Final Report
Strategic Planning for Employment-related Land Uses & Strategic Transport Network in HK
After the Opening of the Hong Kong-Zhuhai-Macao Bridge
Executive Summary

I. Project Description

(See Chapter 1) In the era of intense global competition and challenges, cities can no longer isolate themselves. Supported by infrastructure linkage, cities are connected and integrated to create synergy and agglomeration effect, leveraging on the competitive advantages of each other. The development of Greater Bay Area (GBA) aims at unleashing the potential of the region, through cross-boundary infrastructure. Hong Kong-Zhuhai-Macao Bridge is one the strategic transport network for completing the loop of the whole GBA. It will connect Hong Kong with Western Pearl River Delta, forming the one-hour living circle to foster regional social and economic integration. In view of regional development, Hong Kong is also eagerly developing different STN (both cross-boundary and local) and supplying land to expand the economic capacity of various industries. 2030+ is the visionary strategic plan in which sustainable development in economic, social and environmental aspects is highlighted. One of the key challenges it addresses is job-housing balance to ensure a balanced development.

To further enrich 2030+ and promptly respond to the opening of HZMB, a 3-month study is conducted (“The Study”). The Study aims to:

“Achieve sustainable growth of Hong Kong through appropriate strategic planning and policies for employment-related land use (ERLU) and strategic transport network (STN), which are designed to ride on the opportunities and overcome challenges associated with Hong Kong-Zhuhai-Macao Bridge (HZMB)”

The Study is divided into three stages, namely inception study, sectoral study and recommendations. It starts with a baseline study on literature, international case and Hong Kong study to understand the interaction between strategic infrastructure and cities. A broad view about the spatial and economic development of Hong Kong is gained. Sectoral study helps identify the key development trend of Zhuhai, Zhongshan and Macao which might provide room of further cooperation with Hong Kong via HZMB, Challenges under regional competition are also spotted. Implications of HZMB to the key industries, and aspirations of stakeholders in private and public sectors on ERLU and STN are investigated. Generally, results of Sectoral Study serve as the input of recommendations. The last part is recommendations on vision, strategic plan and policy on ERLU and STN to help Hong Kong leverage on the opportunities of HZMB and overcome challenges. Challenges of 2030+ are also addressed. Policy implication to the government, private sector and the community is covered.

The highlights of each stage are summarized in the following sections.

II. Inception Study

(See Chapter 2-3)The first stage of the study confirms the impact of strategic transport on city
interaction and formation of city regions. Literature and international case study (Chapter 2) reveal that STN might increase intercity flow of people, capital and goods, stimulating growths of certain industries. It might also cause the spillover effect. Government policy support is recognized as one of the key facilitators of industry growth on top of STN development. The review of current situations in Hong Kong (Chapter 3) in policy (local and regional), spatial planning and cross-boundary infrastructure provides insights on general development trend, and more importantly the scope the Study. 5 key industries, namely logistics, tourism, financial services, professional services and high-technology industries are selected.

III. Sectoral Study

Zhongshan, Zhuhai and Macao

(See Chapter 4) Sectoral Study brings forth insights on development of three WPRD cities (Zhuhai, Macao and Zhongshan) with closer linkage with HZMB, and also the implications of HZMB to 5 key industries. UP Studio focuses on Zhongshan. The examination on development strategy and spatial planning of Zhongshan shows that economic modernization (with emphasis on advanced manufacturing) would generate demands for R & D and logistics services of high-value added products, especially when HZMB might provide benefits of cost and time reduction. Spatial planning of the city preserves ecology and Lingnan cultural assets, making Zhongshan a potential site of multi-tourism travelling after the opening of HZMB. There could be further cooperation between Zhongshan and Hong Kong in tourism, logistics, and high-tech industries.

The Sectoral Study conducted other subconsultants also indicated the possibility of further cooperation with the opening of HZMB. For Zhuhai (STAR Planning), the provision of incubator space in Hengqin New District might benefit high-tech industry in Hong Kong to set up front-line offices for mainland market with a lower rent. Development of cross-border e-commerce there might help expand market of e-commerce logistics in Hong Kong. For Macao (by DaDa’s Consulting), development of cultural tourism and MICE space could strengthen the destination attractiveness, facilitating the promotion of multi-destination travelling in Hong Kong with HZMB.

While HZMB and regional development might provide opportunities of further cooperation, Hong Kong faces challenges as the capital cities in EPRD, Shenzhen and Guangzhou are growing rapidly. The geographical proximity of northern parts of WPRD cities, like northern Zhongshan might favor regional cooperation with EPRF, especially with the construction of Shen Zhong Link.

Implications of HZMB to 5 key industries

(See Chapter 6) HZMB might provide benefits to industries, including but not limit to cost and time reduction and branding effects. The following are opportunities HZMB might bring to the 5 key industries due to the potential benefits offered:

- Logistics industry might extend market to WPRD, handing more high-value, time-sensitive air cargoes, and cross-border e-commerce commodities
Tourism industry might attract more tourists by promoting multi-destination travelling, and expand the market of MICE tourists

Professional and financial services industry might expand client base to the growing enterprises at WPRD, with more companies coming from WPRD coming to Hong Kong for IPO or headquarters establishment

High-tech industry might expand market to WPRD, by offering R & D services with the presence of talents under the current well-designed education system.

It is found that presence of competition, cost pressure and uncertainty about the arrangement of HZMB (e.g. opening hours, truck quota) are the common challenges for all industries.

(See Chapter 7) Interviews with stakeholders of the key industries reveal the aspirations and needs with the opening of HZMB on ERLU and STN. Below is a summary.

- Increase in modern warehousing area, especially at Lantau near the airport, is needed to efficiently capture the cargo transported through HZMB. Expansion on ancillary facilities is expected too
- More recreational facilities, retail space and MICE space are needed at Lantau for tourism industry. New tourist attraction with local character is also needed to ensure long-term competitiveness of the industry
- More Grade A office is needed for professional services and financial services industries to cater the potential expansion of business interaction with WPRD. Location in traditional CBD is preferred
- Expansion of start-up and co-working space for high-tech industries with lower rent and nice working environment

IV. Recommendations on Strategic Plan and Policy

In regard to the regional development trend, potential impact of HZMB and stakeholders’ aspirations on ERLU and STN, there is a need for Hong Kong to strengthen its economic capacity to embrace both opportunities and challenges. The vision is:

‘To advance Hong Kong as a competitive, innovative and sustainable city as the international gateway of the Greater Bay Area, strengthening the status as the Asia’s World City’

The strategic plan aims at expanding the capacity of the key industries in Hong Kong to enhance the city’s economic viability, by leveraging on HZMB and other cross-boundary STN. Another key aim is to facilitate Hong Kong to move up the value chain, and enhance long-term sustainable development in the city. A set of Conceptual Spatial Framework is proposed, with

- 4 Strategic Economic Zones with specialized economic functions to enhance economic
development driven by cross-boundary STN

- 4 Strategic Industry Belts and Hubs for logistics, tourism, professional services and financial services, and high-technology industries. The SIBHs cover both existing ERLU clusters and new sites.

- Develop new strategic transport infrastructures (STIs) and upgrade existing STN to:
  
  i) Strengthen inter-regional connectivity within Hong Kong
  
  ii) Reinforce intra-regional transport in SEZs

Suggestions on policy support for each policy are provided to generate a comprehensive strategic planning. The plan and policy are summarized into a roadmap indicating the priority of actions the government could consider.

In conclusion, the proposed strategic plan is intended to strengthen the long-term growth capacity of Hong Kong to seize opportunities of the upcoming HZMB and regional development trend, and overcome challenges.
# Table of Content

1. Introduction ................................................................................................................................. 8
2. Background ................................................................................................................................... 12
3. Project Goals and Objectives ....................................................................................................... 12
4. Project Framework ....................................................................................................................... 13
5. Terminology ................................................................................................................................. 13
6. Report structure ............................................................................................................................ 15
2. Literature review and International Case Studies ......................................................................... 16
3. Literature Review .......................................................................................................................... 16
4. International Case Studies .......................................................................................................... 18
5. Lesson for Hong Kong ................................................................................................................. 20
3. Review of Hong Kong regional development ............................................................................... 22
4. Planning & development of cross boundary infrastructure ............................................................ 22
5. Planning & development of ERLU ............................................................................................... 23
6. Regional Integration with PRD ..................................................................................................... 24
7. Summary ....................................................................................................................................... 25
4. Summary of GBA Study ............................................................................................................... 26
5. Results and Implications of HZMB Transportation Cost Analysis ........................................... 26
6. Economic development and spatial planning of Macao, Zhuhai, and Zhongshan ................. 29
7. Other GBA cities in WPRD .......................................................................................................... 35
8. Cities in EPRD ............................................................................................................................. 36
9. Summary ....................................................................................................................................... 39
5. SWOT Analysis of Hong Kong .................................................................................................... 41
6. Introduction .................................................................................................................................... 41
5.2. Strengths .......................................................................................................................... 41
5.3. Weaknesses ...................................................................................................................... 42
5.4. Opportunities .................................................................................................................... 42
5.5. Threats ............................................................................................................................. 43
6. Implication of HZMB to Hong Kong Industries ................................................................. 44
6.1. Logistics Industry ............................................................................................................. 44
6.2. Tourism Industry ............................................................................................................. 47
6.3. Finance and Professional Service Industry ................................................................. 49
6.4. Hi-tech Industry ............................................................................................................. 51
7. ERLU and STN Aspirations of Industries in Response to the Opening of HZMB .......... 53
7.1. Logistics Industry ............................................................................................................. 53
7.2. Tourism ........................................................................................................................... 54
7.3. Financial and Professional Services .............................................................................. 55
7.4. Hi-tech Industry ............................................................................................................. 56
7.5. Summary ......................................................................................................................... 57
8. Vision and Overarching Planning Goals ........................................................................... 59
8.1. Vision ............................................................................................................................... 59
8.2. Overarching planning goals .......................................................................................... 60
9. HK2030+: The Framework of plan proposal ................................................................. 61
9.1. Mutual goals with HK2030+ .......................................................................................... 61
9.2. Anticipated for the expected - planning for GBA era ..................................................... 62
10. Planning Approach and Guiding Principles .................................................................. 63
10.1. Planning Approach ......................................................................................................... 63
10.2. Guiding principles ......................................................................................................... 64
11. Conceptual Spatial Framework ........................................................................................................... 65
11.2. Strategic Economic Zones (SEZ) ...................................................................................................... 65
11.3. Strategic Industry Belt & Hub (SIBH) ............................................................................................... 67
11.4. Strategic Transport Network ........................................................................................................... 69
12. Recommendations on ERLU and STN for the Key Industries ............................................................. 71
12.1. Logistics Industry ............................................................................................................................ 71
12.2. Tourism Industry ............................................................................................................................. 84
12.3. Financial and Professional Services Industry ................................................................................... 94
12.4. Hi-tech Industry ............................................................................................................................. 108
13. Conceptual for Strategic Transportation Network ............................................................................... 117
13.1. Background ...................................................................................................................................... 117
13.2. Objectives and Strategies ............................................................................................................... 117
13.3. Proposals in Detail ............................................................................................................................ 117
14. Roadmap ............................................................................................................................................ 123
14.1. Overview ........................................................................................................................................ 123
14.2. Actions to be completed in the short-to-medium term ................................................................. 123
14.3. Actions to be completed in the long term ....................................................................................... 126
15. Conclusion ....................................................................................................................................... 128
List of Figures

Figure 1.1 Project Framework

Figure 2.1 Feedback loop between STI and ERLU

Figure 2.2 Relationship between STN and ERLU based on transport cost

Figure 2.3 Consolidated theoretical relationships between STI and ERLU

Figure 4.1 Expense reduction ratio for tourism industry

Figure 4.2 Expense reduction ratio for logistics industry

Figure 4.3 Expense reduction ratio for high-tech and professional services

Figure 4.4 Time reduction ratio for tourism industry

Figure 4.5 Time reduction ratio for logistics industry

Figure 4.6 Time reduction ratio for high-tech and professional services industry

Figure 4.7 Macao and its four collaborating cities on the west bank of Pearl River

Figure 4.8 Major functional zones and key industrial parks highlighted in the Zhuhai City Masterplan

Figure 4.9. The five town clusters outlined in the Zhongshan Masterplan (2010-2020)

Figure 6.1 External merchandise trade statistics by mode of transport, 2012, 2014 and 2016

Figure 6.2 Visitor Arrival Statistics in Hong Kong, 2011-2016

Figure 8.1 Definition of the key terms of vision

Figure 9.1 Three building blocks of HK2030+

Figure 9.2 Illustration of jobs housing balance

Figure 11.1 Proposed Conceptual Spatial Framework
Figure 11.2 Supply of Economic Land at 2030+

Figure 11.3 Proposed STN

Figure 12.1 Regional development trend of logistics

Figure 12.2 Summary of Implications of HZMB to Logistics Industry

Figure 12.3 Overview of Logistics Belt

Figure 12.4 Detailed Area 1: New North Lantau Cargo Gateway

Figure 12.5 Detailed Area 2: Ancillary Logistics Area at Kwai Ching

Figure 12.6 Detailed Area 3: Modern Logistics Hub at Tuen Mun

Figure 12.7 Regional development trend of tourism industry

Figure 12.8 Summary of Implications of HZMB to Logistics Industry

Figure 12.9 Overview of Tourist Hubs

Figure 12.10 Plan for Bridgehead Economic Area

Figure 12.11 Plan for Metropolitan Core Area

Figure 12.12 Plan for Consolidated Sai Kung Town Area

Figure 12.13 Regional development trend of Financial & Professional Services Industry

Figure 12.14 Overview of Finance & Professional Services Belt

Figure 12.15 Plan for Consolidated CBD1 Development

Figure 12.16 Plan for Consolidated CBD2 Development
Figure 12.17  Plan for Consolidated CBD3 Development

Figure 12.18 Plan for Hung Shui Kiu NDA

Figure 12.19 Plan for Kwu Tung North NDA

Figure 12.20 Regional development trend of hi-tech industry

Figure 12.21 Summary of Implications of HZMB to Hi-tech Industry

Figure 12.22 Overview of Hi-tech Belts

Figure 13.1 Conceptual for Strategic Transportation Network

List of Tables
Table 2.1. Summary of the background of the three international cases
Table 2.2. Key conclusion and implications of literature review and international cases studies
Table 5.1 Summary of opportunities and challenges upon opening of HZMB, and under GBA development trend and spatial strategy
Table 12.1 No. of Vehicles with Valid Licences and No. of Parking Spaces in 2016

List of Appendices
Appendix 4.1 Current existing cross boundary infrastructure of Hong Kong (up to Feb 2018)
Appendix 4.2 Cross boundary infrastructure to commence into service in 2018
Appendix 4.3 Route of HZMB and its connection to existing highways
Appendix 4.4 The Conceptual Spatial Framework proposed in Hong Kong 2030+
Appendix 4.5 Major planned/ committed projects and potential solution spaces for economic land
Appendix 4.6 Supply and demand assessment on market-driven employment-related land uses
Appendix 4.7 Examples of policy initiatives under economic integration
Appendix 12.1 Distribution of modern warehouses in Q1/2018

**List of Abbreviations**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hong Kong Boundary Crossing Facilities</td>
<td>HKBCF</td>
</tr>
<tr>
<td>Central business district</td>
<td>CBD</td>
</tr>
<tr>
<td>Employment-related land uses</td>
<td>ERLU</td>
</tr>
<tr>
<td>Financial technology</td>
<td>Fintech</td>
</tr>
<tr>
<td>Foreign direct investment</td>
<td>FDI</td>
</tr>
<tr>
<td>Guangdong-Hong Kong-Macao Greater Bay Area</td>
<td>GBA</td>
</tr>
<tr>
<td>Gross domestic product</td>
<td>GDP</td>
</tr>
<tr>
<td>Hong Kong-Zhuhai-Macao Bridge</td>
<td>HZMB</td>
</tr>
<tr>
<td>Initial public offerings</td>
<td>IPO</td>
</tr>
<tr>
<td>Pearl River Delta</td>
<td>PRD</td>
</tr>
<tr>
<td>Shenzhen - Zhongshan Link</td>
<td>Shenzhen Link</td>
</tr>
<tr>
<td>Small to Medium-sized Enterprise</td>
<td>SME</td>
</tr>
<tr>
<td>Special Administrative Region</td>
<td>SAR</td>
</tr>
<tr>
<td>Strategic transport network</td>
<td>STN</td>
</tr>
<tr>
<td>Western Pearl River Delta</td>
<td>WPRD</td>
</tr>
<tr>
<td>Strategic Economic Zones</td>
<td>SEZ</td>
</tr>
<tr>
<td>Strategic Industry Belt &amp; Hub</td>
<td>SIBH</td>
</tr>
</tbody>
</table>
1. Introduction

1.1. Background

1.1.1. The concept of city region has been popularized since the 1990s and becoming a trend of development under globalization. With strategic transportation networks (STN) as physical linkage, cities among a region are able to have strong economic interaction and mutual growth. In China, the Guangdong-Hong Kong-Macao Greater Bay Area (GBA) was first announced in 12th National People’s Congress (Constitutional and Mainland Affairs Bureau, 2017). Cities in GBA will be linked by various inter-city infrastructure, including the Hong Kong-Zhuhai-Macao Bridge (HZMB). The emergence of GBA marks a new era of regional cooperation in China, while HZMB completes the transportation loop in GBA and compresses travel cost and time between Hong Kong and the rest of GBA.

1.1.2. The introduction of the cross-boundary strategic transport network is expected to have strong implications to strategic planning in Hong Kong. A forward-looking strategic plan responding to these implications can help Hong Kong to leverage on the opportunities brought by HZMB, and at the same time contribute to the GBA development as one of the most important nodes in the area. In the meantime, one of the main issues of local strategic planning is addressing the employment-residence imbalance, as pinpointed in Hong Kong 2030+, the latest strategic planning document of Hong Kong (Planning Department, 2016a). Given the above factors, there is a need to further adjust the strategic planning of Hong Kong to ensure sustainable growth. The strategic planning presented in this report includes changes on employment-related land use (ERLU) and STN to seize opportunities generated by HZMB under the framework of Hong Kong 2030+, with reference to opinions from industry stakeholders.

1.2. Project Goals and Objectives

1.2.1. To strengthen the growth capacity of Hong Kong in the context of regional development, the future strategic planning shall enable local industries and Hong Kong to leverage on opportunities, while addressing challenges. The Project Team commences a study to contribute to the local strategic planning with the following goal:

1.2.2. “To achieve sustainable growth of Hong Kong through appropriate strategic planning and policies for employment-related land use (ERLU) and strategic transport network (STN), which are designed to ride on the opportunities and overcome challenges associated with Hong Kong- Zhuhai-Macao Bridge (HZMB)”

1.2.3. A series of project objectives have been formulated to achieve the stated goal:

   i. Provide an overview of expected dynamics of GBA and Hong Kong, with reference to literature, international experiences and relevant documents
ii. Evaluate the business needs and attributes of key industries in Hong Kong to understand
the potential impact and implications of HZMB in the regional context

iii. Evaluate the concerns, needs and expectations of the private and relevant stakeholders
regarding the development of ERLU and STN in Hong Kong

iv. Examine planning strategies and policies of proximate cities (Macao, Zhuhai and
Zhongshan), and assess the implications on ERLU and STN in Hong Kong

v. Assess the possible regional synergy and economic development of Hong Kong with
reference to local and regional infrastructure and policy plans

vi. Recommend vision and plans of future ERLU and STN, together with a comprehensive
spatial planning strategy and policy to enrich HK2030+

vii. Identify policy implications on the government, private sector and other stakeholders based
on the stated recommendations

1.3. Project Framework

1.3.1. The project is divided into 3 stages, as shown in Figure 1.1.

Figure 1.1 Project Framework

1.3.2. The three stages, namely Baseline Study, Sectoral Study and Analysis &
Recommendations fulfill part of the project objectives. The following chapters in Part I and
Part II in this report summarizes the analysis results from stages 1 and 2, while the latter
part (Part III Recommendations) covers analysis methodology and results in stage 3.

1.4. Terminology

1.4.1. The following is a list of terminology to be discussed in the project. Definitions are provided
for better understanding.

**Guangdong-Hong Kong-Macao Greater Bay Area (GBA)**

1.4.2. It includes 9 cities in the Pearl River Delta (PRD) in Guangdong Province -- Guangzhou, Shenzhen, Foshan, Zhuhai, Jiangmen, Zhongshan, Dongguan, Guizhou and Zhaoqing -- and 2 Special Administrative Regions -- Hong Kong and Macao (Figure 1.2). The term was officially announced in 12th National People's Congress (HKSAR, 2017), as the theme of policy agenda of regional development. It is commonly referred to as Greater Bay Area (GBA) in short.

**Employment-related land use (ERLU)**

1.4.3. According to of Planning Department (2002) and GHK (Hong Kong) Limited (2001), ERLU refers to the land allocated to serve the spatial requirements of different economic activities, which primarily include industrial, office and commercial or business activities. Commercial or business activities include but not limited to retail shop, bank and service trade. In other words, non-economic and employment uses, for example residential land use and open space, are excluded in this land use typology.

**Strategic transport network (STN)**

1.4.4. It refers to the long-term planning of transport networks of territorial importance to support the growth of the city. In the case of Hong Kong, STN refers to highway and railway networks (Planning Department, 2001). The utilisation of the capacity of the transport network and interactions between transport network and land use are two major considerations behind STN under the HK2030+ framework (Planning Department, 2016).

**City region**

1.4.5. It refers to the urban core(s) and its (or their) hinterland which are linked by functional ties (Rodriguez-Pose, 2008). In other words, a city region can be a polycentric urban entity that spans across jurisdictions. It is characterised by the interactions within it, for example flow of goods, capital and labour, the complementary nature between the core(s) and the hinterland, and sometimes policy arrangements (Parr, 2010). Based on the above conceptions, the Greater Bay Area can be considered as a city region.

**Key Industries**

1.4.6. They refer to the industries that this study will look into details in Stages 2 and 3. 4 key industries are included in this study, namely logistics, tourism, financial and professional services, and high-tech industry.
Transport Cost

1.4.7. Transport cost affects a user’s choice of transport mode or transport infrastructure. It refers to both monetary and non-monetary costs incurred to move passengers or freight from one place to another (Grosso, 2011). The actual price of using the transport infrastructure (for example toll fee) and time cost are some of the examples.

Spillover effect

1.4.8. It refers to the positive and negative externalities (indirect effects) of an activity within and beyond its place of origin. Such effects can be tangible, for example economic growth, and intangible, for example transfer of knowledge and technology (Borensztein et al., 1998). For transport infrastructure, its effects extend beyond the infrastructure itself; it can generate positive externalities such as regional economic growth owing to improved network accessibility (Yu et al., 2013).

1.5. Report structure

1.5.1. The Final Report consists of three sections: Background, Final Analysis and Recommendations on Strategic Planning and Policy, followed by the conclusion.

1.5.2. In Background, insights on literature review and international case study, together with their implications to Hong Kong are included. It is followed by a review of cross-boundary infrastructure, regional and local policy and spatial planning in Hong Kong in Chapter 3.

1.5.3. Final Analysis consists of an integrated review on the spatial and strategic planning of Zhuhai, Macao, and Zhongshan, with reference to working papers of other sub-consultants (Chapter 4). To generate a comprehensive analysis, other WPRD cities and EPRD cities are also examined. Opportunities of regional development with the opening of HZMB and challenges to the key industries of Hong Kong are concluded to provide insights to the plan proposal in the later stage. It will continue with a Hong Kong SWOT analysis (Chapter 5), investigation of implications of HZMB to the key industries (Chapter 6) and ERLU and STN aspirations by industry stakeholders (Chapter 7). The detailed investigation will contribute to the recommendations in Section III.

1.5.4. Section III will begin with vision and overarching planning goals (Chapter 8). Since the proposed strategic plan would enrich the Hong Kong 2030+, a chapter (Chapter 9) would follow to elaborate on how the proposal relates to Hong Kong 2030+. Chapter 10 would provide a clarification on planning approach and guiding principles, as the basis of the proposed strategic planning. The conceptual spatial framework will be revealed on Chapter 11. Chapter 12 and 13 would provide detailed elaboration on the proposed ERLU, policy support and policy implications for each key industry and the overall STN planning to facilitate economic growth. A roadmap will be proposed to suggest the priority guiding the future development (Chapter 14). The report will end with a conclusion indicating future direction.
2. Literature review and International Case Studies

2.1. Literature Review

Polycentric City Regions

2.1.1. Polycentric city regions are a subset of city regions. It is distinguishable from monocentric city regions since it has multiple, separated distinct city cores, forming a network-like region. The concept of seeing these kinds of region as an entity appeared as early as 1910s but was popularized in the 2000s. Both political and social reasons contribute to the emergence of modern polycentric city regions, for example, governments start taking up facilitator roles, market liberalization, development of transport infrastructures, urbanization, and globalization (Scott, 2001; Rodríguez-Pose, 2008). Schmitt et al. (2015) provide four analytical levels of a region from shallow to deep:

1. Morphological: Spatial arrangement, accessibility, proximity
2. Functional-relational: Specialization, flow, interaction, commuting
3. Process & Dynamics: Development, economic growth, interaction of industries
4. Integration and Planning: Regional cooperation, policies, urban rescaling

2.1.2. A well-organized polycentric city region can bring economic benefits to the cities and contribute to the national growth. With multiple cities, it provides choices for a favourable setting for development to avoid externalities to and locational disadvantages in a city. Creation of business chain between the cores also improves operating efficiency of firms (Parr, 2003). Parr (2003) also points out several prerequisites to make a city region successful. Without transport interconnectivity, individual quality and specialization of each city, as well as regional coordination, development would be hindered.

Strategic Transport Infrastructure (STI) and Economic development in city regions

2.1.3. Transport system is the main driving force of the development in city regions. A comprehensive strategic transport network (STN) underlie the basic medium of inter-city cooperation, while that increases accessibility of cities, reduces cost of intercity economic operations, and provides more opportunities for interaction (Switzer et al., 2013).

2.1.4. It is widely agreed that new STI can have a very strong positive impact on economic growth in the region (e.g. Ahlfedt & Feddersen, 2010; Zhang, 2013), which does not only benefit areas along the route, but also brings about significant spatial spillover effects to nearby hinterlands (Zhang, 2013; Condeço-Melhorado et al., 2014). Condeço-Melhorado et al.
(2014, p.9) argue that such effect is contextual, where sometimes "some nearby locations obtain only a marginal benefit because they still have other alternative roads that are more useful for reaching important neighbouring cities". Therefore, when analysing the impact of new STI, the network should be understood as a whole instead of a single connection.

Transport-land use interaction as a spatial-economic process

2.1.5. Bertolini (2012) suggests a feedback loop framework to explain the relationship between STN and employment-related land uses (ERLU) (Figure 2.1). As new STI increases the accessibility of certain place, it changes the locational advantages of industries and induces land use changes in the place because of relocation and emergence of new firms. Rietveld (1994) suggests that with reduced as transport cost because of the introduction of new STI, productivity of firms rises, leading to increasing business volume, creates an agglomeration economy and increases the land needed for the boom (Figure 2.2). Both models are open systems that external factors such as government policies, economic structures, and demography may act catalysts or burdens of the interaction. Since the cost and productivity of firms depend heavily on their choices and business nature, as well as the presence of external factors, it can be regarded as a spatial-economic process (Switzer et al., 2013). Therefore, it is important to understand the dynamics, process and interactions behind stakeholders through empirical studies to draw conclusions.

2.1.6. Based on the above theoretical concepts, the relationship between variables of STI and ERLU can be synergized as a conceptual framework (Figure 2.3). This framework sets a general research direction of this study. The implications of literature review to the study will be further discussed in section 2.3.

Figure 2.1 Feedback loop between STN and ERLU
Modified from Bertolini (2012)

Figure 2.2 Relationship between STI and ERLU based on transport cost
Modified from Rietveld (1994)
2.2. International Case Studies

2.2.1. International city-region cases regarding on their experiences and strategies in maximizing the synergy between STN and ERLU are reviewed. Studies cover three locations selected based on their sizes and degree of relevance, namely the Indonesia-Malaysia-Singapore Growth Triangle (IMS-GT), Rhine-Ruhr Metropolitan Region in Germany and San Francisco Bay Area in USA. Table 2.1 gives a summary of the backgrounds of the three international cases. The key takeaways of these experience to Hong Kong’s spatial development will be discussed in section 2.3.

Table 2.1. Summary of the background of the three international cases

<table>
<thead>
<tr>
<th>Region</th>
<th>IMS-GT</th>
<th>SF Bay Area</th>
<th>Rhine-Ruhr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area</td>
<td>6,891 sq. km</td>
<td>18,040 sq. km</td>
<td>7,110 sq. km</td>
</tr>
<tr>
<td>Population</td>
<td>8.7 million</td>
<td>7.15 million</td>
<td>9.96 million</td>
</tr>
<tr>
<td>No. of Cities/Counties/Countries</td>
<td>3 countries</td>
<td>9 counties</td>
<td>20 cities</td>
</tr>
</tbody>
</table>

Indonesia-Malaysia-Singapore Growth Triangle (IMS-GT)

2.2.2. **Strong inter-government cooperation opens up resources and opportunities:** The IMS-GT is a collaborative initiative since the late 1980s, among Malaysia (Johor), Singapore, and Indonesia (Riau Islands) that leverages the comparative advantages of the 3 countries to reshape the region into a more investor-friendly and attractive environment. The regional development connects natural resources, low land price and cheap labour in Riau Islands & Johor to Singapore’s physical infrastructure, venture capital, and professionals, which opened up possibilities and created a synergy in the Triangle.

2.2.3. **STN enlarges hinterland thus create choices for industrial relocation:** As Singapore positioned itself as the centre of the region, a lot of infrastructures had been upgraded and built for the strategic economic development in the less developed areas to strengthen connection to Singapore. These newly developed STN enabled relocation of the old industries in Singapore to areas with cheaper land and labour, thus fostering development of new industries (e.g. Hi-tech, finance) in the city core.

2.2.4. **STN foster flow of capital and economic growth:** Influx of capital and economic activities brought by STN also created opportunities for less developed regions in Indonesia, which led to industrialization, boom on tourism and GDP growth. Such industrial relocation process impacted on ERLU, such as Bintan Island developed as a tourist resort, Singapore’s industrial land redeveloped into offices etc.

San Francisco Bay Area

2.2.5. **Introduction of STN leads to change of location attributes thus change competition dynamics:** The San Francisco Bay Area has an outstanding economic development, with regional GDP growth outpacing the rest of the country (Bay Area Council Economic Institute, 2016). The introduction of new STI near Oakland impacted heavily on the competition dynamics of the two ports, eventually leading to ERLU changes. The development of Central Pacific Railroad and latter highway developments ever since around Oakland Port created locational advantage over San Francisco, and the opening of Bay Bridge promoted truck usage which port in San Francisco could not accommodate due to technical constraints. (Pier 1, 2017; Rosenstein, 2000; Waterfront Action, 2017).

2.2.6. **Industries respond to comparative advantages and disadvantages brought by STN:** STN added comparative advantages in the maritime industry to the Port of Oakland by shaping it as a highly accessible location. More ERLU thus is allocated for the growing logistics industry in Oakland. On the other hand, competitions facilitated industry in restructuring and the emergence of new industries in San Francisco such as tourism, inducing the needs for ERLU changes (Spur, 1999).

Rhine-Ruhr Metropolitan Region

2.2.7. **STN not only boost economy at bridgehead, but also spillover to outskirts:** Rhine-
Ruhr is a densely populated region therefore there are several STIs linking the region, making the region to have the highest regional accessibility in Europe (Spiekermann, 2005). The continuous development of STN contributes to high job and market accessibility, and promotes economic growth of the region (Reggiani et al., 2011). The spillover effect brought by highways benefits not only the big cities, but outskirts too (Spiekermann, 2005). This facilitates the emergence of the new, smaller cores. While different industries react differently to the opportunities (e.g. tertiary industry tends to agglomerate in big cities, hi-tech industry spread to outskirts) (Münter & Volgmann, 2014), The large and small cores are able to make use of the network for material and human transportation.

2.2.8. **Lack of cooperation and industrial specialization among cities hinder regional development:** However, despite the presence of truck linkage between main cities, the overlapping specialization among them as tertiary hub create competition, which limit the development of a complete business chain across the region (Meijers, 2007). Moreover, the region lacks a regional-scale strategic development plan, and not much effort are made to explicitly position each individual city for more cooperation opportunity (Knapp et al.).

2.3. **Lesson for Hong Kong**

2.3.1. Base on the literature review and international case studies, several key conclusions regarding on the relationship among STN, ERLU and other factors are drawn. These conclusions can be applied to the Hong Kong context, serving as lessons to learn. The implications also serve as directions and topics to be considered in the study.

2.3.2. The key conclusions and implications for the study are summarized as below in table 2.2:
<table>
<thead>
<tr>
<th>Key Conclusions</th>
<th>Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low transport cost and compatible business modes foster interaction between industries, thus boosting economic activities between cities.</td>
<td>Business nature and needs of, as well as predicted usage of the bridge by different key industries have to be surveyed.</td>
</tr>
<tr>
<td>STN development increases potential of economic interaction and capital flow. New links between cities opens opportunities for new interactions to take place.</td>
<td>Necessity to understand the dynamics of GBA and identify potential of interactions between industries in Hong Kong and rest of the GBA cities.</td>
</tr>
<tr>
<td>STN development have spillover effect and enlarges hinterland of industries, making new market and resources available. This might lead to industry relocation &amp; emergence of new industries.</td>
<td>Necessity to understand the development trend of GBA, and how Hong Kong’s industry can be benefit from / react to the larger “catchment area” after the opening of HZMB.</td>
</tr>
<tr>
<td>Regional cooperation among cities creates interdependency and foster interaction, while lack of coordination lead to competition and hinder development.</td>
<td>Strategy should be suggested to reinforce Hong Kong’s important position in the GBA.</td>
</tr>
<tr>
<td>Strategic planning of the city government contributes to business mode change through city positioning and adjusting industrial specialization, which can create synergy or to overcome competition.</td>
<td>Consideration should be made to propose city policy tactics on key industries, in order to maximize synergy and overcome challenges brought by opening of HZMB.</td>
</tr>
<tr>
<td>Thriving economic activities in both cities create agglomeration economy in long term, which generate land demand, therefore the government should provide ERLU to meet the demand.</td>
<td>Necessity to understand needs and evaluate potential growth for each key industry, then propose ERLU and new STN to fulfil the aspiration.</td>
</tr>
</tbody>
</table>
3. Review of Hong Kong regional development

3.1. Planning & development of cross boundary infrastructure

Overview

3.1.1. Hong Kong has always been characterized by its external economy, in which cross-boundary infrastructures, as part of the STN, play an important role in facilitating economic and social integration. Currently, there are 14 control points which allow passenger and/or cargo to travel across Hong Kong’s boundary. And they are listed in Appendix 4.1 accordingly to their transportation mode (i.e. land, sea or air), with their passenger throughput and cargo throughput listed.

3.1.2. Recent trends in cross-boundary infrastructures of Hong Kong

Cargo flow

3.1.3. Mainland China, particularly cities of Greater PRD, has always been an important trading partner of Hong Kong. Through the extensive infrastructure network, Hong Kong has been closely connected with PRD in different dimensions. Such connection plays an essential role in supporting logistic services, one of the four pillar industries of Hong Kong’s economy. In the period of 2005 – 2016, Mainland China was the largest destination of re-exports and supplier of imports, accounting for 52.3% and 46.8% respectively (Census and Statistics Department, 2016).

Cross boundary travel

3.1.4. Meanwhile, tourism flow is another major cross-boundary activity using the infrastructure. The average number of daily cross boundary travel (between Hong Kong and mainland and between Hong Kong and Macao) reached 701,600 per day in 2015 (Planning Department, 2016b). A 13.8% growth since 2011 was recorded. Out of all the trips that ends in mainland, 68.9% ends in Shenzhen and up to 92.2% ends in PRD, indicating the close connection between Hong Kong and the GBA region (Planning Department, 2016b).

Future Cross-boundary Infrastructure Projects and Implications

3.1.5. Three new cross boundary infrastructures will be commencing into service in near future, namely Hong Kong – Zhuhai – Macau Bridge (HZMB), Express Rail Link (XRL) and Liantang/ Heung Yuen Wai Boundary Control Point (LT/HYW BCP), their capacity and expected commencement date are listed in appendix 4.3. The new projects are expected to further strengthen the STN of Hong Kong, allowing the city to cater grater traffic flow and thus cross-boundary activities.

3.1.6. HZMB, one of the major focuses of the study, provides Hong Kong’s first, GBA’s second
land-based connection to western bank of PRD. With HZMB, land-based travelling time from Hong Kong to most areas of Western PRD will be shortened to within 3-hour commuting radius (Highways Department, 2018). The route of HZMB and its connection to major highways is shown in Appendix 4.4.

3.1.7. Externally, economic and social cooperation with the western bank of PRD is greatly facilitated, thus strengthening Hong Kong's position as trade and logistics hub in the region (Highways Department, 2018). Internally it could buttress the development of Eastern Lantau Metropolis (ELM), a strategic development area with focus on professional services, high-end logistics, and tourism industries planned in Hong Kong 2030+. Details of ELM will be further illustrated.

3.2. Planning & development of ERLU

Strategies

3.2.1. Hong Kong is enhancing development capacity with the aim of sustaining economic growth and broadening the economic base. Policies and favorable conditions are intended to sustain the four-pillar industries and other emerging industries, and promote innovation, technology and collaboration. Yet, one of the biggest challenges is supplying adequate developable land and space to support economic activities (Planning Department, 2016a). A Conceptual Spatial Framework is provided in Appendix 4.5 for reference.

Major planned and committed projects and land demand

3.2.2. As mentioned in major planned and committed projects, there will be 3,600 ha for Grade A offices, general business projects, industries and special industries. Details can be referred to in Appendix 4.6.

3.2.3. The planned projects tend to cluster around the major infrastructure work, which is designed to boost performance of economic activities. In addition to the planned projects, other land space will also be provided to support the development and diversification of economy, including education of manpower for high-technology industries.

3.2.4. In general, it is predicted that future land use could support some industries/ economic activities like professional services, headquarters, startup companies, MICE, high-technology, logistics and trading, education and tourism.

3.2.5. Based on the current economic trend, it is estimated that a minimum of about 4,800 ha new land would be required by 2040. So, there will be shortfall of 1,200 ha, which is about four times of Kai Tak Development land area (Planning Department, 2016c). Moreover, it is stated that industrial related uses and commercial related uses are facing shortfall of 167 ha and 9 ha respectively by 2030. (Planning Department, 2016d). This situation is expected to continue. According to supply and demand assessment on market-driven employment-related land uses, the total estimated land requirement in CBD Grade A office, industries
and special industrial decreases from 201 ha by 2014 to 80 ha by 2041. But, there is a surplus in non-CBD and general business area due to redevelopment of industrial buildings.

**Strategic growth areas**

3.2.6. Strategic locations are arranged to achieve a balanced spatial distribution of jobs and housing, optimise the present and future infrastructural structure, and enhance environmental sustainability, cost effectiveness and economic diversification (Planning Department, 2016c). They are closely tied with the upcoming strategic infrastructure work.

3.2.7. East Lantau Metropolis (ELM) is planned to be CBD3 with 1,000 ha development area which has easy access to traditional CBD, Hong Kong International Airport, HZMB, Lantau and central water. It can serve as a potential solution for Grade A office demand with about 200,000 jobs opportunities. Provision of commercial floor space for smart, innovative and qualities premises is intended to create a financial and business-to-business (B2B) services hub tied with the airport and STN, serving the extended hinterland at Western PRD strongly. Hong Kong’s connector role in the region could be strengthened (Planning Department, 2016e).

3.2.8. New Territories North is close to new boundary crossing points and can facilitate better connection to Shenzhen east and eastern Guangdong. It is an ideal location of 720 ha for a new science park, industrial estate, specialized logistics facilities for regional supply chain and PRD, and space for professional services, producer services and testing and certification service providers which can produce 215,000 job opportunities. Due to historic values, the tourism industry can also be promoted (Planning Department, 2016f).

### Regional Integration with PRD

#### Prolonged history of integration

3.3.1. Hong Kong has long been a strong supporter of economic development in the PRD region. From 1979 to 2016, the utilized capital from Hong Kong amounted to over RMB $36 billion, accounting for 63.8% of Guangdong’s total (Hong Kong Trade Development Council, 2018). Leveraging on her comparative advantages in financial, logistics, and professional services and the competitive edge as a free market, Hong Kong has played an important role in the PRD by providing comprehensive services support to mainland enterprises and serving as a gateway connecting the mainland with global markets.

#### The establishment of GBA

3.3.2. In the 12th National People’s Congress, the establishment of Guangdong-Hong Kong-Macao Greater Bay Area (GBA) was announced. The mega city-region comprises 9 cities in the Pearl River Delta (PRD), namely Guangzhou, Shenzhen, Foshan, Zhuhai, Jiangmen, Zhongshan, Dongguan, Guizhou and Zhaoqing, together with 2 Special Administrative Regions, Hong Kong and Macao. In 2016, the GDP of the entire GBA contributed to 12.5%
of the GDP of China (Tung, 2017). The GDP of PRD alone had a year-on-year increase by an average of 8.5%, as compared with the national average of 6.7% (Statistics Bureau of Guangdong Province, 2017; National Bureau of Statistics of the People’s Republic of China, 2017). Based on the synergy created through further regional integration, it is expected that the economic potential of the GBA will continue to expand.

3.3.3. Although the Greater Bay Area Development Plan is yet to be released by the National Development and Reform Commission (NDRC), the 13th Five Year Plan formulated at both national and provincial level has outlined the future development of the region and the respective roles played by each city in the region. Through a regional division of labour, it is envisioned that GBA would become a globally competitive city region comparable to the San Francisco, New York and Tokyo Bay Areas. And based on the 13th Five Year Plan, the Framework Agreement on Deepening Guangdong-Hong Kong-Macao Cooperation in the Development of the Bay Area was concluded between NDRC, and the governments of Guangdong Province, Macao and Hong Kong in July 2017. The principles of cooperation, key cooperation areas, institutional arrangement are stipulated in the Framework Agreement.

3.3.4. As coordinated at the national level, Hong Kong will continue its role as an international financial, transportation and trade centre in the Greater Bay Area. This also indicates that the pillar industries of Hong Kong, which possess comparative advantages and have contributed to substantial economic development in the region, are indispensable in supporting Hong Kong and the Greater Bay Area. At the same time, through regional cooperation in innovation and technology, the high-technology industry of Hong Kong is expected to emerge as a key industry and aid the diversification of the Hong Kong economy.

3.4. Summary

3.4.1. Hong Kong has a long history of regional cooperation with the mainland. Hong Kong has been contributing into the economic boom of mainland, especially in PRD region. It involves capital investment, transfer of knowledge and exercising the comparative advantages Hong Kong industries. On the other hand, Hong Kong industries benefit from expanding their market into the mainland. The rapid transformation of Chinese economy, together with its solid momentum, has led this cooperation entering a new era. Further economic integration proposed by the GBA vision brought up in the 13th Five Year Plan, and the commencement of multiple cross boundary infrastructures, would inevitably inject new dynamics into GBA area. To better make use of the golden opportunities to attain sustainable economic growth, Hong Kong must be able to anticipate cooperation and/or competition, through planning ERLU in response to the needs of different industries.
4. Summary of GBA Study

4.1. Results and Implications of HZMB Transportation Cost Analysis

Methodology

4.1.1. Transportation cost analysis aims to draw spatial implications of the opening of HZMB, in terms of cost and time reduced traveling from Hong Kong to different places in the GBA. Based on the general assumption that reduced cost and time can increase accessibility of a place and eventually lead to more potential economic activity (Rietveld, 1994; Bertolini 2012; Switzer et al., 2013), understanding which places in GBA may be benefited from HZMB implies that opportunities or competitions may open up or be induced for Hong Kong’s key industries.

4.1.2. With reference to prior studies (e.g. Wu, 2015), a classic GIS-aided cost-distance analysis (de Smith, et al., 2015) was used to draw the results. Spatial data, including road network, land cover and elevation model of the Guangdong Province and Hong Kong were rasterized and reclassified to form the base surface map (LandsD, 2016). Fuzzy logic models were then constructed to assume the speed and cost of different modes to move across the surface corresponding to road type, elevation, slope and land cover. Multiple models were done since we assume each sectors may use different transport mode, leading to different cost and time reduced thus have different implications. A cost surface was then generated for each sector, indicating the places that enjoy increased accessibility after the opening of HZMB for light cars, trucks and public transports. Further analysis were conducted based on the results, by listing out the cities and districts enjoying increased accessibility and their corresponding pillar industries.

Implications of transportation cost analysis

*Increased accessibility to West RPD*

4.1.3. Form the analysis result, it is found that the accessibility to WPRD could be significantly increased. WPRD holds large hinterland and a large population, which could provide new markets for Hong Kong.

*Higher areal impact on freight traffic than light and public vehicles: Logistics industry may enjoy greater benefits*

4.1.4. From the transportation cost analysis, we could find that the influence of HZMB would be greater on freight traffic than light and public vehicles (Figure 4.1 & Figure 4.2) Both influence area and reduction ratio of freight traffic are higher than those of light and public vehicles. Thus, the logistics industry may enjoy more benefits after the opening of HZMB.

*Significant impacts on other WPRD cities*
4.1.5. It is also found that some other WPRD cities (except Zhongshan, Zhuhai and Macao) are heavily influenced by the HZMB, such as Jiangmen and Foshan. Thus, in the third stage of this study, Jiangmen and Foshan will also be taken into consideration.

Coastal area of WPRD enjoys more direct benefits after the opening of HZMB

4.1.6. The coastal area of WPRD enjoys more benefits after the opening of HZMB. The northern area such as Guangzhou, Shenzhen remains unchanged. This implies that the industries that are located at the coastal area of WPRD (e.g. tourism and logistics) may have more interactions with Hong Kong after the opening of HZMB.

Cost remain unchanged for northern Zhongshan

4.1.7. Southern Zhongshan would be influenced by the opening of HZMB, while insignificant impact is observed in northern Zhongshan as the Wugui Mountain acts as a geographical barrier and divides Zhongshan into two parts. Towns in southern Zhongshan (e.g. Banfu, Sanxiang, Shetan, Tanzhou) are likely to benefit from HZMB and have more interactions with Hong Kong.
Figure 4.3 Expense reduction ratio for high-tech and professional services

Figure 4.4 Time reduction ratio for tourism industry

Figure 4.5 Time reduction ratio for logistics industry

Figure 4.6 Time reduction ratio for high-tech and professional services industry
4.2. **Economic development and spatial planning of Macao, Zhuhai, and Zhongshan**

4.2.1. This section reviews the latest economic development policies and spatial planning strategies of the three WPRD cities proximate to HZMB, namely Macao, Zhuhai, and Zhongshan and draws implications on Hong Kong, including the opportunities and challenges presented to Hong Kong after the opening of HZMB.

**Macao**

4.2.2. After undergoing over 400 years of Portuguese rule, Macao was returned to China in 1999 and became a Special Administrative Region (SAR). In the era of Greater Bay Area development, the historical development of Macao is capitalised and the city is positioned to be a “world centre of tourism and leisure” and an “economic cooperation platform between the People’s Republic of China and countries of the Portuguese-speaking world” (Macao Chamber of Commerce, 2018).

**Economic policies**

4.2.3. Macao’s economy has long been highly dependent on the tertiary sector (92.2% of the GDP), with a focus on tourism and gaming industry. However, Macao is now facing the problem of homogenous economic structure which is highly susceptible external shocks. To ensure a more sustainable growth of the economy, the Macao government intends to promote economic and tourism diversification. For economic diversification, six leading non-gaming industries are identified, including retail, hotel, catering, manufacturing, construction and financial industry. To further strengthen the economic foundation of Macao, three main emerging industries are cultivated, namely convention and exhibition, traditional Chinese medicine and cultural and creative industry. In particular, the convention and exhibition sector has been expanding exponentially and there is a clear plan to increase venue space from 180,000m² in 2015 to about 210,000m² in 2020. For tourism diversification, as outlined in the Macao Tourism Industry Development Master Plan, cultural tourism and cuisine culture are to be promoted for Macao to become a “world centre of tourism and leisure”.

**Spatial planning**

4.2.4. Macao is a very small city in terms of land size, with land area of around 30.5 km². Due to land availability, Macao has chosen to cooperate with near Mainland cities, where massive land of relatively attractive price is available, to develop its emerging industries. The areas facilitating regional cooperation include Hengqin in Zhuhai, Cuiheng New District in Zhongshan, Daguanghaiwan in Jiangmen and Nansha in Guangzhou (fig. 4.7). Apart from seeking land outside its jurisdiction, Macao also forms land through reclamation. In the latest spatial planning of Macao, the New Urban Zone Planning is put forward. Spanning across 350 hectares, the new urban zone consists of 5 zones and serves to provide more housing and space to diversify economic activities. Out of the 5 zones, Zone A is of particular strategic importance for regional development as it is directly connected to the
Macao BCF of HZMB. With an area of 138 hectares, Zone A can well capture the bridgehead economy. However, residential development in Zone A takes up the largest portion (31.7%) and land reserved for commercial purposes is only 3.5 %, limiting Macao’s opportunity in grasping the benefits brought by HZMB.

Figure 4.7 Macao and its four collaborating cities on the west bank of Pearl River
Source: DaDa’s Consulting

4.2.5. To support the promotion of cultural or heritage tourism, the Macao government has dedicated a cultural heritage buffer zone. It serves to preserve the old district of Macao, including the architecture and street blocks.

**Implications on Hong Kong**

4.2.6. With Macao seeking to reinvent its economy, the likelihood of collaboration between Hong Kong and Macao is foreseeable after the opening of the HZMB. Although Hong Kong cannot support Macao’s development in terms of land supply like other PRD cities and the planning of the strategic location (i.e., Zone A) is not conducive to regional cooperation, other kinds of economic cooperation can be explored. One area of potential collaboration lies on leisure and business tourism. Both cities have unique offerings and can develop in a complementary manner. For MICE, the integrated resort model adopted by Macao can work hand in hand with the connectivity and business environment enjoyed by MICE operators in Hong Kong. For leisure tourism, multi-destination packages can be explored to capitalise on historical and entertainment assets of Macao, natural assets of Hong Kong, and the leisure assets of Zhuhai.

4.2.7. Building upon the Hong Kong Special Administrative Region and Macao Special Administrative Region Closer Economic Partnership Arrangement (2017), both governments should proactively seek closer economic cooperation opportunities, for instance in the aspect of tourism, as to capitalise on opportunities brought by HZMB and
create mutual benefits.

Zhuhai

4.2.8. Zhuhai is one of the first four Special Economic Zones established after the introduction of Reform and Opening-Up Policy in the late 1970s. With decades of efforts to promote environmental protection and sustainable development, the city was recognized by the United Nations as the Best Model of International Residential Environment Improvement in 1998, and is now a reputable garden city in China. Under GBA development, Zhuhai is positioned to be the core city of the WPRD, an international innovative city and a special eco-civilisation area (Guangdong Provincial Government, 2016).

Economic policies

4.2.9. Zhuhai is home to state-level special investment zones such as the Zhuhai Free Trade Zone (FTZ), Zhuhai-Macau Cross-border Industrial Zone and Zhuhai Gaolangang Port Economic Zone, which help to attract foreign direct investment and boost its economic development. At present, the secondary and tertiary sectors each takes up around 50% of the total GDP. In response to the national strategy in promoting high-tech and high value-added manufacturing industries, the Zhuhai government puts a strong focus on innovation in its overall economic development. Development of new and high-tech industries, modern industries, eco-agriculture and marine economy are placed at high priorities (Hong Kong Trade Development Council, 2018a). Owing to the establishment of the Hengqin Pilot FTZ in 2015, the tertiary sector is further developed and diversified through collaboration with Macao and Hong Kong in financial services, business services, culture and creation, leisure and tourism, scientific research and development.

Spatial planning

4.2.10. Zhuhai strives to improve its regional transportation networks. Land, sea and air strategic transportation infrastructures has been planned and built in Zhuhai in recent years. These include comprehensive intercity as well as intracity road and railway systems to support the growth of the city and seek new economic opportunities through regional cooperation. On the local level, the Zhuhai City Master Plan (2001–2020) outlines the spatial planning of the city with different levels of core areas and functional zones focusing on the development of different industries. 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 (Fig. 4.8). 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.

4.2.11.
Figure 4.8 Major functional zones and key industrial parks highlighted in the Zhuhai City Masterplan

Source: STAR Planning

**Implications on Hong Kong**

4.2.12. With the upcoming direct land connection between Hong Kong and Zhuhai (i.e. HZMB), potential economic cooperation between Hong Kong and Zhuhai can be further deepened in a number of areas. First, the manufacturing sector of Zhuhai and the services sector in Hong Kong can work hand in hand to support the economic development of Zhuhai. Hong Kong may function as the manufacturing services centre, innovation hub and headquarters cluster to the high-end manufacturing industry of Zhuhai. Second, with the development of the Gaolan Port economic district into another bonded area, cooperation possibilities between Hong Kong and Zhuhai in logistics are generated. Hong Kong could strengthen multimodal transports linking HZMB and other intercity highways with the local ports to further promote cross boundary e-commerce development. Third, leisure and business tourism can be encouraged between Hong Kong and Zhuhai. Capitalising on Zhuhai’s natural assets as well as the mega-scale theme parks and high-tech experience-based tourism hub in Hengqin, and other unique tourism assets in Hong Kong and Macao, multi-destination tourism can be developed. Zhuhai can also capitalise on the role of Hong Kong as an international gateway to promote its manufacturing products. This would benefit the MICE industry of Hong Kong, where exhibitions for Zhuhai enterprises can be held to showcase their products to foreign investors and companies. Fourth, potential cooperation in high-tech industry is expected especially in Hengqin. On the one hand, Hong Kong and
Macau enterprises are encouraged and given priority to enter Hengqin as outlined in the Masterplan of Hengqin (2014) and the Letter of Intent on Strengthening Cooperation of Hong Kong and Zhuhai (2014). On the other hand, Hengqin can serve as the experimental and production field for high-tech industries from Hong Kong, where local fundamental production support is lacking.

**Zhongshan**

4.2.13. Named in memory of Dr. Sun Yat-sen, Zhongshan is rich in historical and cultural assets of southern China. The city is bisected by Wugui Mountain, with only 3 roads connecting the north and south. Zhongshan is known for its prosperous light manufacturing industry, which is based in the specialised towns where each town is home to unique industries. Under the GBA development, Zhongshan is positioned to be a “world-class modern manufacturing base”, a “regional comprehensive transportation hub at the west bank of the Pearl River”, a “regional and scientific and technological innovation R&D centre”, and a “liveable boutique city in the PRD” (Guangdong Provincial Government, 2016; HKTDC, 2018b).

**Economic policies**

4.2.14. With secondary industry accounting for 52.4% of its GDP, the Zhongshan government aims to strengthen its traditional industries and explore new directions to boost economic growth. Two key directions have been identified in the economic development of Zhongshan. First, the Zhongshan government seeks to promote industry restructuring and upgrading through innovation. A number of core and strategic industries are proposed. The former includes precision manufacturing, advanced equipment making, and biopharmaceutical, and the latter includes electronic information, semiconductor lighting, marine industry. Second, the Zhongshan government intends to capitalize on regional development. On the one hand, Zhongshan would capitalize on the Belt and Road Initiative and seek cooperation opportunities with European countries and the USA. On the other hand, it hopes to foster closer connection with cities in the GBA. Taking reference from the Closer Economic Partnership Agreement (CEPA) signed between Hong Kong and the Mainland, the Zhongshan government intends to tighten cooperation with Hong Kong and Macao in terms of industry, human capital, and tourism (yacht tourism).

**Spatial planning**

4.2.15. To establish its position as a “regional comprehensive transport hub”, comprehensive railroad and highway networks have been planned to enable quick connection with neighbouring cities. Southern connection with Zhuhai and Hong Kong, eastern connection with Shenzhen, northern connection with Guangzhou and Foshan, western connection with Jiangmen are emphasized. According to Zhongshan Masterplan (2010-2020), the government intends to better utilise land and organise towns within its jurisdiction. Towns are grouped into 5 clusters, with each town having its own specialization (Fig. 4.9). High-tech areas and establishment of supporting industries in different parts of Zhongshan are intended to support economic modernisation. To capitalise on the natural and cultural
resources of Zhongshan and make it a unique destination for tourists, the government would conserve key assets including Lingnan waterways, Wugui Mountain and historic buildings or villages.

Figure 4.9. The five town clusters outlined in the Zhongshan Masterplan (2010-2020)  
(Source: UP Studio)

**Implications on Hong Kong**

4.2.16. Although Hong Kong is not directly connected to Zhongshan via HZMB, with Zhongshan developing modern industries and improving infrastructure connections, Hong Kong may support Zhongshan in a number of areas. First, the shift of Zhongshan’s economy to modernization might trigger demand for Hong Kong’s services, such as headquarters setting, capital raising, and R&D. Second, the expansion of modern industries might generate more high-value commodities, like advanced manufacturing equipment and biopharmaceutical products for export. HZMB might help attract the high-value and time-sensitive cargoes from Zhongshan to export to the world via Hong Kong, generating new demands for logistics services of Hong Kong. Third, the positioning of Zhongshan as a
historic city with unique Lingnan landscape could be further developed through multi-destination travelling between Hong Kong, Zhongshan, and other WPRD cities like Zhuhai and Macao.

4.2.17. Apart from potential cooperation opportunities, lingering competition between Hong Kong and other EPRD cities are observed. Owing to geographical proximity, manufacturing clusters in northern Zhongshan may prefer to seek logistics services in Guangzhou. Cargoes at places like Dongfeng take only 1.5 hour to Nansha Port, but at least double amount of time would be needed to reach the Kwai Tsing Port in Hong Kong. In addition, the upcoming Shenzhen-Zhongshan Link provides a 30-min transit between the two cities, while the amount of travelling time doubles for HZMB. This might attract some of the companies near the Link to choose Shenzhen as a place for setting head offices given the growing international status of Shenzhen. The competition might limit the amount of growth in demand of certain services from Hong Kong.

4.3. Other GBA cities in WPRD

4.3.1. Based on the TC analysis, it is found that the impact of HZMB covers Jiangmen and Foshan. They are also part of GBA. Foshan contained a GDP of USD 125.3 billion, ranking the top at WPRD in 2016. Jiangmen generated a GDP of USD 34.8 billion (Statistics Bureau of Guangdong Province, 2017). Both cities are enjoying a fast GDP growth rate of 7%, higher than national average. The manufacturing sector is still prominent, especially Foshan where both light and heavy industries are strong and wide-spread. The following are the development direction of the two cities with reference to economic and spatial policy.

Economic Policy

4.3.2. **Foshan moving towards ‘Smart Manufacturing’** – Foshan government aims at further improving the production technology and efficiency after the city gained the status as the pilot city of manufacturing upgrade in China (Development and Reform Bureau of Foshan, 2015; HKTDC, 2018). Hong Kong-Macao-Foshan cooperation is stressed. The government intends to attract investment from Hong Kong and Macao to drive economic development.

4.3.3. **Jiangmen building the brand ‘Made in Jiangmen’** – The government stresses technological advancement of the existing industries. The government also aims at economic diversification, by developing ecommerce and turning the city as the cross-border ecommerce pioneer ion WPRD. More favorable policy in terms of customs clearance simplification will be launched.

Spatial Plans and Policy

4.3.4. Foshan – Eastern development to facilitate integration with Guangzhou is focused. The ‘Central Cluster’ will be strengthened as the service core, with better connection to Guangzhou through intercity highways and railways. Manufacturing clusters are developed around the core, to enjoy service support. Green resources and the Lingnan waterway are
preserved in western, southern and northern part, as the key tourism assets.

4.3.5. Jiangmen – Clusters with specialized economic functions will be developed. The Jiangmen Hi-Tech Industry Development Zone will be further strengthened to lead the manufacturing upgrading in the city. A highway along the coastline will be constructed to promote road trips and leisure tourism.

Implications to Hong Kong after the opening of HZMB

**Opportunity: Cooperation with Hong Kong in logistics, high-tech and tourism industry**

4.3.6. Similar to Zhongshan, as Jiangmen and Foshan are both conducting economic modernization, there could production of high-value products. These commodities could be transported to international market in Hong Kong via trucks. Meanwhile, HZMB might allow efficient transfer of cross-border ecommerce cargoes between Jiangmen and Hong Kong where the free customs could help smoothen cargo flow. The high-tech industry in Hong Kong could act as the R & D center to support the downstream production of high-tech products in both cities. HZMB facilitates communication of high-tech talents between these three places.

4.3.7. The preservation of tourism assets can further consolidate the idea of multi-destination travelling. After the opening of HZMB, international tourists could first arrive at Hong Kong, then visiting WPRD cities rich in green and cultural assets via HZMB. Tourism industry in three cities could cooperate with each other to promote such package.

**Challenge: Tendency to cooperation with EPRD**

4.3.8. Due to geographical proximity to EPRD cities like Guangzhou, especially Foshan, the two cities were inclined to build a tight linkage with them, seeking investment and service support there. Hong Kong might thus, face competition.

4.4. **Cities in EPRD**

4.4.1. Shenzhen and Guangzhou, located in EPRD, are the most developed Mainland cities in GBA. In 2016, Shenzhen attained a GDP of USD 308 billion. It also enjoyed a very fast GDP growth rate of 9%, which ranked the first in the region. Guangzhou generated a GDP of USD 310 billion, while enjoying a growth rate of 8.2%. According to the provincial town-system planning, Guangzhou and Shenzhen would focus on financial services, information technology, professional services and R&D.

4.4.2. Dongguan and Huizhou are also important cities in EPRD. Known as a “world factory”, Dongguan is a city focuses on manufacturing. In 2016, the GDP for Dongguan was USD 108 billion, while that for Huizhou was USD 54 billion. Both cities enjoyed a fast GDP growth rate of 8%, which is higher than the provincial average. Manufacturing is the pillar industry of both cities, especially in the field of electronic equipment manufacturing.
Dongguan and Huizhou would continue to focus on manufacturing industry, especially the electronic and information industry in the future.

**Economic Policy**

**Guangzhou planning to build the ‘Three Centers One System**

4.4.3. According to the five year planning of Guangzhou, it is planned to be an important central city of China by positioning itself as the international shipping, logistics and trade centre and establishing a modern financial service system. The Guangzhou government intends to cooperate with Hong Kong to realize its internationalization strategy through collaboration in the fields of finance, logistics, trade and professional services.

**Shenzhen planning to be a radiative and dynamic national economic center**

4.4.4. Shenzhen government plans to further improve its competitiveness by promoting the development of four-pillar industries: high-tech, finance, logistics and culture to consolidate the status of the Shenzhen as a national economic center. They would also develop other strategic emerging industries and high-end professional services. Cooperation with Hong Kong and Macao in the high-end industry is also stressed. Bilateral economic agreements have been signed with Hong Kong for cooperation in the fields of R&D and professional services.

**Dongguan becoming an international advanced manufacturing base**

4.4.5. Dongguan government aims at optimizing its industrial structure by promoting advanced manufacturing industry, modern service industry, strategic emerging industry and the integration level of industrialization and informatization. Dongguan government also wants to attract professional services, technology and management experience from Hong Kong to promote its industrial upgrading.

**Huizhou aiming at industrial transformation and upgrading**

4.4.6. Huizhou government plans to accelerate the industrial transformation and upgrading by promoting the development of petrochemical industry and electronic information industry. According to the five-year plan of Huizhou, the government intends to attract R&D from Hong Kong to aid its industrial upgrading.

**Spatial Plans and Policy**

**Guangzhou**

4.4.7. The spatial framework of “one river, two shores, three belts” has been proposed in the latest integration planning of Guangzhou. Along the Pearl River, it plans to build the innovation belt, economy belt and landscape belt. Nansha new district, Zengcheng new district and Guangzhou eco-tech development district would be focus areas to promote the
high-tech, logistics, trade and professional services industries.

Shenzhen

4.4.8. Baoan, Nanshan and Qianhai have been planned to be the new urban central area to strengthen Shenzhen’s linkage and cooperation with Guangzhou and Hong Kong. In particular, Shenzhen has signed bilateral economic agreement with Hong Kong to cooperate in the Qianhai Free Trade Zone to promote the finance, high-tech and professional services industries.

Dongguan

4.4.9. The “one core four clusters” spatial structure would be strengthened according to the integration planning. The “central urban area” would be strengthened to be a high quality service and innovation centre. For the four clusters, the linkage and cooperation with Guangzhou and Shenzhen would be stressed to build the EPRD electronic industry corridor.

Huizhou

4.4.10. According to the integration planning of Huizhou, the spatial framework of “one city three clusters” has been planned. The city centre would serve as a service and high-tech industry area. Three clusters would focus on industrial upgrading.

Implications on Hong Kong

Opportunity: Cooperation with Hong Kong in logistics, high-tech, professional and financial services

4.4.11. Both Guangzhou and Shenzhen have planned to develop professional and financial services and high-tech industries, and intended to introduce talents and management experiences from Hong Kong. Three cities could cooperate tightly to be the economic engine of GBA. Dongguan and Huizhou are undergoing economic modernization. Both cities want to attract R&D and management experiences from Hong Kong to accelerate their industrial upgrading process. During process, more high-value goods would be produced, which could then be exported via Hong Kong, which could benefit Hong Kong’s logistics industry.

Challenge: The competition of Shenzhen and Guangzhou

4.4.12. Shenzhen and Guangzhou have planned to promote its professional and financial services industries, and supporting or preferential policies (e.g. financial subsidies) have been in place to attract talents and leading enterprises from all over the world. In addition, Shenzhen has aimed to become the “National Financial Centre” in five years’ time. This might imply that Hong Kong would face competition with Shenzhen and Guangzhou in the field of financial and professional services industries.
4.4.13. As Dongguan and Huizhou has long been part of the production chain of Guangzhou and Shenzhen, it may be a challenge for Hong Kong to participate in their industrial upgrading.

4.5. Summary

4.5.1. The study about the economic development and spatial strategy of GBA cities indicate that HZMB might bring forth opportunities for further cooperation between Hong Kong, WPRD cities, particularly Zhongshan, Zhuhai and Macau. It shall be noted that rapid development at EPRD is causing competition with Hong Kong. A table of summary of analysis is provided in table 5.1. The opportunities and challenges would be embraced when formulating the strategic plan.

4.5.2. Table 4.1 Summary of opportunities and challenges upon opening of HZMB, and under GBA development trend and spatial strategy

<table>
<thead>
<tr>
<th>Opportunities promoted by HZMB</th>
<th>Predicted Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>HZMB helps overcome time and accessibility constraints&lt;br&gt;Both stakeholders and TC analysis found that HZMB might reduce time and cost incurred when travelling between Hong Kong and WRPD. HZMB also allows one-stop, point-to-point travelling of both cargoes and passengers among cities.</td>
<td>Competition from the top EPRD cities&lt;br&gt;It is found that Guangdong and Shenzhen are strengthening their financial, high-tech and logistics sector, posing direct competition with Hong Kong in these three industries.</td>
</tr>
<tr>
<td>HZMB might foster cooperation between industries in Hong Kong and WPRD&lt;br&gt;The potential time and cost reduction brought by HZMB, together with the development trend of WPRD cities, could stimulate interaction in the following aspects:&lt;br&gt;Zhongshan – Shift to advanced manufacturing might generate demand on R&amp;D services and logistics services for export of high-value cargoes in Hong Kong via HZMB&lt;br&gt;Zhuhai – Promotion of high-tech industry and provision of incubator space might help high-tech industry in Hong Kong to set up front-end branches in WPRD, getting direct access to market for more business opportunities.&lt;br&gt;Macau – Stress on diversification on tourism destinations, with highlight on cultural assets could help enhance attractiveness of Hong Kong by promoting multi-destination tourism. Preservation of green and cultural assets in Zhuhai and Zhongshan</td>
<td>Northern WPRD regions are inclining to cooperate with EPRD through STN extension&lt;br&gt;As indicated by the TC analysis and research, northern WPRD cities, including northern part of Zhongshan, are inclined to foster closer cooperation with EPRD cities, through economic integration policy and inter-city infrastructural linkages. Geographical proximity is the main reason. The completion of Shen Zhong Corridor will further shorten the distance and travelling time between northern WPRD and EPRD. The project might act as impetus driving two sides of cities to interact economically. This might limit the geographical extent of impact generated by HZMB for the key industries in Hong Kong.</td>
</tr>
</tbody>
</table>
also helps achieve this. Jiangmen and Foshan – Similar to the case of Zhongshan; Crossborder e-commerce development at Jiangmen might generate demand on logistics services in Hong Kong to leverage on its customs and tax-free status.
5. SWOT Analysis of Hong Kong

5.1. Introduction

5.1.1. In light of the GBA development, the SWOT (namely strengths, weaknesses, opportunities, and threats) analysis serves to provide a better understanding of the Hong Kong’s situation in relation to its key industries at present and in the near future. It can provide more insights about the nationally defined positions and functions of Hong Kong in the GBA as outlined in the 13th Five Year Plan (for example, international financial, transportation and trade centre, the centre for international legal and dispute resolution services). Through analyzing the SWOT of Hong Kong and its key industries, we can better prepare the industries to leverage on the GBA development and stay competitive in the region. Here are the major SWOTs of Hong Kong we have identified.

5.2. Strengths

World Class financial systems

5.2.1. For 23 years in a row, Hong Kong has been selected as the freest global economy (The Heritage Foundation, 2018). On average Hong Kong government imposes 0.00% of tariff rate, and there is in general an absence of screening for foreign investment, which allows listing of companies of all over the world (The Heritage Foundation, 2018). Together with the low tax rate policy, Hong Kong has attracted 75 of the world’s 100 largest banks to enter her market (news.gov.hk, 2017). Hong Kong is thus shaped as an international financial centre, with an extraordinary leading role of her professional and financial services in GBA.

Unique economic identity

5.2.2. Because of historical reason, Hong Kong is one of the earliest Chinese cities with her economy opened to the global market. Under “one country, two systems” constitutional arrangement, Hong Kong has been taking advantage of both the prolonged economic experience and the rapidly developing economy of China, exercising its unique role as the “super connector” between the global market and the flourishing Chinese market (Ferrantino & Zhi, 2008).

Well established transportation network

5.2.3. Because of the strategic geographical location of Hong Kong, cross-boundary transportation network has a long history of development and has always been the focus of the government. Hong Kong International Airport (HKIA) is connected to over 220 destinations worldwide, and ranks top for the largest cargo volume flow and 8th for passenger flow (Airports Council International, 2018). Meanwhile, Kwai Tsing Container Terminals is ranked as the 5th largest container port internationally (World Shipping Council,
The well-developed international transportation infrastructures and their excellent reliability allow Hong Kong to serve as a gateway for talents and goods of GBA area.

5.3. Weaknesses

Unaffordable land price

5.3.1. Land shortage has always been the top of issues to be tackled in Hong Kong. Not only does it affect the livelihood of Hong Kong residents, but also pose a major obstacle to the economic development. Currently, the monthly rent of Grade A office has risen to HK$134.3 (US$17.1) per square foot, and a rising trend of 7% per annum is expected in the coming years, thus giving rise to concerns from the business sector (SCMP, 2018). This discourages the establishment of all businesses, especially emerging industries which do not usually have a solid capital agglomeration. To a smaller extent, the rising housing prices also make the city less attractive to foreign talents and affect industries that are characterized by high foreign talent intake (e.g. high tech industry).

Urban core and transportation infrastructure reaching saturation

5.3.2. Despite the ultra-high-density development in the metropolitan area, the CBD of Hong Kong is reaching its saturation point in which further expansion of existing core is extremely difficult. As explained above, it has led to the skyrocketing land price which would greatly burden Grade A office users. MTR, the major backbone of the public transportation system, is facing severe congestion issue daily (HKFP, 2016). While Kwai Tsing Container Port has shown the need for renovation and relocation after commencing into service for nearly 40 years (JOC.com, 2015).

Limited manufacturing activities to support R&D

5.3.3. Since the economic reform of China in the late 1970s, many Hong Kong manufacturing firms relocated their production processes to the Mainland, leaving behind very limited manufacturing activities (Cai, 1999). Together with the long-gone agriculture activities, Hong Kong has become an import-oriented city. Although Hong Kong’s R&D business is strong in the GBA, the industry would need to heavily rely on the outsourcing of manufacturing processes (i.e. external support) to allow for prototyping and commercialising of the products.

5.4. Opportunities

Better integration with GBA

5.4.1. With the GBA plan to be released by the Chinese government soon, the division of labour, as well as the role of Hong Kong in the area, would become more well-defined. With the
strong comparative advantages of Hong Kong’s leading industries, the integration among cities could provide a platform for the industries to leverage in the emerging Chinese market, amplifying its importance even in a global scale.

Commencement of new cross boundary infrastructure

5.4.2. Despite the rapid advancement of the telecom industry, physical connections play an important role in various industries. Mega-scale cross boundary infrastructure such as HZMB, XRL and 3rd Runway system are expected to be commencing into service in coming years. Not only would the connection be strengthened, a new global synergy with a stronger emphasis of Hong Kong is anticipated. Furthermore, HZMB would be the 2nd highway connecting the two banks of Pearl River, on top of Humen Pearl River Bridge, where congestion has long been a serious issue. Hong Kong is thus becoming an important connecting anchor of GBA, boosting its attractiveness for capital, knowledge, and opportunities.

Capitalizing on mainland’s “going out” strategy

5.4.3. Chinese companies, in many cases led by state-owned enterprises, has shown their ambiguousness in offshore investment (Deutsche Welle, 2017). China has risen from the fifth place to second place in the ranking of global largest foreign investor, behind the USA. Owing to the economic status of Hong Kong, Hong Kong would become a perfect springboard for the Mainland enterprises to explore the global market.

5.5. Threats

Competition from GBA cities

5.5.1. As shown in the GBA Study, nearly all cities in GBA aim to move up the value chain. Some of the major cities such as Shenzhen and Zhuhai are actively developing their financial and professional services industry, and establishment of multiple free trade zones are expected. These developments would inevitably give rise to a sense of competition and threaten the status of Hong Kong. Whether the benefit of GBA integration induced is significant or not is largely dependent on how strong Hong Kong can uphold its comparative advantages.

Competition from GBA cities

5.5.2. As shown in the GBA Study, nearly all cities in GBA aim to move up the value chain. Some of the major cities such as Shenzhen and Zhuhai are actively developing their financial and professional services industry, and establishment of multiple free trade zones are expected. These developments would inevitably give rise to a sense of competition and threaten the status of Hong Kong. Whether the benefit of GBA integration induced is significant or not is largely dependent on how strong Hong Kong can uphold its comparative advantages.
6. Implication of HZMB to Hong Kong Industries

6.1. Logistics Industry

Industry Overview - Performance

6.1.1. Logistics and trading industry is one of the four pillar industries in Hong Kong, steadily accounting for around 20% of value-added GDP (Census and Statistics Department, 2017a). The growth remains mild, with a 5-year annual compound annual growth rate as 1% (2012-2016). Despite the slower growth pace, China has been the key trading partner of Hong Kong, constituting over 50% of Hong Kong’s export value (including reexport) during the same period (Census and Statistics Department, 2014, 2015, 2016, 2017b, and 2017c).

6.1.2. As the international logistics hub, Hong Kong contains world-class cargo terminals with huge throughputs per year. Recently, air cargo and land cargo logistics is becoming more important while sea cargo transport is shrinking in terms of both proportion and absolute amount (Figure 4.3.2) (Census and Statistics Department, 2017d).

![Figure 6.1 External merchandise trade statistics by mode of transport, 2012, 2014 and 2016](source: Census and Statistic Department, 2017d)

Industry Overview - Business Needs

6.1.3. The industry consists of different players, ranging from port/airport/control points operators, freight forwarders and so forth. One of the business needs of logistics and trading industry is minimized transport time, distance and cost (e.g. toll, administration fees, dockage, taxes, terminal handling charge, etc.) (Behar and Venables, 2010). This helps cargo owners and freight forwarders to diversify cost and risk of transportation (based on cargo needs),
enhancing supply chain efficiency (John et al., 2008). Smooth customs checking procedures are also highly desirable to ensure timely shipment. In terms of land, multiple modes of transportation connections warehouses proximity to cargo transport terminals (container terminals/airports/customs control points) are highly desirable to lower the operation cost.

Industry Overview - Outlook

6.1.4. To optimize the industry based on the above needs, the industry is proactively seeking ways to sustain the industry’s development. It is found that industry stakeholders, both land, sea and air, generally welcome the GBA development (Leung, et al., 2017). Facing competition from nearby cities, the industry is shifting focus of services and promoting digitalization/modernization, to justify the high cost services. With limited manpower and land, the industry is actively introducing more technologies as part of high-value added logistics services. Examples include smoother warehouse operation through use of sensors and RFID, and real-time cargo monitoring dashboard to ensure operation efficiency (The Economist 2017; LSCM, 2018; Hongkong International Terminals, 2018).

Impact of HZMB on the industry

Benefits and Opportunities: Potential stimulation of cargo flow from West Pearl River Delta through Hong Kong

6.1.5. The industry expects that HZMB might undermine transport cost of cargos, especially those from WPRD. According to a representative from Hongkong International Terminals (HIT), currently cargoes from WPRD spends more than half day on average to Hong Kong mainly through barge. HZMB can reduce time to 3-5 hours (factory to Hong Kong), and subsequently the time cost of transport of cargoes. This might help expand market of logistics services to WPRD, which contains manufacturing cities like Foshan, Jiangmen and Zhongshan. Time-sensitive cargoes might be attracted. The study conducted by STAR Planning (2018) also reveals that, HZMB could enhance accessibility of Hong Kong to the Zhuhai Bonded Area. This could facilitate flow of cross-border cargo flow between Hong Kong and Zhuhai. Cargoes might first arrive in Zhuhai for easy customs clearance then be sent to Hong Kong airport for export.

6.1.6. The bridge might enhance reliability of Hong Kong as a viable choice of logistics. It is found in the interviews that availability of diverse infrastructure facilities might help build trust among shippers who might need multiple routing options for different shipment plans. An example is that urgent orders of shipments might pass through HZMB to Hong Kong for export to save time.

Benefits and Opportunities: Possible expansion of cross border e-commerce and air logistics cargo

6.1.7. E-commerce sales in China is ever-increasing, with over 30% annual compound growth
rate during 2012-2016 (Ministry of Commerce of the People’s Republic of China, 2016). Taking the advantage of international connectivity (HKIA with over 1100 flights per day) and tax-free status, Hong Kong is an important logistics hub for B2B2C cross border e-commerce cargoes (See Table 6.1) (Hong Kong Maritime and Port Board, 2016). Industry experts claim that Hong Kong can act like a ‘bonded logistics zone’ of China, as products imported from Hong Kong incur lower tax and inspection rate. HZMB could further provide an extra linkage with Guangdong, the province accounting for the biggest proportion of e-commerce sales in China (Ministry of Commerce of the People’s Republic of China, 2016). It could also extend connection to rising e-commerce market in WPRD, like Jiangmen, one of the top 40 trading city out of 100, recording RMB 340 million amount of e-commerce trade (www.gov.cn, 2016; Jiangmen Municipal People’s Government, 2018). Cross-border e-commerce in WPRD is expected to grow further with Zhuhai government shows determination to develop this field (STAR Planning, 2018). As ecommerce cargoes are mainly transported via planes, airport cargo logistics might be further developed after the opening of HZMB.

Table 6.1. Types of e-commerce cargoes in China (Source: HKTDC, 2016)

<table>
<thead>
<tr>
<th>Type</th>
<th>Cost and Time (Logistics &amp; Customs)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>B2C</td>
<td>Medium</td>
<td>Orders and goods are concentrated by overseas suppliers and delivered to an e-commerce pilot city in China. The packages will be further delivered to individuals by Express Mail Service or private courier company.</td>
</tr>
<tr>
<td>B2B2C</td>
<td>Low</td>
<td>Products sent to a customs-approved cross-border e-commerce companies in an e-commerce pilot city in China. They are kept at a bonded warehouse and set to customers by logistics firms.</td>
</tr>
<tr>
<td>Direct Shipment</td>
<td>High</td>
<td>Goods are shipped to customers by overseas suppliers</td>
</tr>
</tbody>
</table>

**Challenges: Rise of competitors**

6.1.8. HZMB, however, might not be able to eradicate the existing threat that Hong Kong is facing severe competition by surrounding cities, like Shenzhen and Guangzhou. Agreed by the stakeholders, the relative low cost and technological improvement have enabled them to attract cargoes, especially maritime transport. The terminal handling charge of Shenzhen and Guangzhou, for instance, is roughly 50% less than that of Hong Kong (Legislative Council Secretariat, 2013). Recently, Shenzhen has surpassed Hong Kong in terms of number of containers handled per year, with Guangzhou being a bit behind Hong Kong (Census and Statistics Department, 2017e). While HZMB is to be completed, other competitors are also advancing swiftly.
6.1.9. **Challenges: High cost in Hong Kong due to manpower and land shortage**

Despite infrastructure enhancement, logistics and trading industry still needs to face internal weakness of land and manpower shortage, which drive the cost up. Based on government figure, the number of cross-boundary container truck drivers shrank about 11% during 2010-2014 whose monthly wage could be around 3 times higher than their mainland counterparts (info.gov.hk, 2015; Hong Kong Silicon Valley, 2017). Meanwhile, according to a report conducted by CBRE, growth of warehouse house space was merely 0.5% in 2003-2014, while the rent skyrocketed by over 130%. (SCMP, 2017). The industry needs to overcome the challenges to fully leverage the benefit of HZMB and further develop as an international logistics hub.

6.1.10. **Challenges: Uncertainty about HZMB**

The potential increase of cargo volume is subject to like the opening hour of HZMB and toll fee. For the industry, however, the certain thing is that ocean freight per km for cargoes to WPRD is generally lower than that of truck freight. Industry stakeholders also express concerns about the uncertainty in quota of trucks and customs arrangements. Limitations on truck quotas or complicated customs procedures might undermine the utilization of HZMB for cargo transfer.

6.2. **Tourism Industry**

**Industry Overview - Outlook**

6.2.1. Tourism industry is one of the four main pillars of Hong Kong’s economy which has 5% GDP contribution to total economy (Census and Statics Department, 2016). It is stated as overall ranking of 11 among 136 countries in the Travel & Tourism Competitiveness Report 2017. The tourism industry can create around 271,800 employees which are 7.2% of total employment in Hong Kong between 2011 and 2015. Among the total visitors arrival to Hong Kong, nearly 75% are from Mainland China. However, it is facing decline in performance as 6.7% decrease in mainland visitor arrival in 2016 and 3.7% fall on hotel room rate and there is lost in overnight visitor and same day visitors arrival as mentioned in Fig.6.2 (Tourism Board, 2016). However, MICE tourists are the growth engine, recording a 10% growth in 2016 (HKTDC, 2017).
6.2.2. Hong Kong tourism industry is confident towards the GBA development as it can enhance market and visitor arrivals. The completion of the HZMB would likely to bring in more tourists to Hong Kong, enhancing the role of Hong Kong as an international gateway and developed the position of travel agencies by increasing inbound-outbound tourism services with multi-destinations. Furthermore, Hong Kong can achieve bridgehead economy. The first boot can be in the North Lantau tourism development. MICE development in Asia World Expo and commercial development in North Commercial District, together with the neighbouring areas which provide ancillary services, can be enhanced (Planning Department and CEDD, 2015). On the other hand, industry stakeholders hope that the government could improve cross-boundary transport arrangement for the bridge users.

Impact of HZMB on the industry

Opportunities: Potential attraction of more tourists to enjoy multi-destination travelling

6.2.3. After the completion of HZMB, Hong Kong could benefit from the geographical advantages. HZMB could enhance market expansion and multi-destination travelling. The first benefit is reduction in travelling time and cost which could encourage visitors to travel from Mainland to Hong Kong and then to other countries and vice versa. A representative of the industry said that HZMB can reduce travel time from 6 hours to 2.5 hours for Hong Kong to Little Hawaii in Guangdong, Kaiping, Xinhui, Zhongshan and alleviate the unpleasant travelling experience caused by the congested Human Bridge. The bridge might able to attract more international tourists from mainland to Hong Kong for inbound trips by having internationally connected airport. There might be a longer trip of inbound tourists with two or three days in Hong Kong then five to six days in the Mainland. Young talents working at the GBA will become potential visitors to Hong Kong for short haul leisure trips.
6.2.4. **Opportunities: Strengthening Hong Kong’s status as an International MICE center**

HZMB provides branding effect for Hong Kong, strengthening its position as an international city. HZMB might further facilitate travelling of merchants of WPRD to hold and participate in business conventions with international clients at areas adjacent to the bridge. It is expected that there will be increase in convention and exhibition (C & E) venue demand from the one-hour commuting circle covering tens of millions population in the PRD region. The enhanced accessibility to Zhuhai and Macao, and the expansion plan of C & E in these two locations could foster another potential cooperation between the MICE industries in these three cities.

6.2.5. **Opportunities: Potential increase in the demand for retail**

The increasing number of visitors after the opening of bridge can accelerate the tourism, convention and exhibition services and they generate growing in retailing. It is noted that the consumers’ preferences for brands have changed over the years. They might prefer to buy local and unique stores than luxury brands based on their tastes and characters (STAR Planning, 2018). So Hong Kong high rental cost can be one of the concern for competition with other regional cities.

6.2.6. **Threat and Challenges: Competition**

On the other hand, there are some threats and challenges that need to consider for Hong Kong tourism industry despite the opening of HZMB. While Hong Kong is able to stand as a transportation hub and gateway, there is potential regional competition to attract and facilitate the potential tourists. Currently, neighbouring cities like Shenzhen and Guangzhou are promoting new destinations to attract the young groups with higher spending power, including the Redtory in Guangzhou and MICE venue in Zhuhai for international events. Conversely in Hong Kong, there are not enough consideration on providing unique and diverse attractions for target tourists to complete with boarding cities (HKSAR, 2017). In the past decade, new destinations promoted tend to be the theme parks (e.g. Disneyland) and shopping centres (e.g. IFC, i-Square) without vivid local characters. The upcoming Skycity in HKIA is mainly focusing on retail, similar to the existing retail clusters (Hong Kong International Airport, 2018). The tourist destinations in Hong Kong might not be attractive in the long run.

### 6.3. Finance and Professional Service Industry

**Industry Overview - Outlook**

6.3.1. The outlook of the financial services industry is quite positive as the positioning of Hong Kong as the international financial centre is further enhanced by some major national policies and initiatives such as the 13th Five-Year Plan. Responding to these favorable
policies, a growing supply of banking services, for example provision of loans, are available in the market. Apart from these loan schemes, there is also an increasing demand for insurance services by the Chinese customers (KPMG, 2017). All of these show that the industry is ready to embrace the potential opportunities brought by the GBA development.

6.3.2. For the professional services industry, the outlook is also positive. With mainland China being the largest mergers and acquisitions (M&A) market in Asia, there is a growing demand in legal service, accounting and auditing services. Because of the simplified procedures for mainland enterprise to set up branches in Hong Kong, it is foreseeable that there will be further need in professional services. In recent years, arbitration has been gaining popularity in becoming a more cost-effective way to settle legal disputes. Providing that the arbitral awards settled in Hong Kong have enforcement power in some of the relevant courts in China (HKICPA, 2014), Hong Kong has been gaining advantages in becoming an international dispute resolution service centre.

Impact of HZMB on the industry

Opportunities

6.3.3. After the opening of HZMB, the connectivity between Hong Kong and WPRD is greatly enhanced with shortened travelling time. The HZMB would bring more opportunities than threats to the both the financial and professional services industry by reinforcing the role of Hong Kong as the “super-connector” in the whole region. Moreover, the GBA market will be further opened up after the opening of HZMB, especially for WPRD. Given that the business expansion in a two-way process, HZMB would facilitate the flow of Mainland customers from WPRD to Hong Kong and at the same time, it would enable the financial and professional services industry to unleash the potential of the WPRD market. For example, because of the “going out” approach by the Mainland enterprises and the well-known high level of integrity and transparency for the market, there are more Chinese enterprises conducting initial public offerings (IPO) in Hong Kong for fund raising. Because of this emerging trend, there is an expansion of professional services targeting the WPRD customers. The opening of HZMB would help Hong Kong’s financial and professional services industry in further expanding its customer bases.

6.3.4. Apart from that, the enhanced accessibility may further facilities the interactions between the two sides such as cross-boundary conferences and meetings. From the perspective of the firms from the WPRD, Hong Kong serves as a bridge in helping them to get connected to the international market. Therefore, Hong Kong is always one of the most suitable place for holding face-to-face meetings for transnational business cooperation. The opening of HZMB basically reinforce the position of Hong Kong as an international financial and professional service provider in the region.
Challenges

6.3.5. Increasing pressure for regulatory compliance is definitely one of the key challenges for the financial services industry (PwC, 2017). For financial institutions and regulators, they are highly aware of the risk management to ensure that illegal activities such as money laundering would not happen and regulations are fully and strictly enforced to the financial operations. With the tightened capital outflow regulations in January 2017, Hong Kong has responded by imposing stricter processes to protect the industry. Because of the stricter regulations, the insurance industry may observe a slowdown of its growth since conducting cross-border payments in a large amount is not as easy as before.

6.3.6. For the professional services industry, institutional differences between China and Hong Kong are major barriers in facilitating the entrance of Hong Kong into the mainland market. Although several measures were imposed for the further cooperation between the professional services providers in mainland China and Hong Kong, regulatory pressure still exists. For example, the accounting practice by Hong Kong firms are highly restricted by the China’s Ministry of Finance (MOF) that Hong Kong audit firms are still prohibited from carrying audit paper out of China.

6.4. Hi-tech Industry

Industry Overview - Outlook

6.4.1. Mainland China is the major source and destination of Hong Kong’s trade in high-tech products. Therefore, establishing an international innovation & technology hub is one of the most noticeable cooperation areas under the notion of Greater Bay Area. Generally, Hong Kong has a good position to assist technology companies in the Greater Bay Area to reinforce their development ability. On the other hand, in terms of regional hi-tech industry cooperation, Hong Kong and Shenzhen has come to an agreement on the development of the Hong Kong-Shenzhen Innovation and Technology Park with an aim to enhance the cooperation in the aspects of innovation and technological research. (HKTDC, 2018)

Impact of HZMB on the industry

Opportunities: Influx of talents and venture capital and education base

6.4.2. With the HZMB, it is expected that the reduced distance between WPRD and EPRD will bring forth talents and venture capital to Hong Kong. Hong Kong should consider turning herself as a gateway for Chinese technology firms to reach the international market, and a springboard for international firms to seek expansion in the Chinese market (Yiu, 2018). As such, regional synergy is expected with cooperation between Hong Kong and Shenzhen in the Science Park. Besides, as Hong Kong enjoys a sound education system and top universities, Hong Kong have the potential in developing herself as the breeding ground for
young talents and a gateway for promoting their product to global market. Fintech hub is also a new trend in the global market which reduce the financial service costs to businesses. Given the world-class financial hub of Hong Kong, coupled with the manufacturing upgrading the WPRD, there is a large room for the technology and financial industry to cooperate and develop a fintech hub that serves the need of GBA.

**Threats and Challenges: Lack of a major technology giant services and high land cost**

6.4.3. Yet, there are some risks that are hindering the development of the hi-tech industry in Hong Kong. Hong Kong is a relatively small market when compared to the foreign or Chinese market, beyond certain niches namely the financial industry, however, Hong Kong is progressively integrating with the enormous Mainland-Chinese market. Therefore, potential business demand is not a major barrier for many start-up hi-tech companies. The most serious problem is Hong Kong's lack of a major technology giant to serve as a catalyst and propel developments in the industry forward just like how Google did to its affiliate companies (HKSTP, 2017). This barrier may possibly resolve by tighter connection with Shenzhen, where a lot of Chinese technology giants are located. While the start-up sector appears to be doing well, it remains vulnerable to high land costs and potential changes in the existing favourable economic environment, while the absence of major tech players, i.e. tech giants, to lead is a noticeable flaw. On top of that, other cities in the GBA are also developing their own start-up ecosystems, so it is reasonable to say competition is fiercer. To conclude, it is still too early to say that Hong Kong has emerged or will successfully emerge as a regional or even international hi-tech hub. (Yiu, 2018).

6.4.4. Besides, according to the working paper, the housing cost in Hong Kong remains notoriously high and deters foreign talents, who are the most essential element in constructing a blossoming hi-tech industry, from targeting Hong Kong as their ideal workplace. The interviewee lamented that the skyrocketed office rent remained the most unbeatable barrier in hindering the development of hi-tech industry in Hong Kong. Many hi-tech giants chose Hong Kong's counterpart: Shenzhen as their base not only because of government support to the industry, but the most importantly the lower land rent and availability of affordable housing for the talents, not to mention how the start-ups can survive in such adverse environment where land rent would erode a major part of their revenues. As such, according to him, Hong Kong may lose its competitiveness in terms of hi-tech industry. Worse still, many start-ups may choose to relocate their office to the Western PRD in favour of the lower rent after the opening of HZMB.

As HZMB reduces the travelling time between the Eastern and Western bank of GBA, Shenzhen will also gain higher accessibility after the opening of HZMB, let alone the Shenzhen-Zhongshan Link will be completed in the near future. The most noticeable threat would be the diminishing role in hi-tech industry that Hong Kong plays.
7. ERLU and STN Aspirations of Industries in Response to the Opening of HZMB

7.1. Logistics Industry

ERLU: More Modern Warehouse to Expand Storage Areas

7.1.1. Diverse types of cargo storage areas shall be provided to lower the cost and expand transshipment cargo handling capacity in Hong Kong. Industry experts reflected that most warehouses in Hong Kong are over 30 years, meaning that they could hardly be turned into modern warehouse installed with temperature-controlled area, sensors and other high-technologies facilities for efficient cargo handling. A typical modern warehouse is usually 50,000 sq. ft., with 15 feet height per floor for 3 pallets of goods (Savills, 2018). Increase in modern warehouse could expand Hong Kong’s ability to handle fast-moving e-commerce goods, time-sensitive and high-value commodities which might need extra monitoring and care, after the opening of HZMB.

7.1.2. It shall be noted that to provide one-stop logistics services, ranging from packing, distribution, customs document submission, and transportation, certain proportion of the newly built warehouse shall be constructed near cargo terminals, especially the airport. It is found that only 5% of the modern warehouse area is near the airport (Savills, 2018). On top of the upcoming BCF which contains logistics facilities for high-value commodities, there might be a need to expand modern warehousing area near the airport. According to stakeholders, North Lantau would be a key location of logistics facility expansion to best capture

7.1.3. The representative of logistics sector also indicates Tuen Mun as an ideal location. The upcoming Tuen Mun-Chek Lap Kok Link would enhance the accessibility of Tuen Mun and BCF, making it a potential place for modern logistics development. A logistics park can be set there and further decentralize logistics land at a lower rent location. The setting might lower the overall operation cost. He also points out that land for ancillary facilities are needed, when HZMB might increase truck flow. More parking space for trucks with space for cargo handling work like packing is needed.

STN: Better Accessibility between Storage Area, STN and Cross-boundary Facilities

7.1.4. As more warehouses are expected in different part of Hong Kong, efficient connection (e.g. express highways) between the new warehouses with STN to cross-boundary facilities, especially HZMB shall be established. This can facilitate swift flow of cargo transfer from Hong Kong to the Mainland through container trucks.
7.2. Tourism

ERLU: More recreational facilities to attract potential tourists

7.2.1. As expected by the industry, HZMB might bring more tourists visiting Hong Kong. To strengthen its attractiveness, new recreational facilities shall be added. Active sports facilities and cultural site, together with areas showcasing local design brands (e.g. PMQ) could be options to consider, according to the industry heads, on top the upcoming plans like Kai Tak Fantasy project at the Kai Tak New Development area (HKSAR, 2014). Moreover, to stand as all-in-one tourism in Hong Kong, all the local tourism resources especially natural landscapes and unique local attractions are needed to upgrade and fully utilized. The synergy between new and exciting tourism development projects may be able to provide new experiences. The SKYCITY at Airport for high-class shopping, commercial development and sightseeing in Lantau, theme park development in Disney land and Ocean park, tourism related development in Sunny bay and unique eco-tourism in Sai Kung Town will be potential recreational areas. Industry stakeholders also expect more new attractions with local characters to be developed at central areas to cater the tourist rise and decentralize tourist activities. The demand in retail shopping will create unique and local store which need affordable rental prices to match the demand of Mainland shoppers.

ERLU: More MICE space

7.2.2. As it is expected that HZMB would bring more MICE opportunities, the industry hopes that more C & E space can be provided. According to a government paper, there is an anticipated shortfall of 130,000 sq m C & E space by 2028 (Legislative Council Secretariat, 2015; HKTDC, 2017). Industry leaders concern that despite the government expansion plans of C & E venues at Wan Chai, the extra space might not be sufficient to meet the potential increase in MICE tourists after the opening of HZMB. They expect more C & E venue and supportive facilities (e.g. hotels) at AWE to capture the potential influx of MICE tourists.

STN: Better connection with new and existing destinations

7.2.3. To support tourism development, better accessibility and convenient transportation network between HZMB and destinations play are critical. Transit-free, stop-free transport and continent linkage could give motivation to visitors to extend their trip plan if possible. For multi-day tourism experience, the smooth transportation from planed Northeast Lantau Tourism Gateway to urban center in Kowloon and Hong Kong Island should be provided. Direct connection from Tung Chung to various tourism development in Lantau may able to reduce travelling time not only for visiting. The transportation link from Tung Chung to Airport Island may enhance visitors flows and job trips.
7.3. **Financial and Professional Services**

7.3.1. The performance of the industry highly depends on the overall market environment and institutional arrangements (e.g. regulations). When the performance of the market is good with thriving businesses and active investment activities, the demand for financial and professional services would correspondingly be stimulated, inducing potential demand for more office space. As analysed in previous sections, it is expected that HZMB will further open up the WPRD market and induce demand for financial and professional services from Hong Kong, which would in turn call for more office space to support the expansion of business services from the industry.

ERLU: More (premier) Grade A office to cater for business expansion

7.3.2. The industry would need a variety of office space to support its potential business expansion. For headquarters, premier Grade A office space, or simply Grade A office space is desired in prime locations. These office spaces can accommodate customer-facing functions, such as meeting clients and signing contracts and corporate functions, such as strategic planning, marketing and communications. As the headquarters of the industry is traditionally located in the Central/ Admiralty area (i.e. CBD1) owing to branding effect, agglomeration, and high connectivity (this is especially the case for the legal sector as seamless connection can be provided to courts and arbitration centre), the industry very much prefers to stay in such a prominent location or nearby and expand their businesses. CBD2 is also considered, though at a lower priority as it is not as developed and prominent as that of CBD1. However, it should be recognized that the industry is facing pressure from rising operational cost (in this case, rent). The influx of Mainland enterprises in renting (premier) Grade A office space in Central/ Admiralty for high prices has reduced the amount of available office stock and driven up the rent in the area (Liu, 2018; Issacson, 2017; JLL, 2016). At present, some financial and professional institutions have left or are planning to leave CBD1 in search of cheaper places elsewhere in Hong Kong (Li, 2017; Liu, 2018).

7.3.3. Apart from requiring (premier) Grade A office space for headquarters functions, additional Grade A and Grade B office would also be needed to support middle and back office operations, such as risk management and regulatory compliance. These two types of spaces can be located outside CBD1 upon consideration of the space needed, rent, and extent of customer-facing activities.

7.3.4. With the opening of HZMB, the industry also aspires to benefit from the bridgehead economy created near the HKBCF Island. It can be expected that more branches of the financial institutions, for example banks, would be opened in Tung Chung to provide timely services to the incoming business and individual clients from WPRD.

STN: Seamless connection between CBDs

7.3.5. A seamless connection from HZMB to different CBDs (especially CBD1 in the short term) is desired by the industry. Apart from the headquarters, the key courts and arbitration centre
are located in the Central/ Admiralty area, meaning that connection is needed to strengthen Hong Kong’s position as an international financial centre and a centre for international legal and dispute resolution services in the Asia Pacific region. In the long run, efficient and convenient transport network within the CBD and between CBDs is necessary so that customers can easily access different services and firm employees can commute between offices (for example between headquarter and back office) conveniently.

7.4. Hi-tech Industry

ERLU: Integrated Science Park, Co-working space and fintech hub in ELM

7.4.1. Integrated Science Park should incorporate the affordable housing with the decent working environment so that foreign talents can be retained. Currently, the high housing costs have been deterring technology talents out of Hong Kong, leading them to locate their office outside Hong Kong. This will become a net loss to the long-term development of Hong Kong technology. After that, stronger connection with the universities in Eastern Knowledge and Innovation belt is required to satisfy the need of technology transfer and innovation synergy.

7.4.2. Co-working spaces with cooperation with Science Park and universities should offer cheap and alternative office spaces for technology start-ups. Besides, co-working space can be deemed as a idea exchange and brainstorming platform so as to commercialize their products.

7.4.3. The CBD3 in ELM has high potential of becoming a fintech hub in GBA, given that Hong Kong enjoys a sound financial and legal system. With joint effort with Shenzhen, the technology powerhouse, fintech can enable Hong Kong to strike remarkable improvements in productivity and financial services quality to GBA and the world. The financial inclusion offered by fintech can bring forth consumers and SMEs with higher control over their financial affairs and a wider variety of financial services.

STN: Better Accessibility between Exhibition Area, research hub and mainland technology firms

7.4.4. As the manufacturing base in EPRD is evolving and upgrading, it is expected that their business demand for technological advancement and its associated financing will bring opportunities to Hong Kong. A close connection between the BCF and the Eastern Knowledge and Innovation belt should be offered. Other than that, ELM, together with the exhibition centre in Wan Chai, should be well-connected with the research hub in Hong Kong. Lastly, a tight integration and strategic linkage with technology cores will be vital and this can be fulfilled by building Kwu Tung North and Lok Ma Chau Loop as the bridging point between the Belt and Shenzhen technology cores.

7.4.5.
## 7.5. Summary

<table>
<thead>
<tr>
<th>Industry</th>
<th>Spatial Implications</th>
<th>Policy Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Logistics</td>
<td>More modern warehouses with advanced monitoring technologies to handle time-sensitive and and high-value cargoes Some storage area shall be placed near the warehouses</td>
<td>Favorable customs policy to facilitate cross-boundary cargo flow Training of manpower to contribute to further upgrade of logistics industry in Hong Kong</td>
</tr>
<tr>
<td>Tourism</td>
<td>More recreational facilities, iconic landmarks and convenient hotels Land Study in Lantau Island</td>
<td>Convenient one-stop services and policy support on cross-border flow Further enhancement on Individual Visit Scheme (IVS) and multiple entry permit arrangement</td>
</tr>
<tr>
<td>Financial services</td>
<td>More Grade A office space to support expansion in financial services provision Seamless transition from the HZMB to different CBDs (especially CBD1)</td>
<td>Development of fintech to cope with increased pressure for regulatory compliance Providing a favourable business environment to maintain Hong Kong’s competitiveness in the GBA region Continuous liaison with the Mainland authorities and the financial institutions of Hong Kong to facilitate cross-border flow of capital Preparation of the industry for potential increase in IPO Close monitoring and managing of risks Nurturing and retaining talents</td>
</tr>
<tr>
<td>Professional services</td>
<td>More Grade A office space in the CBDs or near CBDs Convenient transportation network for people to move between the CEDs, key courts and arbitration</td>
<td>Relaxation of regulations for Hong Kong professional services firms to enter the mainland local market Funding allocated for SMEs to</td>
</tr>
<tr>
<td>High tech</td>
<td>Regional science park that integrate and cooperate with technology giants in Mainland China, especially Shenzhen. They can drive and propel the industry forward. Higher integration of science park with affordable and decent housing environment to retain talents from overseas. Co-working office spaces in Grade A office are much needed as they cater the business needs of the hi-tech industry, particularly start-ups.</td>
<td>Support for local universities to invest in hi-technology subjects and researches. Raising the subsidies and educational standards for teachers in primary and secondary education. Cultivate technology culture and ecosystem in the industry community. High-quality education for foreign talents’ child.</td>
</tr>
</tbody>
</table>
8. Vision and Overarching Planning Goals

8.1. Vision

8.1.1. The analysis in Section II reveals that there are opportunities brought forth by the cross-boundary infrastructure, and the regional development trend in the long run. In the wake of regional competition, it is necessary for Hong Kong to further strengthen the economic viability and move up the value chain for both the pillar and emerging industries through a sound development and spatial strategy. The proposed strategic plan is set to expand the capacity and resilience of key industries, to embrace the future opportunities and challenges, and benefit the community as a whole.

8.1.2. The vision of the proposed strategic plan is:

8.1.3. “To advance Hong Kong as a competitive, innovative and sustainable city as the international gateway of the Greater Bay Area, strengthening the status as the Asia’s World City”

Figure 8.1 Definition of the key terms of vision
8.2. **Overarching planning goals**

8.2.1. The planning goals are set to guide Hong Kong prosper and advance in the context of GBA, and promote balanced development to safeguard the economic, social and environmental interests. The cross-boundary infrastructure is regarded as a stepping stone by which the key industries could leverage on to pursue growth opportunities. Challenges observed in 2030+, especially about competition and home-job imbalance, would be addressed for sustainable city growth. The planning goals are:

- To initiate economic integration with the Greater Bay Area through cross-boundary infrastructure and sectoral development in Hong Kong
- To sharpen the edges of Hong Kong as the ‘Super Connector’ bridging the Greater Bay Area with the international market
- To achieve economic advancement along the GBA value chain by leading and riding on the regional development trend
- To provide spatial solutions to the key industries to:

8.2.2. i). seize the opportunities provided by Hong-Kong-Zhuhai-Macao Bridge

8.2.3. ii). overcome challenges in local and regional context

- To enrich the current development framework of 2030+ to address spatial challenges and unleash development potential

8.2.4. 
9. HK2030+: The Framework of plan proposal

9.1. Mutual goals with HK2030+

9.1.1. On top of achieving the vision and objective set out in the previous chapter, this study also aims at proposing appropriate spatial planning strategy and policy to achieve the planning vision of HK2030+ as its supplement. The planning vision proposed is to make Hong Kong “become a liveable, competitive and sustainable “Asia’s World City””, and the overarching planning goal is “to champion sustainable development with a view to meeting our present and future social, environmental and economic needs and aspirations.”

9.1.2. To achieve the planning vision and overarching planning goal, HK2030+ has set out 3 major building blocks, and these building blocks were translated into spatial terms in a conceptual spatial framework (see figure 11.1). Our study, with focuses primarily put on ERLU and STN planning, aims at achieving the building blocks 2 and 3 – “Embracing New Economic Challenges and Opportunities” and “Creating Capacity for Sustainable Growth”. On top of that, redressing the existing unbalanced spatial distribution of homes is one of the major focuses of the strategic plan too. To date there 41.2% of the population lives in the non-metro area, meanwhile there is only 23.8% of occupations located in the non-metro area (Planning Department, 2016a). It has induced heavy traffic flow and even social problem due to the prolonged daily commute time. In a long run, with further development New Towns in New Territories, this issue would be intensified if there was no significant change in the planning strategy from the past.

Figure 9.1 Three building blocks of HK2030+

Figure 9.2 Illustration of jobs housing balance
9.2. **Anticipated for the expected - planning for GBA era**

9.2.1. HK2030+ has taken account of the current influence brought by Pearl River Delta Economic Zone, which is governed by the Guangdong Province. Under the plan of this economic zone, 9 cities located at the Pearl River mouth are included. And due to the non-affiliative relationship between Guangdong Province and SARs, Hong Kong and Macau are not part of the plan. Meanwhile, the GBA plan, which was proposed by the top governance of central Chinese government last year, has re-incorporated Hong Kong and Macau, into one single economic zone, together with the 9 cities. Not only would it give Hong Kong a clear role to play in regional context, Hong Kong’s integration into mainland cities is going to reach its highest level ever.

9.2.2. Compared to PRD, the GBA plan has a higher emphasis on central government. With the government’s ambitiousness to develop GBA into a “world class bay area comparable to San Francisco”, the investment into the area, either capital or non-capital, from the central government or private sector, is expected to be more significant than any time before. With a greater amount of resources and a rapid pace of development, it is expected that each city could unleash their own potentials according to their role stated in the future GBA plan to a further extent. And such accelerated development of the whole region would in turn brings more opportunities, as well as competitions, to Hong Kong in the context of regional cooperation. Therefore, based on the framework of HK2030+, UP studio has proposed a supplementary strategic plan, attempting to better position Hong Kong in achieving the planning visions and objectives, with the consideration of the establishment of GBA in near future.

9.2.3. The GBA integration is highly economic oriented, and the study has a focus on ERLU and STN planning, thus the scope of the study is put on the economy of Hong Kong. Although HK2030+ has proposed a few economic belts regarding the locational factor, in this study, however, the strategic planning proposed is expanding the idea into finer details. With an assumption of future planning direction stated in HK2030+, Strategic Economic Zones are identified to indicates the strategic functions and role of a physical area; and Strategic Industry Belt & Hub are identified to indicates the current and potential cluster of each focus industries. Together with the results generated in the final analysis, economic oriented ERLU and STU planning that has taken consideration of updated input of GBA development, is generated as a supplement to HK2030+ to better achieve the planning vision and objectives.
10. Planning Approach and Guiding Principles

10.1. Planning Approach

10.1.1. The Project Team generates the following strategic plan based on in-depth study of information and data. The study covers the inception study on strategic plan, regional policy and cross-boundary infrastructure in Hong Kong, regional development trend at GBA, with focus on WPRD, implications of HZMB to key industries, expectations n ERLU and STN by industry stakeholders, and lastly a SWOT analysis of Hong Kong. The study formulates a solid basis for the team to propose a strategic plan to expand the capacity of key industries to capture the opportunities of HZMB and overcome challenges.

10.1.2. The study results are adopted to form a set of criteria. The criteria (See Table 10.1) is used to find suitable sites for and types of ERLU for each key industry.

<table>
<thead>
<tr>
<th>Opportunities of HZMB and WPRD development</th>
<th>Locations and types of ERLU are selected based on whether they can help the key industries seize the opportunities of HZMB and WPRD development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business needs and challenges of the key industries</td>
<td>Locations and types of ERLU are selected by evaluating if they can meet the business needs and overcome challenges.</td>
</tr>
<tr>
<td>Feasibility</td>
<td>The feasibility of locations will be assessed by review on the existing government plans and policy to see if they can hold the proposed ERLU.</td>
</tr>
<tr>
<td>Sustainability</td>
<td>ERLU would be proposed at locations which will pose the least threat to the environment, and maximize the potential economic and social sustainability (especially the home-job balance pinpointed by 2030+).</td>
</tr>
</tbody>
</table>

10.1.3. Suggestion on STN development will be made based on the pattern of proposed ERLU and evaluation on the impact of proposed ERLU on traffic. Needs of key industry on traffic and accessibility would be taken into consideration as well.
10.2. Guiding principles

10.2.1. To achieve the vision and overarching planning goals, the following guiding principles are adopted for the overall strategic plan.

- Stimulation of regional economic integration by facilitating industries to provide services supporting regional growth

- Promotion of business development at strategic locations to enhance business viability, and the overall economic performance in the long run – Expansion of capacity of Hong Kong industries to capture the opportunities generated by HZMB and WPRD development

- Expansion of infrastructure and road network to facilitate growth of the key industries and the associated flow of people and commodities

- Enhancement of home-job balance by adopting a decentralized mode of economic development
11. Conceptual Spatial Framework

11.1.1. To attain the visions and goals discussed in earlier sections, the conceptual spatial framework of our proposed strategic plan is illustrated in figure 11.1 (see attachment 1)

![Figure 11.1 Proposed Conceptual Spatial Framework](image)

11.2. Strategic Economic Zones (SEZ)

11.2.1. Taking the consideration of the latest development trend and the new dynamics of the city, we have identified 4 SEZ, which indicates the strategic functions and role of the area. In this sense, ERLU proposed within the SEZs shall refer to the function of which. In such a way synergy of the zones are enabled, thus maximizing the strategic functions and role of the area.

**Bridgehead Economic Circle**

11.2.2. Located on the Western side of Hong Kong, with the HZMB BCF and Hong Kong International airport at the centre, Bridgehead Economic Circle enjoys the highest cross
boundary accessibility of Hong Kong. With the existing Northern Lantau Highway, together with the future development of Chek Lap Kok – Tuen Mun Link and a transportation network connecting northern and southern Lantau proposed in 2030+, such high accessibility effect could radiate into nearby districts such as Tuen Mun, Kwai Chung and Tai O. This world class infrastructure provides accessibility which enables Bridgehead Economic Circle to be the ideal location for future time-sensitive activities of all kinds of industries to locate. It could also be the tourism gateway hosting both international tourists who take Hong Kong as the first stop of their tour in China.

**Metropolitan Business Core**

11.2.3. The current CBD of Hong Kong is located in the Central area, and it is the world’s well known international financial centre where numerous multinationals locate. The branding effect and the economy of scale have led to an enormous demand for office area. With reference to the 2030+, the existing CBD, together with the future CBDs in Eastern Kowloon and Eastern Lantau Metropolis form the Metropolitan Business Core. This SEZ currently serves as the growth engine of Hong Kong’s financial & professional service industries. It would be the center of Grade A offices as the headquarters of the ever-booming enterprises, especially those from WPRD. It is anticipated that, through providing ERLU at high proximity to the CBDs, with the high density and connectivity within this SEZ, would promote scaling up of the current CBDs. Ultimately, the maximization of the comparative advantages of Hong Kong in GBA and in a global scale can be attained.

**Integrated Innovation Hub**

11.2.4. Aligned with the Eastern Knowledge and Technology Corridor proposed in 2030+, the Integrated Innovative Hub locates on the eastern side of Hong Kong, enclosing existing high technology and knowledge-based industries, such as Science Park, and world-class tertiary institutions, including CUHK and HKUST. With the current rapid development of high-tech industry in GBA, the role of Hong Kong is expected to be more crucial. Due to the emphasis of connectivity of high tech industry and the proximity to the scenic area, capitalizing and further expansion of the existing cluster could leverage Hong Kong’s position as the cradle of talents and R&D centre of GBA in the long-run.

**Emerging Economy Hub**

11.2.5. Being the most distanced area from the central area of Hong Kong, yet the closest area to Shenzhen, Emerging Economy Hub enjoys both benefits of low rent and high proximity to Shenzhen’s knowledge, capital, and business opportunities. With the future establishment of Lok Ma Chau Loop Innovation and Technology Park, and Qianhai Bay Free Trade Port Zone (also a high-tech cluster) in Shenzhen, the importance and attractiveness of this area would elevate to a greater extent. The Emerging Economy Hub would be an ideal location and incubator of new high-tech companies. The SEZ has a potential to be the hub of future Hong Kong startups,
11.3. Strategic Industry Belt & Hub (SIBH)

11.3.1. To better direct the strategic planning for the focus industries, 4 SIBHs regarding 4 focus industries of this study are identified. The SIBHs identify the current clusters of each industry connected with STN, in such a way a guide to ERLU development is developed. In proposing new ERLU with regards to the industries, ERLU is located at high approximate to the current SIBH hence the economy of scale of the current clusters can be capitalized. On top of that, some ERLU are located in a way that extends the current SIBH, which implies the proposed ERLUs strategically expand the catchment area of the regarded industries. Detailed identifications and insights of the SIBH are to be discussed in the later chapter of this study.

Considerations of ERLU

11.3.2. In the Conceptual Spatial Framework, different locations are identified for ERLU development of the key industries. There could be expansion of the existing ERLU clusters. Addition of ERLU would share the same functions as the existing one. ‘New’ ERLU is also proposed. It consists of ERLU development at either:

1. unplanned sites (without any planning study, draft/ statutory Outline Zoning Plan), or
2. planned sites (with planning study, draft/ statutory Outline Zoning Plan ), or
3. developed sites in which the existing land use will be changed.

11.3.3. To ensure the feasibility of ERLU proposal, official information of land supply stated at 2030+. The existing clusters of economic land, planned/committed projects, potential solution spaces for meeting shortfall are considered as the possible sites of the ERLU proposal. Other government development schemes, including committed reclamation projects are also covered.
11.3.4. Industry needs are examined to find the optimal location of ERLU. It is recognized that needs including proximity to market and accessibility will affect development and performance of ERLU. In addition to economic viability, home-job balance is the key social consideration to achieve sustainable development in Hong Kong. As found by 2030+, the New Territories consist of 41% of population, but offer merely 24% of the jobs. In wake of new housing development in the New Territories, the importance of placing ERLU close to the homes of workers is recognized to shorten the commuting time. This consideration is reflected spatially by developing the Emerging Economy Hub at New Territories North.
11.4. Strategic Transport Network

Figure 11.3 Proposed STN

Goals and Objectives

11.4.1. With expected newly developed ERLU and expansion on existing ERLU clusters, the transport network should be further developed support the ERLUs. An STN Development Plan is thus proposed to strengthen inter-regional linkage, to enhance regional accessibility of new ERLU developments, and to increase capacity and connectivity of intra-regional transport network. It is expected that with STN development, economic interactions within SEZs and along industry belts/hubs can be fostered, maximizing the potential of economic growth and agglomeration brought by the opening of HMZB and ERLU development.

11.4.2. Several STI developments are proposed to achieve the above goals. They can be categorized as three categories, including proposal of new STIs, integration of committed STIs with new ERLU development, and upgrade of existing transport networks. The overall STN Plan is formulated on the base of government strategic plans such as HK2030+ and Railway Development Strategy 2014 (Transport and Housing Bureau, 2014), where the goals and proposed projects are respected. Further new suggestions are made in this Plan with deeper consideration made for proposed ERLU development.
Highlights

11.4.3. A general overview of the scheme is listed as below. Full explanation of the proposed scheme will be further elaborated in Chapter 13.

1. Strategic inter-regional linkage along western Hong Kong: Two new highway systems and one railway are proposed to link up Tuen Mun, Lantau, Kau Yi Chau and Hong Kong Island, providing an outer link that links up new ERLU development in the western part.

2. Network upgrade along external linkages from Northern New Territories: Improvement of Route 9 by network upgrade and new bypass to cater expecting traffic increase to and fro Northern NDAs.

3. Network integration and upgrade to strengthen linkage between Kowloon East - Sai Kung: Integrate planned networks and upgrade existing roads to Hiram’s Highway and HKUST to increase accessibility of strategic development ERLUs.

4. Accessibility enhancement to Cyberport: Upgrade current Pok Fu Lam Road and integrate planned MTR line to increase traffic capacity and convenience between Cyberport and CBDs.
12. Recommendations on ERLU and STN for the Key Industries

12.1. Logistics Industry

Overview

Regional Development

12.1.1. The current regional development trend as shown in Figure 5.1 provides insight on the logistics industry in Hong Kong. While WPRD is developing both high-tech products and cross-border e-commerce, the relatively sophisticated logistics infrastructure at EPRD and Hong Kong might capture the cargo hinterland there (refer to Part I chapter 5). The rapidly growing logistics sector in EPRD has imposed threat to Hong Kong, but Hong Kong shall leverage on its competitive advantage to capture the cargo of WPRD, supporting the economic development there.
12.1.2. The opening of HZMB helps Hong Kong to ride one the market trend in Greater Bay Area. As shown in Figure 5.2, HZMB might lower the cargo transport time and cost between Hong Kong and WPRD. This could extend the cargo hinterland of Hong Kong, attracting the high-value, time sensitive cargos, especially from Zhongshan to Hong Kong and leveraging Hong Kong’s wide connectivity. HZMB might also stimulate influx of cross-border ecommerce cargoes to be transferred from Hong Kong to WPRD (refer to Chapter 7). More inter-modal logistics activities are expected. However, it shall be noted that the logistics industry still faces challenges, including the competition imposed by EPRD, high operating cost and uncertainty about the customs arrangement of HZMB.

12.1.3. The recommended strategic planning will take the above into consideration, expanding the economic capacity of the logistics industry upon the opening of HZMB.
Key Strategic Direction and Actions

12.1.4. The following strategic plan and policy aims to provide extra land to increase capacity of the logistics industry to seize the opportunities brought forth by HZMB and address challenges which might hinder its development.

12.1.5. The following are the list of key actions of the strategic plan and policy:

- To increase supply of logistics land at Hong Kong International Airport and North Lantau to strengthen development of bridgehead economy of logistics industry

- To provide land for modern logistics development, including modern warehouses, smart logistics parks, e-commerce fulfilment center to enhance the competitiveness of logistics industry to provide high-value logistics services in GBA.

- To provide land for warehouses in appropriate areas of Hong Kong to ensure sufficient capacity for the industry to capture the potential rise of cargoes by HZMB and regional development trend

- To increase supply of land for ancillary logistics services, especially truck parking to support efficient operation of the logistics industry

- To offer suitable land to lower the operation cost of the logistics industry in Hong Kong

- To encourage regional flow of cargoes with suitable cross-border customs arrangements in the long run
12.1.6. More land of ERLU for the logistics industry will be provided at three main areas, namely North Lantau, Kwai Tsing, and Tuen Mun (with its surrounding areas). Each area will carry different functions to enhance the overall capacity of the logistics industry upon the opening of HZMB.

12.1.7. Overall, the plan aims at providing greater supply of land for modern logistics development, supported by ancillary facilities. While intermodal logistics (especially between air and land) might grow, the selected areas lay along the major roads to ensure truck movement of cargoes among different points remain smooth, cost-efficient and time-efficient.
12.1.8. North Lantau would be the key airport-led cargo gateway upon opening of WPRD, given its geographical proximity to HZMB. Modern warehouse facilities, together with service centers could be provided at topside of HKBCF island and land near HKIA (e.g. Kwo Lo Wan). The facilities will serve to offer high-value added services, and handle time-sensitive and high-value cargoes (e.g. biopharmaceutic products), which require special handling with a high security level from WPRD via HZMB. Closeness of the facilities to the cross-border customs and airport helps to minimize time of cargo transfer, enabling prompt air cargo transshipment. The area will also hold cold-chain facilities to support safe storage of temperature-and-time sensitive cargoes (e.g. frozen meat and fruits). At Siu Ho Wan, land for warehouse and offices for storage, forwarding and distribution of e-commerce cargos can be provided to achieve just-in-time delivery to the WPRD market. Land provision there for the logistics industry could strengthen the function of the Bridgehead Economic Circle.

*Capturing the potential influx of cargoes under the opening of HZMB and regional development*

12.1.9. HZMB and WPRD development creates demand for land to best seize the potential opportunity. The studies at earlier stage recognized that HZMB might reduce time and cost of cargo transfer, when compared with barge cargo shipment (see Chapter 5). The economic modernization at Zhongshan with focus on advanced manufacturing could generate high-value cargos (e.g. biopharmaceutic products and electronics), which could be trucked efficiently via HZMB to HKIA for export to international market. HZMB also
enables the time-sensitive cross-border ecommerce cargoes to be trucked to WPRD efficiently after they are shipped to Hong Kong via air logistics. Provision of land for warehousing facilities at North Lantau, BCF and HKIA could expand the capacity of the logistics industry to handle the potential cargo rise in an efficient manner, creating synergy between HZMB and HKIA.

Addressing the uneven distribution of modern warehouses in Hong Kong

12.1.10. Modern warehouses with efficient management systems and handling facilities tend to cluster in Kowloon (See Appendix 12.1) (Savills, 2018). There are only two in Lantau. Farther distance between airport and warehouse will add extra time cost to cargo transfer, which might rise the overall logistics cost. Provision of land for modern warehouse facilities in North Lantau can help expand cargo handling capacity there, reducing time needed for cargo transfer. Siu Ho Wan is around 7 km away from HKIA, taking trucks about 10-drive to the airport via North Lantau Highway. The site has potential for offering land to ensure time-efficient cargo transfer.

Feasibility of land provision

12.1.11. The selected sites have area for further development, as indicated in Figure x. The HKBCF island is about 150 ha, with potential for further top-side development in addition to the boundary-crossing facilities (Arup, 2018). At the airport, land at Kwo Lo Wan and land parcels near the planned Sky City could be provided for modern warehousing facilities with service centers (Hong Kong International Airport, 2018). Meanwhile, recent government paper confirmed the feasibility of reclamation at Siu Ho Wan without harming the adjacent marine life at the Brothers Marine Park (Civil Engineering and Development Department, 2018). The new land could provide space for high-value added logistics services, for example the storage and fulfilment of e-commerce.

Home-job balance at North Lantau

12.1.12. Provision of land for logistics development could create extra employment for the future new population. It is estimated that the Tung Chung New Town Extension Plan (East and West) would hold 144,000 more people at Tung Chung (CEDD, 2017). The expansion of logistics area in North Lantau, the airport and BCF could provide new employment opportunities, which are easily accessible to the nearby residents. The helps to achieve the home-job balance, one the key issue 2030+ aims at tackling.
12.1.13. Land could be provided at Kwai Chung and Tsing Yi for ancillary logistics services. Multi-storey complex for cargo handling and truck parking, and open carparks for trucks and storage of related equipment could be developed there. The can support truck operation and deployment, enhancing the overall efficiency of cargo flow in Hong Kong.

Preparing for the potential rise in number of trucks after the opening of HZMB

12.1.14. As HZMB might stimulate cargo transport from WPRD to Hong Kong, there could be an associated rise in number of cross-border trucks to carry cargoes. Efficient truck transportation is key to ensure prompt delivery of cargos, especially e-commerce and other time-sensitive cargoes (Bain & Company, 2012) Land is need for efficient truck operation, maintenance and cargo handling (e.g. packing, loading and unloading). This could add to the trucking bays provided at warehouses in North Lantau, and increase the overall capacity of the logistics industry to seize the opportunity brought forth by HZMB and WPRD development.

Addressing the problems of truck parking

12.1.15. The stakeholder interview and government paper reveal that some truck parking sites are dispersed and unorganized, mostly in brownfields at New Territories (Development Bureau,

Figure 12.5 Detailed Area 2: Ancillary Logistics Area at Kwai Ching
The remoteness of those parking sites from HZMB and HKIA might lengthen the time of cargo transportation, incurring extra operation cost of the logistics industry. Meanwhile, official data reveals that there is a shortage of over 10,000 truck parking bays (See Table 12.1) (Transport Department, 2017). To better handle the potential rise in trucks, there is a need to provide extra parking area, as the ancillary logistics services to support the efficient operation of the whole industry.

Table 12.1 No. of Vehicles with Valid Licences and No. of Parking Spaces in 2016

<table>
<thead>
<tr>
<th>Number</th>
<th>Goods vehicles (Excluding light vehicles)</th>
<th>Parking Spaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>64,610</td>
<td>43,017</td>
<td></td>
</tr>
</tbody>
</table>

Note 1: Goods vehicles refer to trucks

Source: Transport Department, 2017

Feasibility of land provision

12.1.16. The government has conducted a study regarding to optimization of port-back up land at Kwai Chung and Tsing Yi (Transport and Housing Bureau, 2015a; Legislative Council Secretariat, 2017). The government has reserved around 100 ha of land for “port back-up” uses. One possible use is parking area of trucks. Multi-storey complex for both truck parking and on-site cargo handling is identified as the potential land use at Kwai Chung and Tsing Yi to enhance truck operation and overall logistics flow. Trucks could travel between BCF/HKIA to Kwai Tsing via Tsing Ma Bridge within 30 minutes (under congestion-free condition). Easier access to North Lantau makes Kwai Tsing a desirable location as well.
12.1.17. Land provision at Tuen Mun, Lung Kwu Tang and So Kwun Wat can further expand the capacity of the logistics industry upon the opening of HZMB. The land can be offered for modern warehouses, forwarding, distribution and packing facilities to offer high-value-added logistics services (e.g. cargo testing and certification) for the upcoming high-value cargoes. A smart logistics park with the facilities mentioned and advanced operation systems can be developed near the planned toll plaza of Tuen Mun-Chek Lap Kok Link (Area 38,40,46 &49). Logistic development there can reinforce the capacity of the Bridgehead Economic Circle to capture cargoes within 30 minute travelling time.

**Expansion of capacity to handle the potential cargo influx associated with HZMB**

12.1.18. The logistics development at the site can support the New North Lantau Cargo Gateway, handling less urgent cargoes. It also prepares the industry to handle extra cargoes during peak seasons when the logistics facilities at North Lantau cannot sufficiently support the temporary surge in cargo volume. The overall area will become a new logistics hub of modern logistics development for high-value and e-commerce cargoes, increasing the long-term capacity of the industry in Hong Kong.

**Overcoming challenge of warehouse shortage and dispersal of the industry**

12.1.19. Study at the earlier stage reveals that land shortage for warehousing facilities in Hong Kong hinder further development of logistics industry. Vacancy rate of modern warehouses
remains smaller than 4% during 2013-2017 (Savilles, 2018). One of the reason is that supply of logistics through government tender remains little. During the same period, there was only one tender sale of a logistics site (not in short term tenure – STT) at Tsing Yi (Lam, 2018). The shortage in supply has been driving up the rent warehouse which is the most expensive among the international logistics hubs (CBRE, 2017).

12.1.20. According to stakeholders and government studies, the shortage of warehouse space has led to emergence of open storage at brownfield in New Territories, with a rent at least 50% lower than that at warehouses in city areas (Legislative Council, 2017). The problem also drives some operators to set warehouses at outskirt areas, including Lau Fau Shan. The remoteness of unorganized storage sites might impose extra cost and time needed for cargo transfer to cargo terminals (e.g. HKIA), undermining the operation efficiency of the logistics industry.

12.1.21. Supply of logistics land in the three sites can help overcome the above problem, which might ease the rent pressure. Leveraging on the swift connection provided by TM-CLKL, the logistic land can consolidate warehouse operation at a convenient location for cargo transfer. In addition, the reserved land can also cater the long-term modern logistics development and growth, adding flexibility to the industry to meet the future changes of cargo demand in face of the opening of HZMB and the Greater Bay Area.

**Feasibility: Land Provision and Road Connection**

12.1.22. Land is available at the proposed sites. In Tuen Mun West, Area 38,40,46 and 49 have been identified as suitable for logistics development, given their proximity to TM-CLKL (Planning Department and CEDD, 2015; Transport and Housing Bureau, 2015b). Cargoes stored there can be delivered via the link to HKIA within 10 minutes (Highways Department, 2018). The total area of over 60 hectare could provide space for development of a smart logistics park for efficient logistics operation. The logistics development might generate extra traffic flow, which could be handled by the construction of Tuen Mun Western Bypass.

12.1.23. The proposed reclamation by the government at Lung Kwu Tang also provides around 220-250 hectare for development. Together with the non-green belt areas in So Kwun Wat, land can be offered for modern warehouses with high-value-added logistics services. These two locations are close to Area 38, 40, 46 and 49 at Tuen Mun, and TM-CLKL, taking around 10-15 minutes ride to arrive there.

**Home-job balance at Tuen Mun, Lung Kwu Tang, Yuen Long South and Huang Shui Kiu NDA**

12.1.24. The land for logistics development could generate new job opportunities for the nearby residents. Tuen Mun District and Yuen Long District together consist of over one million population (Census and Statistics Department, 2016). Yuen Long South and Hung Shui Kiu NDA would contain around 85,400 and 176,000 more population respectively. It is also expected that Lung Kwu Tang can provide extra residential flats to hold new population.
Taking the large existing, and potential rise of population, the land for development of logistics industry at the site help to provide more accessible jobs to residents, achieving a home-job balance in long-term.

Policy support to Logistics Industry

12.1.25. In addition to land supply, policy support is vital to strengthen the capacity of the logistics industry to grow and overcome challenges. Policy formulation shall be aimed to lay a solid foundation for the industry to facilitate its expansion generated by the upcoming HZMB and GBA development trend.

Coordination on customs to facilitate cross-boundary cargo flow

12.1.26. Customs systems in between Hong Kong and GBA cities are different. The difference in terms of procedures and standards might cause duplicate inspection and declaration, imposing risk of time delay of cross-border cargo transhipment. Customs and Excise Department has launched Intermodal Transshipment Facilitation Scheme (ITFS) in 2016 to reduce inspection times and allow early declaration of cargoes at Hong Kong before being transhipped to mainland via trucks. (Customs and Excise Department, 2017). The scheme is integrated with the Speedy Customs Clearance (SCC) of Guangdong Customs to offer a ‘green lane’ equipped with efficient inspection facilities to enhance cross-border cargo flow. The scheme is confined to land control points at Shenzhen. Details of customs arrangement at HZMB are yet to be finalized.

12.1.27. The Hong Kong government could coordinate with mainland authorities to provide schemes as the ITFS. Cargo declaration could be done at electronic platforms to enhance flexibility. Cargo inspection can be conducted at either entry or exist point in Hong Kong or Gongbei to simplify the procedure and minimize cargo time lag.

12.1.28. Another concern about customs held by industry stakeholders is that customs in different Chinese cities and towns have their own policy. The complexity of mainland customs cause inconvenience of cargo transfer between Hong Kong and the Mainland (Leng et al, 2017). The Hong Kong government could cooperate with the authorities at WPRD cities, like Zhuhai and Zhongshan, to launch customs lanes with simplified and standardized procedures for cross-border cargoes. Such arrangement could enhance the efficiency and stimulate utilization of HZMB in the long run.

Enhancement of Manpower Training

12.1.29. Manpower in the logistics industry could be further expanded, especially in terms of quality. According to official figure, the expected average annual growth of manpower in logistics is 0.1% in 2010-2018, smallest among the pillar industries (HKSAR, 2015). It is also anticipated the industry would need mainly professional staff with an education level of sub-degree or above. The industry stakeholders agreed such trend by pointing that more young and educated talents are needed to join the R & D force to achieve technological
advancement of the industry (Leng et al, 2017). Meanwhile, young members with knowledge about Chinese customs and trade regulations are needed to strengthen the capacity of the industry to handle cross-border cargo business and extend client network so as to promptly capture the opportunity offered by HZMB.

12.1.30. Different tertiary institutions are offering sub-degree programmes on logistics (maritime and aviation), yet the above two aspects mentioned are not much covered. The Hong Kong government could reinforce manpower training by subsidizing the education institutes to offer more specialized programmes in logistics R & D and trading in China. The programmes could include experiential learning like logistics internship in China to help students better understand the market. Such enhancement of manpower training can provide labour force to help the logistics industry to provide better value-added services tailor-made for Chinese market. More talents working for logistics R & D could help speed up digitalization of the industry, with a higher efficiency of cargo flow and potential of service innovation.

Policy Implication on the government, private sector and the community

The Hong Kong government

12.1.31. Much communication and coordination are needed for the policy and plan. The government might closely communicate with the industry stakeholders and the community about the strategic plan to solicit comments on land provision of the logistics industry. Refinements are expected to ensure the plan could balance both economic and social needs. Solutions might be needed to minimize the impact of new logistics development to the surrounding environment and neighbourhoods.

12.1.32. The opening of HZMB could bring new opportunities to the logistics industry. Customs arrangement is a vital part of efficient cargo flow between Hong Kong and WPRD. The government might need to negotiate with the mainland authorities to decide on favourable customs arrangement to ensure smooth cargo flow along the bridge. Such negotiation could be driven by Hong Kong-Zhuhai-Macao Bridge Authority in which representative of Hong Kong, Macao and Zhuhai are present (Hong Kong-Zhuhai-Macao Bridge Authority, 2010). The government shall consult industry representatives like air logistics operators, shippers, freight forwarders and truck operators to solicit their views about optimal customs arrangement at different control points. To enhance manpower training, the government shall cooperate with education institutions and industry stakeholders to offer the optimal programmes in the long run.

Private sector

12.1.33. The plan and policy might help growth of logistics operators specialized in high-value and time-sensitive air cargoes. Ecommerce logistics operators might further develop. The extra land provided for logistics industry might help alleviate the rent pressure. Placing warehouses close STN and cargo terminals could also reduce transport cost and time
needed for cargoes. Policy support by the government in terms of customs and manpower training could further strengthen the competitiveness of the logistics industry. However, since both plan and policy take time to be implemented, industry stakeholders shall

**The Community**

12.1.34. New logistics development near the residential areas might bring forth opportunities and threat to the existing and new neighbourhoods. The logistics land could generate new job opportunities near residential areas, bringing convenience to local residents, like the case in North Lantau and Tuen Mun. However, some residents might find logistics facilities and the increase in traffic flow undesirable. There might be opposition against the land development which might generate pollution and affect living quality.
12.2. Tourism Industry

12.2.1. Overview

Regional Development

12.2.2. Each city in PRD region have a role to play in the tourism industry development. Given the fact that geopark is unique in Hong Kong in the whole GBA, Hong Kong should promote its geo-tourism. Also, Hong Kong should sustain its image as a shopping paradise in the region. Responding to the increasing number of MICE travellers, Hong Kong will boost in expanding MICE venues by being one-hour commuting cycle. It can overcome the competition with MICE industry in Macao and Zhuhai MICE with the advantages of high-level professional services and comprehensive intellectual property protection. On the other hand, HZMB would encourage further cooperation between the three cities.
Implications of HZMB to Tourism Industry

12.2.3. The HZMB would likely to bring in more tourists not only group tourism also multi-destination tourism. The reduction in time, distance and cost for travelling can accelerate the expenditure for international and regional tourists. Moreover, the visitors to regional tourism development such as Zhuhai marine tourism and casino paradise in Macao may become potential visitors to Hong Kong.

Key Strategic Direction and Actions

12.2.4. The strategic plan aims to sustain Hong Kong’s competitive edge in the tourism industry through further development in tourism attractions.

12.2.5. The following are the list of key actions of the strategic plan and policy:

- To create the Bridgehead Economy by developing tourist attractions on Lantau Island and near the Airport
- To diversify tourism products by unleashing the potential of Hong Kong natural and cultural assets
- To Introduce local character into traditional retail and exhibition space to create distinctive experience
- To Introduce new development into the underutilised tourism attractions for revitalisation
To expand the MICE facilities to cope with the increasing regional and international demands

**Strategic planning - Overview**

![Figure 12.9 Overview of Tourist Hubs](image)

12.2.6. New tourism-related facilities may be provided in three designated areas in order to compete with regional tourism related developments and to provide unique and local characters. The developments in there will include leisure activities like retail shopping, World-class shopping, hotels and theme parks, unique attractions in the region such as geopark, coastal tourism and sightseeing, heritage tourism including rural villages and historic monuments and buildings and exhibition venue for business trips.

12.2.7. The plan is targeting to fulfill the tourism needs and some of them are planned to develop very soon. To reach the goal of one stop tourism industry, the some of the selected area are already well-connected and the strategic transport network can provide good connectivity for visitor flow.
12.2.8. Having the advantage of being adjacent to HKIA and landing point of the HZMB, the HKBCF and Lantau may serve as a gateway and the development of Bridgehead Economy. Tung Chung has its strategic location with the connectivity to the existing and planned transport infrastructure nearby which are HKIA, HZMB and HKBCF under construction. It can create an inspiring and image of Hong Kong and gateway. Together with Lantau tourism attractions development, BCF could bring potential development on more retail shopping for local characters and office space and world-class shopping mall in Tung Chung which is the local and regional demand. Moreover, Tung Chung East will able
to promote commercial and tourism uses with the development of hotel, resort centres and marina. Tung Chung development area can grab the opportunity on heritage and natural resources, like preservation and revitalizing on monuments, historic buildings and rural village, for educational and tourism purpose. The proposed commercial developments in TCE and the North Commercial District (NCD) in HKIA have been planned to be complementary to each other. TCE can grab opportunity of having good accessibility to the city centre and proximity to residential developments to develop regional office node, regional retail uses and local retail uses in the extension areas (TPB Paper No.9726).

12.2.9. Locationally being close to Hong Kong Disneyland, the Sunny Bay Mass Transit Railway Station and HKIA, Sunny bay has potential development as an entertainment and a significant regional node for sustaining economic development of Lantau. The proposed Sunny Bay development land can be used as residential development, tourism-related facilities such as hotels, dining, leisure and entertainment, GIC uses including parks or recreational area.

Better utilization of regional tourism development

12.2.10. HKIA can connect to Asia’s major commercial cities within 4-hour flight time and half or the world’ population within 5-hour flight time. The 3RS of HKIA and opening of bridge could strengthened Lantau as an international and regional transport hub and “Double Gateway” to the world and PRD region. (Lantau Sustainable). At the same time, other PRD regional cities are developing their role to attract upcoming visitors. Zhongshan is developing yacht tourism. Macao is targeting their goal of World Center Tourism and Leisure by promoting gambling and historical tourism. Moreover economic platform between portuguese speaking country. The short distance between Macao and Hong Kong via bridge will extend the leisure trips to Hong Kong. The potential shopping and recreational facilities development in HKBCF island, Sky City on HKIA, MICE venus on AWE, pier yacht extion in Tung Chung East extion,Disneyland and tourism-related facilities in Sunny Bay can attract increasing number of tourist from PRD region to Hong Kong.

Smooth connection in shorter distance

12.2.11. The distance between origin and destination play an important consideration of tourist destination choice. Hong Kong need to provide easy access to each tourist spots. The improvement on branding of destination is also considerable factor for tourism industry.

Feasibility and resources

12.2.12. The overall extension project may able to create about 40,000 jobs opportunities with over 800,000 m2 of commercial floor space providing regional offices, retail and hotel development.(Lantau Blueprint). Sunny bay proposal for tourism-related development can also provided new land for hotels, retail, world-class shopping malls, outlets and leisure spaces.

Job-Housing unbalance
12.2.13. It is estimated that the whole Tung Chung New Town will have population about 270,000 in future but the capacity of creating jobs will be about 40,000 jobs. It can create job-housing unbalance in future. Related to the reclamation concern about impact on marine ecology and environment, Chinese White Dolphin (CWD) survey was conducted and revealed that Sunny Bay is not a likely CWD hotspot and has very low probably for dolphin. So it was stated as no insurmountable environmental problems from reclamation at Sunny Bay. (PWSC(2016-17)34)

Detailed area 2: The Metropolitan Core

![Plan for Metropolitan Core Area](image)

Figure 12.11. Plan for Metropolitan Core Area
Source: Up Studio

12.2.14. The metropolitan core aims to consolidate and further develop the existing tourist attractions by enhancing the sense of local character, revitalising the underutilised area and introducing new development. There are four main areas with their own differentiated
functions, which includes West Kowloon area, Tsim Sha Tsui waterfront area, Wan Chai waterfront area and Kai Tak area. Given the presence of the XRL West Kowloon Terminus and the West Kowloon Cultural District (WKCD), West Kowloon area has the capability to focus on cultural tourism, catering the needs of business travellers coming from the EPRD who are looking for distinctive experience. In this area, there is a potential need for more retail and hotel space near or on the top of the XRL station. For the WKCD, more land could be provided for the expansion of exhibition centres and retail space for local designer products and brands. Currently, the Tsim Sha Tsui waterfront is underutilised. A revitalisation plan of an integrated leisure and retail hub with museums would bring the Tsim Sha Tsui waterfront new opportunities. With a similar situation, the underutilised Kai Tai Cruise terminal may also be integrated with a proposed water sports centre, Kowloonbay International Trade & Exhibition Centre (KITEC) and other hotel facilities for revitalisation of the underutilised area. For the Wan Chai waterfront area, there shall be expansion of MICE space for large-scale international events and corresponding ancillary facilities such as hotels.

**Grab opportunities of the regional development after the opening of HZMB**

12.2.15. Tsim Sha Tsui, which is described as a “one-stop shopping paradise” high-end malls, has a relatively underutilised waterfront area. After the opening of HZMB, there will be an increasing influx of tourist from the WPRD. To better utilise the waterfront to capture potential customers, expansion should be conducted to make the area a retail hub with new facilities such as hotels and museums.

12.2.16. The Guangzhou-Shenzhen-Hong Kong Express Rail Link (XRL), which will connect Hong Kong with the over 25,000-km National High Speed Rail Network, is shaping Hong Kong and the Pearl River Delta into a one-hour travel zone. As the terminus of the XRL will be located in West Kowloon adjacent to the WKCD, it is foreseeable that there will be more business travellers and tourists attracted to the WKCD because of the shortened travelling time and enhanced connectivity. With the positioning of WKCD as a world-class integrated arts and cultural district, it will be one of the most vibrant places gathering the international, Mainland and local tourists. To differentiate itself from the other cultural projects in the GBA such as the Hengqin Creative Cultural City in Zhuhai, there should be an expansion of exhibition center and retail space in the WKCD for local brands. More retail space and hotels can be provided near the XRL West Kowloon Terminus to create synergy in better capturing the business opportunities.

12.2.17. Responding to the increasing influx of MICE travellers, Wan Chai will receive about 175,000 square metres from the three existing government buildings. Among them, 23,000 square meters are expected to be revitalized as conference and exhibition facilities and that can be sufficient for C&E space during peak season (HKSAR, 2017).

**Industry needs**

12.2.18. Currently, Elements is the only shopping centre in the West Kowloon area. However, it is
filled with high-end luxury brands which are in a lack of local character. With more Mainland consumers looking for “niche” local brands with unique shopping, more retail space for local designer brands should be provided near the XRL West Kowloon Terminus and the West Kowloon Cultural District to provide distinctive shopping experience.

**Feasibility of land provision and resources**

12.2.19. According to the Consolidated Land Requirement and Supply Analysis (Planning Department, 2016), there is available land on the top of the XRL West Kowloon Terminus. Although Grade A Offices projects are expected to be carried out for that area, there is still potential to provide integrated commercial buildings with a mixture of uses.

**Detailed area 3: Sai Kung Town Area**

![Figure 12.12. Plan for Consolidated Sai Kung Town Area](source: Up Studio)

12.2.20. The area near the Sai Kung Pier is intended to be a new emerging hub for eco-tourism, geo-tourism and cultural tourism to support the sustainable growth of Hong Kong’s tourism industry in the overall regional development. As the Mainland has always been the largest source of visitors to Hong Kong, there is an observable trend that in recent years, visitors
are more interested in a wide variety of tourist attractions with local character instead of merely shopping which could be easily replaced by e-commerce with access to most of the international brands. For the long-term development of the industry, more tourist facilities can be provided near the Sai Kung Pier to further expand the capacity in diversified tourism. A range of tourist facilities such as hotels and youth hostels can be offered to cater the needs of different groups of visitors.

Capturing the potential tourist influx after the opening of HZMB

12.2.21. Although other cities in the Greater Bay Area such as Huizhou, Jiangmen, Zhongshan, Zhaoqing have started planning and developing eco-tourism with their own nature resources, Hong Kong Geopark is the only park in the area which is recognized as a Global Geopark by the United Nations Education, Scientific and Cultural Organization (UNESCO). With its international status and the unique natural landforms, Hong Kong Global Geopark should continuously receive more recognition and be seen as a suitable place to further develop geo-tourism and eco-tourism. With the availability of boat tours to the Hong Kong Global Geopark, provision of tourist facilities near the Sai Kung Pier can further expand the capabilities of the tourism industry to cater the needs of tourists who are looking for attractions with local characteristics and ecological features after the opening of HZMB.

Diversification of tourism attractions beyond shopping

12.2.22. Hong Kong has always been known as “shopping paradise” with high-end retail. However, these stores are mostly luxury retail chains which can be found everywhere around the world without a sense of local character. With the growing prominence of online shopping, shopping malls are no longer as popular as before. Therefore, for the sustainable long-term development of the tourism industry, shopping should no longer be the only main focus. To maintain its competitive edge in the industry, Hong Kong should consider diversifying its tourism attractions by actively developing other tourism products such as geo-tourism and ecotourism.

Feasibility and resources

12.2.23. Up until now, there are 140 UNESCO-listed global geoparks in the world with 37 of them located in China (Hong Kong UNESCO Global Geopark). In order to gain the global geopark status, the geopark needs to be assessed by a list of strict requirements to prove that it has landscapes of international geological significance. Therefore, Hong Kong Global Geopark undoubtedly has the capabilities and resources to be promoted as a world-class natural tourist attraction. Apart from the geopark, there are also other attractions in the area such as Sai Kung East Country Park and Yim Tin Tsai Village. These are important assets in shaping the area as a proper place to further develop eco-tourism and cultural tourism.

Economic sustainability

12.2.24. In order to sustain its competitive advantages in the industry, there is a need for Hong Kong to create distinctive experience for the high-spending and young tourists who would like to
pay a visit to explore some rural and cultural attractions rather than shopping centers. With the popularity of e-commerce, promoting shopping would not be a long-term sustainable plan. Diversifying tourism offerings is a one of the ways to gain economic sustainability.

*Policy support and justifications to Tourism Industry*

12.2.25. To receive higher visitor flow, there should be more concentration on development of unique tourist attractions. Current Hong Kong tourism industry has limited visiting spots which can put behind in competition with regional cities and Asia. So, tourism source and products should expand, introduce more attractions to inbound business visitors. For example, cruise tourism as a passenger-friendly transport.

12.2.26. Upgrading manpower relating to hospitality services is also essential for better tourism services. The hotels and restaurants are first image to introduce Hong Kong hospitality services, the good services can be one of the popular attractions.

*Policy implications to the government, private sector and the community*

12.2.27. The tourism industry is critical to the city, Government should create a friendly environment for tourists and local people. The flexibility visa access and one-stop immigration system is also important as it can be another favourable consideration for upcoming visitors' choices.

12.2.28. Hong Kong tourism mainly rely on mainland tourists and as they spend more on jewellery, luxury brands and cosmetics, other old and local shops and restaurants may not able to compete. As long as the retail rents are skyrocketing, they may difficult to survive and the city is losing its unique character at the same time. And Hong Kong should not only rely on mainland tourists and should try to attract tourists from other countries. The main shopping streets in Hong Kong such as Russell Street in Causeway Bay and Canton Road in Tsim Sha Tsui should renovated to provide better shopping environments to shoppers and facilities to tourists like Orchard Road in Singapore and Myeongdong in South Korea.
12.3. Financial and Professional Services Industry

Overview

Regional Development

Figure 12.13 Regional development trend of Financial & Professional Services Industry
Source: UP Studio

12.3.1. Figure 12.13 gives a summary of the current regional development trend of the financial and professional services industry. One of the key observations is that WPRD cities such as Zhongshan is focusing on industry restructuring and upgrading and have started to develop financial services and technology innovation, in which the EPRD cities are gathering pace. Moreover, there are several pilot free trade zones (FTZs) in the area such as Hengqin Pilot FTZ, Qianhai-Shekou Pilot FTZ and Nansha Pilot FTZ, which are keen on attracting Hong Kong enterprises for cooperation owing to Hong Kong’s leading financial and professional services. With high-level market integrity and regulations up to international standards, Hong Kong has the most internationalised business services provision in the GBA. Hong Kong should utilise this advantageous positioning to maintain its competitive edge in the industry.

Implications of HZMB to Financial and Professional Services industry

12.3.2. The enhanced accessibility after the opening of HZMB would allow clients from WPRD to
come to Hong Kong easily, further facilitating cross-boundary meetings and communications. As shown in Figure 5.X, it may lead to potential growth in customer base from the WPRD with firms which are aiming to “go out”. At the same time, it may induce opportunities to expand the financial and professional services provision for those who want to enter the WPRD market. As a result, the position of Hong Kong as an international financial center and dispute resolution hub would be further enhanced. However, there are several factors that may hinder the growth of the industry, such as the increased pressure of regulatory compliance by the Chinese government, differences in legal systems and the complicated process for license application to provide auditing services in China.

Key strategic direction and actions

12.3.3. In light of the opportunities and challenges brought by the opening of HZMB, as well as other developments in Hong Kong (e.g. XRL, development of the Lok Ma Chau Loop), the capacity for the financial and professional services is to be expanded through increasing the supply of office space and formulating supporting policies for the industry to grow and prosper.

- To reserve land at North Lantau to allow the industry to capture opportunities brought by the bridgehead economy created by HZMB
- To reserve land at West Kowloon (i.e. near the XRL station) to allow the industry to capture opportunities brought by XRL
- To increase the supply of (premier) Grade A office space in CBD and non-CBD areas to support different types of businesses (e.g. multi-national corporations (MNCs) and small-and-medium enterprises (SMEs)) and different business operations (e.g. headquarter or regional office, supporting office, back office)
- To encourage collaboration and synergy between the financial and professional services industry with other emerging industries of Hong Kong (e.g. high-tech industry) through appropriate spatial allocation
- To expedite the supply of land at existing prime locations through appropriate policies
- To promote the sustainable development of the industry by unleashing the potential of the local labour force and encouraging the incoming of foreign talents
- To strengthen the integration of the Hong Kong and Mainland markets through appropriate institutional and economic arrangements
12.3.4. Increased supply of office space will be provided at four main areas, namely CBD1, CBD2, CBD3 and the New Territories. With varying functions, a hierarchy of office space will be offered to serve the different needs of the industry, thus forming a hub-and-spoke network for each CBD.

12.3.5. Overall, the plan aims to provide a range of office spaces at different strategic locations. The selected areas are generally well-connected or will be connected through strategic transport networks to allow for the smooth and efficient movement of both clients and business operators between different areas.
12.3.6. The Central/ Admiralty/ Wan Chai area will remain the hub of the area and supported by spokes in the Quarry Bay area and West Kowloon. Through increasing the provision of premier Grade A office, the Central/ Admiralty/ Wan Chai area can perform its traditional functions –headquarters setting owing to the branding effect created and accommodating customer-facing services –and ride on the opportunities brought by HZMB and other regional developments (e.g. consolidation of Hong Kong as the global offshore renminbi business hub and leading arbitration centre in Asia Pacific). The industry is also more well-equipped in the short term to deal with the incoming clients from WPRD. For the Quarry Bay area and West Kowloon, more Grade A office space is supplied. The Quarry Bay area can accommodate the supporting and back offices of the headquarters located in Central/ Admiralty/ Wan Chai, or serve as the headquarters of business operators who incline to stay on Hong Kong Island (e.g. SMEs of legal firms) yet having concerns over the skyrocketing rent in the traditional business core. For West Kowloon, the Grade A office space provision is intended to capture opportunities brought by the XRL. Front-line customer services centre can be established in the area to provide timely support to clients coming from EPRD or other parts of China.

*Capturing the potential influx of corporate and individual clients after the opening of HZMB and other regional developments*

12.3.7. As explained in previous sections, the development trends of WPRD and EPRD (e.g. economic modernization, promotion of “going out strategy”) induce demand for financial and professional services from Hong Kong. The cross-boundary strategic transport infrastructures facilitate Mainland enterprises to come to Hong Kong and set up headquarters or offices for capital raising and to conduct IPO; and for individuals to seek for
investment or insurance services. The expansion of office space in and around CBD1, where major business services providers are clustered, allows more room for business expansion for the financial and professional services industry.

**Providing more office space for different business providers**

12.3.8. CBD1 is a highly preferred location for headquarters, as reflected by our stakeholder interviews. However, owing to the high rent which is further driven up by Mainland enterprises and limited supply at present, only large corporations or MNCs may afford to rent (premier) Grade A offices in the area. In fact, some MNCs have already considered to relocate their headquarters to other areas, like Quarry Bay. By increasing the supply of premier Grade A office in the Central/Admiralty/Wan Chai area, and Grade A office in the Quarry Bay area, it is hoped that the aspirations, concerns and needs of different business providers (including large corporations, MNCs and SMEs) can be addressed in the short-to-medium term.

**Feasibility of land provision**

12.3.9. Land and office supply in the short-to-medium term is expected owing to a number of redevelopment and new projects in the CBD1 and Quarry Bay area. The new Central harbourfront and the redevelopment projects in Admiralty and Wan Chai (e.g. redevelopment of Queensway Plaza and redevelopment of the three government offices in Wan Chai) will generate around 545,000m² of commercial/office gross floor area. The topside development of the XRL terminus will provide around 260,000m² of office area (Ji, 2018). For the Quarry Bay Area, there are major planned or committed projects (e.g. redevelopment of Taikoo Place, redevelopment of government depots) in that area which may help alleviate the demand for office supply (Planning Department, 2016b). Indeed, some MNCs from the legal and financial sectors have already relocated their offices to Quarry Bay, indicating the attractiveness of the area (Ye, 2017).
Detailed area 2: Consolidated CBD2 development

Figure 12.16 Plan for Consolidated CBD2 Development
Source: UP Studio

12.3.10. CBD2 is intended to be the business hub of Hong Kong comparable to CBD1, supporting the economic growth of Hong Kong and capitalizing on potential opportunities brought from regional developments. CBD2 consists of Kwun Tong and Kowloon Bay, and Kai Tak. Due to its large area, CBD2 can function as both a hub and a spoke for financial and professional services. Through the provision of premier Grade A office, the Kwun Tong/ Kowloon Bay/ Kai Tak area can house headquarters or regional offices of the business services providers who find it hard to rent a space in the CBD1 area, thus strengthening its position as a hub. Even though CBD2 may not seem like a prominent business district at present, it is envisioned that with more premier Grade A office space provision, it would attract businesses to come and agglomerate, forming another headquarter cluster and thriving CBD in Hong Kong in the near future. The area can also serve as a spoke by providing of Grade A office space to accommodate supporting and back offices of headquarters located in CBD1 area.

12.3.11. As there is a bit of distance between CBD2 and HZMB or XRL, apart from establishing offices in the area, strategic transport networks are necessary to draw business opportunities.

Providing more office options for different business providers

12.3.12. With greater room for development compared with CBD1, CBD2 can help to further increase (premier) grade A office supply in Hong Kong in the short-to-medium term. It provides a comparatively cheaper option for the location of offices compared with Central/ Admiralty/ Wan Chai and even the Quarry Bay Area (JLL, 2012), which is to the benefit of different types of business providers as they tend to pursue a higher profit margin. The availability of land parcels (e.g. in the Kai Tak Development Area) also makes it possible for
large corporations to buy a piece of land, build an office block and name it after their corporations in order to establish their presence in Hong Kong.

**Addressing home-job balance**

12.3.13. Consolidating the CBD2 can help achieve of home-job balance, which is a key issue identified in Hong Kong 2030+. For the population working on Hong Kong Island, over 60% resides in Kowloon, the New Territories and the new towns, with those residing in Kowloon taking up the largest portion (44%) (C&SD, 2017a). At the same time, the employment of the financial and professional services industry takes up 12% of the total (C&SD, 2017b). By increasing the supply of office space in CBD2, the number of jobs created in the area will increase correspondingly. The re-distribution of financial and professional services-related employment in Hong Kong will help encourage employment near the area of residence and reduce commuting time and congestion of key commuting corridors.

**Feasibility of land provision**

12.3.14. In recent years, the private sector has been encouraged by the Hong Kong government to revitalize or redevelop industrial buildings. In Kwun Tong and Kowloon Bay, industrial buildings are being redeveloped into commercial ones and providing Grade A office space. Some sites have also been put up for sale in Kwun Tong and Kowloon Bay (Planning Department, 2016b). In addition, office space can be created in the redeveloped Kwun Tong Town Centre and Kai Tak Development Area. For the latter, 2 million m2 of commercial/office space has been planned, in which half of the space is expected to be developed as (premier) Grade A office by the private sector (Development Bureau, 2018; JLL, 2012). With an expected total provision of (premier) Grade A office of 2.4 million m2 in CBD2 by 2020s (JLL, 2012), the area has great potential to accommodate the foreseeable expansion of business services in Hong Kong in the short-to-medium term.
12.3.15. Concurring with proposed CBD3 development at Kau Yi Chau (part of the proposed East Lantau Metropolis development) in Hong Kong 2030+, this consolidated CBD3 development serves to provide abundant office supply for the industry in the long term. Kau Yi Chau, can serve as the hub, with Tung Chung supporting it as the spoke to further capture opportunities brought from WPRD. The overarching function of CBD3 is different from CBDs 1 and 2; it is proposed to be a fintech hub to ride on the global megatrend of innovation and technological development and the strengths of Hong Kong in finance and R&D. This will be further explained in Section X. Premier Grade A office can be supplied in the East Lantau Metropolis for headquarters or regional offices. For Tung Chung East, as it is located at close proximity to HZMB, Grade A office space that accommodates front-line customer services centre can be provided. This can ensure that the incoming customers can get timely support from Hong Kong business services providers.

*Best capturing the potential influx of business opportunities after the opening of HZMB and the economic takeoff of WPRD*

12.3.16. The WPRD is experiencing economic modernization at present, with industries moving up the value chain and seeking opportunities to go global. As reiterated in previous sections, this would induce demand for Hong Kong’s financial and professional services as the individuals and enterprises from WPRD can access the services more easily via HZMB. In the long run, it is expected that the economic development of WPRD and the GBA as a whole would have spillover effects and serve as an example to lead and drive the development of cities in the pan-PRD (National Development and Reform Commission,
Cities in the western part of Guangdong like Yangjiang and Maoming, in addition to other GBA cities in WPRD (e.g. Jiangmen, Foshan) may follow the footsteps of Zhongshan and Zhuhai and foster connections with Hong Kong. In this sense, Hong Kong should be well-prepared to ride on their development trends and explore new business opportunities. Capitalizing on the strategic location of CBD3, abundant office space should be considered and planned ahead.

Creating synergy between financial and professional services industry and high-tech industry

12.3.17. Through supplying (premier) Grade A office in CBD3 and encouraging headquarters or regional offices to locate there, synergy can be created with the high-tech industry. On the one hand, the industry can provide financial and professional services support to the tech firms (e.g. capital raising, conducting IPO, protection of intellectual property rights); on the other hand, their operations can serve as the testing bed of new technologies and systems. This can help to form a tech ecosystem in which newly developed technologies can be funded, tested on industries and commercialized.

Addressing home-job balance

12.3.18. Even though the employed persons in Hong Kong is expected to drop after 2022 (C&SD, 2017c), the issue of home-job imbalance may still be lingering. Coupled with the creation of 200,000 jobs in the area (Planning Department, 2016a), the office space development in CBD3 would help to further decentralize the financial and professional serviced-related jobs in Hong Kong, particularly from the CBD1 where jobs are concentrated at present, in the long term.
12.3.19. The Hung Shui Kiu New Development Area (NDA) will serve a key function in providing more Grade A office space in non-CBD area to support the continuous growth of enterprises in different scales and for different business operations. Currently, most of the major Grade A office space is provided within the traditional CBDs such as Central and Kowloon East with some exceptions located in North Point, Cheung Sha Wan, etc. As not all enterprises have the sufficient capital and resources to afford a Grade A office space in the traditional CBDs, the Hung Shui Kiu NDA can offer an alternative option for the small-and-medium enterprises (SMEs). Moreover, these non-CBD Grade A offices can also be used as supporting and back offices of headquarters, which are relatively not dependent on the agglomeration and branding effect of the CBDs. Capitalizing on the locational advantage, Grade A offices in HSK NDA can facilitate the communications and enhance business integration between Hong Kong, Shenzhen and other East PRD cities.

**Supporting the sustainable development of enterprises in different scales and operations**

12.3.20. As reflected in the stakeholders interview, after the opening of HZMB, there may be further potential rental growth for office space in the CBDs due to the increasing demand by Chinese investors to set up branches in Hong Kong. The SMEs, which are already lacking capability to rent a space in the CBDs, may recognize even slimmer chances for their presence in the area after the influx of the Chinese enterprises. Therefore, the Grade A office space provision in the Hung Shui Kiu NDA is intended to support the sustainable development of enterprises in smaller scale.

**Addressing the shortfall of non-CBD Grade-A offices**
12.3.21. According to the Consolidated Land Requirement and Supply Analysis, there is about 0.29 million m² GFA shortage in non-CBD Grade A offices (Planning Department, 2016b). Responding to the foreseeable increasing demand throughout the medium-to-long term, Grade-A office space provision in the Hung Shui Kiu NDA is one of the medium-term plan to cater the ERLU needs for the continuous growth of the industry. With the redevelopment of industrial buildings in other business areas and other planned projects, for the medium term, there will be a projected surplus of around 1.81 million square meter GFA. Feasibility of land provision.

12.3.22. There are already major planned or committed projects to provide Grade A office space in the Hung Shui Kiu NDA (Planning Department, 2016a). According to the outline of the development proposal, there would be 6.37 million m² of industrial and commercial floor area. The Hung Shui Kiu NDA would be an abundant source for medium-term provision of non-CBD Grade A offices.

Home-job balance

12.3.23. With the provision of land for the development of businesses and industries, the Hung Shui Kiu NDA is expected to create 150,000 employment opportunities. On the other hand, around 61,000 housing units would be provided to accommodate a new population of 176,000 (Development Bureau, 2017). This development plan would help the area to achieve home-job balance, which is one of the key goals of Hong Kong 2030+.

Detailed Area 5: Kwu Tung North NDA

---

Figure 12.19 Plan for Kwu Tung North NDA
Source: UP Studio
12.3.24. The Kwu Tung North NDA is proposed to be developed with a wide variety of uses, including residential, retail, leisure. Given its strategic location in proximity to the Boundary Control Points and transportation network such as railway links and highways, it is expected that synergy can be created between the Business and Technology Park in the Kwu Tung North NDA and the Lok Ma Chau Loop Science Park. There is a great potential to provide Grade-A office space in Kwu Tung North NDA in providing financial and professional services support in a timely manner.

**Providing financial and professional services in a timely manner**

12.3.25. Based on the synergy created by the technological development in Kwu Tung North NDA and the Lok Ma Chau Loop, there may be some potential emerging needs for financial and professional services. However, given the relatively long distance to the current service providers (e.g. in Central/ Admiralty/ Wan Chai), the provision of land for financial and professional services industry is intended cater the needs in a timely manner.

**Feasibility of land provision**

12.3.26. For the Kwu Tung North NDA, there is about 447 ha land provided. With such a large scale development project to create a future town with a mix of various land uses, the area has the capacity to provide more Grade A office for the sustainable development of the industry.

**Home-job balance**

12.3.27. Kwu Tung North NDA will accommodate a total population of 105,500 with 31,200 jobs created. In achieving a more balanced home-job provision, there is a potential for the area to provide more job opportunities for the financial and professional services industry.

**Policy support**

12.3.28. Apart from supplying more office space, supporting policies are also recommended to facilitate land supply and better prepare the financial and professional services industry for the opportunities and challenges arising from HZMB and other developments in GBA.

12.3.29. To promote more efficient land and office supply in Kwun Tong and Kowloon Bay in the short-to-medium term, continual facilitation of revitalizing industrial buildings is required. Measures including financial incentives or regulatory arrangements like modifying the threshold for compulsory land sale in light of multiple ownership of industrial buildings should be considered and reviewed.

12.3.30. To consolidate Hong Kong’s competitive edge in GBA as the international financial centre, leading offshore renminbi hub and premier asset management centre, Hong Kong should continue to provide a favourable business environment, which is desired by the industry, by upholding the rule of law and maintaining low tax rates and political stability. Our capacity to deal with opportunities and challenges brought by local and regional economic developments should be maintained and further enhanced.
12.3.31. More promotion of Hong Kong as a centre of international legal and dispute resolution services in the Asia-Pacific region to GBA cities is needed. The Hong Kong government should work closely with the legal authorities of GBA cities (e.g. Zhuhai, Shenzhen) and encourage the Mainland enterprises to seek legal and arbitration support in Hong Kong.

12.3.32. As a way to integrate with the GBA region, Hong Kong should strengthen its market integration with the Mainland. On top of the Hong Kong – Shenzhen Stock Connect, other arrangements should be explored (e.g. bond connect) to facilitate cross-border renminbi flow and consolidate Hong Kong’s position as the offshore renminbi business hub.

12.3.33. Our regulatory framework should be improved in light of the potential challenges brought by the increased number of investors, IPO and other financial activities in the market. The Anti-Money Laundering and Counter-Terrorist Financing (Financial Institutions) Ordinance and Companies Ordinance would be amended to ensure that our financial system is managing risks well and in line with international standards.

12.3.34. Considering the great potential of GBA development, Hong Kong needs prepare a pool of talents, which the industry finds it hard to recruit and retain, to ride on the trend and capitalize on opportunities that it may bring. More resources should be allocated to better equip our local talents, for example through funding, training programmes, and cooperation with Mainland institutions, and attract foreign talents to increase Hong Kong’s competitiveness in the region.

12.3.35. In light of GBA development and the Belt and Road Initiative, the Hong Kong government should continue to foster closer cooperation with GBA cities and Chinese authorities based on the “what the country needs, what Hong Kong is good at” policy (HKSAR Government, 2017). Under and on top of CEPA, more cooperation opportunities can be explored for our industries and achieve mutual benefits. For instance, the permission areas for the partnership between Hong Kong law firms and Mainland law firms can be extended from the existing three pilots zones in Guangdong Province to the whole PRD, allowing the market share of the Hong Kong professional service industry in China to be greatly increased to sustain regional competitiveness.

Overall implications

12.3.36. Based on the spatial plan and supporting policies, implications can be observed on the public and private sectors and the society as a whole:

   *Hong Kong government*

   12.3.37. In terms of increasing land supply for office development, the land sale programme for sites (e.g. in Kai Tak Development Area) need to be prepared and expedited if possible. At the same time, other potentially suitable sites for development can be identified, reviewed and put to more optimal uses. To further support the industry in capturing opportunities and dealing with challenges brought by regional development through policies, government
authorities, including the Financial Services and the Treasury Bureau, Commerce and Economic Development Bureau and Hong Kong Monetary Authority, and other public institutions including the Hong Kong Trade Development Council and Financial Services Development Council would need to work closely with the industry and relevant Mainland authorities. At the same time, the government would need to review the current regulatory and institutional arrangements to remove the possible barriers to regional cooperation or industry development.

*Financial and professional services industry*

12.3.38. With more supply of (premier) Grade A office in different parts of Hong Kong, there is greater flexibility and variety for industry to choose the location of the offices. To grab the first-mover advantages, some business services providers may set up front-line customer services centre near HZMB after opening of the bridge. With the Hong Kong government’s facilitation, there would be more opportunities for the industry to cooperate with its Mainland counterparts and explore business opportunities in Mainland, allowing the industry to grow and thrive in the long run.

*Society*

12.3.39. A more balanced distribution of jobs across Hong Kong can allow citizens to engage in employment nearer to their place of residence. This would reduce travelling time caused by commuting and congestion, and in turn enhances the productivity of the workforce. In addition, with the increased supply of office and more vibrant economic activities given rise by regional development, diverse job opportunities will be created for the growing population in Hong Kong in the short-to-medium term.
12.4. Hi-tech Industry

Overview

Regional Development

Figure 12.20 Regional development trend of hi-tech industry

Source: Consolidated by Up Studio

12.4.1. Technology companies and manufacturing industries located in the western bank of PRD, i.e. Zhongshan and Zhuhai remain as manufacturing bases in GBA. A lot of small- to medium-sized factories are still adopting the labour-intensive approach in fulfilling their customers' orders. Nowadays, many factories are aiming at upgrading their production hardware by adopting technology advancement. This process serves as a remarkable opportunity for Hong Kong as such upgrade will inevitably involve financing and technology innovation. They can capitalise on and enjoy the most Hong Kong’s advantages, such as free flow of information and capital, extensive international market networks, and sound corporate management, to enhance their development ability, as the accessibility between the western and eastern bank was low before the HZMB.

12.4.2. After capturing the needs of the WPRD, another opportunity would be reinforcing the cooperation with technology giants in Shenzhen. Since the 2000s, Shenzhen has been experiencing rapid growth in the hi-tech sector, making it the technological powerhouse of
China, in which many technology giants like Tencent, Baidu etc. are located. It is critical to have those giants to serve as the driving force behind Hong Kong’s technology development because those giants usually create peripheral demand for a product or service like cloud storage.

12.4.3. Hong Kong’s intrinsic environment is favourable for innovation and technology development. It has globally well-recognized universities, strong intellectual property protection and enforcement regime, state-of-the-art and robust science & technology infrastructure, excellent understanding and relationships with the Chinese market, and the advantageous treatment under Closer Economic Partnership Arrangement (CEPA). Therefore, Hong Kong is well-placed to engage in downstream research and development, cultivate hi-tech growth, accelerate industrial development in Hong Kong and the Mainland China, in particular cooperation with PRD region. (ITC, 2016).

**Implications of HZMB to hi-tech Industry**

![Summary of Implications of HZMB to Hi-tech Industry](source)

**Opportunities**
- Manufacturing upgrading in WPRO and its financing will pose chances for HK
- Regional Cooperation in hi-tech industry with SZ: HK can provide funding for manufacturing upgrade
- Influx of technology and venture capital from WPRO

**Challenges**
- Competition of technology industry among HK, ZL, ZH and SZ
- Relocation of HK start-ups to WPRO, enabled by HZMB
- High land and living costs deter talents from working in HK

Figure 12.21 Summary of Implications of HZMB to Hi-tech Industry

Source: Consolidated by Up Studio

12.4.4. Hong Kong should position herself as a springboard for mainland firms to reach the global market, and a gateway for international firms to seek expansion in the Chinese market (Yiu, 2018). As such, regional synergy is anticipated with collaboration between Hong Kong and Shenzhen in the Innovation and Technology Park. Therefore, it is expected that integration with the technology giants will play a vital role in determining the success of Hong Kong hi-tech industry. The authority should place more emphasis on the cooperation with Shenzhen in developing a science park. Lok Ma Chau Loop will be a critical demonstration of how the
hi-tech industry in Shenzhen can integrate with Hong Kong’s hi-tech industry and leverage the comparative advantages that Hong Kong enjoys. Hong Kong should consider how to leverage technology, coupled with her advantage of having an advanced financial system, to upgrade its hi-tech industry.

Key Strategic Direction and Actions

12.4.5. The strategic plan aims to capture the technological needs on the WPRD and boost the technology cooperation between Hong Kong and the GBA, creating a ladder that start-ups can climb on and retaining talents from GBA and overseas.

12.4.6. The following are the list of key actions of the strategic plan and policy

- To create an all-rounded Science Park with integration with nearby university, housing and transport infrastructure.
- To retain and attract talents by improving working and living environment in research hubs in Hong Kong
- To better utilize the old industrial buildings in CBD2 and renovate and transform into co-working space, providing affordable office spaces for start-up to grow.
- To create a fintech hub in ELM, combined with the excellent financial system in HK and the professional talent in Western HK Island, in order to facilitate the financial need of the GBA.
12.4.7. More land of ERLU for the hi-tech industry will be offered at three main areas, namely East Lantau Metropolitan (ELM), Existing Science Park in Ma Liu Shui and CBD2 in East Kowloon. Each area will have its characteristics and is designated to fulfil the need aroused by the opening of the HZMB. All in all, the plan aims at 1. attracting and retaining talents by improving the working environment of the hi-tech industry in Hong Kong, 2. capturing the opportunities to fulfil the need of the WPRD and 3. reinforcing technological cooperation between Hong Kong’s research hub, local universities and technology giants in PRD.

**Detailed area 1: Integrated Science Park with Eastern Knowledge and Technology Belt**

12.4.8. The existing Science Park has a strategic location with the proximity to the cluster of universities located at the east side of HK, the future Lok Ma Chau Loop Science Park, and the leading technology cores in Shenzhen, i.e. Nanshan, Qianhai. These factors have given chances for Science Park to further develop into a comprehensive research and technology hub for Hong Kong. Although the Science Park is carrying out stage 1 expansion, no
housing needs are taken into consideration (HKSTP, 2017). As housing and working environment constitute a major part of the attractiveness of Hong Kong as a workplace, it is proposed that affordable and decent living environment can be offered for the talents who work at the Science Park in Ma Liu Shui. Besides, the linkage between Science Park, local universities and Lok Ma Chau Loop is also emphasized in this plan so as to maximize the development potential and create synergy among these entities through the strategic transport network.

Capturing Talents from GBA and overseas countries

12.4.9. HZMB and WPRD development will for sure bring more talents and venture capital into Hong Kong. The ability to attract top talent is crucial to Science Park’s and Hong Kong's competitiveness. Providing housing for talents is imperative. Besides career advancement, research opportunities, working environment and remuneration, one important fringe benefit that overseas talent looks for is whether the accommodation is provided by the employer (Yiu, 2018). However, the setting of the existing Science Park did not satisfy the need that there are not housing development in the perimeter of the Park and the remote location to housing and support of daily life has been deterring talents from working in Hong Kong. As such, the need for an integrated science park, which incorporates housing into the working environment, cannot be overlooked, or else the competitiveness will be lost.

Innovation synergy with local universities

12.4.10. The geographical closure of Science Park to universities could catalyse the growth of local technology start-ups and support universities at the upper stream of the innovation and technology ecosystem value chain to transfer technology and translate academic research into commercialised products. Therefore, the strategic linkage between research hub and universities will lay the foundation in determining the success of transforming Hong Kong into an international research hub.

Cooperation with Chinese technological giants

12.4.11. The most serious problem of Hong Kong’s technology industry is the lack of a major technology giant to serve as a catalyst and propel developments in the industry forward just like how Google did to its affiliated companies in the United States (HKSTP, 2017). This barrier may possibly be resolved by tighter connection with Shenzhen, where a lot of Chinese technology giants are located. While the start-up sector appears to be doing well, it remains vulnerable to high land costs and potential changes in the existing favourable economic environment, while the absence of major tech players, i.e. tech giants, to lead is a noticeable flaw. On top of that, other cities in the GBA are also developing their own start-up's ecosystems, so it is reasonable to say competition is fiercer. To conclude, it is a must for Hong Kong to strengthen connection and cooperation with technology giants in Mainland China, i.e. Qianhai and Nanshan, to catch up the progress (Yiu, 2018). Therefore, a direct linkage between the Science Park, Lok Ma Chau Loop, Hung Shui Kiu new town and the technology powerhouse in Shenzhen is proposed.
12.4.12. There are sites available around the exciting Science Park for development. The government has proposed a reclamation area in Ma Liu Shui, which covers about 60 hectares. It will accommodate the population of around 34,100 people and employment opportunities of 41,500 (Planning Department, 2016). The development direction for the site will be focused on research and development and higher education. As integrated housing plays a key role in attracting foreign talents, the government should carry out detailed feasibility study on integrating housing into the expansion project of Science Park. Another natural resource that the government can utilize the promenade in Tolo Harbour to create a decent environment for the hi-tech industry. The government should carefully consider how to incorporate the blue resources in the site.

12.4.13. As also mentioned in 2030+, Hung Shui Kiu and Kwu Tung North, which enjoys the proximity to Lok Ma Chau Loop and the technology cores in Shenzhen, i.e. Nanshan, Qianhai, will be targeted bridge connecting these places (Planning Department, 2017). It is expected that more and more information exchange will happen between the Chinese market and the foreign countries. Hung Shui Kiu can seize the opportunity to develop herself into a cloud storage centre, serving the data need of GBA. Besides, Hung Shui Kiu and Kwu Tung North can evolve into a housing satellite site for the research hub in the future.

12.4.14. Concurring with proposed CBD3 development at the East Lantau Metropolis (ELM) in Hong Kong 2030+, this consolidated CBD3 is designed to ride on the megatrend of innovation and technology development. Hong Kong enjoys a privileged status regarding the financial and legal system. Therefore, fintech is changing the business of banking and customer relationships with financial institutions. The government has stressed fintech as a critical goal and vowed to promote its development to establish Hong Kong as a nerve center for the application and advancement of state-of-the-art fintech. Eyeing on the strategic location of ELM, it has high potentials to serve as a fintech hub for the world and GBA. Since financial services contribute 18% of Hong Kong’s GDP and 6% of its employment, the impact will be noticeable (Yeung, 2017). Fintech may revolutionise many exists jobs and business model derived from a complication of process and administration. This will translate into improved services at a lower cost for financial services customers, benefiting the overall development of GBA in the financial aspects.

12.4.15. Besides, fintech has the power to make considerable improvements in productivity and financial services quality to Hong Kong, which could export to the PRD and beyond. The financial inclusion offered by fintech can empower consumers and small- to medium-sized enterprises with more control over their financial affairs and a wider variety of services. As such, alongside the goal of reinforcing the development of technology and innovation, fintech is a sensible next step, securing a place in the future of financial services (Yeung,
Ultimately, This Fintech will play an essential role in supporting the financial needs of industrial upgrading and transformation and product development in GBA.

*Grabbing opportunities of the financial service needs of the WPRD with technological innovation*

12.4.16. Considering her giant financial industry which incorporated many regional headquarters, Hong Kong could serve 1. as a landing pad for fintech companies aiming at regional potentials, 2. as a market for fintech companies which offer business-to-business (B2B) services, and 3. as a launch pad for PRD fintech companies which are looking for overseas expansion (Yeung, 2017). This strategy for fintech development will be a major statement of Hong Kong’s vision to be a regional, even international, fintech hub. The strategy of ELM should construct a platform for Fintech-empowered finance and innovation industry in Hong Kong over time and help to cultivate an ecosystem which attracts players from foreign countries and PRD as well as nurturing local technology enterprises. By then, Hong Kong should strengthen its attractions as a springboard for Mainland Fintech firms to expand internationally. Local consumers, businesses and government could be benefited from the improved financial services and from the Hong Kong’s continual competitiveness as a major international financial centre. After all, Hong Kong would be able to secure a pivotal role in the future development of fintech.

*Fulfilling the exhibition need of technology companies and exposure to international market*

12.4.17. Hong Kong Convention and Exhibition Centre (HKCEC) is undergoing expansion in terms of exhibition floor space. According to our previous study, the technology firms in GBA, or even China, may find it difficult to find a gateway to promote their product to the international market. Since the scale and variety of the exhibition held in Hong Kong are larger and wider when compared to the mainland counterpart, it is suggested that, through seamless connection between HKCEC, ELM and the Eastern Technology and Innovation Belt, technology companies in GBA can take on the opportunities to find business buyer and business matching. After all, beside the education and research part, Hong Kong can also play a role in ‘bringing the technology industry out’ by connecting international customer with mainland technology firms. (Yeung, 2017)

12.4.18. Detailed area 3: Co-working space cluster CBD2 in Kowloon East

12.4.19. In the micro-perspective, the supply of co-working spaces in CBD2, i.e. old industrial building, is a new concept in contrast to the conventional perception of how an office should be for traditional industries. There are several advantages of co-working space which can perfectly serve the business need of start-ups (JLL, 2017). Due to the land supply shortage, it is difficult to build a new pile of co-working space on undeveloped land. Nevertheless, taking the eastern technological and innovation belt into account, the CBD2 in Kowloon East will be a strategic location for laying down the foundation of co-working space in Hong Kong. On the other hand, there is an opportunity to unleash the development potential of
the old industrial building in East Kowloon. Currently, many of the industrial buildings there have been redeveloped into new commercial buildings while some remained the old structure but are used as media, creative or cultural use like an art studio. It is proposed that the government can make use of the floor space supply in the industrial buildings and cooperate with the local universities as well as Science Park to transform the hardware into co-working space cluster which can offer reasonable office spaces and software to underpin the breeding ground for the technology industry.

Creating a breeding ground for technology start-ups

12.4.20. Although Hong Kong has an excellent education system and copyright protection, unaffordable office rent remained a critical hurdle for start-ups. Since the office rent is too high in Hong Kong, many hi-tech companies, especially start-ups, choose to locate in another part of the GBA in order to slash down their costs, especially when many WPRD cities like Zhuhai have stepped up the game by providing more and more culture and innovation centres, i.e. Hengqi. This is an unhealthy phenomenon which disrupts the development of hi-tech industry in Hong Kong.

12.4.21. Thanks to the idea of co-working space, first, the rent will be shared amongst the tenants. These offices are also often fully equipped, so tenants could save costs by avoiding buying office equipment. They are also regularly renovated and look great, which enhances creativity, productivity, and the overall work experience. Ultimately, it cuts the rent which are the heaviest burden for start-ups. Second, it enhances the networking of the talents. Working in a co-working space means that worker can work with all the talent around. Talents could spend their working day amid creative and passionate inventors, and the most importantly cultivating entrepreneurship. The notion of co-working spaces emphasizes flexible spatial designs to facilitate start-ups’ operational and functional needs and trigger idea exchange among each resident in the co-working space. Start-ups’ entrepreneurs could then make use of the various multifunctional areas for collaborations, presentations and product launches (ITC, 2016). These spatial setting and pools of talents would lay the foundation of a blossoming hi-tech industry in Hong Kong. After all, the co-working space cluster here should serve as a breeding ground for technology start-ups which was previously evolved from universities. (ITC, 2016)

Feasibility and resources: Better utilization of old industrial buildings

12.4.22. East Kowloon used to serve as the industrial hub in Hong Kong since the 1960s. With the relocation of the industrial sectors to Mainland China started in the 1990s, many industrial buildings were left idled and underused. Some of the buildings have already been transformed into a commercial building for the long-term sake of developing East Kowloon into the CBD2 of Hong Kong. Nevertheless, around the fringe of CBD2, there is a pile of industrial buildings which have floor space potential to be released. This should be considered as a more easy approach as it does not involve physical modification like redevelopment (JLL, 2017).
Policy support and justifications to hi-tech Industry

12.4.23. Although the policy and spatial factors are critical, the institutional factor should not be overlooked. Hong Kong’s primary and secondary education system requires careful attention. Raising the subsidies and educational standards for teachers will be vital, as will be raising computer literacy and the ability to think laterally. Government-subsidized schools can consider to offer fast tracks to cultivate youth with high calibre, who will become inevitable talents in the science and technology ecosystem in the near future. The talents nurtured will also raise the bar Hong Kong’s universities.

Overall implication

12.4.24. Based on the spatial plan and supporting policies, implications can be observed on the public and private sectors and the society as a whole:

Hong Kong Government

12.4.25. Other than spatial planning, policy formulation will heavily influence the steering of the future development. Mechanism in backing the industry and facilitating regional cooperation should be emphasized to fully make use of the spatial plans. Communication with the officials in Shenzhen should be reinforced and cooperation with technology giants should be boosted.

Hi-tech industry

12.4.26. The hi-tech industry should foresee swift development after the opening of the HZMB, bring in more venture capital and talents from GBA. With more supply of different office spaces, technology companies in different stages, like startup or mature stage, can find the appropriate office spaces to suit their needs. The hi-tech field should formulate their own business plans to coordinate with the master planning of the government in order to fully realize the goal.

Society

12.4.27. The social openness and academic atmosphere in the society is the cornerstone in facilitating the healthy growth of hi-tech industry. It should be cultivated in the primary education system so as to set up the ladder for future talents. Although it takes a long time, it worths our collective endeavour with an aim to turn Hong Kong as a leading technology hub in the world.


13. Conceptual for Strategic Transportation Network

13.1. Background

13.1.1. Hong Kong has a mature transport network that provides linkage between main economic nodes. Several new developments on railways and highways are expected in the coming years, further adding traffic capacity and accessibility to cater developments and solve existing traffic issues. However, after the opening of the HZMB, it is expected that there would be increased traffic along existing and new ERLUs. The concept of SEZs and industry belts/hubs, as proposed in this study, also relies on strong STN connections to maximize synergy. These new traffic demands may not be particularly considered during formulation of previous government transport plans, such as HK2030+ and Railway Development Strategy 2014. Using these existing strategies as an foundation, the Project team propose a STN strategy to support the development of ERLUs.

13.2. Objectives and Strategies

13.2.1. In order to achieve this, there are 3 objectives of the proposed STN Development Plan: (1) strengthen inter-regional linkage to foster economic interaction between SEZs and along industry belts/hubs; (2) enhance regional accessibility of new ERLU developments to support demand of employee and business commute; and (3) increase capacity and connectivity of intra-regional transport network within SEZs to maximize agglomeration synergy.

13.2.2. Several STI developments are proposed in the Plan to achieve the objectives. The developments are grouped into either inter-regional STN, which responds to objective (1) and (2); or intra-regional STN to fulfill objective (3). Considering the government strategic transport plans, the design and function of committed project, as well as current situations of existing STNs, the Project Team sets up three option of development modes for a particular linkage, including (i) proposal of new STIs, (ii) integration of committed STIs with new ERLU development, and (iii) upgrade of existing transport networks.

13.3. Proposals in Detail

13.3.1. The details of each development proposal is listed as the following:
Intra-regional transport network developments

**A1 Tuen Mun Western Bypass & A2 Tuen Mun - Chek Lap Kok Link**

13.3.2. The Tuen Mun - Chek Lap Kok Link (TM-CLKL) is expected to be completed in 2020, and Tuen Mun Western Bypass (TMWB) is a planned project still under review. The project team propose integration of Tuen Mun - Chek Lap Kok Link with planned ERLUs in Tuen Mun, and proceed TMWB into construction stage as soon as possible.

13.3.3. These two projects have significant importance to the development of the BCF, the Bridgehead Economic Circle and the Western New Territories as a whole. As soon as both TM-CLKL and TMWB are both completed, there will be highway linkage along the proposed logistic belt (Kong Sham Western Highway, Tuen Mun West and BCF), logistic vehicles can enjoy faster linkage between ERLUs and cross-border facilities. Moreover, by integrating TMWB with existing Route 9, the whole transport corridor provides convenient connection between the Emerging Economy Hub and BCF as well, bypassing congested linkage in Tuen Mun Town.
13.3.4. The direct linkage between BCF and Tuen Mun West also enlarges the direct hinterland of BCF, and thus maximize the potential of ERLUs in Southern Tuen Mun to serve as a bridgehead logistic cluster. While ERLUs located in Tuen Mun West are proximate to the ingress point of TM-CLKL, nearby proposed ERLUs (Lung Kwu Tan & So Kwun Wat) does not have high accessibility to the infrastructure according to the current plan. Therefore the Project Team propose a further study to evaluate the possibly to integrate TM-CLKL with these new areas, possibly by another new trunk road linkage (see A3).

A3 South Lantau Link (Tung Chung East - Kau Yi Chau, HK Island West)

13.3.5. A brief concept of linking up BCF and ELM is mentioned in HK2030+. Base on the concept, The Project Team proposes South Lantau Link, a new expressway to link up Tung Chung East (Ending point of TM-CLKL), Kau Yi Chau and Hong Kong Island by a tunnel and bridge passing through South Lantau and Green Island.

13.3.6. This STI can provide direct linkage along the proposed Finance & Professional Service Belt and Hi-tech Belt. It will create a seamless corridor between HZMB, BCF, Tung Chung, CBD3 and CBD1 and the rest of the Metropolitan Business Core. Foreign visitors from HZMB and Airport can enjoy a faster route towards main business zones using this linkage. With enhanced accessibility and connectivity, industries located in the Metropolitan Business Core can be benefited.

A4 Route 11 (Tuen Mun East - Kau Yi Chau)

13.3.7. First mentioned in 2016, The Route 11 intends to serve as an alternative route against Tuen Mun Highway and Ting Kau Bridge to redirect traffic along the existing routes (Transport and Housing Bureau, 2017). With new ERLU development proposed by the Project Team in Hung Shui Kiu, So Kwun Wat and Kau Yi Chau, it adds urgency to increase traffic capacity between the above mentioned nodes. The Project Team suggests that the Route 11 can be extended towards Kau Yi Chau CBD3, connecting the proposed South Lantau Link towards Hong Kong Island. It is expected that suggested route can cope with increased traffic brought by the ERLU development in Western New Territories, thus provide a welcoming environment for economic activities to take place.

A5 Kwai Chung - Kau Yi Chau Link

13.3.8. It is expected that Kau Yi Chau CDB3 will be developed as a new centre of business activity, thus connections from other metropolitan areas are needed to support the commuting demand. The Kwai Chung - Kau Yi Chau Link is suggested to provide a connection between Kowloon East and CBD3, where it can connect with existing STIs such as Tsing Sha Highway, forming a North-South transport corridor (as proposed in HK2030+). The new link can capture the large population in Kowloon West, Tsuen Wan and NT East to support economic development in CBD3.

A6 Sheung Shui - Fanling Bypass & A7 Upgrade on Tolo Highway & Tai Po Road (Sha Tin)
13.3.9. According to HK2030+ and Project Team’s proposal on ERLU development, rapid development is expected in Northern New Territories, forming the Emerging Economy Hub (EEH). Despite of having existing highway linkage, the capacity of the route between EEH and Integrated Innovation Hub in NT East is limited. In order to facilitate traffic flow along the Hi-tech Belt and between the two SEZs, the Project Team proposes a new Sheung Shui - Fanling Bypass that serves as an alternative route to Fanling Highway, as well as road widening Tolo Highway & Tai Po Road (Sha Tin) to increase capacity.

A8 Upgrade on Hiram’s Highway & Clear Water Bay Road

13.3.10. Hiram’s Highway and Clear Water Bay Road are two of the only three roads linking Sai Kung Town with urban areas in Hong Kong. Due to road design and topographical constraints, the routes are reaching maximum capacity and are often congested (Meinhardt, 2016; Highways Department, 2018). Although improvement works along Hiram’s Highway has been commenced, it is uncertain that if the enhanced capacity can cope with proposed ERLU development as a tourism hub in Sai Kung Town.

13.3.11. The Project Team suggests that Hiram’s Highway and Clear Water Bay Road should be repositioned into a trunk road in long term, with upgrade works acting in concert, e.g. road widening and straightening, grade-separated junctions, parallel service roads etc.. By such action, interconnectivity between Sai Kung and urban areas in East Kowloon can be enhanced, creating favourable environment of the development of tourism hub in Sai Kung.

A9 Western Outer Railway Corridor

13.3.12. The concept of Western Outer Railway Corridor is proposed as early as in the Railway Development Strategy 1994 but is shelved afterwards. As the Central Waters being repositioned as CBD3, together with proposed ERLU development along the Western New Territories, the Project Team suggests a revisit of the concept to link up Tuen Mun, So Kwun Wat, Sunny Bay, CBD3, and Hong Kong Island West. The new railway corridor can serve as a parallel commute route with Route 11 for passengers. As justified in A1, A2, & A4, the railway corridor can further benefit proposed ERLUs, especially CBD3 with direct linkages to populated New Towns and existing urban cores.

13.3.13. A10 MTR Eastern Kowloon Line

13.3.14. The planned MTR East Kowloon Line is parallel to the existing Kwun Tong Line which intends to serve population in Tseung Kwan O and Anderson Road NDA (THD, 2014). Although it does not pass through proposed ERLU developments directly, the new line can be expected to reinforce the transport corridor in East Kowloon. By providing alternative route to Kwun Tong Line, it can congestions and effectively capture population of East Kowloon and Tseung Kwan O to new ERLUs. Therefore the Project Team urges that timely development of the MTR line can create synergy and support development of ERLUs.

13.3.15. Moreover, the Project Team suggests that the possibility of extending the railway to HKUST should be evaluated. This can enhance the current inadequate linkage between the R&D
university and CBD2 as well as the rest of the Metropolitan Core Area, maximizing the potential of hi-tech belt development in the future.

Intra-regional transport network developments

**B1 Upgrade on San Tin Highway, Yuen Long Highway, Tsing Long Highway & Kong Shan Western Highway; B5 Implementation of MTR Northern Link**

13.3.16. With expected ERLU and New Town development in the Emerging Economic Hub, traffic demand between strategic development areas such as Kwu Tung North, Lok Ma Chau Loop and Hung Shui Kiu will increase. However bottlenecks in highway interchanges (e.g. Pok Oi Interchange) may limit the traffic flow and development synergy within the area. Thus the Project Team propose upgrade works on related highways to increase the capacity, in order to cater goods vehicles, business passengers and commuters along the proposed Hi-tech Belt. Timely inauguration of the MTR Northern Link would benefit the development of ERLUs as well by mass transit access.

**B2 Tuen Mun South Trunk Road (So Kwun Wat - Lung Kwu Tan) & B6 MTR Tuen Mun South Extension**

13.3.17. With multiple places proposed to be developed into logistic nodes in Tuen Mun, robust interconnection between these ERLUs are vital to create agglomeration. These ERLUs also need trunk road connection to expressways. The three ERLU clusters (So Kwun Wat, Tuen Mun West, Lung Kwu Tan) are linked by Castle Peak Road, Wong Chu Road and Lung Fu Road. As these arterial roads pass through built up areas, ERLU development in the future may cause negative effects such as noise nuisance and congestion along the current route. Therefore a new trunk road bypassing Tuen Mun South, possibly by a tunnel or bridge along the shoreline is proposed to link up the ERLUs and the future expressway network (TM-CLKL, TMWB, Route 11).

13.3.18. Extending the West Rail Line to Tuen Mun South provides convenient access to Tuen Mun West ERLU can also reinforce the internal connectivity.

**B3 Upgrade on Pok Fu Lam Road & B7 implementation of MTR South Island Line (West Section)**

13.3.19. Cyberport is regarded as an important R&D hub, but its potential may not be fully utilized until accessibility of the site is enhanced. Currently, the only main regional connection is the Pok Fu Lam Road, while there is no direct exit to Cyberport. The MTR South Island Line (West Section) passing through the site is planned to begin construction in 2021 (THD, 2014). In order to capture the potential of Cyberport more effectively and to create synergy with ERLU developments in CBD1 and CBD3, the project team suggest road upgrade Pok Fu Lam Road to highway standard and provide direct exit to Cyberport, as well as advance the commence time of South Island Line (West Section).
B4 Extension of Route 6 (Pak Shing Kok - HKUST)

13.3.20. The current plan of Route 6 provides linkage between Tseung Kwan O and Central Kowloon which the Tseung Kwan O side ends at Pak Shing Kok (CEDD, 2018). With the proposed development of Sai Kung (see A8) and expected demand of infrastructure linkage towards HKUST (see A10), The Project Team propose that the Route 6 can be further extended to connect with the upgraded Clear Water Bay Road near HKUST, create seamless connection from Sai Kung to the Route system and serving the R&D site, benefiting both tourism and hi-tech development in the proximity.
14. Roadmap

14.1. Overview

14.1.1. Based on the conceptual spatial framework, detailed spatial planning strategies for each key industry, and supporting policies proposed in the Chapter X, a roadmap is presented here to stipulate the actions required and to be completed in the short-to-medium term and the long term. Following the classification adopted by Planning Department (2016b), the former refers to a time frame that commences from now to 2033, and the latter is beyond 2033.

14.2. Actions to be completed in the short-to-medium term

ERLUs and STN support

14.2.1. With HZMB expected to commence operation in the second quarter of 2018, and XRL in the third quarter of 2018, some actions are required in the short-to-medium term to capture the immediate economic benefits brought by these strategic transport infrastructures.

14.2.2. The area near HZMB is considered to be of strategic importance as it can benefit from the bridgehead economy brought by HZMB. Acting as a gateway, it is the first stop for people and cargoes coming from WPRD. Hence, the proposed ERLUs within the Bridgehead Economic Circle should be developed in the short term (between now and 2033) if possible, or at least completed within the short-to-medium term. The location of the proposed ERLUs and their functions are:

- Topside development of the HKBCF for tourism-related ERLU (retail) and logistics-related ERLU (modern warehousing, cold-chain facilities, services centres)
- SKY CITY, Hong Kong International Airport for tourism-related ERLU (retail, entertainment)
- AsiaWorld – Expo for tourism-related ERLU (MICE)
- Tung Chung East for financial and professional services-related ERLU (customer services centre) and tourism-related ERLU (retail, leisure)
- Sunny Bay for tourism-related ERLU (leisure and entertainment)
- Kwo Lo Wan for logistics-related ERLU (modern warehousing, cold-chain facilities, services centres)
- Siu Ho Wan for logistics-related ERLU (warehouse, offices)
- Tuen Mun, Lung Kwu Tan and So Kwun Wat for logistics-related ERLU (modern warehousing, cold-chain facilities, services centres)
warehouses, forwarding, distribution and packing facilities)

- Area 38,40,46 and 49 for logistics-related ERLU (smart logistics park)

14.2.3. Located further away from HZMB, the Metropolitan Business Core captures the spillover from the Bridgehead Economic Circle and is home to the pillar industries of Hong Kong. The development of this area can sustain the development of these industries and capitalize on opportunities brought by GBA development, and should be developed in the short-to-medium term (except for ELM). The location of the proposed ERLUs and their functions are:

- Kwai Ching/ Tsing Yi for logistics-related ERLU (ancillary logistics services for cargo handling and truck operation)
- West Kowloon and topside development of the XRL terminus for financial and professional services-related ERLU (customer services centre) and tourism-related ERLU (retail, hotel, C&E)
- Tsim Sha Tsui East for tourism-related ERLU (retail, leisure)
- Central/ Admiralty for financial and professional services-related ERLU (office for headquarters)
- Wan Chai for financial and professional services-related ERLU (office for headquarters) and tourism-related ERLU (MICE)
- Quarry Bay for financial and professional services-related ERLU (office for headquarters, supporting and back offices)
- Kwun Tong/ Kowloon Bay for financial and professional services-related ERLU (headquarters, supporting and back offices) and high tech-related ERLU (co-working space)
- Kai Tak Development Area for financial and professional services-related ERLU (office for headquarters) and tourism-related ERLU (retail, hotel)

14.2.4. The Integrated Innovation Hub in the eastern side of Hong Kong provides a serene environment for the high-tech industry to prosper under the global megatrend of innovation and technological development. The location of the proposed ERLUs and their functions are:

- Science Park for high tech-related ERLU (integrated research and technology hub)
- Sai Kung Town for tourism-related ERLU (hotels, hostels, infrastructure upgrade)

14.2.5. Riding on the economic and technological development of Shenzhen, and the emergence of new development areas, the Emerging Economic Hub in the north of Hong Kong
provides diverse economic opportunities for the population. Most of the developments in this area should be completed in the medium term, and if possible, within the short-to-medium term. The location of the proposed ERLUs and their functions are:

- Lok Ma Chau Loop for high tech-related ERLU (co-working space)
- Kwu Tung North New Development Area for financial and professional services-related ERLU (office)

14.2.6. A number of inter and intra-regional STNs are proposed to enhance the accessibility of different SEZs and industry belts/hubs and enhance their synergy. The proposed STNs and their functions are:

- Tuen Mun - Chek Lap Kok Link and Tuen Mun Western Bypass to provide direct linkage between BCF and Tuen Mun
- Tuen Mun South Trunk Road (So Kwun Wat - Lung Kwu Tan) and MTR Tuen Mun South extension to enhance internal connectivity within Tuen Mun
- Sheung Shui – Fanling Bypass and upgrade on Tolo Highway and Tai Po Road to facilitate traffic flow in northern New Territories
- Upgrade on San Tin Highway, Yuen Long Highway, Tsing Long Highway and Kong Shan Western Highway and implementation of MTR Northern Link to increase accessibility to Kwu Tung North, Lok Ma Chau Loop and Hung Shui Kiu
- Upgrade on Pok Fu Lam Road and implementation of MTR South Island Line (West Section) to provide better access to Cyberport
- Upgrade on Hiram’s Highway and Clear Water Bay Road to enhance connectivity between Sai Kung and urban areas in East Kowloon

Policy support

14.2.7. Additional policy support from the government is preferred to leverage the opportunities brought by HZMB and GBA development. The policies include:

- Coordinating with Mainland authorities on favourable customs arrangement to facilitate cross-boundary cargo flow
- Implementing smooth immigration arrangement at HKBCF to facilitate passenger flow
- Promoting Hong Kong as a centre of international legal and dispute resolution services in the Asia-Pacific region
- Improving the regulatory framework to protect the financial system from risks
Facilitating revitalization of industrial buildings to expedite land supply in Kwun Tong and Kowloon Bay

14.3. Actions to be completed in the long term

ERLUs and STN support

14.3.1. Taking reference from the development schedules released by the Hong Kong government, some proposed ERLUs in the Conceptual Spatial Framework are expected to be completed in the long term. These ERLUs can help to support the long term development of the key industries and help sustain the Hong Kong economy. The location of the proposed ERLUs and their functions are:

- East Lantau Metropolis for financial and professional services-related ERLU (office for headquarters) and high tech-related ERLU (fintech hub)
- Hung Shui Kiu New Development Area for financial and professional services-related ERLU (office)

14.3.2. It should be noted that ELM is a proposal put forward in the Hong Kong 2030+. The feasibility of the development is yet to be conducted and confirmed.

14.3.3. Corresponding to CBD3 development, a number of STNs are proposed to ensure inter and intra-regional connectivity. The proposed STNs and their functions are:

- South Lantau Link to link up Tung Chung East, Kau Yi Chau and Hong Kong Island
- Route 11 to connect Tuen Mun East and Kau Yi Chau
- Kwai Chung - Kau Yi Chau Link to connect Kowloon West and CBD3
- Western Outer Railway Corridor to link up Tuen Mun, So Kwun Wat, Sunny Bay, CBD3, and Hong Kong Island West
- MTR Eastern Kowloon Line to improve linkage between East Kowloon and Tseung Kwan O
- Extension of Route 6 to provide seamless connection between Tseung Kwan O and Clear Water Bay Road

Policy support

14.3.4. For our key industries to stay innovative, competitive and sustainable in the long run, the Hong Kong Government should take consideration of the following policies:
• Nurturing local talents to support the growth of the pillar and emerging industries (i.e. logistics, tourism, financial and professional services, and high tech industries)

• Formulating conservation policies to support the development of eco-tourism

• Strengthening market integration with the Mainland

• Fostering closer cooperation with GBA cities and Chinese authorities
15. Conclusion

15.1.1. The rapid development of the mainland in recent years has induced a major impact on global economy. Hong Kong, with its special integration with both the mainland and the global market, has both enormous opportunities and challenges to anticipate. Under the establishment of GBA initiative, the extent of Hong Kong’s integration into the mainland market would reach one of its historic highs. Whether Hong Kong could successfully grasp this precious opportunity and flourish its economy, is highly subjective to the actions of Hong Kong in the near future.

15.1.2. With the proposed supply of ERLU & STN, the focus industries, which are the cornerstones of Hong Kong’s economy, are enabled to maximize their opportunities and strengthen their niche in the GBA area. Not only would it maintain the leading roles of the industries, altogether it would strengthen the role of Hong Kong as World’s Asia City in GBA and on a global scale. Internally, the sustainable economic development and uplifting liveability could also be achieved.

15.1.3. Recalling to our vision, “To advance Hong Kong as a competitive, innovative and sustainable city as the international gateway of the Greater Bay Area, strengthening the status as the Asia’s World City”, requires comprehensive planning and a holistic thought, with regional development trend considered thoroughly. All these would not be enabled without a strong ambition and perseverance from the government, private sectors, and citizens of Hong Kong.


Census and Statistics Department (C&SD) (2017a), 2016 Population By-Census: Main Results, Hong Kong: Census and Statistics Department.

Census and Statistics Department (C&SD) (2017b), The Four Key Industries and Other Selected Industries in the Hong Kong Economy, Hong Kong: Census and Statistics Department.

Census and Statistics Department (C&SD) (2017c), Hong Kong Labour Force Projections for 2017 to 2066, Hong Kong: Census and Statistics Department.


Civil Engineering and Development Department (2017), Recommended Outline Development Plan. Available at: http://www.tung-chung.hk/files/docs/plans/RODP_TCNTE.pdf


Customs and Excise Department (2017), Intermodal Transshipment Facilitation Scheme. Available at: https://www.rocars.gov.hk/en/ITFS.html


Development and Reform Bureau of Foshan (2015), The 13th Five-year Plan for Economic and Social Development of Foshan, China: Foshan

Development and Reform Bureau of Jiangmen (2015), The 13th Five-year Plan for Economic and Social Development of Jiangmen, China: Jiangmen


Development Bureau (2017b), Positioning of the NDA. Available at: http://hsknda.hk/positioning-of-the-nda


Foshan Urban Planning Bureau (2016), Foshan Masterplan 2010-2020, China: Foshan

Highways Department (2018), Tuen Mun - Chek Lap Kok Link. Available at: http://hzmb.hk/eng/about_overview_04.html


HKFP, (2016), “4 passengers per square metre: New report shows MTR overcrowding during morning rush”, Available at


HKSAR (2017), LCQ7: Opportunities for tourism industry brought about by development of cities in Guangdong-Hong Kong-Macao Bay Area, Available at http://www.info.gov.hk/gia/general/201706/21/P2017062100348.htm?fontSize=3 (last accessed on 2 April 2018).


Hong Kong International Airport (2018), Information Package. Available at: https://www.skycityhongkong.com/common/docs/booklet/Skycity_Insert_Booklet_RDE-en.pdf?v=20170622


Hong Kong-Zhuhai-Macao Bridge Authority (2010), About the Authority. Available at: http://www.hzmb.org/en/bencandy.asp?id=4


Jiangmen Urban Planning Bureau (2016), Jiangmen Masterplan 2010-2020, China: Jiangmen JLL (2016), Past, present, future: China’s role in driving the growth of Hong Kong’s property market, Hong Kong: JLL.
JLL (2016), *Past, present, future: China’s role in driving the growth of Hong Kong’s property market*, Hong Kong: JLL.


Jones Lang LaSalle (JLL) (2012), *Broader Hong Kong: Commercial Space Master-Plan Embraces CBD2 Development*, Hong Kong: Jones Lang LaSalle.

KPMG (2017), 2018 Hong Kong Banking Outlook, Hong Kong KPMG. Available at https://assets.kpmg.com/content/dam/kpmg/cn/pdf/en/2017/12/hong-kong-bankingoutlook-2018.pdf (last accessed on 29 April 2018)

KPMG (2017), 2018 Hong Kong Banking Outlook, Hong Kong KPMG. Available at https://assets.kpmg.com/content/dam/kpmg/cn/pdf/en/2017/12/hong-kong-bankingoutlook-2018.pdf (last accessed on 29 April 2018)

Lam K. S. (2018), Tender sale of first logistics site in five years in Tuen Mun likely to fetch HK$2.56 billion. Available at: http://www.scmp.com/property/hong-kong-china/article/2142856/tender-sale-first-logistics-site-five-years-tuen-mun-likely


Legislative Council Secretariat (2017), Background brief on further development of Hong Kong’s port and maritime services. Available at: https://www.legco.gov.hk/yr16-17/english/panels/edev/papers/edev20170626cb4-1261-5-e.pdf


Liu, P. (2018), “Multinationals set to leave Hong Kong’s prime office district Central in search of


Planning Department (2016a), Hong Kong 2030+: Towards A Planning Vision and Strategy Transcending 2030, Hong Kong: Planning Department.


Planning Department (2016c), “Land Supply Considerations and Approach”, Hong Kong

Planning Department (2016d), “Consolidated Land Requirement and Supply Analysis”, Hong

Planning Department (2016e), “Preliminary Concepts for the East Lantau Metropolis”, Hong


Planning Department and CEDD (2017), Planning and Engineering Study for Housing Sites in Yuen Long South. Available at: http://www.yuenlongsouth.hk/links/information_digest.pdf

PwC, (2017), PWMA / PwC Hong Kong Private Wealth Management Report 2017, Hong Kong: PwC.


Statistics Bureau of Guangdong Province (2017), Guangdong Statistical Yearbook 2016, China: Guangdong


Transport Department (2017), Parking Policy. Available at: https://www.legco.gov.hk/yr16-

World Tourism Organization (2012), Tourism 2020 Vision Vol.3 East Asia & Pacific (English Version)


## Appendix 4.1 Current existing cross boundary infrastructure of Hong Kong (up to Feb 2018)

<table>
<thead>
<tr>
<th>Name</th>
<th>Mode</th>
<th>User(s)</th>
<th>Passenger Throughput in 2016</th>
<th>Cargo Throughput In 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>China Ferry Terminal</td>
<td>Sea</td>
<td>Passenger ferries</td>
<td>7,412,875</td>
<td>NA</td>
</tr>
<tr>
<td>Macau Ferry Terminal</td>
<td>Sea</td>
<td>Passenger ferries, Passenger helicopters</td>
<td>17,041,350</td>
<td>NA</td>
</tr>
<tr>
<td>Kai Tak Cruise Terminal</td>
<td>Sea</td>
<td>Passenger ferries</td>
<td>1,622,517</td>
<td>NA</td>
</tr>
<tr>
<td>Tuen Mun Ferry Terminal</td>
<td>River</td>
<td>Passenger ferries</td>
<td>600,026</td>
<td>NA</td>
</tr>
<tr>
<td>Tuen Mun River Trade Terminal</td>
<td>River</td>
<td>Cargo ships</td>
<td>NA</td>
<td>4,609,000 (Twenty-foot Equivalent Unit, TEU)</td>
</tr>
<tr>
<td>Kwai Tsing Container Terminal</td>
<td>Sea</td>
<td>Cargo ships</td>
<td>N/A</td>
<td>15,203,000 (TEU)</td>
</tr>
<tr>
<td>Lo Wu Control Point</td>
<td>Land</td>
<td>Passenger vehicles, Cargo vehicles</td>
<td>81,281,147</td>
<td>NA</td>
</tr>
<tr>
<td>Sha Tau Kok Control Point</td>
<td>Land</td>
<td>Passenger vehicles, Cargo vehicles</td>
<td>2,998,143</td>
<td>NA</td>
</tr>
<tr>
<td>Lok Ma Chau Control Point</td>
<td>Land</td>
<td>Passenger vehicles, Cargo vehicles</td>
<td>27,234,684</td>
<td>NA</td>
</tr>
<tr>
<td>Lok Ma Chau Spur Line Control Point</td>
<td>Land</td>
<td>Passenger rail</td>
<td>63,409,534</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>Control Point</td>
<td>Mode</td>
<td>Description</td>
<td>Passenger vehicles</td>
</tr>
<tr>
<td>----</td>
<td>---------------</td>
<td>------</td>
<td>-------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>11</td>
<td>Man Kam To Control Point</td>
<td>Land</td>
<td>Passenger vehicles</td>
<td>3,997,874</td>
</tr>
<tr>
<td>12</td>
<td>Hung Hom Control Point</td>
<td>Land</td>
<td>Passenger rail</td>
<td>3,883,639</td>
</tr>
<tr>
<td>13</td>
<td>Shenzhen Bay Control Point</td>
<td>Land</td>
<td>Passenger vehicles</td>
<td>38,518,273</td>
</tr>
<tr>
<td>14</td>
<td>Hong Kong International Airport</td>
<td>Air</td>
<td>Passenger flight</td>
<td>48,640,973</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td>296,641,035</td>
</tr>
</tbody>
</table>
### Appendix 4.2 Cross boundary infrastructure to commence into service in 2018

<table>
<thead>
<tr>
<th>Name</th>
<th>Capacity</th>
<th>Expected Commencement Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hong Kong – Zhuhai – Macao Bridge (HZMB)</td>
<td>Approximately 40 km 45 mins travelling time between Zhuhai and Hong Kong International Airport&lt;br&gt;Dual three-lane road (Highways Department, 2018)</td>
<td>2(^{nd}) quarter, 2018 (China Daily, 2018)</td>
</tr>
<tr>
<td>Express Rail Link (XRL)</td>
<td>Connected with national express rail link network&lt;br&gt;Average time of short-haul travels: Less than 1 hour within GBA (e.g. around 48 minutes to Guangzhou)&lt;br&gt;Average time of long-haul travels: Less than half day to Beijing (e.g. around 8 hours to Beijing)</td>
<td>3(^{rd}) quarter, 2018 (MTR, 2018)</td>
</tr>
<tr>
<td>Liantang/ Heung Yuen Wai Boundary Control Point (LT/HYW BCP)</td>
<td>Handling around 30,000 passenger trips, 17,850 vehicular trips daily&lt;br&gt;Around 4-8 min travelling time between Fanling and Sha Tau Kok</td>
<td>4(^{th}) quarter, 2018 (HK01, 2017)</td>
</tr>
</tbody>
</table>

Source: Development Bureau (2017); Highways Department (2018); MTR (2013)
Appendix 4.3 Route of HZMB and its connection to existing highways

Source: Highways Department (2018)
Appendix 4.4 The Conceptual Spatial Framework proposed in Hong Kong 2030+
Appendix 4.5 Major planned/committed projects and potential solution spaces for economic land
Appendix 4.6 Supply and demand assessment on market-driven employment-related land uses

<table>
<thead>
<tr>
<th>Grade A Office</th>
<th>CBD</th>
<th>New Land Requirement in Long Term By 2041</th>
<th>Surplus(S)/Deficit(D) (After Discounting the 3,600 ha of Committed and Planned Projects) (Net Area Site)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Short Term By 2023</td>
<td>Medium Term By 2033</td>
</tr>
<tr>
<td></td>
<td></td>
<td>27 ha</td>
<td>4.0 ha(D)</td>
</tr>
<tr>
<td></td>
<td>Non-CBD</td>
<td>15 ha</td>
<td>4.6 ha(S)</td>
</tr>
<tr>
<td>General Business</td>
<td>17 ha</td>
<td>12.9 ha(S)</td>
<td>27.1 ha(S)</td>
</tr>
<tr>
<td>Industries</td>
<td>37 ha</td>
<td>8.4 ha(D)</td>
<td>38.0 ha(D)</td>
</tr>
<tr>
<td>Special Industries</td>
<td>137 ha</td>
<td>84.6 ha(D)</td>
<td>70.0 ha(D)</td>
</tr>
<tr>
<td>Total Land Area Requirement</td>
<td>201 ha</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>Total Land Area of Deficit</td>
<td>NA</td>
<td>97.0 ha</td>
<td>110.6 ha</td>
</tr>
</tbody>
</table>

Source: Planning Department (2016a)
## Appendix 4.7 Examples of policy initiatives under economic integration

<table>
<thead>
<tr>
<th>Policy Initiative</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mainland and Hong Kong Closer Economic Partnership</td>
<td>• A free trade agreement to facilitate trade in goods and services, investment, economic and technical cooperation between Hong Kong and the mainland</td>
</tr>
<tr>
<td>Arrangement (CEPA) (2003)</td>
<td>• Preferential policies allowing Hong Kong enterprises to operate in the pilot Free Trade Zones in China, e.g. Qianhai/ Shekou and Hengqin</td>
</tr>
<tr>
<td></td>
<td>• The Individual Visitor Scheme is one of the policies stemming from CEPA for easing tourist flow</td>
</tr>
<tr>
<td>Shenzhen-Hong Kong Stock Connect (2016)</td>
<td>• Allowing mutual access between the Mainland and Hong Kong stock markets, thus achieving market integration and capital flow</td>
</tr>
<tr>
<td></td>
<td>• Memorandum of Understanding between the CSRC and the SFC on Strengthening of Regulatory and Enforcement Cooperation under the Mutual Access between the Mainland and Hong Kong Stock Markets form the basis of such integration</td>
</tr>
<tr>
<td>Hong Kong-Shenzhen Innovation and Technology Park</td>
<td>• Development of the 87-hectare Lok Ma Chau Loop for technology cooperation, jointly by Hong Kong and Shenzhen</td>
</tr>
<tr>
<td>(2017)</td>
<td>• Memorandum of Understanding on Jointly Developing the Lok Ma Chau Loop by Hong Kong and Shenzhen between the Hong Kong Special Administrative Region Government and the Shenzhen Municipal People’s Government was signed in January 2017, yet the completion date of the Park is yet to be confirmed.</td>
</tr>
</tbody>
</table>

Appendix 12.1 Distribution of modern warehouses in Q1/2018

Source: Savills, 2018