.5.1 With the strategic location having convenient access to the I&T talents and market in the Western PRD and the emerging I&T districts in the Eastern PRD, Hong Kong enjoys the preferential geographic, policy and legal environments to further enhance the development of I&T industry and to encourage regional cooperation in the sector with clear complementing work division of different cities in the industrial chain.
To develop intercity congregated industrial chain and enhance synergy benefits

7.5.2 With main focus on R&D in universities and research institutes, the currently segregated industrialization process of I&T development in Hong Kong results in weak synergy benefits that could be retrieved from closer collaboration between policy, industry, academia and research. Thus, the challenge reveals the need for Hong Kong to form a joint platform linking with rapid I&T development in the PRD cities to weave the gap between product development, production and application catering the market growth.

7.5.3 Aiming to accelerate the industrialization process of I&T products and boost synergy benefits in the industry, the identified strategic direction urges to create regional I&T cooperation incentives to optimize industrial synergy benefits through injecting Hong Kong’s traditional advantages in legal and financial services in supporting the development of I&T. The strategic direction also stimulates I&T sector’s future development following three key actions.

7.5.4 The foremost task is to develop an industry-academia-research congregated I&T hub. Economic benefits generated in the hub with marketization could be maximized through featuring I&T development led financial services in the area and motivating investment on I&T development. Other supporting factors enhancing attractiveness for I&T enterprises include comprehensive infrastructures and policy incentives to boost innovative vitality in various domains.

To converge I&T forces from West and East PRD and maximize bridgehead opportunity

7.5.5 The second key action is to optimize bridgehead opportunity to converge I&T forces from Shenzhen and Zhuhai in Hong Kong to further expand I&T development capacity. Major consideration involves bringing talents coming from the Western PRD to the newly planned I&T land use in New Territory North to expand the innovation capacity in the cross-boundary I&T districts connecting to Shenzhen. Through extending and accelerating the development of Eastern Corridor, it helps converging the academic strength in Hong Kong with the leading R&D firms in Shenzhen and the marketization production in Western PRD.

To promote complementary financial service supporting I&T development and maintaining competitive advantage in Hong Kong

7.5.6 To promote Fintech services as complementation of traditional financial services in Hong Kong, another key action looking into the development of CBD3 emphasizes the need to distinguish its functions with that in the traditional financial hubs. Meanwhile, more efficient connections linking CBD3 with existing CBDs, North and Eastern corridors, and ELM infrastructures are required to make financial and legal services in Hong Kong accessible for I&T enterprises and talents in the GBA so as to optimize Hong Kong’s unique position in strengthening regional I&T cooperation.

7.5.7 The three key actions combined help clarifying the main focus of the feasible conceptual spatial strategy while proposing to highlight Hong Kong’s speciality in legal and financial services to support I&T development.
Proposed Conceptual Spatial Strategy

7.5.8 The proposed concept spatial strategies for I&T sector are shown in Figure 7.16 as a way to optimise the locational advantages and the surrounding environment, in additional to fulfilling the key actions proposed above. ERLUs are placed in a way to capture the value of the location and the surrounding context at the same time. On the other hand, the STNs are planned to create a comprehensive transport system for the workers in professional in the I&T sector, both from Hong Kong and Mainland.

7.5.9 Two conceptual belts, namely South Financial Innovation Belt and Eastern Research Innovation Belt, are proposed to fortify the economic opportunities bought by the HZMB. These belts are conceptual belt that indicate the conceptual linkage of related ERLU that could optimise the interactions of various infrastructure. While both belts have the common aim in capitalising on the I&T sector and grasp the flow of talents and knowledges, each belt has its own objective to embrace diverse economic opportunities, from direct to indirect, from local to regional.

7.5.10 STN are proposed with the aim to promote the mobility of the professionals and workers. To cope with the extra expected traffic demand emerged from the, strategic transport network is formed to strengthen the connections between the ELM and I&T developments in North and East side of Hong Kong.

Figure 7.16 Overall spatial framework for I&T sector
Source: Study Team

Conceptual Belt 1 – Southern Financial Innovation Belt

7.5.11 The first conceptual belt facilities the strategic locations of the infrastructures that promote the use of high-technology and financial and professional services. The belt travels from HKBCF Island, ELM, CBD3 to the West side of Hong Kong Island, which includes CBD1, The University of Hong Kong (HKU) and Cyberport. The whole belt aims to directly promote the bridgehead economic opportunities from the HZMB to inject synergic effect to the existing core urban area.

7.5.12 CBD3 would act as an anchor point for I&T services. The position of CBD3 will be further fortified to provide high value-added professional and technology services. It is proposed
to refine position of CBD3 by incorporating additional I&T sector features. FinTech and related I&T services that served as complement to the professional services would be emphasised.

7.5.13 Existing infrastructures are also integrated into the belt, with all of them located in the core urban area. CBD1 would still act as a rich-experience traditional financial hub in Hong Kong. The belt is also supported by the academia and research part in the I&T sector, by the inclusion of HKU and Cyberport, in response to the aspiration of optimising industry-academia-research synergy (產學研合一). The position of Hong Kong in the development chain could be focused on the “services” part of industrialisation instead of the “product manufacturing” part. Examples include, but not limited to, offices spaces that provide meeting spaces for I&T firms discussing product development matters and mini-scale laboratories for producing prototype of products.

7.5.14 Development of this belt is in line with the general planning principles as stated in Chapter 6.2. Another major guidance to the emergence of this belt is to maximise the locational advantages of the land, including its surrounding contexts and their planned use.

7.5.15 This belt could optimise the planning vision of CBD3 and ELM. ELM is planned to create a critical mass for urban and economic developments in and around the ELM. The belt is thus in coherence with its planning vision. The belt would create new momentum for economic growth by highlighting the importance of knowledge-based economy. A further balance in overall economic development pattern could be catered. On the other hand, with a sizeable flatland in ELM that could accommodate 700,000 populations and 200,000 employments, a mix of offices, other I&T-related ERLU and residential area could be offered to cater the need of I&T professionals.

7.5.16 CBD3, with the leverage of I&T sector, enjoys the proximity to the core urban area. CBD3 would not only act as a complement to the CBD1. Instead, a metropolitan business core would be formed that CBD3 and CBD1 would be evenly essential that both would complement each other to foster economic growth of Hong Kong. CBD1, being a traditional long-established base, could provide branding effect to the whole metropolitan area in order to attract firms from other cities to invest and use the offices in CBD3. For professional services, branding of the location is deemed a key factor to promote the attractiveness of the firm, as the location of the office somehow shows their economic capabilities. CBD3, on the other hand, would provide complimentary I&T-related services for the professional and financial services.

7.5.17 The belt would also directly capture bridgehead opportunities emerged from the West PRD. With the solid legal and financial basis of Hong Kong, CBD3 could be formed as the new attraction point for firms expanding from West PRD. Intellectual property protection and free access of Internet could further promote the attractiveness for I&T firms in West PRD. The belt could reinforce the world-class image of GBA in I&T development to welcome investments form regional to international level.

7.5.18 Overall, this belt provides a branding effect specialised in I&T sector while complementing other high-value added sectors in order to promote a tech-ecosystem based on the financial-based industries.
Conceptual Belt 2 – Eastern Research Innovation Belt

The Eastern Research Innovation Belt (Figure 7.17) draws an extension belt traveling from the future CBD3 to the proposed Eastern Knowledge and Technology Corridor to take action in enlarging and introducing the bridgehead opportunity into existing or planned I&T developments in East and North Hong Kong. The conceptual belt serves to capitalise existing I&T sector in Hong Kong through consolidating the proposed Eastern Corridor and ELM development with regional I&T strategic plans to maximise cooperation opportunities.

Figure 7.17 Eastern Research Innovation Belt
Source: Study Team

The three focus areas as marked in the Eastern Research Innovation Belt cover CBD3 in ELM, university and research institutes in the East and I&T incubators in the NTN, which are allocated different roles in I&T development. Following the key action proposed to establish an industry-academia-research congregated I&T hub featuring Fintech services, the CBD3 serves as a regional springboard communicating I&T forces in Hong Kong and Western PRD, facilitated by efficient commute after the opening of the HZMB. With marketization production support from the Western PRD, I&T enterprises in Hong Kong are expected to have refined industrial chain with closer regional cooperation thus to accelerate the process of product application and investment return. Besides offering pioneer fintech services for start-ups in developing I&T districts in the Western PRD, Hong Kong’s growing strength in I&T also provides new inspiration and incentives for PRD’s ongoing manufacturing transformation through encouraging innovative production over product processing.

As Western PRD cities, including Zhuhai and Zhongshan, are looking to catch the trend of I&T development as concluded in their spatial plans, regional cooperation opportunities in I&T encouraged by the HZMB are not limited to the complementing work division between two cities. There is the trend to strengthen the linkage between the West and East Coast of the PRD as a whole to shape a globally sound image of the I&T development in the GBA. As Hong Kong has long been emphasizing I&T talent communication with Shenzhen, it functions as a mediator to converge the workforce from the Western PRD with direct impact from the HZMB to maximize the synergy benefits of I&T industry.
Continuing to seek for more active human capital flow and interaction between Hong Kong and the Eastern PRD in light of the advanced I&T development in Shenzhen, the highlighted cross-boundary I&T land use, including Shenzhen-Hong Kong I&T Park in Lok Ma Chau Loop and the proposing development in Heung Yuen Wai, are suggested to promote communication of R&D institutes operational experience and professional training (HKSAR & Shenzhen Municipal People’s Government, 2017). Considering the overall cooperation between the East and West Coast of the PRD, Hong Kong functions as a unique coordinator with sound legal and financial system enjoying higher openness to the world and intelligent property protection. These advantages perform as influential incentives for R&D firms and talents in the GBA to have their works registered and commercialized in Hong Kong to attract international investments.

Figure 7.18 indicates the relations of regional cooperation in I&T development in the GBA, with strengthened local support from the proposed Eastern Research Innovation Belt in Hong Kong. Market-oriented I&T projects initiated by private enterprises are the focal developments in the CBD3 to attractive international investments and generate immediate financial return to continuously support long-term R&D projects in the Eastern Corridor. I&T developments in the planned Eastern Knowledge and Technology Corridor would continue to carry out long-term R&D for livelihood improvement with combined financial support from private investment and government subsidy.

The two conceptual belts proposed for I&T sector to facilitate local and regional developments stimulate the enhancement of strategic transport network in Hong Kong to strengthen the connections between the ELM and I&T developments in North and East Hong Kong (Figure 7.19). In the short term, extended railway system is proposed to transship human capital coming from the HZMB to coverage in the cross-boundary I&T parks. In addition to the Tuen Mun-Chek Lap Kok Link under construction, additional railway connection between the two areas are required to join the railways in Lantau and New Territory. The currently planned Northern Linkage is suggested to extend to the
Heung Yuen Wai Cross Boundary Control to provide continuously linkage between the segregated I&T land use in the NTN.

![Proposed STN for I&T development in Hong Kong](image)

**Figure 7.19** Proposed STN for I&T development in Hong Kong  
Source: Study Team

7.5.25 As the CBD3 in ELM joining the two explained conceptual belts is emerging into a local and regional I&T hub, railway and road connections are proposed to connect developments in Kau Yi Chau to the west with ELM infrastructures and to the east with the traditional CBD. Hence, I&T talents in the PRD, local enterprises and international financial investments would meet in ELM to shape CBD3 into a base for regional I&T cooperation with accelerated industrialization process. Other proposed road projects include direct connections between I&T incubators in CBD3 with universities and research institutes in the Eastern Corridor to reinforce synergy benefits of connecting product development and marketization production.

7.5.26 With the railway link connecting ELM and NTN, and the rails and roads radiating from the I&T hub in CBD3, the bridgehead opportunity gained from the HZMB to promote regional cooperation in I&T industrialization is maximized. While short-term impacts include attracting I&T talents from East and West PRD to form I&T incubators in the cross-boundary I&T parks in NTN, long-term impacts contribute to enhance the industry-academia-research synergy benefits with the development of CBD3 and to establish an international brand of I&T development in the GBA.

**Supporting Policies**

7.5.27 The supporting policies for the I&T is designed for achieving different objectives. In the regional scale, these policies would aim to provide a smooth and efficient process for talents for travel around the GBA so as to utilise the increase in geographical mobility of the talents from West PRD after the opening of the HZMB. In accordance with this major bridgehead advantage, policies would be made with the objective to enhance the
effectiveness of the human capital movements. On the other hand, in the local scale, policies are established for the sake of attracting professionals and workers work in the designated area for I&T uses, so as to capture the anticipated synergy effect of that location. In such a way, all these policies could promote the development of I&T sector in both intra- and inter-city aspect.

7.5.28 Four major support policies proposed to complement with the proposed spatial framework are listed below paragraphs. The policies are related to supporting I&T industrialisation, streamlining custom clearance procedures, attracting talents and lowering entering threshold. These policies would ensure I&T professionals in the GBA could enjoy the infrastructure as proposed in the conceptual spatial framework in order to utilise the planned ERLU.

7.5.29 Policies related to supporting I&T industrialization process in the development chain of the whole I&T sector. As mentioned above in paragraph 7.5.9, Hong Kong’s legal and financial services and its connection to world’s market is the outstanding part in the GBA context. In terms of cooperation with the GBA cities, policies could be aimed promote these advantages.

7.5.30 For regional measures on immigration and customs, policies would be targeted to promote more efficient ways for talents movement around the GBA, especially to West PRD. Hong Kong could consider taking the initiative in streamlining custom clearance at boundary crossing for reducing the number of procedures and time required for workers and professionals waiting for boundary crossing. If possible, 24-hrs clearance and immigration could be established such that workers could travel at any time. Even if there are urgent matters, they could still immediately travel from one place to another at any time.

7.5.31 In addition, policies on talent attractions could be put forward. Those schemes could be adjusted to enhance the attractiveness of Hong Kong for I&T talents from Mainland, ranging from students to working professionals. The Admission Scheme for Mainland Talents and Professionals (ASMTP) could be cited as an example. The scheme currently aims to attract Mainland professionals in sector that are locally not readily available or in labor shortage (Immigration Department, 2018a). Extra quotas and subsequent economic incentives e.g. taxation relief could be added for I&T talents. Talents with I&T background could also be preferentially considered by the scheme.

7.5.32 Immigration Arrangements for Non-local Graduates (IANG) is targeted for non-local students who have obtained university degree with full-time study. If they are interested in stay or return to work in Hong Kong, they could apply for the scheme (Immigration Department, 2018b). While currently IANG is quota-free and non-sector specific, restrictions apply on time limitation the students allowed to stay. Fresh graduates are granted at most 12 months’ stay for looking offers of employment. Detail measures like this could be relaxed as I&T sector is still an emerging industry that the job opportunities may be challenging for non-local graduates, especially those fresh ones.

7.5.33 Measures on provision of housing could be implemented to tackle the housing price issue, which may be considered a major hindrance to Mainland talents when they would like to work in Hong Kong. Schemes similar to the Social Security Housing for Talents (人才保障房/人才安居房) in Shenzhen could be cited as a supporting policy to attract Mainland professionals. In order to tackle the housing affordability issue, Communist Party’s Shenzhen commission have proposed a system to dedicate portion of the public housing
provided to “talent” specifically. With the planned 400,000 units of social housing going to be built in 2021, 300,000 of them will be earmarked to cater the housing needs of the “talent”. Yet, the party does not provide a concrete definition of “talents” (Xie, 2016).

7.5.34 In Hong Kong’s context, similar refined policies could be applied in the social housings in the development of social housings in ELM. A portion of the flats could be used for accommodating the Mainland talents by allowing them to rent the flat at a price lower than the market price. A clear definition of “talent”, yet, needs to be provided in order to minimise ambiguity that may in the end fails to cater the actual “talent”. Workers with higher innovation ability and entrepreneurship would generally be pursued by the I&T sector.

7.5.35 Lowering entering threshold for I&T enterprises could be considered in order to further create incentives for firms from West PRD to set up branches in Hong Kong. In light of the HZMB, with the improvement in accessibility and connectivity, attractiveness of Hong Kong for enterprises, especially based in West PRD, would be enhanced. Financial subsidies could be targeted to those I&T firms to attract I&T sector investment in Hong Kong.

Implications for Stakeholders

7.5.36 In general, stakeholders in the I&T sector could be divided into four major categories: Government, Industry, Academia and Research. Instead of reviewing strategies one by one, a holistic review is conducted to evaluate the effects of the I&T spatial strategy and supporting policies in order to comprise the polices together and look into the possible effects resulting from the implementation of multiple policies. The implications for stakeholders are summarised in Table 7.4. The detailed implications are listed out by stakeholders.

Government

7.5.37 For government, as the coordinator of regional plans and initiator of local preferential policies to facilitate I&T development and cooperation with the PRD cities, it is motivated to re-examine the resources input in I&T industry to apply adjustment on subsidy allocation with consideration to the potential growth of I&T enterprises. Besides continuing to provide sufficient financial and departmental support for universities and research institutes, extra focus should be placed to create more incentives for private investments on I&T developments. The government should also enhance communication with the PRD city governments to seek for the possibility of establishing a joint platform to coordinate regional I&T assets while allowing smooth implementation of supporting regional policies.

Industry

7.5.38 For the key players in I&T industry including existing I&T firms and an increasing number of start-ups in the future, the proposed spatial plan further enhances I&T enterprises’ accessibility to the market, talents and marketization production support in the GBA. The existing I&T firms now enjoys higher competitiveness in attracting international investments with closer cooperation with enterprises and talents in the PRD. Featuring pioneer financial services provided in CBD3, I&T enterprises are able to capture new regional cooperation opportunities branding partnership services with the professional and financial firms. For start-ups, the suggested strategic transport network with connections to the traditional CBD allows more diverse financial support for product
development. The accelerated industrialization process of I&T also enables shortened return period for the developing start-ups.

**Research**

7.5.39 Human capital formation in local research institutes is expected to welcome higher diversity and flexibility while encouraging communication with I&T professionals in the PRD. With more efficient commute, the increased geographical mobility within the GBA results in more frequent operational experience and human capital communication between the East and West Coast of the PRD.

**Academia**

7.5.40 Academia stakeholders in Hong Kong enjoying distinct advantage in the GBA would benefit from attracting diversified financial support. Universities are able to rely less on government support on I&T research and application as I&T marketization provides more incentives for implementation of R&D projects, which previously have long-term and slow return. For I&T scholars and enthusiast, there would be increased regional employment opportunities and funding as incentives for contribution to the industry. To strengthen professional training and ensure efficient talent introduction, the professional institutes may establish widely-accepted accreditation framework and clear qualification framework for I&T & Financial professions.

**Table 7.4 Implications for stakeholders in I&T sector**

<table>
<thead>
<tr>
<th>Stakeholders</th>
<th>Potential Implications</th>
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</thead>
<tbody>
<tr>
<td><strong>Government</strong></td>
<td></td>
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</table>
| I&T Bureau            | • Require to inject resources on I&T development and act as initiator to support I&T investment  
                        | • Policy coordination and negotiation between Hong Kong and other cities in the GBA would be required to allow smooth implementation of supporting policies |
| **Industry**          |                                                                                         |
| Existing I&T Firm     | • Competitiveness enhanced by easier communication with other I&T firms in the West PRD  
                        | • Have chance to cooperate with professional and financial firms in CBD3 so as to expand its business  
                        | • Engage in the “service provision” part in the industrialization process of the I&T sector |
| Start-Up              | • Enhanced marketization production with the expanded market accessibility from the GBA for quicker return period |
| **Research**          |                                                                                         |
| Research Institute    | • Operational experience and human capital communication                                 |
| Researcher            | • Reduced commute time to travel between different areas in the GBA                     
                        | • Increased geographical mobility                                                       |
| **Academia**          |                                                                                         |
| University            | • Utilization of diversified financial support for long-term R&D projects with smaller return rate |
Overall speaking, I&T sector would be benefited from edited strategic plan in a way to integrate with the current I&T industry and market in the GBA in a smoother way. Advancing the freedom of human, resources and capital flows in the local context could promote Hong Kong’s attractiveness to the professionals and workers in Mainland, thus allowing further economic growth in the sector.
8 Action Plan

8.1 Key Considerations of Implementation Programme

8.1.1 This chapter aims to broadly outline the conceptual implementation priority and timeline of the respective proposed conceptual spatial strategies and supporting policy recommendations.

8.1.2 A list of key evaluative consideration is devised in Table 8.1 for a comprehensive consideration of development constraints and favourable factors. The list is neither exhaustive nor definitive, which serves as a guiding reference only.

<table>
<thead>
<tr>
<th>Aspects</th>
<th>Key Consideration</th>
</tr>
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<tbody>
<tr>
<td>Market Environment</td>
<td>• Urgency of Actions;</td>
</tr>
<tr>
<td></td>
<td>• Consistency with Market Trend</td>
</tr>
<tr>
<td>Policy Environment</td>
<td>• Legislative Procedure;</td>
</tr>
<tr>
<td></td>
<td>• Concurrent with Regional and Local Policy Directions</td>
</tr>
<tr>
<td>Public Aspiration</td>
<td>• Stakeholders' Needs;</td>
</tr>
<tr>
<td></td>
<td>• Cost of usage;</td>
</tr>
<tr>
<td></td>
<td>• Public Acceptance;</td>
</tr>
<tr>
<td></td>
<td>• Public Benefits upon Development</td>
</tr>
<tr>
<td>Infrastructural Feasibility</td>
<td>• Land Availability;</td>
</tr>
<tr>
<td></td>
<td>• Readiness of Supporting Infrastructure;</td>
</tr>
<tr>
<td></td>
<td>• Construction Cost</td>
</tr>
</tbody>
</table>

Source: Study Team with reference to HK2030+ and ‘Land Supply Options’, Task Force on Land Supply

8.2 Prioritised Actions

8.2.1 In view of the fact that HZMB had achieved readiness for commissioning in January 2018 and the estimated date of opening might be in the mid-2018, the Study Team, based on the above set of consideration, is proposing five prioritized actions for the three economic functions as shown in Table 8.2. These actions, with low capital costs, high urgency, high technical ease and favorable existing policy in common, are recommended to be implemented in short term to immediate create spatial and institutional capacity to capitalize the key opportunities and overcome the potential competition after the opening of HZMB.
Table 8.2 List of Suggested Prioritized Actions

<table>
<thead>
<tr>
<th>Functions</th>
<th>Prioritized Actions</th>
</tr>
</thead>
</table>
| Logistics | • Off-airport One-stop Customs and Screening Facilities at HKBCF Topside Development;  
            • Competitive Toll Pricing for HZMB |
| Tourism   | • Expansion of Asia-World Expo;  
            • Construction of BCF Topside MICE Facilities;  
            • Facilitation of Multi-venue-and-stop Trade Fair Agreement |
| I&T       | • Relaxation and Increment of Incentives for Talents Attraction Policy for Mainland China Applicants with I&T skillsets |

Source: Study Team

Logistics: Seamless and Attractive Transhipment Arrangement via HZMB to HKIA Port

8.2.2 Supported by the discussion in Chapter 5.2 and 7.3, the key opportunities brought by HZMB to the logistics sector is the potential land-air transhipment for high-valued added and time-critical freight from the Western PRD taking Hong Kong as the inbound/outbound port. Potential competition among cities in the GBA is also foreseeable. Shippers may take alternative shipping routes and handling ports after the establishment of other cross-estuary transport infrastructure, viz. Humen Second Bridge to be completed in 2019 and Lianhuashan Cross-river Channel between Panyu and Dongguan to be completed in 2025.

8.2.3 In view the high urgency to respond to the rapid changing market context, immediate strengthening of the transhipment position of Hong Kong in the GBA from freight handling efficiency and effectiveness perspective should be prioritised. One of the immediate actions could be setting a competitive toll pricing for HZMB before the opening with reference to the transport infrastructure sharing similar logistics functions, ensuring a strong incentive for transhipment via HZMB.

8.2.4 Another action in view of the market context is effectively utilising the HKBCF topside floorspace to facilitate a smooth and efficient transhipment procedure. Whilst the land formation and supporting infrastructure works of HKBCF will soon be completed, off-airport one-stop customs and screening facilities at HKBCF Topside Development could be feasible to be implemented soon after the opening of HZMB.

8.2.5 In terms of policy environment, the existing agreement between the Customs and Excise Department of Hong Kong and the Speedy Customs Clearance of the Customs Administrations of Guangdong Province (i.e. using a single E-lock with global positioning system to co-monitor the routes of the transhipment vehicles to avoid double inspection by two authorities) had provided a solid and sound experience and reference for customs at HZMB. Negotiation and research procedure in policy setting and trial implementation can be significantly shortened.

Tourism: Expansion of MICE Capacity and Facilitation of Regional Tourism Synergy

8.2.6 Addressed in Chapter 5.3, the current MICE space in Hong Kong is in a shortage of some 92,000 sqm planned or committable rentable exhibition space. Expansion of MICE capacity with regional collaboration could maintain the competitive edge as a welcoming
and desiring destination for business and incentives tourists; and capitalise the immediate potential influx of visitors taking HZMB for multi-destination tourism in the GBA region.

8.2.7 Additional and readily available developable business floorspace provided in HKBCF Topside, Airport North Metropolis and the existing developable site (currently as open carpark) at the East of the AWE had already been provided which facilitates a soon expansion of MICE facilities at the bridgehead.

8.2.8 Meanwhile Macao and Hengqin as investigated in Chapter 4, and other cities in the ASEAN region such as Shanghai and Singapore are dedicated to developing business tourism and MICE industry in their high-level policy agenda, Hong Kong should be aware, not only the urgency and potential demand to provide adequate convention floorspace in light of HZMB, but also the regional competition as a threat brought by the increased mobility in the Western PRD. In line with the existing functions and tasks carried by HKTDC and Hong Kong Economic and Trade Offices, Hong Kong should prioritise the strategic promotion of image for a significant destination for world-class convention and exhibition, and collaboration through establishing regional agreement in facilitating multi-stop and multi-venue trade fair. Direct competition can then be avoided.

**I&T: Attraction of Potential Talent and Capital from the Western PRD**

8.2.9 Consolidated from the discussion in Chapter 5.4, the momentum for the growth of the I&T sector of Hong Kong relies mostly on the favourable policy environment as well as institutional support, high quality of talents, and capital resources promptly available for interdisciplinary research. Spatial provision for knowledge exchange, collaboration and R&D works is also vital for the sectoral development. It, however, plays a rather long-term position due to its either stringent technical requirement regarding the facilities design with high capital costs for biomedical industry, or small-scale yet already available office space in CBD1 for fintech development and collaboration space for start-ups and creative industry in HKSTP and HSTP. Provision of I&T ERLU after the opening of HZMB might not be able or required to be prioritised.

8.2.10 In light of the above consideration, the Study Team proposed the following three policy actions which are recommended to be pursed in the near term with least legislature procedure in policy amendment or financial approval required:

- Enhancing the Talent Attraction Policy, e.g. Quota Increment of QMAS, Special Consideration for ASMTTP for I&T Talents from Mainland China;
- Funding to Institutions for Regional Research-Academia Projects in Hong Kong; and
- Cross-boundary Agreement on Simplified Visa Application Procedure

8.3 **Suggested Phasing Programme**

8.3.1 Serving as an additional input to HK2030+, a phasing programme for the implementation of the proposed ERLU and STN in the conceptual spatial strategy is suggested initially to realise the quick-win development proposals in the short-to-medium term (within 10 years after the completion of the Study) and medium-to-long-term (10-30 years after the completion of the Study). This suggested timeframe, as discussed in Chapter 1, considers the latest published Land Supply Options by the Task Force of Land Supply which is also an additional input for HK2030+.
The programme also takes into consideration the public aspirations for faster implementation of desirable development proposals. This implementation programme was derived on a broad basis and is subject to further study on, including but not limited to, the following planning, engineering and financial aspects:

- Carrying out a feasibility study (including financial viability) and detail technical assessment for implementation of the above proposals;
- Carrying out a strategic traffic and transport assessment for implementation of a functional cluster in relation to the opening of HZMB; and
- Carrying out a stakeholder consultation and engagement for the proposed conceptual spatial strategy and the recommended proposals, etc.

Considering that the adjoining infrastructure and road network are still under construction with the completion year of some infrastructure yet to be determined, the phasing only provides a descriptive condition with flexibility for strategic changes where and when required. A more consolidated implementation programme is presented in Table 8.3 as in according to the findings of the Study.
### Table 8.3  Conceptual Phasing Programme

<table>
<thead>
<tr>
<th>Functional Clusters</th>
<th>Short-to-medium Term</th>
<th>Medium-to-long Term</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Logistics</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Logistics</td>
<td><strong>Aviation Logistics Cluster</strong></td>
<td><strong>Aviation Logistics Cluster</strong></td>
</tr>
<tr>
<td></td>
<td>• Security-sensitive cargo services facilities</td>
<td>• Siu Ho Wan and Sham Shui Kok Rock Caverns for E-commerce Warehousing and Distribution (with reference to the Land Supply Options)</td>
</tr>
<tr>
<td></td>
<td>• Off-airport one-stop customs and screening facilities</td>
<td><strong>Integrated Logistics Belt</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Integrated Logistics Belt</strong></td>
<td><strong>Integrated Logistics Belt</strong></td>
</tr>
<tr>
<td></td>
<td>• Consolidation of Brownfield Sites at Lung Kwu Tan, So Kwun Wat and Tai Lam Chung into Cold-chain Cargo Storage and Modern Multi-storey Buildings (with reference to the Land Supply Options)</td>
<td>• STI to facilitate a Loop Circulation of Freight</td>
</tr>
<tr>
<td></td>
<td>• Road Widening Works in Tuen Mum</td>
<td><strong>Supporting Policies</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Supporting Policies</strong></td>
<td><strong>Supporting Policies</strong></td>
</tr>
<tr>
<td></td>
<td>• HZMB Management-related Policy e.g. opening hours and toll price</td>
<td>• Conservation Proposal by Study and Adaption of Three-zone Conservation Concept</td>
</tr>
<tr>
<td></td>
<td>• Management Framework e.g. talent training</td>
<td>• New water-way connection between eco-tourism nodes in South Lantau after detail feasibility and engineering study</td>
</tr>
<tr>
<td></td>
<td>• Regional Integration initiatives</td>
<td>• Road connection from Sunny Bay to Mui Wo</td>
</tr>
<tr>
<td><strong>Tourism</strong></td>
<td><strong>Northeast Lantau Tourism Hub</strong></td>
<td><strong>South Lantau Ecological Recreation Belt</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Western MICE Core</strong></td>
<td><strong>Supporting Policies</strong></td>
</tr>
<tr>
<td></td>
<td>• Earlier implementation of Road P1 along North Lantau</td>
<td>• Ecological monitoring system</td>
</tr>
<tr>
<td></td>
<td><strong>Supporting Policies</strong></td>
<td>• Improvement of Traffic Conditions along South Lantau Road and Tung Chung Road</td>
</tr>
<tr>
<td></td>
<td>• Public transit planning aiming for direct, transit-free and affordable public transport connection from Tung Chung (as a stable pool of Lantau employment) to Sunny Bay and other various proposed tourism developments in Lantau</td>
<td><strong>Supporting Policies</strong></td>
</tr>
<tr>
<td></td>
<td>• Development of integrated tourism packages</td>
<td>• Relaxation of guesthouse policy</td>
</tr>
<tr>
<td></td>
<td>• Mechanism for community collaboration for tourism development</td>
<td><strong>Supporting Policies</strong></td>
</tr>
<tr>
<td></td>
<td>• Relaxation of guesthouse policy</td>
<td>• Secure housing provision for incoming talents</td>
</tr>
<tr>
<td><strong>I&amp;T</strong></td>
<td><strong>Eastern Research Innovation Belt</strong></td>
<td><strong>South Financial Innovation Belt</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Supporting Policy</strong></td>
<td><strong>Eastern Research Innovation Belt</strong></td>
</tr>
<tr>
<td></td>
<td>• Rail connection between NTN, Lok Ma Chau Loop and Eastern Research Innovation Belt</td>
<td><strong>Supporting Policies</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Series of Talent Attraction Policy</strong></td>
<td>• Re-positioning of ELM for Fintech</td>
</tr>
<tr>
<td></td>
<td><strong>Economic incentives for Talent to avoid double taxation with home country</strong></td>
<td><strong>Supporting Policies</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Funding for interdisciplinary Research-Academia-Industry projects</strong></td>
<td>• Secure housing provision for incoming talents</td>
</tr>
</tbody>
</table>

Source: Study Team
9 Conclusion

9.1.1 This Study has consolidated the analysis of spatial development of three selected GBA cities to identify the possible opportunities and challenges brought by the HZMB from a sectoral perspective. Three most influenced sectors which consist of logistics, tourism and I&T were discussed to understand their spatial and policy needs, and to provide a foundation for the next steps to reinforce the Hong Kong’s position as an international gateway and capitalise bridgehead opportunities from the GBA by creating capacity for sustainable growth. As illustrated in Chapter 4 and Chapter 5, facing keen competition from neighbouring cities, Hong Kong should further strengthen its comparative advantages and provide a more strategic spatial and policy planning. Taking note of the international experiences, regional strategic plans, HK2030+ and the sectoral needs, the Study responded to the key market trends, opportunities and challenges through the strategic plan as below:

- **Aviation Logistics Cluster**
  To develop a land-air transhipment hub serving for high value-added freight as an international freight gateway to and from the Western PRD cities. It aims to capture land-air transhipment advantages brought by HZMB in the surrounding area of HKIA.

- **Integrated Logistics Belt**
  To consolidate the existing brownfields and expand the logistic cluster in Tuen Mun West in order to bring about clustering effect and opportunities.

- **Northeast Lantau Tourism Hub**
  To create capacity for holistic tourism with unique themed RDE facilities. It aims to delivery “all-for-one” tourism experience for visitors and attract longer stay of visitors.

- **South Lantau Ecological Recreation Belt**
  To better utilise the natural asset in the less ecologically sensitive areas of Lantau to promote eco-tourism and low-impact recreational activities, with an aim to diversify tourism offerings for enhancing travel experiences.

- **Western MICE Core**
  To increase capacity for MICE industry and strengthen the collaboration between the current MICE facilities in Hong Kong. It aims to maximise the bridgehead opportunities brought by the HZMB.

- **South Financial Innovation Belt**
  To provide a branding effect specialised in I&T sector while complementing other high-value added sectors in order to promote a tech-ecosystem based on the financial-based industries.

- **Eastern Research Innovation Belt**
  To enlarge and introduce the bridgehead opportunity into existing or planned I&T developments in East and North Hong Kong. It aims to capitalise existing I&T sector in Hong Kong through consolidating the proposed Eastern Corridor and ELM development with regional I&T strategic plans to optimize industry-academia-research synergy benefits.
In addition to the spatial strategies mentioned above, supporting policies are also important in maximising the effectiveness of the strategic plan. With policies promoting regional collaboration, talent attraction, capacity building and comprehensive planning, the implementation of spatial strategies can be further facilitated. Hong Kong should take actions to carry out regional division and act as a springboard between GBA and the World. Besides, Hong Kong should seize competitive edge of possessing rich human, capital and knowledge assets as comparing with cities in the strategic regional context and realise the bridgehead opportunities. Most importantly, to achieve sustainable development, Hong Kong should create reserve and capacity for sustainable growth in the changing socio-economic context. To maximise its effectiveness, this Study strongly recommends the government to implement the above strategic plan in short and long terms, with the collaboration between both public and private sectors. Meanwhile, detailed assessment will be needed to supplement the proposed strategy before execution.
References


Airport Authority Hong Kong. (2018b). *Hong Kong International Airport Latest Developments*. Presentation for Airport Visit for Department of Urban Planning and Design, HKU.


Civil Engineering and Development Department. (2017b). Cavern Master Plan Information Note


Strategic Planning for Employment-related Land Uses and Strategic Transport Network in Hong Kong
After the Opening of the Hong Kong-Zhuhai-Macao Bridge


Swangjang, K., and Lamaram, V. (2011). Change of land use patterns in the areas close to the airport development area and some implicating factors. Sustainability, 3(9), 1517-1530.


Appendix 1

Study Programme

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## Appendix 2

### Gist of Interviews

#### List of Interviewees

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<tr>
<th>Sector / Scope</th>
<th>Interviewee</th>
<th>Identity</th>
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<tr>
<td><strong>PRD Development</strong></td>
<td>A</td>
<td>Scholar specialising in regional and urban development in PRD</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>Scholar specialising in cross-boundary collaboration in China</td>
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<td></td>
<td>C</td>
<td>Senior town planner involved in strategic planning</td>
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<td><strong>Government</strong></td>
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<td><strong>Tourism, Recreation &amp; Retail</strong></td>
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<td>Economist in HKTDC specialising in China trade policy and consumer market</td>
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<tr>
<td></td>
<td>E*</td>
<td>Representative from a local travel agent</td>
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<tr>
<td></td>
<td>F*</td>
<td>Representative from a major theme park operator</td>
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<tr>
<td></td>
<td>G</td>
<td>Representative from Hong Kong Tourism Board</td>
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<td><strong>Logistics</strong></td>
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<tr>
<td></td>
<td>I</td>
<td>Scholar specialising in transport geography and port development</td>
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<td>J</td>
<td>Logistics and port development consultant</td>
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<td></td>
<td>K*</td>
<td>Business development manager of a freight forwarder in Hong Kong</td>
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<td>Representative from Strategic Planning &amp; Development, Airport Authority Hong Kong</td>
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<td><strong>Innovation and Technology</strong></td>
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<td>N*</td>
<td>Representative from AsiaWorld-Expo</td>
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<td><strong>Professional and Financial Services</strong></td>
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<td>Director and research fellows of a policy research institute</td>
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| **Trading and Manufacturing**   | P           | Scholar specialising in supply chain management and decision support system |}

*The interview notes for Interviewees E, F, K and N are not released due to confidentiality.*
Interviewee A – Scholar specialising in regional and urban development in PRD
Date: 19 March 2018
Format: Face-to-face Interview

Gist of Interview

- **Actual spatial benefits of the HZMB in terms of economic development in Hong Kong and the GBA region:**
  - Time is money, certain time-sensitive industries such as fashion and electronics will benefit from the shortened travelling time; we cannot devoice time and cost from one another. Therefore, there is still possibility that sea logistics in Hong Kong will benefit from the new markets in Western PRD
  - Even if the benefit to sea logistics is minimal, we should note that container boxes will either go to HKIA or Kwai Tsing port, i.e. the final destination is still Hong Kong

- **On the relationship between Hong Kong and Free Trade Zones (especially Hengqin):**
  - Setting Free Trade Zones is regarded as a “winning formula” for Mainland cities to develop their own gateway to the world, yet Hong Kong still maintains its competitive edge
  - Strength of Hong Kong: (1) strong financial capacity and capability, key outport for renminbi policy → important in transaction; (2) as a role model for Mainland cities (e.g. Qianhai which tries to emulate the Hong Kong model) (however, Hengqin has a closer relationship with Macao than with Hong Kong)
  - Nevertheless, Hong Kong should ask itself what can be done better

- **On the relationship between Hengqin New Area and the rest of Zhuhai:**
  - Early development proposals in Zhuhai are already visionary
  - Hengqin New Area serves as a “service/policy provider” offering innovative and pilot “policy environment” which add values to the city (i.e. rest of Zhuhai), while Zhuhai serves as a “spatial container” (e.g. actual production base) → Hengqin and Zhuhai are complementary to one another
  - We cannot make clear demarcation of one district to another, e.g. London and the London Dockland ~ Zhuhai and Hengqin
  - Some industries are only viable in Hengqin but not Zhuhai due to policy limitation

- **On the relationship between Hong Kong and the rest of Zhuhai after the opening of the HZMB:**
  - Agree that cooperation between Hong Kong and Zhuhai would mainly focus on Hengqin instead of the rest of Zhuhai
  - Attractiveness of Hengqin will eventually trigger other development in the rest of Zhuhai

- **Implications of the unclear position of Zhuhai (which seems to be substantially overlapped with Hengqin) to the economic development in the Western PRD:**
  - Hengqin only provides policy environment but do not have capacity for real development, which depends on the overarching umbrella of Zhuhai → need to take Zhuhai holistically, e.g. as a hub in Western PRD linking to Kaiping etc.
  - Therefore, Hengqin and Zhuhai would not mutually exclusive
  - Division of labour: Hengqin attracts international investment, while Zhuhai connects to the Western PRD
Interviewee B - Scholar specialising in cross-boundary collaboration in China
Date: March 22, 2018
Format: Short Chat
[shared with DADA’s Consulting Group]

Gist of Interview

Why GBA Development is important?

- The central government notice that there are, indeed, lots of difficulties in implementing “One Belt, One Road”.
- Guangdong was one of the first opening up cities in China. However, recently, most of the coastal cities in China are well developed, Guangdong is falling into confusion about its role in the Greater China
- Because of these two reasons, GBA would be a model to the world the potentials of “One Belt, One Road”, as well as re-positioning Guangdong province
Gist of Interview

- The HZMB is expected to bring changes to Hong Kong in terms of its economic environment and market.
- After the opening up of HZMB, in view of the comparative advantages enjoyed by Hong Kong which include highly educated talents and well-established system, Hong Kong should be mainly responsible for the development of professional services, high-value added business and R&D in the universities, whereas the western PRD can play its role in manufacturing and mass production.
- When discussing whether the comparative advantages are caused by Hong Kong’s location in the GBA instead of directly due to the bridge itself, the interviewee responded that the bridge itself is of paramount importance because it greatly enhanced the connectivity, especially with the western PRD. Therefore, it can act as the most important physical linkage to encourage the economic integration and more cooperation opportunities.
- The key asset of Hong Kong is its people, they are renowned for the way they work and the high efficiency possessed by them. Besides, their ability to speak fluent English allows them to be more superior and productive when compared to the employees from the Mainland. Hence, Hong Kong is able to provide skilled talents for the multinational companies in Hong Kong.
- The key factors which may discourage the talents to come Hong Kong or the companies to set up their business in Hong Kong may include the land shortage and the high rent which may not be affordable for them. Therefore, it is critical for Hong Kong to solve this issue. At the same time, it might be useful for Hong Kong to consider more efficient positioning by moving the land-intensive industry to the western PRD which provides abundant land resources.
- More comprehensive STN will be needed to leverage the bridgehead opportunities brought by the HZMB.
- Due to the strategic location of ELM, the CBD3 can consider focusing on business opportunities brought by the mainland companies in the PRD. Hong Kong can act as a gateway for them to reach out to the world.
Interviewee D – Economist in HKTDC specialising in China trade policy and consumer market
Date: March 23, 2018
Format: Face-to-face Interview

Gist of Interview

- Not so sure about the Hong Kong’s exact position in Logistics as per the GBA plan as they are still waiting for the release of detail plans for way forward. However, the agreed objective is to have a greater integration between these 9 cities and 2 SARs. The operational efficiency of logistics will be increase thus heightening its competitiveness in the whole region.
- Cities of western PRD are also developing logistics to capture the regional market but because of the competitive edge such as free market economy, Hong Kong will continue to be on the lead.
- Although there is decline in the market share by Hong Kong ports, it still is the 5th largest Container Port and are now focusing more on high value added goods.
- Logistic function of Hong Kong
  - Inbound-outbound gateway particularly for high value added products
  - Base for Cross-border ecommerce for distribution of foreign products to Mainland
- Impacts of HZMB
  - Strengthen the physical connectivity
  - Business connectivity to huge cluster of traders and professional service providers
  - Strengthen Hong Kong’s role as regional hub for professional services
  - System integration with the Mainland besides the economic integration
- Challenges
  - High operating cost due to acute shortage of land
  - Because of high rental cost, difficult to introduce the ‘niche brands’
- FDI
  - Hong Kong is a hub for FDI mainly for large companies
  - Not so concerned about the negative impact on the FDI with the opening of bridge
  - As a regional headquarter function
- Although some industries wish to move from eastern PRD to western PRD, may be due to more land supply, the western PRD cities do not welcome any kind of industries rather they are more selective such as the less pollutant industries, high value, etc.
- Remaining manufacturing industries in Hong Kong
  - Some manufacturing industries by statistics may not have manufacturing operation rather will have headquarter functions (now classified as traders)
  - Manufacturers catering to local market still exists such as printing and food processing.
- Benefits of HZMB in different sectors of Hong Kong
  - Logistics is benefited the most with direct physical connectivity with the cities of western PRD providing more options for logistic operators
  - Tourism industry will also be benefitted significantly by expanding the tourist destination to further west and also address the congestion at Humen bridge
- Hong Kong and the neighboring cities will continue to enjoy their complimentary relationship because of the difference in their economic structure
- Hong Kong will be a choice for financial service provider compared to other cities in the western PRD because of its efficiency and reliability.
• Concerns/issues for consideration
  ▪ Insufficient exhibition space
  ▪ Lower Grade A office rentals to facilitate for different service providers to stay in Hong Kong
  ▪ Smooth daily operation of the bridge
Interviewee G – Representative from Hong Kong Tourism Board  
Date: March 20, 2018  
Format: Email Conversation

Gist of Interview

- Hong Kong used to position itself as the world’s meeting place. One of the key strategies adopted by the HKTB is to further develop the MICE industry in Hong Kong. It hopes to attract a larger number of high-yield MICE visitors to visit Hong Kong. Also, it is important for Hong Kong to also provide support for the organisers and participants, regardless of their scale. Therefore, conventions ranging from large-scale to smaller-scale can still benefit from the government policy.

- With the opening of HZMB, it is expected that more business opportunities can be brought by the companies from the western PRD. As a result, it is crucial to strengthen the connections with professional and business associations in the Mainland, particularly high tech industry in the PRD. It might be constructive to arrange more familiarisation tours for these associations so that they can be more aware of Hong Kong’s competitive edge as a good MICE destination and its image as an international hub. In doing so, they can be encouraged to hold more conferences or participate in the exhibitions in Hong Kong.

- It is beneficial to capitalise on the enhanced connectivity from the HZMB and Hong Kong’s core strengths which include its international status and high language capability by holding more international industry events which may consider bringing in more exhibitors from the Mainland. In view of the development in MICE industry in our neighbouring cities, Hong Kong can position itself as an international gateway holding large-scale international events which also help promote corporates from the Mainland. To maximise the opportunities brought by the HZMB, more collaboration will be needed between the two major exhibition venues in Hong Kong. By doing so, it can further strengthen Hong Kong’s role in Asia, and maximise the opportunities brought by the bridge.

- Facing the intensive tourism development in our neighbouring cities, Hong Kong should explore the possibilities to expand its market and diversify the tourism experiences in Hong Kong, so that it can maintain its competitive edge in the region. Meanwhile, to attract more visitors from the PRD, the strategic direction in promoting multi-destinations travel shall be adopted to collaborate with other PRD cities.

- Besides, in view of the importance of sustainable development, it is suggested that ecotourism shall be promoted in Hong Kong to appreciate the valuable natural assets in Hong Kong while providing new and unique experiences for the visitors.
Interviewee H – Council member of Hong Kong Logistics Association
Date: March 22, 2018
Format: Short Chat

Gist of Interview

Implication of HZMB on Logistics Sector

- Given the operational details of HZMB are clearly announced and well-acknowledged by the bridge authority and welcomed by the sector
- Cost, customs and clearance arrangement, and handling facilities are the three pull factors other than time concern for freight transhipment which may significantly increase the handling cost and terminal selection
- General view from the sector: actual benefits from the HZMB on the sector is still uncertain
- Personal view: potential growth for land-air cargo transhipment via HKIA

Implication of HZMB on Planning and Development of Hong Kong

- Possible logistics cluster with facilities at some strategic location
- Spatial configuration of the smart logistics park – around 25 ha
  - The possible site location could be on North Lantau, Tuen Mun West (TMW), Hung Shui Kiu (HSK) and HKBCF Island
Interviewee I - Scholar specialising in transport geography and port development

Date: March 22, 2018
Format: Seminar
[shared with DADA's Consulting Group]

Gist of Interview

Implications of the HZMB

- 3 points to take note to:
  1. BCF + Airport: mega commercial complex (would become the largest shopping in HK) → producing many jobs in the area
  2. Tuen Mun area: with the Chek Lap Kok-Tuen Mun link, mobility increased. Indeed, there are 28% of people working in the Airport living in Tuen Mun, while only around 14% of them living in Tung Chung
  3. The big companies in GBA west can move into Lantau, it is a good location for them, and it is difficult for them to find place in Central
  4. There is lack of university/training and talents in tourism, aviation industry, possible to have these institutions set up in Lantau
  5. It is sure that Tung Chung North would have great potentials to develop and converted into a vibrant economic center. However, CBD3 mentioned in 2030+ would only be realised after the development of Tung Chung North
  6. Side story: by putting CBD3 in 2030+ might be a strategy to bargain with the villagers in New Territories. Since they are not willing to give up their land there, the government would like to put down CBD3 there and pretend that they are giving up the option of reclaiming land from the villagers. So that, the villagers might have greater incentive to move away.
  7. Lantau East great potential and Mui Wo, low environmental impact
  8. Possible transport linkage between Lantau North and Lantau East by Light Rail
  9. Currently, underutilization (underutilisation?) of roads in Lantau
  10. To cater the expected population growth (400,000), Kwai Chung Container Terminal can be moved to somewhere (west of Tuen Mun?)
  11. it is the prime location connected to Kowloon
  12. Kwai Chung (100,000) + North Lantau (100,000)
  13. Is East Lantau is necessary?
  14. Job-housing balance
  15. There are 28% of people working in the Airport living in Tuen Mun, while only around 14% of them living in Tung Chung
  16. North Lantau development would attract Grade-A and general business offices to move in → might help addressing the problem of job-housing imbalance in Tung Chung
  17. Census 2011
     - Employment in the same district (Lantau): 29.8%
     - Employment in the same district (Tung Chung): 9.4%
     - Employment in different district Tung Chung: 72.7%
Interviewee J – Logistics and port development consultant
Date: March 18, 2018
Format: Email Conversation

Gist of Interview

Questions Raised

(1) Impacts of the enhanced Connectivity in Western PRD and Strategies of HK Logistics Services Users
Cross-boundary container traffic from PRD are now mainly shifted to a river-brone mode instead of land-brone. With respect to the completion of the mega-road transportation infrastructure, particularly the HZMB, Shenzhen-Zhongshan Corridor and related national highways construction:

Would you foresee that the enhanced connectivity in the Western PRD would lead to the changing the choice of port for outbound cargo, or forming a more cost-effective routing for containerized cargo, to increase the use of Hong Kong’s port (for both TS & IE)? (Or the other scenario that HZMB brings minimal impacts as businesses in W. PRD would make use of Shenzhen and Guangzhou Ports instead?)

(2) Responding Strategy for HK Logistics Sectors
In terms of port performance, Namsha and Qianhai are two major competitors with national policy support to be the FTZ in the Greater Bay Area.

Could the opening of HZMB maintain the competitive position of Hong Kong’s logistics industry? What would be the additional supporting policies for logistics development after the opening HZMB?

(3) Supporting Logistics Facilities, Land Use Planning and Policies
Currently there are some land-use planning directors raised from various think tanks and practitioners (1) urging for supply of long-term port back-up land, multi-storey storage floorspace or yard area; (2) provision for barge perths; (3) regional intermodal logistics park & clusters with new highway connections in Tuen Mun West to Lantau.

Could these proposal, or any other suggestions, cater for the changing demand for logistics facilities brought by HZMB?

Extract of Non-confidential Answers

- The impacts of HKZMB on sea cargo and air cargo would be rather different.
- Sea cargo is cost sensitive: shippers / forwarders would choose an option that can save them a few dollars on delivery. Time saving is not their concern - containers can wait for days (or sometimes weeks).
- On the contrary, air cargo is time sensitive: shippers / forwarders would choose an option can that save them an hour. Cost is less of a concern.
- Barging cost is only a fraction of trucking cost. I do not have the latest numbers on hand, but a barge can take at least a few dozens of containers (can be up to a few hundred), whereas a truck can only take 2 TEU (2x 20-ft containers, or 1x 40-ft container) at most. That explains why many sea containers (esp those to/from west PRD) for transshipment at HK Port are barged, instead of trucked.
- It is not common for air cargo to be barged, because (i) it is slow, and (ii) it involves double-handling (loading / unloading between truck and barge) which increases the risks of cargo
mishandling. Trucking is still the preferred option for inland transportation of air cargo between HK Int'l Airport (HKIA) and W PRD, and it takes 4-5 hours today.

- Therefore, a few hours saving on the HKZMB would have minimal impacts on the inland transportation modal choice for container cargo - barging will continue to be the preferred option. On the contrary, a few hours savings is attractive for air cargo to/from W PRD - however, this market only accounts for a small share of total HKIA cargo volume. There is no official figure, but it is estimated that about 70% of total HKIA cargo is generated to/from Guangdong Province; of this cargo, the volume generated to/from W PRD can be proxied by the share of GDP of Guangdong cities.

- The supporting logistics facilities would benefit HK sea cargo and air cargo as a whole. The HKZMB could induce air cargo from W PRD (see above for market size), but the impact on sea cargo would be minimal.

- It’s challenging to find large enough space for MICE and exhibition facilities in the city, which at the moment is facing supply shortage. The BCF at HKZMB offers land for such use, but the target visitors would be mainly from out-of-HK (e.g. flying into HK and some from PRD, either via HKZMB or other means), and less so HK residents - this would be similar to the visitor profile of AWE. But again, if this works, it’s more because of the land made available by the HKZMB. Enhanced connectivity due to the Bridge could induce some visitors from W PRD, but they are expected to account for a small share of total facility users.
Interviewee L – Representative from Strategic Planning & Development, Airport Authority
Hong Kong
Date: February 1, 2018
Format: Seminar

Gist of Interview

- Over 100 airlines operate flights to 220 destinations worldwide, including over 50 Mainland destinations, and there are around 1,100 daily flights
- Reaching half of the world’s population within five hours flying time
- Continuous growth of air traffic
- World’s third busiest airport in terms of international passenger traffic
- World’s busiest cargo hub since 2010
- Most efficient airport in the world
- Highest usage of wide bodied aircraft

Capacity expansion
- Terminal 1 expansion (Themed boarding gate area, New East Hall food hall, etc.)
- Car park 4 expansion (HK International Aviation Academy, staff canteen, etc.)
- Shaping future travel experience (online shop, self-bag drop, Real time queuing info, etc.)
- Single token for passenger journey

Developments in GBA
- Development of major land transport infrastructures (HZMB, SZ bridge, Humen 2nd Bridge)
- Guangzhou and Shenzhen Airport Expansion Plan
- Growth of passenger throughput is much higher at GBA (CAGR-7% for 2006 to 2016)
- Greater Bay Area Airport capacity falling short of expected demand (IATA Consulting)

Opportunities
- HKIA as air cargo hub for the GBA with the following facilities:
  - Intermodal transfer terminal
  - Air-to-Sea ticketing
  - Upstream check-in
  - Cross boundary transport
- Establishment of Hong Kong International Aviation Academy
  - To meet the manpower and talent needs for current and the 3RS
  - To further strengthen HK civil aviation industry competitiveness
  - To enable HK as a regional civil aviation training hub to nurture talents for the aviation industry in Hong Kong and in the region.
- HKIA provides job opportunities of various kinds
  - Professionals
  - Skilled
  - Management
  - Manual/low skilled

Environment Sensitive
- Pledge to reduce airport-wide carbon intensity (10% by 2020 with 2015 baseline)
- Carbon reduction and energy saving schemes (LED lights)
- Use of electric airside saloon cars
- Fixed ground power and preconditioned air system
Gist of Interview

- The major hindrance of the I&T sector in Hong Kong is in the part of Industrialisation of the sector
- Major view from the public still consider the application and integration of technology as simple and “low-level” economic activities, yet they should be deemed the essential keys for I&T economic growth and a “high-level” skill
- In Hong Kong, not much workers and professionals in the I&T sector are willing to start from bottom and run through the whole process of I&T product development, resulting in a lack of talents to do and contribute on “application and integration of technology”
- The basis and starting point of the I&T production chain is from the production and enterprise side, instead of the research side. I&T productions starts with the question “what should be developed”.
- The development concept is then carried to the research part of the whole industry and suitable technology is used to turn those concepts into real world application. Therefore, the ability to design those concepts are intrinsically different from how advance the research basis is.
- Construction of building could be used as a metaphor. Housing development started with design of building, with selection of building materials being the latter step. The developer will not be able to construct building only because they have some high-quality building materials is hand
- An old case: One university in Hong Kong had once invented an enhanced semiconductor. Yet no industry or firm in Hong Kong did invest in the project, and the professor in the end sold the patent right of that semiconductor to a Taiwan firm, and was finally undergo massive production in Foshan. While Hong Kong is the place where the technology is invented, most of the economic value was runout to other cities
- The case of Shenzhen: At first Shenzhen was never strong in I&T and did not get the state-of-the-art technologies, and even discriminated by some Hong Kong people as the “homebase of counterfeit goods”
- Yet, these types of imitations allowed Shenzhen to repeatedly participated in the whole product development process and run through the whole industry chain, thus learnt and grasped the method of how to integrate all small, minor techniques together to create goods with attractive economic value, and further accumulate the technological skills
- Hong Kong should enhance its ability to participate in the market, which is determined by “what product do the city have”. Having only one skill (which is research skills in Hong Kong) in the whole industry chain would not enable product development
- Agglomeration of the industry, academia and research segment (產學研合一) is essential for developing a healthy industry chain in Hong Kong, especially the emphasis in the industry division
Interviewee O – Director and research fellows of a policy research institute
Date: 22 March 2018
Format: Face-to-face Interview

Gist of Interview

- Comparing the level of development between Eastern and Western PRD, activities in Western PRD are not as active, lagging behind Eastern PRD
- Activities and synergy between Hong Kong and Western PRD is very low at the moment, but once HZMB is opened, rapid changes may occur. Maybe 70-80% of ferries from HK to Macao may stop operating
- Opening of HZMB may bring up a lot of discussions on institutional arrangement
- HZMB bridge the gap between national road system and extend Hong Kong’s hinterland to Western PRD
- Influence on logistics: currently cargo from Western PRD need to pass through Shenzhen to Hong Kong to reach container terminal and airport for export (long routes that may take 1.5 days). In the future (after the opening of HZMB) it will only take 0.5 day with shorter route
- Current statistics on export through Hong Kong: export from Western PRD account for a small percentage only
- It is also predicted that improve connection to Western PRD will induce new activities, but hard to quantify
- It is explained that the opening of HZMB will lead to additional establishment of international schools in Western PRD, as more international schools are near to HK, this may attract more talents to work in HK (as there is insufficient international school places in HK)
- Furthermore, medical industries may also benefit from the opening of HZMB. HK may set up medical institutions in Zhuhai and attract tourists
- “Hong Kong villages” have been developed in Foshan with preferential policies and medical care, this may benefit HK citizens
- Interviewee expressed that HK not only act as operational control centre, there are still a lot of domestic manufacturing found in Hong Kong, such as Kwai Chung and Wong Chuk Hang. Furthermore, new & modern manufacturing can also be found in commercial buildings in Wan Chai (producing computer chips). Also, assembling of expensive watches can also be found in San Po Kong
- In terms of space for ERLU development, the interviewee expressed that brownfield sites and the decline of port can hopefully free up space for housing and other development
- The interviewee is suspicious about the development of CBD3, due to the problem of location.
- The interviewee expressed that current CBD is saturated and the market not only require Grade A offices. The market nowadays requires offices with large floor plates and places with good environment. Hong Kong is short of offices of this kind.
- Before the Central Market is very dirty and create traffic problems (due to loading and unloading), which hinder the expansion CBD to the west. However, nowadays the conditions and environment has improved, therefore CBD slowly expands to Sheung Wan.
The GBA is indeed not a completely new concept, with pre-existing regional cooperation mechanisms like the Pan-PRD.

The key question is not about Hong Kong’s competitiveness per se, but the competitiveness of the whole GBA. The PRD is transforming its economy to high value-added manufacturing, emphasising R&D and the commercialised products. Seizing on the “one country, two systems” institutional advantage, Hong Kong should serve as a connector for “going out” and “bring in” strategy. Mainland, while having robust hardware, needs improvement for its software (i.e. talents).

Logistics industry: sea logistics will not gain much advantage as compared to air logistics which ships high value-added goods, but the HZMB will bring business opportunity.

Flow of capital and information are not relevant to the HZMB; the bridge will mainly facilitate the movement of people and goods.

HZMB at its initial operation stage will mainly carry the flow of people rather than goods; nevertheless, transportation of certain types of goods e.g. e-commerce and fresh produces is expected to benefit from the HZMB due to the just-in-time and zero inventory requirements of e-commerce and the high fixed cost and long travel time of traditional sea logistics (e.g. HK – Shanghai takes half month).

For high-end financing and services industry, Hong Kong remains a relatively advanced position compared to Zhuhai and Zhongshan. With the current land use plan, the number of offices expects a continuous increase, but supporting infrastructure may fall in shortage in the next few years. Hong Kong should plan for sufficient infrastructure provision while consider shifting some industries to other GBA cities.

Better utilization of some I&T land use in Hong Kong, including Cyberport, Science Park, and Lok Ma Chau Loop Area, could be taken in consideration. The offices in these areas could place more focus on boosting Hong Kong’s advantage industries. For R&D development, Hong Kong should seek for a clearer position in the industry.

Strengthening Hong Kong’s role in the GBA requires enhanced integration with the 9 PRD cities and better coordination between the 2 SARs. Nevertheless, Hong Kong might not be able to play a leading role in every industry, neither does other cities. So Hong Kong and other GBA cities could find clearer work division and closer cooperation in development to improve the capacity of the GBA as a whole to strengthen global competitiveness.

With recognized advantage in education, Hong Kong could emphasize more on seeking expansion in mainland and attracting human capital.

For ELM development, it is not necessary to emphasize on finance service solely, as Central is still prioritized in finance development. More innovative industries in light of Macao and Zhuhai’s development could be placed in the ELM. The development also requires more strategic incentives for attracting enterprises. ELM should also plays a complementary role in supporting the financial growth in Central and Kowloon East.

Port development in the GBA calls for complementation, cooperation and work division between existing infrastructure in different cities. Some current constrains of ports in Hong Kong includes limited multimodal transhipment and lacking and unclear government agenda of land provision for sea logistics.
Logistics in Hong Kong also requires refined supply chain from goods sources to local infrastructure and facilities. Government management on logistics is also considered fragmented and needs to reinforce coordination function. For future development in R&D, some PRD cities revealed interest in accelerating commercialization of products invented. Hong Kong remains its major advantage in academia and research but lacks local production force. Thus, Hong Kong may consider closer cooperation with Shenzhen, which serves as an experimental field for sample production and application. Taipo for example may release more land for R&D development. Zhuhai and Zhongshan may share relatively different advantages in R&D development compared with Shenzhen, and Hong Kong could make better use of the growing forces, including capital and technical support, in these cities.