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

FINAL REPORT
APRIL 2018

DÀDÀ’s Consulting Group

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Ng, Si leong
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Executive Summary

The concept of the Greater Bay Area (GBA) has been put forward by the central government with the intention to create a greater regional synergy which is comparable to other bay areas around the world. Meanwhile, the completion of the HongKong-Zhuhai-Macao Bridge (HZMB) would induce substantial growth and development in Hong Kong and neighbouring cities in GBA.

Section 1 outlines the study background and explains the methodology and study approach adopted in this study. Details of study goals and objectives are listed in the section. Closer regional integration among cities in the GBA is expected with the opening of the HZMB. Section 2 offers a brief overview of Hong Kong’s economy and reviews the strategic spatial plans and policies of Macao, Zhuhai and Zhongshan and their respective strategic positionings and comparative advantages in the region. Section 3 identifies three key concepts related to the study which shed light on the evolving functional and spatial dynamics facing the Pearl River Delta region and how regional transport infrastructure can act as a tool to achieve urban land use and policy objectives. By making reference to relevant international cases in Asian, North American and European contexts, this section obtains insights for strategic recommendations for strategic transport network in relation to employment-related land uses in Hong Kong. Section 4 consolidates stakeholders’ consideration on three specific sectors in Hong Kong to analyse the opportunities and challenges brought by the opening of the bridge. The analysis focuses on the potential sector growth, potential regional collaboration, utilisation of land uses, strategic location arrangement and so on to generate key takeaways for each sector in focus. Section 5 offers an updated vision of the HK2030+ for employment-related land uses and the strategic transport network in Hong Kong: “Equipping Hong Kong with land and space, supporting infrastructure and human capital for the economy to move up the value chain, strengthen the economic pillars and capitalize the opportunities brought by regional coordination, through promoting a diversity of economic sectors, innovation and technology as well as quality jobs with a range of skills.” This updated vision is then translated into the territorial conceptual spatial plans focusing on the proposed future development consisted of various economic clusters and economic corridors in the territory. With regard to closer regional coordination, actions required to capitalise the opportunities brought by the development of HZMB for the associated sectors are translated into key planning suggestions. The section then devises detailed spatial plans for three identified sectors in Hong Kong. In the end Section 6 summarises the study process, outcomes, and key takeaways from the final report.
**Table of Contents**

Executive Summary .................................................................................................................. 1

Section 1 Introduction ............................................................................................................. 9
  1.1 General ............................................................................................................................ 9
  1.2 Study Background .......................................................................................................... 9
  1.3 Study Goals and Objectives ......................................................................................... 10
  1.4 Project Scope ................................................................................................................. 10
  1.5 Study Approach and Methodology ................................................................................ 11
  1.6 Structure of the Report ................................................................................................. 13

Section 2 Understanding Hong Kong and the three cities in the context of the Greater Bay Area .......................................................................................................................... 15
  2.1 General .......................................................................................................................... 15
  2.2 The Initiative of the Greater Bay Area and Its Sectoral Performance ......................... 15
  2.3 Understanding Hong Kong ........................................................................................... 17
  2.4 Review of Macao Strategic Policies ............................................................................. 19
  2.5 Review of Zhuhai Strategic Policies ........................................................................... 23
  2.6 Review of Zhongshan Strategic Policies ..................................................................... 28
  2.7 Overall Key Takeaway ................................................................................................. 33

Section 3 Understanding the Relationship between Transport Infrastructure and Urban Land Use .......................................................................................................................... 35
  3.1 Understanding Regional Development and Transport Infrastructure ....................... 35
  3.2 Transport Infrastructure and Urban Land Use Changes .............................................. 36
  3.3 How the other cities grasp the opportunities .............................................................. 38
  3.4 Relevance to Greater Bay Area and Hong Kong Context ........................................... 40
  3.5 Benefits and Costs of Regional Collaboration ............................................................ 41
  3.6 Key Lessons to Hong Kong and Greater Bay Area ...................................................... 43

Section 4 Sectoral Opportunities and Challenges brought by HZMB ................................ 45
  4.1 General .......................................................................................................................... 45
  4.2 Financial and Business Professional Services Sector ................................................ 45
  4.3 Logistics Sector ............................................................................................................ 48
  4.4 Tourism Sector ............................................................................................................. 52
  4.5 Innovation & Technology Sector ................................................................................ 55

Section 5 Making it happen - Recommendation ................................................................. 58
  5.1 Updated Vision ............................................................................................................. 58
  5.2 Territorial Conceptual Spatial Plan ............................................................................. 58
5.3 Detailed Spatial Plan for Financial and Professional Services Sector ................. 59
5.4 Detailed Spatial Plan for Logistics Sector ......................................................... 65
5.5 Detailed Spatial Plan for Tourism Sector .......................................................... 71
5.6 Detailed Spatial Plan for Innovation and Technology .......................................... 80
5.7 Strategic Transport Network ............................................................................ 87

Section 6: Conclusion ............................................................................................ 93
6.1 Overview of this Report .................................................................................... 93
6.2 Key Notes of Spatial Solutions ........................................................................ 93

Section 7: Reference ............................................................................................. 96

Appendix A Overview of Study Framework in Three Phases
Appendix B Study Programme
Appendix C List of Interviewees
Appendix D Interview Notes
## List of Figures

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 1.1</td>
<td>Greater Bay Area Cities Comparison</td>
</tr>
<tr>
<td>Figure 2.1</td>
<td>Industry Composition and Foreign Direct Investment in Greater Bay Area (in 2016)</td>
</tr>
<tr>
<td>Figure 2.2</td>
<td>The Latest Spatial Plan of Macao and the Proposed Cultural and Creative Centres</td>
</tr>
<tr>
<td>Figure 2.3</td>
<td>The Latest Spatial Strategic Plan of Zhuhai and Selected Key Areas</td>
</tr>
<tr>
<td>Figure 2.4</td>
<td>Spatial Planning of Zhongshan</td>
</tr>
<tr>
<td>Figure 3.1</td>
<td>Land Use - Transport Feedback Cycle</td>
</tr>
<tr>
<td>Figure 5.1</td>
<td>Territorial Conceptual Spatial Plan</td>
</tr>
<tr>
<td>Figure 5.2</td>
<td>Detailed Spatial Plan for Financial and Professional Services Sector</td>
</tr>
<tr>
<td>Figure 5.3</td>
<td>Detailed Spatial Plan for Logistics Sector</td>
</tr>
<tr>
<td>Figure 5.4</td>
<td>Potential Area for River Transhipment Zone</td>
</tr>
<tr>
<td>Figure 5.5</td>
<td>Detailed Spatial Plan for Tourism Sector</td>
</tr>
<tr>
<td>Figure 5.6</td>
<td>Detailed Spatial Plan for Innovation and Technology</td>
</tr>
<tr>
<td>Figure 5.7</td>
<td>Locations of Roads and Rail Links under Construction/ Clanning or Government’s Consideration</td>
</tr>
<tr>
<td>Figure 5.8</td>
<td>Suggested and Existing Road Transport Corridors</td>
</tr>
<tr>
<td>Figure 5.9</td>
<td>Suggested and Existing Rail Transport Corridors</td>
</tr>
</tbody>
</table>
## List of Tables

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 2.1</td>
<td>General Aarticulars of the GBA, Tokyo Bay Area, New York Bay Area and San Francisco Bay Area</td>
<td>p. xx</td>
</tr>
<tr>
<td>Table 3.1</td>
<td>Characteristics of International Case Studies</td>
<td></td>
</tr>
<tr>
<td>Table 3.2</td>
<td>Regional Collaboration of International Case Studies</td>
<td></td>
</tr>
<tr>
<td>Table 3.3</td>
<td>Costs of Three International Case Studies</td>
<td></td>
</tr>
<tr>
<td>Table 5.1</td>
<td>Roads and Rail Links under construction/ planning or Government’s consideration</td>
<td></td>
</tr>
</tbody>
</table>
List of Abbreviation
For all the abbreviations employed in the report, please refer to the following table for full expressions:

<table>
<thead>
<tr>
<th>Abbreviations</th>
<th>Full Expressions</th>
</tr>
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<tbody>
<tr>
<td>3RS</td>
<td>Three-Runway System</td>
</tr>
<tr>
<td>AWE</td>
<td>AsiaWorld-Expo</td>
</tr>
<tr>
<td>BCF</td>
<td>Boundary Crossing Facilities</td>
</tr>
<tr>
<td>B/D</td>
<td>Bureaux and Departments</td>
</tr>
<tr>
<td>BOT</td>
<td>build–operate–transfer</td>
</tr>
<tr>
<td>CBD</td>
<td>Central Business District</td>
</tr>
<tr>
<td>CCI</td>
<td>Culture and Creative Industries</td>
</tr>
<tr>
<td>CEPA</td>
<td>Closer Economic Participation Arrangement</td>
</tr>
<tr>
<td>CIQ</td>
<td>Customs, Inspections and Quarantine</td>
</tr>
<tr>
<td>ERLU</td>
<td>Employment-related Land Use</td>
</tr>
<tr>
<td>FinTech</td>
<td>Financial technology</td>
</tr>
<tr>
<td>FTZ</td>
<td>Free Trade Zone</td>
</tr>
<tr>
<td>GBA</td>
<td>Greater Bay Area</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross domestic product</td>
</tr>
<tr>
<td>HK2030+</td>
<td>Hong Kong 2030+: Towards a Planning Vision and Strategy Transcending 2030</td>
</tr>
<tr>
<td>HKBCF</td>
<td>Hong Kong Boundary Crossing Facilities</td>
</tr>
<tr>
<td>HKCEC</td>
<td>Hong Kong Convention and Exhibition Centre</td>
</tr>
<tr>
<td>HKIA</td>
<td>Hong Kong International Airport</td>
</tr>
<tr>
<td>HK-Macao CEPA</td>
<td>Hong Kong Special Administrative Region and Macao Special Administrative Region Closer Economic Partnership Arrangement</td>
</tr>
<tr>
<td>HKSAR</td>
<td>Hong Kong Special Administrative Region</td>
</tr>
<tr>
<td>Acronym</td>
<td>Description</td>
</tr>
<tr>
<td>----------</td>
<td>--------------------------------------</td>
</tr>
<tr>
<td>HKSP</td>
<td>Hong Kong Science Park</td>
</tr>
<tr>
<td>HKSS</td>
<td>Hong Kong Service Supplier</td>
</tr>
<tr>
<td>HSK NDA</td>
<td>Hung Shui Kiu New Development Area</td>
</tr>
<tr>
<td>HZMB</td>
<td>Hong Kong-Zhuhai-Macao Bridge</td>
</tr>
<tr>
<td>LT/HYW BCP</td>
<td>Liantang/Heung Yuen Wai Boundary Control Point</td>
</tr>
<tr>
<td>ICT</td>
<td>Information and communication technology</td>
</tr>
<tr>
<td>IMS-GT</td>
<td>Indonesia-Malaysia-Singapore Growth Triangle</td>
</tr>
<tr>
<td>IoT</td>
<td>Internet of Things</td>
</tr>
<tr>
<td>KTCT</td>
<td>Kwai Tsing Container Terminal</td>
</tr>
<tr>
<td>KTN/FLN NDA</td>
<td>Kwu Tung North / Fanling North New Development Area</td>
</tr>
<tr>
<td>MICE</td>
<td>Meetings, incentives, conferences and exhibitions</td>
</tr>
<tr>
<td>MSAR</td>
<td>Macao Special Administrative Region</td>
</tr>
<tr>
<td>NCD</td>
<td>North Commercial District</td>
</tr>
<tr>
<td>NDA</td>
<td>New Development Area</td>
</tr>
<tr>
<td>NTN</td>
<td>New Territories North</td>
</tr>
<tr>
<td>ODP</td>
<td>Outline Development Plan</td>
</tr>
<tr>
<td>OZP</td>
<td>Outline Zoning Plan</td>
</tr>
<tr>
<td>P2P</td>
<td>Person-to-person</td>
</tr>
<tr>
<td>PRD</td>
<td>Pearl River Delta</td>
</tr>
<tr>
<td>R&amp;D</td>
<td>Research and Development</td>
</tr>
<tr>
<td>RDE</td>
<td>Retail, Dining, and Entertainment</td>
</tr>
<tr>
<td>RTT</td>
<td>River Trade Terminal</td>
</tr>
<tr>
<td>SEZ</td>
<td>Special Economic Zone</td>
</tr>
<tr>
<td>STN</td>
<td>Strategic Transport Network</td>
</tr>
<tr>
<td>STT</td>
<td>Short Term Tenancy</td>
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</table>
### List of Government Departments

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEDD</td>
<td>Civil Engineering and Development Department</td>
</tr>
<tr>
<td>C&amp;ED</td>
<td>Customs and Excise Department</td>
</tr>
<tr>
<td>HKMA</td>
<td>Hong Kong Monetary Authority</td>
</tr>
<tr>
<td>MSAR</td>
<td>Macao Special Administrative Region</td>
</tr>
<tr>
<td>NDRC</td>
<td>National Development and Reform Commission</td>
</tr>
<tr>
<td>THB</td>
<td>Transport and Housing Bureau</td>
</tr>
</tbody>
</table>
Section 1  Introduction

1.1  General
1.1.1  The Hong Kong-Zhuhai-Macao Bridge (HZMB) is close to completion and expected to open in the third quarter of 2018. The bridge straddles across the estuary of Pearl River Estuary, connecting Hong Kong Special Administrative Region (HKSAR), Zhuhai City of Guangdong Province and Macao Special Administrative Region (MSAR). It would further shorten the travelling distance and time between the east and west banks of the Pearl River, further promoting regional cooperation in the Greater Bay Area. With regard to the new opportunities and challenges arising from the bridge, Dada’s Consultant Group (Dada’s) was commissioned by the HKSAR Government on 15th January 2018 to provide consultancy services for employment-related land uses and strategic transport network to support and enhance the sustainable growth and development of Hong Kong after the opening of HZMB under the context of GBA.

1.2  Study Background
1.2.1  With intention to create a regional economic heft which is comparable to other bay areas around the world, the concept of the Greater Bay Area (GBA) has been put forward by the central government. It was first mentioned in “The Action Plan for the Bay Area of the Pearl River Estuary” and reinforced in 13th Five Year Plan. The GBA comprises of Hong Kong, Macao and city clusters in Guangdong’s Pearl River Delta Estuary (See Figure 1.1), which is widely recognised as one of the most dynamic, rapid growing city-regions among the developing countries.

1.2.2  In light of improved regional cooperation in the GBA, it is foreseen that new opportunities, along with new challenges, would be brought to Hong Kong. The latest strategic plan of Hong Kong is “Hong Kong 2030+: Towards a Planning Vision and Strategy Transcending 2030”, with its economic land requirement study completed. It has laid down the latest conceptual spatial framework, providing directions on ERLU and STN. However, some policy gaps between the territorial plan and national plan are expected. A refinement of the HK2030+ is necessary, especially in the field of ERLU and STN, to help better unleash the potentials. Therefore, this assignment is conducted to update the vision of HK2030+ and formulate ERLU and STN policies to support and enhance the sustainable growth and development of Hong Kong after the opening of HZMB under the context of GBA.
1.3 Study Goals and Objectives

1.3.1 The study aims to accomplish the following objectives:

(a) To identify the opportunities and challenges faced by Hong Kong in the light of the HZMB;
(b) To evaluate the current strategic plans and policies of neighbouring cities, i.e. Macao, Zhuhai and Zhongshan, and identify the opportunities and challenges in regional cooperation;
(c) To review ERLU and STN strategies under the current territorial development plans, i.e. HK2030+; and
(d) To formulate appropriate spatial planning strategies and policies for Hong Kong’s ERLU and STN to support and enhance the sustainable growth and development in the light of the HZMB.

1.4 Project Scope

1.4.1 Complying with the study requirement, the study has reviewed the planning policies of four PRD cities directly affected by the bridge under the context of the GBA, namely Hong Kong, Macao, Zhuhai, and Zhongshan.

1.4.2 Policy recommendation area has been confined to Hong Kong, focusing on two planning aspects, i.e., employment-related land uses and strategic transport network. In terms of ERLU,
land use for five specific sectors, i.e. financial and business professional services sector, logistics sector, tourism sector, as well as innovation and technology sector, have been identified for the study. Moreover, the study would focus on the internal transport network of Hong Kong, and the recommendations would highlight and address the connectivity between the regional infrastructure, i.e., the bridge, and the other parts of Hong Kong.

1.5 Study Approach and Methodology

1.5.1 For the purpose of achieving the study goals and objectives, the assignment adopted a holistic approach to obtain relevant information and statistics for policy recommendation to supplement the policy gaps identified. The assignment is further divided into 3 stages, namely Inception and Background Research Stage (Stage 1); Review Stage (Stage 2) and Consolidation and Policy Recommendation Stage (Stage 3). This session would first recap the study process of Stage 1 and Stage 2, and then highlight the process and methodologies employed in Stages 3 (refer to Appendix A for the Work Task, and Appendix B for the Study Programme).

Stage 1 Inception and Background Research Stage

1.5.2 Stage 1 was made up of three important components that are essential input for Stage 2 and Stage 3. It started with the conceptual frameworks, in which the concept of city region, the role of transport infrastructure in regional development and the relationship between the transport infrastructure and urban land use changes were identified as relevant to the study. In particular, three major policies, including mobility policies, local spatial planning policies and economic policies were found to be relevant to the assessment of potential impact to ERLU and STN. Thus, these policies were under the close scrutinization for policy review for Hong Kong and the three other selected cities in the Review Stage. The second component includes in-depth review of the current spatial strategies and policies of Hong Kong. This part outlined the Hong Kong’s territorial planning strategies and relevant strategies and policies on ERLU and STN. The final component reviewed a number of relevant international case studies as input to formulate policy recommendation in Stage 3. The international case experiences were thoroughly researched as these international cases are relevant and applicable in the context of GBA and Hong Kong.

1.5.3 This Stage was relying on desktop research. In this stage, relevant information are gathered and analysed for the following stages. Literature, policy documents, territorial development strategies, paper, and reports were examined to understand the current strategic plans and supporting policies in Hong Kong, which will lay foundation for assessing the potential impact on demand for ERLU and STN after the completion of HZMB.

Stage 2 Review Stage
1.5.4 The main objective of Review Stage is to study about the latest strategic planning of Macao, Zhuhai and Zhongshan for assessing its potential impact to Hong Kong’s ERLU and STN in Stage 3. Latest government strategic plans were examined to gain better understanding about the updated strategic planning in three selected cities. It is followed by the anticipation of potential impacts to Hong Kong economic and employment structure. The potential impacts were then translated into the potential opportunities and challenges to the selected sectors in Hong Kong, which will be the key input for updated vision for ERLU and STN in Hong Kong and corresponding conceptual spatial plans in Stage 3. Working Paper prepared by Dada’s, STAR Planning and UP Studio would be focusing on Macao, Zhuhai and Zhongshan respectively. Three methods had been adopted to understand the opportunities and challenges faced the selected industries in Hong Kong, including desktop research, interviews and site visit.

**Desktop Research**

1.5.5 Policy review was employed to examine the latest strategic planning of Macao, Zhuhai and Zhongshan. The policies were further analysed in three perspectives, including three cities’ mobility policies, local spatial policies and socio-economic policies. These information helped generalise opportunities and challenges faced by Hong Kong economy. The method was employed to understand the current situation of Hong Kong economy and identify the comparative advantages of Hong Kong. Then, opportunities and challenges faced by the selected industries were also revealed by the policy review.

**Interview**

1.5.6 Interviews with the relevant stakeholders had been conducted to gain more understanding about the insights and perspectives from the stakeholders, their expectation on the change brought by the opening of HZMB was discussed during the interview. In order to acquire a comprehensive understanding about the topic, academia, professionals and experts from the selected industries were invited to the interviews to talk about their insights on the topic (refer to Appendix C for the Interviewee Lists and Interview Notes). The insight from the stakeholders was to find out needs of the selected industries, which help to formulate spatial plans and supporting policies in Stage 3.

**Site Visit**

1.5.7 The site visit was conducted from 21 January 2018 to 26 January 2018. During the site visit, the local planning authorities and representatives for the related industries had been interviewed to gather the first hand information about the local strategic plans and insights from the selected industries. These information will help the study team to identify the opportunities and challenges to Hong Kong economy and selected industries in the light of the latest planning of the cities in the proximity after the completion of HZMB.
Stage 3 Consolidation and Policy Recommendation Stage

1.5.8 The major aim of the Consolidation and Policy Recommendation Stage is to consolidate the findings and key takeaways from Stage 1 and Stage 2 to identify opportunities and challenges to Hong Kong economy and selected sectors after the opening of HZMB. The opportunities and challenges identified from policy review and stakeholder interviews were be important input to policy recommendation. The updated vision on ERLU and STN in Hong Kong has been identified based on the HK2030+ (Task C2). Corresponding key actions conceptual spatial plan for ERLU of selected industries and STN (Task C3 and Task C4) to capitalise the opportunities brought by the regional cooperation of HZMB have also been explained in this report. Apart from the conceptual spatial plans, relevant corresponding supporting policies (Task C5) were also suggested for selected industries to better position themselves in face of regional cooperation and opportunities brought by HZMB.

1.5.9 In particular, the latest territorial development strategies, i.e. HK2030+, was examined thoroughly to find out the policy gaps from the consolidated findings from the policy review and the insights from the stakeholders. The recommendation on the updated vision of ERLU and STN was based on the HK2030+. Relevant planning studies and technical papers were also referenced to suggest recommendations. In this Stage, the in-depth policy review was employed to suggest recommendations to the updated vision and spatial plans for ERLU and STN with evaluation and explanation.

In-depth Policy Review

1.5.10 In-depth policy review was adopted for assessing the potential spatial needs and STN arising from the opening of HZMB. The opportunities and threats to Hong Kong and the selected industries after the completion of HZMB were identified in the first part of this study stage.

1.5.11 Policy review was conducted to some key actions for the selected sectors. These key actions were translated to spatial needs and supporting policies, with reference to the prevailing government plans and international case studies. Existing territorial development strategies and policies were recommended with corresponding changes to better equip the selected sectors to seize the opportunities and face future challenges brought by the completion of HZMB.

1.6 Structure of the Report

1.6.1 This report is divided into four sections, inclusive of Section 1 which provides a brief introduction of the final report. The following sections are described as follows:

Section 2 offers brief overview of Hong Kong’s economy and reviews the strategic spatial plans and policies of Macao, Zhuhai and Zhongshan and their comparative advantages.

Section 3 identifies three key concepts related to the study and relevant international cases.
Section 4 outlines the opportunities and challenges brought by the opening of the bridge as from the consolidated findings from policy review and stakeholders’ consultation process.

Section 5 offers an updated vision of the HK2030+ for employment-related land uses and the strategic transport network in Hong Kong. The section also provides territorial conceptual spatial plans and supporting policies for key industries.

Section 6 summarises the study process, outcomes, and key takeaways of the final report.

Section 7 provides access to references and additional information.
Section 2 Understanding Hong Kong and the three cities in the context of the Greater Bay Area

2.1 General
2.1.1 After the opening of the HZMB, connectivity and interaction between Hong Kong and the neighbouring cities of the west bank of the Pearl River would be enhanced. It is expected to bring significant economic opportunities and challenges to Hong Kong, leading to new demands on ELRU and STN. Policy review of the cities directly affected by the bridge, i.e. Macao, Zhuhai and Zhongshan, has been conducted in the Review Stage (Stage 2). This section would summarise the anticipated impacts arising from the strategic plans and policies of these cities, and identify the sectors of Hong Kong which are expected to be affected after the bridge was opened. The following would first recap the initiative the GBA and its sectoral performance, and then it would provide an overview of Hong Kong economic pillars and emerging industries. After that, policy review key takeaways of the three neighbouring cities would be provided. This section would then be concluded by highlighting the sectors which are expected to be affected after the opening of the HZMB.

2.2 The Initiative of the Greater Bay Area and Its Sectoral Performance
2.2.1 With an intention to create a regional economic heft which is comparable to other bay areas around the world, the concept of the GBA has been put forward by the central government. It comprises of Hong Kong, Macao and city clusters in Guangdong’s Pearl River Delta Estuary, and is widely recognised as one of the most dynamic, rapid growing city-regions among the developing countries. The concept was first mentioned in “The Action Plan for the Bay Area of the Pearl River Estuary” and reinforced in 13th Five Year Plan. Subsequently, Premier Li Keqiang announced the initiative in the annual government report at 12th National People’s Congress in 2017, and highlighted its role to serve as a catalyst to China’s ‘One Belt and One Road Initiative’.

2.2.2 The GBA has a strong and rapid growing economy. According to Table 2.1, GDP of the GBA was 1.39 trillion USD in 2017; however, its economy is far from mature, as tertiary sector constitutes slightly more than 60% of its economy. According to Figure 2.1, most of the cities in the region rely on industrial sector. Apart from Hong Kong, Macao, Guangzhou and Shenzhen, the remaining cities in the region are serving as production bases for various types of manufacturing. For example, Zhongshan is specialised in manufacturing domestic electronic appliance, clothing, light and domestic furniture. Moreover, foreign direct investment in GBA cities remains low except Hong Kong. It implies that although the economy of GBA is rapidly growing, it is still depending on primary and secondary industries.

2.2.3 However, Shenzhen and Zhuhai are striving to transform into a service economy. Shenzhen is turning into a regional research and development hub gradually, while Zhuhai is developing its
position as being the regional financial centre. Moreover, tourism sector is becoming one of the major economic engines of the region. Overall speaking, although the GBA is relying on primary and secondary industries currently, it is expected that the Initiative would stimulate the development of tertiary sectors in the region.

Table 2.1 General particulars of the GBA, Tokyo Bay Area, New York Bay Area and San Francisco Bay Area.

<table>
<thead>
<tr>
<th>Bay Area</th>
<th>Greater Bay Area</th>
<th>Tokyo Bay Area</th>
<th>New York Bay Area</th>
<th>San Francisco Bay Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (thousand)</td>
<td>67,740</td>
<td>43,960</td>
<td>20,150</td>
<td>7,680</td>
</tr>
<tr>
<td>Area (thousand sq. km)</td>
<td>56</td>
<td>36.5</td>
<td>21.5</td>
<td>17.9</td>
</tr>
<tr>
<td>Gross Domestic Product (trillion USD)</td>
<td>1.39</td>
<td>1.86</td>
<td>1.68</td>
<td>0.78</td>
</tr>
<tr>
<td>GDP per Capita (USD)</td>
<td>20,500</td>
<td>42,700</td>
<td>82,200</td>
<td>101,700</td>
</tr>
<tr>
<td>Container Throughput (billion)</td>
<td>626.4</td>
<td>77.3</td>
<td>62.5</td>
<td>23.7</td>
</tr>
<tr>
<td>Airport Passenger (billion)</td>
<td>186</td>
<td>117</td>
<td>13</td>
<td>7.6</td>
</tr>
<tr>
<td>Proportion of Tertiary Industry</td>
<td>62.2%</td>
<td>82.3%</td>
<td>89.4%</td>
<td>82.8%</td>
</tr>
</tbody>
</table>

Source: Legislative Council Secretary (2018).
2.3 Understanding Hong Kong

2.3.1 Hong Kong economy performed well in 2017, with 3.8% increase in GDP (DBS, 2018). In 2017, the export of goods went up by 8% and the household income also underwent a solid increase (Census & Statistics Department, 2018a). The most updated unemployment rate fell to 2.9% in January 2018, which was the lowest in the recent two decades (Census & Statistics Department, 2018b).

2.3.2 According to the Chief Executive’s 2017 Policy Address, the Government continues to increase the land supply for economic development. The major scope covers general industrial and commercial sites, sites for logistics use, and sites for convention and exhibition facilities. It was expected that several commercial sites will provide a total of about 1.1 million square metres of floor area. The Government is keep looking for sites for the logistics use and support the SKYCITY development of the Airport Authority. For Convention and Exhibition Sites, the plan is to build a new international convention and exhibition venue which connects with the existing HKCEC in Wan Chai and increases about 23,000 square meters to convention and exhibition facilities. Moreover, the Government proposes to demolish and reconstruct the three government buildings in Wan Chai. Hotel and grade A office can be built on the top of the new convention and exhibition centre.

2.3.3 The Government continues to enhance the cooperation with the Mainland. Hong Kong signed an agreement with the Central Authorities to participate in the Belt and Road Initiative with the National Development and Reform Commission in December 2017. The Belt and Road aims to
promote further integration of the market and strengthen the linkage between different economies to inject momentum into the capital flow, goods and services between Asia and the rest of the world. Hong Kong has also signed the Framework Agreement on Deepening Guangdong-Hong Kong-Macao Cooperation in the Development of the Bay Area to create more favorable conditions for Hong Kong to promote industrial diversification, especially in terms of innovation and technological development.

2.3.4 Transportation and logistics industry is one of the pillar industry. Hong Kong signed the Memorandum of Cooperation with both the Civil Aviation Administration of China and the Civil Aviation Authority of Macao to optimize the development and efficiency of the air traffic arrangement in the GBA. In terms of the maritime industry development, the Government works with the industry to formulate the strategy plan and implements the favorable trade measures. The Government also aims to diversify the development of the industry such as high value-added maritime services and aviation services.

2.3.5 As the international financial centre, the Government aims to reinforce the financial status of Hong Kong by continuous investment, diversifying structure development and strengthening the confidence of the investors. Fintech is one of the focus area in the financial industry recently. The Government continues to support the innovation business of the industry. For example, HKMA will launch a Faster Payment System in September 2018 to facilitate the P2P payments.

2.3.6 In order to maintain the sustainable development of tourism, the Government has formulated the four strategies. It aims to develop the diversified source of the visitors by attracting higher value-added overnight tourists and diversifying the tourist product, such as developing cultural and green tourism in particular on the Lantau. Moreover, the Government plans to leverage on the innovative technology to promote the smart tourism and upgrade the service quality of the tourism. Several tourism boards and Government departments in the GBA have signed the “GBA Region Tourism Cooperation Agreement” to promote “Multi-destination Travel” in the bay area in 2017. Major development land includes HKIA NCD Development, Tung Chung and Mui Wo.

2.3.7 To catch up in the race, the Government identified eight major areas of Innovation and Technology to facilitate the development including increasing resource for R&D, pooling together technology talent, providing investment funding and technological research infrastructure, reviewing legislation and regulations, opening up government data, leading changes to procurement arrangement, and promoting science education. Smart City is the extension of the Innovation and Technology which aims to increase the liveability of Hong Kong. The Government invested $700 million for the initial development of the smart city (Office of the Chief Executive, 2017). In addition, With the “Re-industrialization” policy, the Government
had reserved over 170 ha land for the innovation and technology Industries and proposed the Hong Kong - Shenzhen Innovation and Technology Park and new industrial estate in Liantang/Heung Yuen Wai to conduct regional cooperation and to create synergy effect with Shenzhen. The land demand for Innovation & Technology is anticipated to be high in long-term as mentioned in the Inception Report.

2.3.8 From 2005 to 2015, the average annual rate of value added in the nominal terms of Creative Industries increased by 5.4%. The Government will leverage on the GBA and update the policy as a tool to facilitate the development of the creative industry. In order to nurture the creative thinking in the early state, the Government promises to support the local and overseas institution through various programs.

2.4 Review of Macao Strategic Policies

Strategic Positioning

2.4.1 MSAR is located at the west of PRD. According to Macao Chamber of Commerce (2018), the government is aiming to make Macao a “World Center of Tourism and Leisure” and “An Economic Cooperation Platform between the People’s Republic of China and Countries of the Portuguese-Speaking World”. In the interest of implications on Hong Kong, only the former position will be focused and further elaborated. In 2017, Macao Government has completed the Macao Tourism Industry Development Master Plan, outlining the guidelines and implementation plan for tourism development in the next 30 years. Based on the foundation of gaming tourism, tourism and economic diversification have been highlighted to achieve the strategic position of being the World Centre of Tourism and Leisure.

World Centre of Tourism and Leisure

2.4.2 The Macao Government has completed the Macao Tourism Industry Development Master Plan in 2017 to outline the guidelines and implementation plan of developing Macao into a “World Centre of Tourism and Leisure” in the next 30 years by dividing the development phrases into the short, medium and long term. Based on the foundation of gaming tourism, there are two ways to achieve this positioning: tourism and economic diversification.

Comparative Advantage

Gaming Tourism

2.4.3 Macao is the only city in China where gambling is legal after reunification with Mainland China in 1999. After 2001, Macao Government determined to end the gambling monopoly and to expand the casino industry by inviting international casino capitalists to enter into the market. Since then, Macao’s casino industry expands to 6 casino operating concessions and there are 38 casinos in operation (Wan, 2010). Gaming industry is the most crucial industry in Macao given its substantial contribution to the economy. Macao economy structure is heavily relying on
tertiary sector (92.2%), with the gaming and junket activities alone stands for 48% of Macao’s GDP, not to mention other gaming related activities that are boosted by gaming industry (DSEC, 2017).

**Cultural Tourism**

2.4.4 Because of the Portuguese settlement in such a Chinese society for more than 400 years, the colonization has left Macao a valuable asset for cultural tourism - a symbol of integration and co-existence of eastern and western cultures. The historic centre of Macao is inscribed on the World Heritage List in 2005 (Macao Government Tourism Office, 2018). In GBA, Macao is the only city which has the honor of this World Heritage recognition and certainly stands out in the region. In addition, the cultural heritage buffer zone is an indication of Government’s determination to uphold the cultural value in the tourism industry.

**MICE Tourism**

2.4.5 Macao’s casino development has been shifting from single casino buildings to comprehensive resort clusters. These comprehensive resort complexes could cater different needs of tourists by becoming a comprehensive and relaxing holiday destination, and so be able to attract different types of tourists with ample varieties of leisure activities and entertainments. Moreover, the comprehensive resort complexes can provide sufficient and grand venue for MICE. Macao’s competitive edge in MICE is the integrated resort model: most of MICE venues are incorporated into the large resort complex, such as the Venetian. As a typical integrated resort MICE venue, it provides high-class and one-stop experience for attendees.

**New Urban Zone Development**

2.4.6 The New Urban Zone Planning is the latest spatial planning of Macao (DSSOPT, 2015). Approved by the Chinese Central Government, Macao obtained 5 pieces of land by reclamation. The total area of the new urban zone is 350 hectares. Apart from resolving social issues of housing demand, the new urban zone also serves as an opportunity to diversify economic activities (Figure 2.2). Providing space for cultural and creative sector, leisure corridor and other leisure tourism activities, the new urban zone echoes and strengthens Macao’s strategic positioning towards a World Centre of Tourism and Leisure.
**Gaps**

2.4.7 It is identified that there are some gaps between the strategic policies of Macao and the target of a World Centre of Tourism and Leisure. The gaps are in two folds: tourists profile and quality of tourism products.

*Economic and Tourism diversification*

2.4.8 In order to become a World Centre of Tourism and Leisure, Macao needs to have a lot to offer. However, Macao’s comparative advantage in cultural heritage is rather limited in terms of scale.
To fill this gap, Macao must cooperate with nearby cities to enrich the tourism package and to provide diverse tourism experience. Macao and Zhuhai are continuously making seamless connection with each other. This connection helps to produce a region of tourism: the gaming centre and cultural heritage in Macao in complementary with Hengqin’s large theme park and leisure activities (Tiben, 2012). Whereas Macao has UNESCO World Heritage and a richer colonial culture, Hong Kong has more local culture such as villages and country parks. Abundance of natural resources is what Macao tourism is lacking. Different tourism focus allows the three places to grasp the opportunity by turning competition into collaboration. For example, Hong Kong, Macao and Zhuhai can find ways to make a comprehensive tourism package for visitors to enjoy all three places in one vacation.

2.4.9 In Macao, the cultural value of the tourism industry was overshadowed by the label of casino tourism. Although the cultural heritage buffer aims to preserve the old district of Macao with the architecture, street block layouts and so on, the Macao Government needs to increase efforts to create incentives for tourists to visit the old district, as well as enrich and diversify its tourism image. Macao government strives to cultivate three main emerging industries to diversify the economy from reliance on casino tourism to MICE, traditional Chinese medicine, and cultural and creative industry. In terms of CCI, the rich cultural value of Macao can be used as the foundation. However, Macao’s high development density may not be conducive to creative industry cluster, which may justify Macao’s outward approach for extending its emerging industry development to Hengqin. Macao Government’s existing support for creative industry is mostly financial, while the spatial location for creative industry is dispersed. However, Macao’s CCI is still at the very initial stage, and it is not certain how the impacts of developing CCI in Hengqin could be transferred back to Macao.

2.4.10 Macao has two major gaps in promoting MICE tourism: the first is the lack of business environment such as international headquarter base; the second is Macao’s traditional image as a gaming destination. These two aspects may reduce Macao’s attractiveness for MICE planners. Hong Kong’s thriving business environment serves as an international headquarter base and a well-developed financial market, would potentially help Macao in filling this gap. Overall, no matter where future events and exhibitions are held, the increased visitors flow in one city could boost the visitor flow in another city, or even attract visitors to join exhibitions in both cities at the same time. Cooperation between Hong Kong and Macao could create synergies that benefit both cities.

Regional Transport Network

2.4.11 The existing transport modes between Hong Kong and Macao (i.e., ferry and helicopter) do not offer readily available 24-hour cross-boundary service, though limited sailing schedule at night is offered. The HZMB might overcome the time constraint of the existing terminals. The bridge
could cover part of the existing passenger flow to play a supplementary role in the prevailing modes of transportation connecting Hong Kong and Macao. However, the custom clearance may not be convenient for passengers who depart from or arrive at Hong Kong, as passengers need to get on and off the coach for four times due to the “Separate locations of boundary crossing facilities” policy (三地三檢). In contrast, Macao and mainland citizens are only required to show identification documents once to enter each other’s boundary due to the experimental Joint Inspection and One-time Release arrangement (合作口岸，一次放行) (Fang, 2018).

2.4.12 Even though Macao has been positive in terms of the number of visitor arrivals, Macao’s tourism profile leans heavily on Mainland tourists (DSEC, 2017). Diversifying tourism profile is the key to maintain a healthy and diversified tourism structure. For this point, Macao International Airport might not be able to fill this gap in terms of capacity, as limited international direct flights have restricted the access of international travelers to certain extent. Macao could utilize the advantage of sharing regional resources with the nearby airports such as the seamless connection with the Hong Kong International Airport to expand its tourist profile.

Hong Kong-Macao Cooperation

2.4.13 It is argued that Hong Kong and Macao have very limited collaboration. When the Central Government identifies closer cooperation between Macao and other GBA cities, there is no particular plans or orders for direct cooperation between Hong Kong and Macao. Regarding the initiative, since Macao often acts as a supporting role in the regional collaboration and follows the order from the central Government, Macao seldom actively takes initiative. However, from the perspective of Hong Kong, Hong Kong may not have the initial stake to invite Macao for cooperation at first glance. Hong Kong may need to re-evaluate the possible opportunities and play a proactive role.

2.5 Review of Zhuhai Strategic Policies

Strategic Positioning

2.5.1 Zhuhai, located on the west Pearl River Delta, is one of the first four SEZs established in the late 1970s after the introduction of Open Door Policy and economic reform of China. In the light of GBA and HZMB, the strategic positioning of Zhuhai is to be a major urban core and innovation hub on the west PRD as well as to focus on ecological protection (The Framework for Development and Reform Planning for Pearl River Delta Region (2008–2020), 2008; Outline of the 13th Five-Year Plan for the National Economic and Social Development of the Guangdong Province, 2016). To achieve this positioning, Zhuhai has developed a city masterplan where the key new areas and nodes are highlighted in Figure 2.3.
2.5.2 **Major Urban Core and Innovation Hub in PRD**

Being directly connected to Hong Kong via HZMB and at the centre of west PRD, Zhuhai is at the strategic location for driving economic developments of west PRD cities. To support this positioning, the Hengqin New Area is established as the core of the Major Urban Core and Innovation Hub in PRD. Under this big title, Zhuhai’s strategic positioning could be further elaborated according to its strategic planning and highlighted industries, including the regional finance hub, regional logistic hub, innovative platform, and high-end manufacturing base.

2.5.3 **Ecological Civilization New Area**

Zhuhai has a high priority in environmental protection and sustainable development ever since the economic reform. This latest positioning is in line with Zhuhai’s long-term development strategy and also indicates that Zhuhai is pursuing sustainable development. For instance, Zhuhai is actively promoting both eco-tourism (such as eco-agriculture) and the highlighted industries with low pollution (such as modern logistics and finance).
Comparative Advantage

Financial Services industry

2.5.4 Shizimen Commercial Area in Hengqin and Wanzai is a new comprehensive CBD including International Financial Centre, companies headquarter bases, etc. As Hengqin is the pioneer development in Zhuhai, it creates opportunities for cooperation among the PRD. Zhuhai has the advantage in foreign investment, trade, and logistics with the supporting preferential policies. Particularly, while the Hengqin New Area is still under construction, it has already attracted various oversea investments through Hong Kong; and many Hong Kong enterprises have also captured the opportunity of investment and are going to set up regional offices in Hengqin. In the long run of Zhuhai’s strategic planning, Hezhou in west Zhuhai is designated to be the future CBD with international financial services. As a result, Zhuhai is developing into a regional financial centre, and has comparative advantage in terms of financial services industry.

Logistics industry

2.5.5 The development of logistics industry in Zhuhai is promoted by the industrial parks zones such as Hengqin Free Trade Zone, Zhuhai-Macao Cross-border Industrial Zone, Gaolan Port and Zhuhai Aviation Industrial Park. These key industrial parks are promoting multimodal transport logistics through strengthening the linkage between land transport infrastructure and seaports. In particular, the Zhuhai Bonded Area close to the HZMB in Zhuhai is the only existing bonded area in the West PRD (Zhuhai Bonded Area Management Committee, 2015) and it enjoys the “three in one” preferential policies: free trade zone, export rebates, and 24-hour boundary control in the area. This Zhuhai Bonded Area is consistent with the Zhuhai Government’s emphasis of promoting cross boundary logistics cooperation with Hong Kong upon the completion of the HZMB. In another perspective, the Gaolan Port economic district is developing into another new bonded area to facilitate cross boundary shipment after receiving national approval (Zhuhai Bonded Area Management Committee, 2018), and will highly facilitate the flows of exports and imports. Thus, it is essential for Zhuhai to have good logistics cooperation with HKIA. Moreover, Gaolan Port is the only deep-sea port in west PRD which served as a gateway radiating the Xijiang River Area and Southwest China (Zhuhai Port Authority, 2017). In addition, a Zhuhai-Hong Kong-Macao Logistics Park will be developed in Hengqin, which will further strengthen international high-value logistics between HKIA and Hengqin. Moreover, Zhuhai Airport could be served as a regional logistics hub to facilitate the flows of high value-added logistics.

Tourism industry
2.5.6 In MICE tourism, Zhuhai currently positions itself as the “core C&E city in the Western PRD”. In spatial strategy, Zhuhai is aggressively expanding MICE industry by building large dedicated venue in Hengqin such as the Zhuhai International Convention and Exhibition Centre (Zhuhai Science, Technology, Industry and Information Technology Bureau, 2012). Apart from spatial strategy, Zhuhai government is generous in subsidizing MICE events to attract event planners, for example, the subsidy could be up to $0.5 million RMB depending on the degree of internationalization and number of attendees (Zhuhai Financial Bureau, 2017).

2.5.7 In leisure tourism, Hengqin is envisaged to be an “international tourism and leisure island” with a focus on developing mega-scale theme parks and innovative experience-based tourism hubs. Examples include the 500-hectare Chimelong International Ocean Resort and the 100-ha Novotown. Eco-tourism is also actively promoted in Doumen and Jinwan District, such as Taiwanese Peasant Innovation Park.

Innovation Industry

2.5.8 Hengqin provides a major land supply for I&T industries in PRD: 144.85 hectare of land in Hengqin are reserved for I&T development (equaling to 5% of the total built area in the masterplan) (Hengqin New Area Management Authorities, 2016). In 2011, Park of Co-operation between Guangdong and Macao was established with the cover area of about 500,000 sq. m, and acts emerging industry collaboration with Macao SAR. Moreover, preferential policies in Hengqin prioritizing investments from Hong Kong and Macao and providing tax deduction for I&T enterprises. Till 2017, 1446 Hong Kong-Macao companies have already entered Hengqin (Chen, 2017). Hong Kong and Macao startup businesses are also encouraged to enter Hengqin by the land supply and financial incentive, and incubation of HK-Macao startup projects reach 252 and project funding reaches $0.4 billion RMB (Xinhua, 2018). Hengqin will also guide foreign-funded R&D institutions and innovative teams to invest in strategic emerging industries such as the Internet of Things (IoT) and big data. With extra funding, major breakthroughs are anticipated in software, integrated circuit design, artificial intelligence, biomedicine, and new-energy vehicles (The Letter of Intent on Strengthening Cooperation of Hong Kong and Zhuhai, 2014).

High-end manufacturing Industry

2.5.9 Zhuhai’s preferential policy, abundant land supply, and low rent contributed to the comparative advantage in fostering high-end manufacturing development. The favoring policy such as tax exemption on import of important raw materials and key equipment for manufacturing sectors will stimulate manufacturing industry in Zhuhai (Zhuhai Human Resources and Social Security Bureau, 2017). Examples include Zhuhai Aviation Park and Fushan Industrial Park, and they are mostly within Jinwan District and Doumen District. Particularly, Zhuhai Aviation Industrial Park (size of 99 km²) is considered as the largest general aviation base with a focus on aircraft
manufacturing in south China (Zhuhai Municipal Government, 2015). In the regional level, Zhuhai has a great connection to the Western PRD, including Jiangmen and Zhongshan, together they aim at creating a high-tech manufacturing cluster.

Gaps

Professional Services

2.5.10 There are several challenges that oppose Hengqin’s pursue as regional financial hub. Zhuhai’s business foundation is not strong enough to support its finance hub in spite of Zhuhai’s effort in developing various industries. While other cities in the West PRD are Hengqin’s hinterlands and targets for its financial industry, Hengqin is still in its initial development stage, and the foundation of its finance hub is rather weak and immature. Closer collaboration with Hong Kong will fill this gap by building a better professional image for Hengqin and getting a stronger support for Hengqin’s regional finance development.

2.5.11 The prosperous manufacturing and other emerging industries in Zhuhai demonstrate a huge gap between supply and demand of professional services. As Zhuhai itself could not offer this service to satisfy the demand, this creates cooperation opportunities between Zhuhai and Hong Kong. For instance, enterprises in Zhuhai might seek foreign-related professional services from Hong Kong which has comparative advantage in finance and international trade.

Logistics Industry

2.5.12 The current cross boundary industrial zone in Zhuhai is mainly serving the product imports and exports between Zhuhai and Macao. Upon the completion of the HZMB, the Zhuhai Government plans to increase emphasis on promoting cross boundary logistics cooperation with Hong Kong. In addition, Hong Kong could strengthen multimodal transports linking the HZMB and other intercity highways with the local ports to further promote cooperation with the future bonded area in the Gaolan Port. HKIA could cover for Zhuhai Airport’s lack of international flights, and at the same time, Zhuhai’s large air-cargo capacity could be focused on regional level. In this way, the air-land-air logistics flow is built up with Zhuhai Airport, Hengqin FTZ, Logistics Park, HZMB and HKIA. HKIA has a crucial role in filling international gap in high valued logistics. By utilizing Hong Kong’s mature international logistics, Zhuhai can enhance its role in west PRD ecommerce and trading especially in international trade. This strategy is further supported by the enlarged storage spaces provided for transshipment goods from inland cities in Southwest China.

Tourism Industry

2.5.13 In terms of leisure tourism, the leisure destinations and activities are all newly constructed and established, and thus, the companies need to input very strong marketing efforts to increase
the target market customers’ awareness, interest and demand. It is essential to create a differentiated product package in order to stand out in the highly competitive tourism industry.

2.5.14 In terms of business tourism, the success of the China International Aviation and Aerospace Exhibition has shown the rising demand for the China’s manufacturing products from the foreign investors, and the needs for mega exhibitions at international level to connect both Chinese and foreign companies. Due to the absence of international flights at Zhuhai airport, foreign passengers may sometimes have difficulties in reaching Zhuhai. At the same time, some Chinese companies also want to look for the opportunities to invest in overseas companies or establish partnership with these foreign companies. They would like to have more chances to explore or interact with overseas companies via mega exhibitions. Thus, Hong Kong is critical to fill the demand for MICE services from the mainland China.

Innovation and Technology industry

2.5.15 As human capital is essential for I&T industry, Zhuhai and other cities in Western PRD are planning to implement preferential policies to attract professionals, especially by cross-boundary human capital inflow. Close cooperation with Hong Kong and Macao will enhance the human capital flow from Hong Kong and overseas to Zhuhai to satisfy the labor demand.

2.6 Review of Zhongshan Strategic Policies

2.6.1 Strategic Positioning

The 13th Five-Year Plan for Economic and Social Development of Guangdong Province (2016-2020) indicates key directions of future economic and social development for Zhongshan. In the new development context emphasizing on regional integration and global competitiveness, Zhongshan should grasp the trend and contribute to the PRD regional development through functioning as the following four roles: a world-class modern equipment manufacturing base, an integrated transportation hub for the western PRD, a regional R&D centre for science and technology innovation, and a boutique city in PRD showcasing a high quality of life.

2.6.2 Following the provincial 13th Five-Year Plan, Zhongshan’s own 13th Five-Year Plan underlines the goal of developing a new mode of economic development driven by innovation. Two key strategies are further pointed out. The first is to restructure the industries for city upgrading. Zhongshan plans to move up the value chain through evolving into an innovative economy fuelled by advanced manufacturing industries and modern services such as tourism; meanwhile supplemented by leisure agriculture and tourism agriculture. The second is to capitalise the regional cooperation including the Belt and Road and the GBA development. Through closer cooperation particularly with Hong Kong and Macao, Zhongshan aims to attract more foreign direct investment, to improve the overall performance its export-oriented economy, to
encourage local enterprises to go global and to accelerate its industrial upgrading especially for the manufacturing and service sector.

2.6.3 Taken consideration of the existing socioeconomic conditions of Zhongshan as well as the provincial and city-level policies and initiatives, it can be summarized that Zhongshan is strategically positioned to become a world-class innovative and specialised manufacturing hub, an integrated transportation hub for western PRD and a regional cultural and eco-tourism destination with unique attractions. Key strategic and territorial plans relevant to the three positions are highlighted below.

A world-class innovative and specialised manufacturing hub

2.6.4 According to the 13th Five-Year Plan of the city, the Zhongshan government identifies and prioritises several emerging industries of strategic importance to lead the industrial restructuring and upgrading. They include high-end and innovative electronic information, biomedicine, semiconductor lighting and photoelectric equipment. It is expected that the identified emerging industries of strategic importance, together with the newly introduced advanced manufacturing industries will facilitate the transformation of the traditional manufacturing industries and fuel the city’s economic development in the long term.

2.6.5 The Zhongshan City Master Plan (2010-2020) outlines the spatial framework for economic transformation and upgrading of the city. In general, the framework consists of “one main hub and two sub-hubs, one corridor and two belts, four functional clusters” as shown in Figure 2.4.

- The main hub will focus on modern services and emerging industries of strategic importance. The two sub-hubs located in the north and south of Zhongshan respectively will take a leading role to facilitate the traditional manufacturing industries in neighbouring area to move up the value chain.
- One development corridor for traditional industries and two economic belts for emerging industries are identified to enhance cooperation among different sectors.
- Each of the four functional clusters, namely the Central Cluster, East Cluster, Northwest Cluster and South Cluster has its own specialisation. In particular, the East Cluster will focus on innovation and high-tech industries.
In terms of regional connectivity, multiple modes of transportation including railways, highways and ferries have been considered to shorten the travel distance and time between Zhongshan and neighbouring cities to create a half-hour economic circle between Shenzhen and Zhongshan and a one-hour economic circle between Zhongshan and other cities in the GBA. The construction of Shenzhen-Zhongshan Corridor, HZMB, Shenzhen-Maoming high-speed railway and a new passenger terminal of ferries is expected to significantly enhance the regional connectivity and economic integration.

As of Zhongshan’s internal transportation network, the city has planned to upgrade its road system to a network of “Five Horizontals and Six Verticals” as shown in Figure 2.4. The improved transportation network together with the strategy of prioritising public transport would increase the internal transportation capacity and prepare for future development.
A regional cultural and eco-tourism destination with unique attractions

2.6.8 Apart from being known as the hometown for Sun Yat-sen, Zhongshan features rich natural and cultural assets including historic buildings and villages of Lingnan style, Wuguishan, natural hot spring as well as a number of forest parks and wetland parks. The city’s Master Plan includes tourism planning (refer to Figure 2.4) which aims to utilise and also conserve the existing resources. Two theme-based tourism zones are identified, namely the Wuguishan Core Tourism Zone and the Sanjiao-Minzhong Lingnan Riverside Village Tourism Zone. The planning also proposes designated towns for cultural, waterway and eco-tourism to provide various travelling experience for tourists.

Comparative Advantages

A strong base for manufacturing

2.6.9 The second industry has been the biggest contributor to Zhongshan’s economic development over the years. Under the special city-town system, no district is established in the city. Thus, towns play a significant role in Zhongshan’s second industry. The features of “one industry in one town” apply to most towns and the specialised manufacturing towns can be renowned for being the leading manufacturer in their pillar industries.

2.6.10 Historically, Zhongshan has shown comparative advantages in a number of manufacturing sectors, including lightings, home appliances, furniture, electronics, garments and hardware, with the capacity to produce a comprehensive range of products with high quality with competitive pricing. For example, Guzhen Town, which is located in the northwest of Zhongshan, is known as “China’s Lighting Capital” as it is the largest manufacturing base for lightings in China and one of the four major distribution centres for lightings in the world. Another town in the northwest of the city, called Xiaolan Town, is dedicated in the production of locks, hardware and electronic acoustics products. As for the furniture sector, Dachong Town, which is located in the southwest of Zhongshan, has been designated for rosewood furniture production by the Guangdong government since 2001 and it is now known as “China’s Rosewood Furniture Capital”.

2.6.11 At present, the western PRD has been strategically positioned to target on the advanced manufacturing as the development direction according to the national and provincial policies. It is believed that Zhongshan will provide solid support with its strong manufacturing base to boost the growth of modern equipment manufacturing in the region. Despite of the growing trend of the tertiary industry, the Zhongshan government will continue to position the second industry as the foundation industry with strategic importance to further promote the city’s unique role in the regional context.
An emphasis on foreign trade and investment

2.6.12 Zhongshan has a comparatively active performance in foreign trade. The total value of imports and exports accounted for 69.87 percent of the city’s total GDP in 2016, and the total exports value of RMB 205.56 billion is 3.9 times more than its total import value of RMB 52.59 billion in 2017 (Zhongshan Statistics Bureau, 2018). In terms of the commodity categories, 69 percent of export commodities are machinery and electrical products and 21 percent are high-tech products. Major trading partners include the USA, European Union, Japan and Hong Kong, together accounting for 66 percent of total imports and exports value of Zhongshan (Zhongshan Statistics Bureau, 2018).

2.6.13 Zhongshan received foreign direct investment of USD 474 million in 2016, with the wholesale and retail industry as well as the manufacturing industry as the top two sectors being invested most (32% and 28% respectively). Furthermore, it is noticeable that Hong Kong and Macao invested 57% of the total FDI in Zhongshan in 2016 (Zhongshan Statistics Bureau, 2017).

2.6.14 Opening up to the outside world at an early stage, Zhongshan captures the opportunities to develop foreign trade and attract foreign investment. The government also puts forwards multiple initiatives to further enhance Zhongshan’s economic cooperation with various partners, in particular Hong Kong and Macao. The annual Zhongshan Investment and Trade Fair is one of the typical examples showcasing the close economic relationship between Zhongshan and Hong Kong. With favourable government policies and a historical development path emphasizing the foreign trade and investment, local enterprises may possess more beneficial conditions to be in line with the national strategy to go global.

Gaps

Insufficient Innovation Capacity

2.6.15 The enterprises are regarded as the major players to drive innovation; however, their overall innovation capacity is not sufficient to evolve Zhongshan into a world-class innovative and specialized manufacturing hub. At present, there is a number of local enterprises still locating at the low value-added level and relying on an extensive mode of development at the expense of the environment.

2.6.16 There are several aspects related to the fall-behind innovation capacity in Zhongshan, including inadequate capability in the development of own core technology and transition of science and technology into production, lack of talents in the disciplines of science, technology, engineering and mathematics, as well as a comprehensive system for intellectual property protection.
2.6.17 The Zhongshan government has begun to support the development of high-tech industries with fiscal policies. For example, spending in R&D has accounted for 2.4% of the city’s total GDP in 2016 (Zhongshan Statistics Bureau, 2017). However, more actions are in need to stimulate the traditional manufacturing industries to transform their operation for upgrading into advanced manufacturing.

2.6.18 Zhongshan may develop a partnership with Hong Kong to enhance the innovation capacity given the following highlighted advantages featured by Hong Kong. The world well-known top-ranked universities in Hong Kong with strong fundamental research abilities not only nurture a number of talents but also lay a solid foundation for developing core technologies. Hong Kong also has advantages in the intellectual property protection that may provide favourable conditions for Zhongshan’s enterprises to strengthen their innovation capacity. Moreover, being more experienced with international technical trends and standards, Hong Kong may play a significant role to promote quality enhancement of industrial products manufactured in Zhongshan.

Limited access to the international markets

2.6.19 The 13th Five-Year Plan of Zhongshan points out that lack of access to the international markets is one of the major challenges for the city given the large percentage of GDP contributed by the imports and exports. Moreover, there is a negative average growth rate of 4 percent in the total value of foreign capital utilized by Zhongshan between 2006 and 2016 (Zhongshan Statistics Bureau, 2017). The economic structure and the slowing-down growth in recent years have urged the city to create and capture more opportunities for foreign trade and investment.

2.6.20 Though most of the enterprises in Zhongshan have experience in foreign trade to certain extent, there is still a significant lack of business professionals to help the enterprises to go global. In particular, Zhongshan needs management and operation expertise with risk coping capabilities in a more globalised context.

2.6.21 Zhongshan may seek economic cooperation with other cities in order to expand its access to the international market and to fulfill the shortage of business professionals. Hong Kong can be one of the potential partners as it is renowned for being the hub for financial and professional services as well as its strong connection with the global market.

2.7 Overall Key Takeaway

2.7.1 In this section, the gaps found in the policy review of the three cities in GBA will be summarized under the following four sectors: 1) financial and business professional services, 2) logistics, 3) tourism, and 4) innovation and technology. Hong Kong’s role in cooperating with the three cities for each of the four sectors would then be briefly laid out for later sections’ analysis.
Financial, Business and Professional Services

2.7.2 Zhuhai has positioned Hengqin as the regional finance hub. However, Zhuhai’s financial industry development is still at its initial stage and lacks strong business foundation support; thus, Hong Kong and Zhuhai have opportunity in horizontal coordination in financial sector. Zhuhai and Zhongshan’s innovation and high-end manufacturing industry might need to seek professional services from other places because their city cannot satisfy the demand. The silver lining is that Zhuhai and Zhongshan can turn to Hong Kong for professional services.

Logistics Industry

2.7.3 The current logistics in Zhuhai is lacking close connection with Hong Kong. Zhuhai Airport has potential in high valued logistics with large air-cargo capacity. In addition, Zhuhai’s FTZ with preferential policies has great potential in handling international logistics. HKIA is playing the critical role in providing external network in promoting cross-boundary high valued logistics.

Tourism Industry

2.7.4 In terms of leisure tourism, comparative advantages of three cities and Hong Kong have already been explained. For the regional multi-destination tourism, Hong Kong, Macao, Zhuhai and Zhongshan all play different roles on mutually beneficial common grounds. Stronger cooperation between these four cities is crucial for the success of their agenda of tourism. The multi-destination tourism package needs stronger marketing and branding efforts. The cities should leverage the advantages of HZMB and HKIA in diversifying tourist profile and increasing tourist number. They should also utilize Hong Kong's role as an international platform to promote and package the regional tourism products.

2.7.5 Zhuhai and Zhongshan’s growing business in innovation and manufacturing are lacking of international exposure due to insufficient international network available. Thus, they need to seek assistance from Hong Kong, the international financial centre, to bring their businesses to the world. It is therefore reasonable to expect a more prosperous MICE tourism across the region in the light of HZMB.

Innovation and Technology Industry

2.7.6 Zhongshan's manufacturing industry is in the process of transformation into high-end manufacturing. However, Zhongshan is lacking the transformation catalyst: innovation capacity. Zhongshan does not have enterprise giants to support the initial investment in research and development. Also, only few top universities in Zhongshan could provide the support in innovation development and research. In this sense, close cooperation with Hong Kong’s I&T industry could enhance the innovation capacity.
Section 3 Understanding the Relationship between Transport Infrastructure and Urban Land Use

3.1 Understanding Regional Development and Transport Infrastructure

3.1.1 In this report, three key concepts are identified related to our study: (1) city-region (2) the role of transport infrastructure in regional development (3) transport infrastructure and urban land use changes. The following sections would explain the concepts, identify the implications, and construct the conceptual framework with key variables. Thus, the conceptual framework and key variables would guide the formulation of land use planning strategies for Hong Kong in relation to HZMB.

City-region

3.1.2 Despite its wide usage during recent years, the term “city-region” has been defined in many ways by scholars and theorists. “City-region” is sometimes associated with words like “world” or “global” to give it a sense of vastness or global relevance. Although the definitions vary widely, the concept of city-region is usually used to refer to individual or group of territorial units at the sub-national level (Rodriguez-Pose, 2008). One common perception about the extent of city-regions is that their expanse is beyond the formal administrative boundaries of cities or urban local governments. Marvin et al. (2006) define city-regions as functional entities that are “enlarged territories from which core urban areas draw people for work and services such as shopping, education, health, leisure and entertainment” (p.5).

3.1.3 Defining a region gives direction in policy impact analysis at various levels. In general, the concept of region has geographical implications. Richardson (1979) identified region from three aspects and mentioned them as 1) homogeneous region, 2) planning region, and 3) nodal region. Taking the concepts from geography, homogeneous region commonly refers to a group of cities sharing similar characteristics (e.g., identity and climate) which displays a clear distinction from other regions. Planning region is straightforward and has a confined planning boundary. In nodal region, Richardson (1979) emphasized on the functional interdependence of cities within a region. Thus, a region is classified as core and periphery region in which regional disparity arises.

3.1.4 The form of city-regions that have been evolving in Pearl River Delta region or Yangtze River Delta region was referred as Mega City-Regions (Hall, 2009; Pain, n.d.). It is characterized by a series of towns and cities that may be physically separate but functionally networked. In such city-regions, a new functional division of labour consolidates economic strength. These could exist as separate entities, where most workers are local residents, or as parts of significant functional urban region connected by intense flows of people, goods, and information along
transport and telecommunications links. According to Hall (2009), this was the “emerging urban form” at the beginning of the 21st century.

3.1.5 However, when regional economic processes enjoy increased international connectivity then *Global City-Regions* arise. Global cities play a critical role in such city-regions to manifest economic globalization. Hong Kong in Pearl River Delta mega city-region and Shanghai in Yangtze River Delta mega city-region are examples of global cities which display higher connectivity of the city-regions within global networks (Pain, n.d.).

**Regional Development and Transport Infrastructure**

3.1.6 As mentioned above, the concept of city-region is to bring prosperity to the region as a whole. In contrast, empirical evidence suggests that regional disparity is one of the products in regional development (Kanbur and Venables, 2005; Jain and Korzhenevych, 2017). Rodríguez-Pose (2008) pointed out that “policy emphasis is almost exclusively centred around the growth poles.” In other words, city-regions aggravate concentration of the economic activity in the urban core areas. One of the factors in bridging the linkage between city-region and the regional disparity is the distribution of transportation infrastructure within the region (Jain and Korzhenevych, 2017). Meanwhile, regional disparity exists in GBA to a certain extent, with the western part being less developed. Transportation infrastructure is considered a lever to unleash the potential opportunities brought by the completion of HZMB.

3.1.7 Policy objectives play a crucial role in transport infrastructure since transport infrastructure is a tool to achieve policy objectives in different levels, namely national, regional and local (OECD, 2002). However, transport infrastructure alone hardly completes the tasks, frequently it will bring changes in land use in the local context. Thus, spatial planning must be integrated with transport infrastructure (See Figure 3.1). Jain and Korzhenevych (2017) believe that fragmented governance in different levels delays this integration. To capitalise potential benefits of transportation infrastructure, governance and policy objective among various authorities should be coordinated. Hong Kong’s policy objective should be responsive to the latest changes after the opening of HZMB. In particular, strategic spatial and transport planning of Hong Kong should also appraise other cities linked by the HZMB, namely Macao, Zhuhai and Zhongshan on the basis of better coordination among GBA.

**3.2 Transport Infrastructure and Urban Land Use Changes**

3.2.1 Literature points to a bidirectional relationship between transport infrastructure and urban land use, called the ‘land use - transport feedback cycle’ (Bertolini, 2012; Kasraian et al., 2016; Wegener and Fürst, 2004). As shown in Figure 3.1, the transport infrastructure has a direct impact on accessibility, which can be measured by travel time and travel cost and will further
lead to changes in trip length and trip frequency. The spatial distribution of accessibility in different areas influences their level of attractiveness for development purposes, and thus results in land use changes. Types of land use, such as commercial, industrial and residential, determine locations for people to carry out activities. The growing volume of human activities and the distance between different locations for activities requires transport network to adapt to the increasing demand for spatial interactions.

![Figure 3.1 Land Use - Transport Feedback Cycle](source: modified from Wegener and Furst (2004) and Bertolini (2012))

3.2.2 Multiple factors influencing the impact of transport infrastructure on land use. The first is the characteristics of the transport infrastructure. The following outlines three major policies affecting the land use and strategic transport network as follows:

**Mobility Policies**

3.2.3 With reference to Bertolini (2012), Kasraian et al., (2016) and Cervero (2007), the mobility factor includes the transport infrastructure investment and operational details, which change the demand for land use that in the proximity of the transport link. In the case of the opening of HZMB, the operation details of HZMB would pose a major composition of the mobility factor that potentially change the ERLU and STN. The operational details includes the following:

(i) Arrangement of cross-boundary vehicles, including quota and cost of using the transport infrastructure, i.e. HZMB
(ii) Clearance procedure and visa policies for passengers and goods
(iii) Estimated number of vehicle. Passenger and freight volume

**Local Spatial Policies**

3.2.4 Spatial factor is another factor that potentially affects the land uses and transport link. Spatial factor consists of the existing and planned land use planning policies, including multiple levels of land use planning in Hong Kong, neighbouring cities and the whole region of GBA. The land use planning of the neighbouring cities can help assess the impact on Hong Kong after the travelling distance and time have been compressed due to the opening of HZMB. With the
closer integration between Hong Kong and GBA, Hong Kong is more vulnerable to the land use planning of neighbouring cities. Therefore, it is important to assess land use planning in Hong Kong and also other cities in the region. Spatial factor assesses the following, including local, regional and national spatial factors. The operational details includes the following:

A. Local Spatial Factor
   a. Land supply by different types of land uses stipulated by Planning Department of Hong Kong
   b. Local land use demand and its characteristics and the amount of land required under the local economy.
   c. The latest land use and transport policy at the time of the opening of the bridge and latest strategic planning in face of the context of the bridge, i.e. new land uses promoted by the local planning authority.

B. National/ Regional Spatial Factor
   a. The land use planning of neighbouring cities directly linked by the HZMB.
   b. Comparative advantages and economic policies of neighbouring cities.

Economic Policies

3.2.5 From literature review, several factors of macro-climate that have potential impacts on changing the land use and strategic transport linkages have been identified (Bertolini, 2012; Kasraian et al., 2016). Some examples of such factors are mentioned below:
   (a) Economic performance of different selected sectors. This assesses the GDP growth and composition.
   (b) Policy direction of the Government, not only confined to land use planning strategies but involves other kinds of policies, such as economic, social and political policies.
   (c) Individual characteristics of households and firms, which includes composition of the employment force and its comparison among cities.
   (d) Potential User groups, stakeholders affected and their aspirations on economy after the completion of the transport infrastructure.

3.3 How the other cities grasp the opportunities

3.3.1 In order to obtain insights for strategic recommendations for strategic transport network in relation to employment-related land uses in Hong Kong, international experience in strategic planning and development will be reviewed, explained together with relevance and application in the context of GBA and Hong Kong. The three city-regions to be examined include the Indonesia-Malaysia-Singapore Growth Triangle, California-Baja, and The Øresund.
Indonesia-Malaysia-Singapore Growth Triangle

3.3.2 IMS-GT is a tripartite arrangement between Singapore, Johor State in Malaysia and Riau Islands Province in Indonesia in the ASEAN Free Trade Area. The 'triangle of growth' is a key element of the regionalisation scheme, combining Singapore’s professional expertise, capital, technology and infrastructure with the abundant labour, land and natural resources of the neighbouring Malaysian and Indonesian regions. Existing road and rail connections in the region are mainly developed between Singapore and Malaysia, co-managed by a Malaysian BOT operator and the Land Transport Authority of Singapore, which is a merger of public sector entities.

California-Baja

3.3.3 The California-Baja megaregion lies at the intersection of the Mexico-United States border. The binational region is regarded as a single economic entity with a growing knowledge-based economy in California and advanced manufacturing sector in Baja California. California-Baja is currently connected with 7 land ports of entry and a marine port. Multi-agencies in the region agreed to expand the capacity of existing border crossings by improving wait time detection system, managing traffic demand with the use of electronic variable toll rates and introducing partnership financing approaches.

The Øresund

3.3.4 The Øresund is an example of European binational collaboration in creating “two countries, one labour and housing market”, which integrates the metropolitan area of Copenhagen in Denmark and the cities of Malmö, Lund and Helsingborg in Southern Sweden. Cities in the binational Swedish-Danish region share equivalent levels of development in a knowledge-based economy, however, the Øresund is more economically significant in the Danish national context than the Swedish side. About 78 percent of jobs in the region is in the service sector with economic development priorities for high-tech industries such as life science and information and communication technology. The Øresund is known for its “Borders, bridge and branding” with the opening of the Øresund Bridge connecting Copenhagen and Malmö.

3.3.5 Features of three international case studies are summarized as below:

Table 3.1 Characteristics of Three International Case Studies

<table>
<thead>
<tr>
<th></th>
<th>IMS-GT</th>
<th>California-Baja</th>
<th>The Øresund</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geographical Location</td>
<td>Within the ASEAN Free Trade Area</td>
<td>The United States and Mexico Border, composed of San Diego County and Imperial County in Southern California and State of Baja California in</td>
<td>built among the metropolitan area of Copenhagen and southern Sweden with the cities of Malmö, Lund and Helsingborg.</td>
</tr>
<tr>
<td>Key Industries</td>
<td>Mexico</td>
<td>78 percent of jobs in the service sector²</td>
<td></td>
</tr>
<tr>
<td>------------------------------------</td>
<td>------------------------------------------------------------------------</td>
<td>------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>- Banking and finance</td>
<td>40 percent of the audio-visual manufacturing industry in the United States and Mexico¹</td>
<td>- Life science</td>
<td></td>
</tr>
<tr>
<td>- Logistics</td>
<td>- Advanced manufacturing</td>
<td>- IT</td>
<td></td>
</tr>
<tr>
<td>- Tourism</td>
<td>- Agribusiness</td>
<td>- R&amp;D</td>
<td></td>
</tr>
<tr>
<td>- Rubber and oil palm processing</td>
<td>- Advanced biotech</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Electronics</td>
<td>- Logistics</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Regional Transportation Infrastructure</th>
<th>Existing:</th>
<th>Existing:</th>
<th>Existing:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- Johor-Singapore Causeway</td>
<td>- Motorway network with border control stations</td>
<td>- A combined road and rail bridge</td>
</tr>
<tr>
<td></td>
<td>- Malaysia–Singapore Second Link</td>
<td>- Cross-border airport terminal and passenger bridge</td>
<td>- Marine ports and an airport</td>
</tr>
<tr>
<td></td>
<td>- Ferry terminal and cruise centre</td>
<td>- Marine ports</td>
<td></td>
</tr>
<tr>
<td>Planned:</td>
<td>- Kuala Lumpur–Singapore high-speed rail</td>
<td>Planned:</td>
<td>Planned:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- The SR 11/Otay Mesa East Port of Entry</td>
<td>- Underground railway between Copenhagen and Frederiksberg;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Expansion of the railway network and motorway network</td>
</tr>
</tbody>
</table>

### 3.4 Relevance to Greater Bay Area and Hong Kong Context

3.4.1 Cross-jurisdictional collaboration in the three cases draws attention to multiple layers of bilateral economic relations and a possible common framework for coordinated regional development in GBA. California-Baja’s case showcases the importance of private sector support in providing incentives to connect enterprises and organizations in city-regions.

3.4.2 Complementary nature of development among regions is another relevant point in addressing the potential change in employment scenario and labour market in light of regional differences. The example of IMS-GT addresses the uneven economic roles of cities in the triangular relationship of capital, labour and land. In particular, Singapore’s cross-border hinterlandisation may serve as a takeaway in addressing the traditional economic dominance of particular cities in GBA to ensure positive spillover. The takeaway for GBA is how to utilise the reciprocal

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aspects and the strategic use of resources between different cities to strengthen the existing converging exchanges in the region. The creation of an integrated labour market and industrial base in California-Baja and the Øresund has implication on the expanding size of the labour market and the possible spatial skill matching for its workers in GBA facilitated by the establishment of HZMB.

3.4.3 All of the three cases demonstrated the synergy of cross-border infrastructure and urban development. It is characterised by the convergence of the development of economic clusters, transportation infrastructure and supporting public and private amenities.

3.4.4 The synergy between these two sheds light on the influence of border management on urban mobility and land uses. Taking the border management at trading port Tanjung Pinang along Singapore-Indonesia border in IMS-GT as an example, the public agencies’ decision to allow free movement of goods and services but not visitors have turned the area into self-contained industrial township. The takeaway for GBA from IMS-GT is the flexibility between mobility and enclosure among different cities.

3.4.5 California-Baja’s incorporation of integrated movement data in the ports of entry provides suggestion on management of transportation infrastructural network in GBA. With Hong Kong being a major economic and transport node in GBA, transport circulation data will be beneficial for the soft management of the carrying capacity and expected volume of BCF.

3.4.6 The Øresund’s focus of innovation and knowledge in its latest regional collaboration strategy offers implication on the long-term regional development in GBA. Taking the Øresund as an example, the rationale for pursuing stronger cross-border innovation was to boost the stagnating regional economy. For GBA, cross-border innovation represents the untapped potential in the parallel development of innovation cluster. For Hong Kong, attention shall be paid to the land uses regarding high value-added services, innovation and technology.

3.5 Benefits and Costs of Regional Collaboration

Benefits of Regional Collaboration

3.5.1 Firstly, the increase of labour mobility can foster the growth of the cross-border employment and labour market integration. Large-scale transport infrastructure has played an integrative role in functionally unifying the labour market in the region. As the connectivity between the regions is improved by road transport and new railway, cross-border commuting and a wider talent pool access become possible. With more choices of jobs and talents are available, the mismatch between job market and labour supply can be reduced.

3.5.2 Regional cooperation fosters more frequent cooperation among the governments, the amount of foreign direct investment increases which spurs the economic development of the nations.
Joint investment strategies can be developed by the participants to attract the investment from the TNCs and ensure the flow of foreign direct investments can assist in developing the capabilities of the focused areas effectively.

3.5.3 Regional development offers the potential for new tourism products, strategic routes planning and collective marketing. The presence in the marketplace can be expanded with regional tourism programs and improved transport network (Henderson, 2001). The regional tourism development can be complementary – one participant provides world-class shopping facilities while another offers relaxing beach resorts and cultural diversity.

3.5.4 Benefits of three case studies from regional collaboration are summarized as follows:

**Table 3.2 Regional Collaboration of Three International Case Studies**

<table>
<thead>
<tr>
<th>Mobility and employment Increase</th>
<th>IMS-GT</th>
<th>California-Baja</th>
<th>The Øresund</th>
</tr>
</thead>
<tbody>
<tr>
<td>In Riau, the binational projects directly created 150,000 jobs and 750,000 indirect employment³</td>
<td>On average, 135,000 people cross the border each day between San Diego and Tijuana⁴</td>
<td>In 2014, around 15,000 people commuted to work in Denmark via the bridge compared with 2,600 people before the bridge was built⁵</td>
<td></td>
</tr>
</tbody>
</table>

| Economic growth and FDI increase | Joint Indonesia-Singapore projects increased annual foreign exchange and boosted the expansion of industrial development in Riau | Mexico as the United States second largest trading partner. In 2016, California exports $25.26 billion of dollars to Mexico, constituting 15.4% of total annual exports of California⁶ | Combine innovative and knowledge resources for integrated labour markets and access to wider business and knowledge networks to foster economic growth |

| New tourism product | By combining attractions, trilateral tourism development and collective marketing was created | Tourism and cultural activities increased to the American side are shaping a “blurred” border | Develop joint marketing strategies and projects in the region with increased connectivity |

**Costs of Regional Collaboration**


⁵ Bettina Petersohn and Nicola McEwen. (2014). Insights from the border between Sweden and Denmark, Centre on Constitutional Change.

3.5.5 The high construction and maintenance costs of the infrastructure can put fiscal stress on the governments. When it comes to mega infrastructure projects, cost overrun and timeline delay are more likely to occur due to bigger technical challenges, over-optimism and strategic misrepresentation on the cost (Siemiatycki, 2015). Additional costs often incurred because of the poor estimation of the carrying capacity of the large infrastructure and ineffective of cost control.

3.5.6 A number of processes are involved in the development of regional collaboration including infrastructure installation and maintenance, site location selection and construction, pollution and environmental damage. Each of these steps can cause political conflicts among the governments. For example, the rationale of the project can be in conflicts with the goals of the national or local policies. Addressing the issues of regional policies can be complex and time-consuming as it requires coordinate efforts among local jurisdictions.

3.5.7 Ethical tensions and economic disparities can be widened due to the uneven level of participation and awards among the governments. These tensions can induce unproductive collaboration within the regions.

3.5.8 Costs of three case studies from regional collaboration are summarized as below:

**Table 3.3 Costs of Three International Case Studies**

<table>
<thead>
<tr>
<th>IMS-GT</th>
<th>California-Baja</th>
<th>The Øresund</th>
</tr>
</thead>
<tbody>
<tr>
<td>- The level of participation in the triangle remains uneven and the Johor-Riau link is weak</td>
<td>- High construction and maintenance costs of the transport infrastructure to service international trade due to inadequate infrastructure capacity</td>
<td>- Built-in conflicts exist between project goals of regional integration and the environmental goals of reducing carbon dioxide emission</td>
</tr>
<tr>
<td>- Lack of harmonisation of procedures across countries in policy formulation</td>
<td>- Increasing congestion cost and air pollution across the border cities</td>
<td></td>
</tr>
<tr>
<td>- Widening income disparities and generating of social and ethnic tensions</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3.6 Key Lessons to Hong Kong and Greater Bay Area

**Clear Political Commitment and Policy Coordination among the Participants**

3.6.1 IMS-GT is a typical example showing an uneven level of participation in regional collaboration among participants. The Growth Triangle is mainly founded on the Singapore-centred bilateral relations where the linkage between Johor and Riau are non-existent. The link of Singapore-Riau is the strongest under the growth triangle with sets of formal agreements signed. In 1990, the Singapore-Riau Economic Cooperation Agreement was signed by the two governments, which has essentially become the foundation of the Indonesia-Singapore joint development projects in the growth triangle (Smith, 1997). On the other hand, the Malaysia-Singapore
relation is founded on the supply of water and gas transported from Johor to Singapore. Hence, there is no linkage exists but only “understanding” between Malaysia and Indonesia due to the absence of agreement and incentive.

3.6.2 The IMS-GT case study demonstrates that clear political commitments from the governments are required to ensure balanced benefits and provide a sense of stability among the participants. To develop a more sustainable and successful cooperation, it is essential that the regional collaboration is based on formal agreement shared goals among participants. Based on the political commitments, an enhanced framework of policy coordination and a set of legitimate regional policies can be developed.

**Convening a Working Group to Develop a Regional Master Plan**

3.6.3 The California-Baja California Border Master Plan (BMP) was developed by binational coordination including Mexico Joint Working Committee, California Department of Transportation and SANDAG Service Bureau (SANDAG Service Bureau, 2014). It serves as a comprehensive regional plan which aims at coordinating planning and delivery of the Port of Entry and transportation infrastructure projects in the region. This case study shows the importance of each participant to develop a master planning for the region to prioritize joint infrastructure projects, implementation of transportation projects and enhance coordination of regional planning.

**Removing Barriers and Building on the Place Brand and Regional Innovation System**

3.6.4 The Øresund Committee and its supporting institutions provided strong institutionalisation and legitimacy to the area and formulated a common vision and a joint cross-border development plan. As innovation and knowledge is the focus of the region, the joint use of scientific infrastructure has been extensively used with the establishment of European Spallation Source and MAX IV Laboratory. Different types of human capital have been actively deployed to promote cross-border innovation synergies.

3.6.5 Another important focus of the region is creating the international “Øresund” branding. Apart from promoting regional scientific infrastructure, Øresund Network is formed to promote the international branding and create a clear profile of regional identity to different stakeholders. The two governments have frequently cooperated on different international branding activities.

3.6.6 In this case study, the tax systems and regulation differences hindered the labour mobility. To facilitate regional collaboration, continued efforts should be made to remove these barriers and put emphasis on developing a regional identity and brand to increase the external recognition of the region. Developing a regional innovation system which encourages the wide diffusion of knowledge and skills within the region can effectively increase the global competitiveness of the region.
Section 4 Sectoral Opportunities and Challenges brought by HZMB

4.1 General
4.1.1 Section 3 has identified the sectors which are expected to be affected after the opening of the HZMB. They are financial and business professional services, logistics, tourism, and innovation and technology. This section would consolidate stakeholders’ consideration on these specific sectors, and then concluded by sectoral opportunities and challenges brought by the bridge.

4.2 Financial and Business Professional Services Sector
4.2.1 Being the Asia’s regional business hub, Hong Kong boasts a vibrant and diverse services sector. The financial and business professional services sectors are economic pillars of Hong Kong, and they account for 17.7% and 12.5% of Hong Kong GDP in 2016 respectively (HKTDC, 2018). Renowned for its free flow of capital and information, advanced financial infrastructure and effective regulatory regime, Hong Kong has attracted a rich pool of professional talent and financial expertise, employing over 250,000 people. In addition, Hong Kong’s position as a major asset management, capital formation, banking and insurance hub is supported by a business-friendly environment, low taxation and a trusted legal system. In particular, the banking sector is one of the largest banking centres in the world with 75 of the world’s top 100 banks have anchored in Hong Kong at end June 2017. The sectors are recognised as the most important sectors in maintaining Hong Kong’s reputation and position of international financial centre.

Key Takeaways from Stakeholders’ Interview
4.2.2 There are two key takeaways drawn from stakeholders’ interview. First, Hong Kong has a strong ability to attract investment on financial and business professional sector from both mainland and oversea. Second, rapid economic development in China will most likely sustain increasing demand on Hong Kong financial and business professional services.

Key Takeaway 1: Hong Kong has strong ability to attract multinational corporations
4.2.3 Hong Kong is one of the global leading financial and business professional services centres which has strong ability to attract multinational corporations from both mainland and oversea. Currently, some 8,000 Chinese and foreign companies have set up their offices in Hong Kong, including 75 of the world’s 100 largest banks, and the number is expected to be increased in the future. Hong Kong has a number of comparative advantages that clearly define its international position. First, Hong Kong is a world city, closely connected to foreign economies, while maintaining extensive connection to mainland economies. It is also an international city with various professional services clusters. PwC (2017) reported that Hong Kong, among cities in
GBA, has the largest number of Forbes Global 2000 companies headquarters, i.e. 39. Therefore, it becomes a common springboard for mainland companies to go global.

4.2.4 Comprehensive legislative and judicial systems, which are comparable to western ones, and absence of capital control, make Hong Kong one of the most important financial centre of the world. English-speaking and generally higher educated society has become important assets of Hong Kong. Moreover, Hong Kong has become, by far, the world's largest offshore Renminbi (RMB) business hub. As RMB becomes increasingly popular as a financing and transaction currency, Hong Kong is strengthening its ability to offer financial services to investors around the world. Therefore, it has the highest amount of foreign direct investment of around RMB 750 billion among cities in the GBA (PwC, 2017).

Key Takeaway 2: Economic growth of China will sustain the development of financial and business professional services sectors of Hong Kong

4.2.5 As a regional financial hub, rapid economic development in China will most likely sustain increasing demand on Hong Kong financial and business professional services. The financial and business professional services providers in Hong Kong play a pivotal role in linking the connections between mainland corporates and global markets. The demand for these services in Hong Kong from mainland companies is gradually on the rise due to their need to diversify and “internationalise”. According to a report by JLL (2016), the number of mainland corporates which have offices in Hong Kong is 52 percent more in 2015 compared with 10 years earlier. Moreover, it is expected that nearly one third of the occupants of Grade A offices in CBD would be mainland corporates by 2021. The phenomena can be explained by a strong desire of mainland corporates to establish a physical presence in Hong Kong in order to their international reputation and position (JLL, 2016).

Sectoral Opportunity and Challenges

4.2.6 In general, the opening of the bridge would facilitate the designated role of Hong Kong as being a “super-connector” between Guangdong Province and the rest of the world. The demand on Hong Kong financial and business professional services is expected to be increased. By consideration the key takeaways from policy review and stakeholders’ interview, there are three key opportunities and a challenge identified after the opening of the HZMB.

Opportunity 1: Horizontal Collaboration between Hong Kong International Financial Centre and Zhuhai Regional Financial Centre

4.2.7 First, there is an opportunity for Hong Kong and Zhuhai financial sectors to consider horizontal collaboration and create greater synergy effects. Hong Kong is an international financial centre which has strong and extensive linkages to the other parts of the world, while Zhuhai has positioned itself as a regional financial centre. If these two financial centres corporate, Zhuhai can utilise the strong bases of Hong Kong to facilitate the development of its strategic position.
Moreover, Hong Kong can take advantage of market penetration to further strengthen its status as a global offshore RMB business hub and an international asset management centre, promoting the services sectors towards high-end and high value-added developments.

**Opportunity 2: Vertical Collaboration between Hong Kong Services Sectors and Mainland Cooperates from Western PRD**

Second, there is an opportunity to promote vertical collaboration between services sectors in Hong Kong and mainland cooperates from the western bank of PRD. While the business in mainland is having stronger desire to be “internationalised”, Hong Kong offers wide range of human capital, international linkages and favourable legal system. In practice, there are two possible pathways. First, it can be achieved by attracting them to establish head office in Hong Kong. Second, Hong Kong government, collaborating with Zhuhai government, can encourage business integration between companies in Hong Kong and other cities in the region. Regardless of how, both pathways allow Hong Kong to take the advantage of economic development of the GBA to expand financial and business professional services industries of Hong Kong.

**Opportunity 3: Growth of Financial and Business Professional Services Sectors**

Third, it is expected that improved connectivity would bring an opportunity to boost financial and business professional services in Hong Kong. The expected demand increase of the services is two-fold, i.e. demand from mainland cooperates and foreign businesses. The GBA Initiative encourages economies in the western bank of the Pearl River to go global via the international platform of Hong Kong. The opening of the bridge would reduce travelling distance and time between Hong Kong and PRD cities significantly. Although physical connectivity might be less concerned in service industry, it is expected the reduction of physical barrier would increase incentives of mainland cooperates to employ financial and business professional services in Hong Kong. Moreover, the improved connectivity would add bonus to existing comparative advantages of Hong Kong as a destination for foreign corporates who would like to invest in western PRD.

**Challenge 1: Keen Competition of Financial and Business Professional Services Sector between Hong Kong and Zhuhai**

Nevertheless, the development of Zhuhai regional financial centre raise a challenge to financial and professional services sectors of Hong Kong. It is expected that Zhuhai would take advantage of Hong Kong human capital and international linkages to develop their financial industry. However, when the financial sector in Zhuhai is becoming more mature, the demand on Hong Kong services might be reduced. Moreover, according to the latest strategic plan of Zhuhai, extensive amount of land resource in the new areas, including Hengqin and Hezhou New Area, has been dedicated for high-end service development. Then, land costs in Zuhou is expected to be much lower than that in Hong Kong. In this regard, after the establishment of Zhuhai
regional financial centre, the demand on Hong Kong financial and business professional services might be shifted to Zhuhai. Therefore, maintaining international reputation and lowering land costs of Hong Kong are some important measures to turn challenge into opportunities, and avoid being outcompeted.

4.3 Logistics Sector

4.3.1 Hong Kong has been a logistics centre and regional gateway to the GBA thanks to the geographical location and the low tax regime. Facing the intensifying competition arise from the region, the Government has to strengthen the position of the logistics industry in Hong Kong while upgrading the overall competitiveness of the industry. Trading and logistics industry is one of the pillar industries of Hong Kong. It is the largest industry in terms of value-added and employment. In recent years, the economic value contributed by the industry and employment have slightly declined from 25.6% to 21.7% and 23.4% to 19.3% respectively from 2008 to 2016 (Census & Statistics Department, 2017).

Key Takeaways from Policy Review

4.3.2 To sustain the growth of the industry, the Government aims to increase the provision of land and expand the existing and supply for logistics operations to accommodate the need of the industry. HK2030+ outlined the strategic planning for the spatial locations of logistics land supply, there are several key takeaways:

4.3.3 The Government is undergoing the consolidation of the operations of the brownfield sites in the New Territories by developing them into NDA including New Territories North (NTN), Hung Shui Kiu NDA and Yuen Long South Potential Development Areas. In NTN, the Government aims to develop three potential development areas into “high value-added logistics hub” to increase land provision for modern logistics and relevant industrial uses around the location of the boundary (Development Bureau, 2016). For example, 35 hectares of land at the the Man Kam To Logistics Corridor will be provided for “agri-logistics consolidation and certification area for storage, testing and certification of food before distribution as well as other modern logistics” in order to capture the proximity to the Man Kam To cross boundary facilities (Development Bureau, 2014).

4.3.4 In HSK NDA, 37 hectares of the land will be provided for logistics operations and 24 hectares of land will be served for Other Specified Uses (Port Back-up Uses) such as storage and workshop facilities including multi-storey buildings to support the vehicles movement in the area (Development Bureau, 2016). In addition, the Government examines the brownfield sites in the Yuen Long South and consolidates land for the purpose of open storage and workshop.
4.3.5 Tuen Mun West has been identified as a strategic location for the potential development of the modern logistics, especially after the completion of the HZMB and the Tuen Mun-Chek Lap Kok Link. Area 38, 40, 46 and 49, as well as the reclamation area in the nearby Lung Kwu Tan, aims to increase the land supply for the logistics and industrial uses (AECOM; Civil and Engineering Development Department and Planning Department, 2015). It is anticipated that these areas can be promoted as the comprehensive logistics development with the provision of modern logistics and cargo handling facilities.

4.3.6 In addition to the new development areas, the Government also consider to utilize the existing land more efficiently by developing multi-storey facilities and consolidating the port-related land use in Kwai Chung. On the other hand, Tsing Yi is close to both container terminal and the airport, three sites consisting of 6.9 hectares are designated for establishing modern logistics hubs, expansion of container terminals and as well as the cargo handling facilities (Development Bureau, 2016).

4.3.7 To conclude, the government has outlined the spatial conceptual framework for the potential provision of land for the logistics industry to strengthen the positioning and support the future growth of the industry. However, some of the development areas require more detailed planning to specially address the needs of the stakeholders.

**Key takeaways from Stakeholders’ View**

4.3.8 Increasing the competitiveness in the market by minimizing the transport cost and time is one of the major concerns of the industry. Thus, the availability of supporting facilities and the connectivity of the transport network are important to reduce the cost of the transportation. The stakeholders’ views of the impact on the ERLU and STN can be summarized as following:

*Key takeaway 1: Establishment of Smart Logistics Park as an integrated clustering point*

4.3.9 In general, different stakeholders regards the establishment of smart logistics park as a potential comprehensive clustering point for both inbound cross-border e-commerce storage and cold-chain storage spaces with the possibility of tax exemption. As suggested by various stakeholders, possible locations of the site location could be on North Lantau, TMW, HSK NDA and HKBCF Island which is proximate to the HKIA. The introduction of smart logistics such as Information and Communication Technology enhance the efficiency and handling capacity of the logistics operations. Smart logistics aims at providing a wide range of high-value added services to the industries with the use of advanced technology such as electronic identification to upgrade the tracking and handling systems.

*Key takeaway 2: More modern warehouses with advanced monitoring technologies would be needed to meet the emerging trends*
4.3.10 With the growth of the e-commerce, the online retailing involves greatly the use of e-commerce logistics. Hong Kong, as the regional logistics hub in the China, the value of online retail sales of physical goods increased RMB 3,242 billion to RMB 4,194 billion from 2015 to 2016, with 30% of the growth per annum (Savills, 2018). To respond to this emerging trend, another point stressed by the stakeholders is the need for more modern warehouse equipped with advanced technologies to handle the time-sensitive and fragile cargo. The e-commerce logistics would need to respond to the new trading pattern: transporting the goods from warehouses to the end-users directly, instead of physical stores. The use of Information and Communication Technology in the area of logistics could respond to this emerging retailing pattern by facilitating the supply chain.

4.3.11 In addition, the distribution of the temperature-controlled products such as medicine and health care products involve more advanced airport warehouses. With the ageing population in Hong Kong, it is expected that the demand for the health care products would increase and bring changes to the distribution pattern of the products. Similar with the e-commerce, this trend would need more advanced technologies and modern warehouse in handling the product distribution.

**Key takeaway 3: Possible shortage of special-designed freight handling facilities might occur**

4.3.12 Since the planned modern logistics facilities in designated locations including South Cargo Precinct in the Lantau, HSK NDA and TMW will be completed earliest by 2021, some stakeholders expressed the concerns that the shortage of special-designed freight handling facilities such as temperature-controlled storage might occur in these areas. It is anticipated that there will be an increasing flow of logistics between Hong Kong and the West PRD region after the opening of the HZMB and thus a time lag exists between the completion of the handling facilities and the opening of the HZMB. The industry concerns that the insufficiency of the special handling facilities would affect the competitiveness of the business in the market.

4.3.13 In short, the stakeholders opt the utilization of advanced technologies and smart logistics as a possible solution in facing the increasing flow of the goods distribution between Hong Kong and the Western of PRD region, as well as the emerging trend of e-commerce and temperature-controlled products. To sustain the growth of the industry, the Government is intended to further develop the modern logistics industry such as allocating the two sites in Tsing Yi for the establishment of the modern logistics centres.

**Sectoral Opportunity and Challenges**

4.3.14 After reviewing the policy framework and the stakeholders’ view, this section is to summarize the opportunities and challenges in the logistics industry.
Opportunity 1: Increasing the volume of throughput between Hong Kong and the Western PRD region

4.3.15 The construction of the HZMB improve the connectivity between Hong Kong and the Western PRD region. The bridge offers a direct and stable connection between Hong Kong to Macao and Zhuhai and decrease the travelling time between Zhuhai and Kwai Tsing Container Terminal and the HKIA over 60 percent and 80 percent respectively (Transport and Housing Bureau, 2009). With the enhanced connectivity across the GBA region, it is anticipated that the volume of throughput between Hong Kong and cities in the Western PRD region would increase and promote the development of the industry.

Opportunity 2: Opening up new consumer markets to expand the cargo hinterland of Hong Kong

4.3.16 The improved road transport network thanks to the opening of the bridge would open up new consumer market for the industry and expand the cargo hinterland of Hong Kong. Thus, the position of Hong Kong as a regional transport hub can be further strengthened and at the same time, meet the growing demand for the e-commerce logistics. Moreover, the HZMB and BCF are proximate to the HKIA which facilitate the land-air cargo transhipment and optimize the utilization of the airport. Thus, more collaboration opportunities between Hong Kong and the Western PRD region are brought by the HZMB.

Challenge 1: Intensifying Competitions between Hong Kong and other ports in the GBA

4.3.17 Yet, as indicated by some of the stakeholders, some challenges may arise such as Hong Kong faces more intense competitions with other ports in the GBA. Long established as the regional distribution centre and the global logistics hub, there are direct competition from the neighbouring city Shenzhen which is in the same sea transport hinterland. Shenzhen possesses the comparative advantages of large supply of land and much lower operations cost, plus higher the quality of the handling and warehouse facilities. The city is getting more competitive in the logistics industry and thus Hong Kong would need to further upgrade the logistics handling facilities and systems and strengthen its comparative advantage such as the free port status to catch up the pace. Intergovernmental coordination could facilitate collaboration in the industry and prevent vicious competition.

Challenge 2: Growing demand for quality third-party logistics services

4.3.18 Another challenge is that there is a gap between supply and demand of third-party logistics services in western PRD region. The industry is facing a continues growth in demand for the high value-added products and thus the higher quality of the logistics services. Although the manufacturing sector in Hong Kong are more receptive to third-party logistics services, there are limited local third-party logistics company in the western PRD region. With the increased volume of throughput between Hong Kong and the western PRD region after the opening of the
HZMB, the existing quality of the third-party logistics services may not be able to meet the standards of the manufacturing sector.

4.4 Tourism Sector

4.4.1 The tourism industry is a major economic pillar of Hong Kong. In particular, the MICE industry generates enormous economic spillover. It was estimated to have offered an estimate of 83,500 full-time jobs across different related and supporting sectors in the tourism industry (HKTDC, 2017). In other words, the economic return and employment opportunities brought by the MICE industry benefit not just the industry operators such as venue managers and exhibition organisers, but also business marketing enterprises, hotel operators, retail, and catering sectors. The following analysis on the tourism industry focuses on the MICE industry, hotel industry, and RDE industry.

Key takeaways from the Policy Review and Stakeholders’ Consultation Process

Key Takeaway 1: The completion of the HZMB would potentially facilitate the development of regional multi-stop tourism in Hong Kong and GBA

4.4.2 The opening of HZMB would further promote regional multi-stop tourism with the GBA becoming an integrated location which would offer a combination of tourism features and experiences. With the improved transport linkage that comes along, the tourism resources in western PRD could be further developed to form new travelling itineraries. In the GBA region, investment opportunities for upgraded leisure and recreational facilities are worthy of attention. For example, the development of up-market resorts in Big Hengqin Mountain of Zhuhai and development of theme-based tourism in Wuguishan area of Zhongshan. As trips between Hong Kong and western PRD are becoming increasingly frequent, there would be greater incentives for tour operators to design vacation packages to connect Hong Kong and various new tourism nodes in West PRD within the three-hour commuting circle. As a result, the potential changes in traveling pattern in GBA may likely boost the introduction of more diversified itineraries of various lengths into the western PRD, from one-day tours to multi-day tours.

Key Takeaway 2: Hong Kong would remain an important convention and exhibition hub in light of closer regional cooperation

4.4.3 For the convention and exhibition services, representatives from the MICE industry offer an optimistic outlook. It is anticipated that the opening of the HZMB would increase the demand for convention and exhibition venues considering the untapped market potential through the enlarged one-hour commuting circle, which will cover tens of millions of people in the PRD region. Regarding the potential competition in the MICE industry with its regional counterparts, it is believed that Hong Kong would be able to differentiate itself by advanced business consulting services with global orientation. The positive outlook of the MICE industry comes
from Hong Kong’s solid worldwide recognition as one of the most popular MICE destinations for business travellers. In 2016, Hong Kong ranked first as “Asia’s Leading Meetings & Conference Destination” in the World Travel Awards (HKTDC, 2018).

4.4.4 Still, adding on top of Hong Kong’s prominent influence in the MICE industry of the Asia Pacific region. In terms of visitor arrivals, Mainland China is the largest source market for MICE tourism in Hong Kong (Bauhinia Foundation Research Centre, 2016). Stakeholders with policy research background point out that the 24-hour clearance offered by the bridge would bring positive impacts to the development of the tourism industry with faster flow of incoming visitors, especially for the MICE industry. Therefore, cooperation is encouraged to develop complementary partnerships across the MICE industries on the two ends of the bridge in the PRD to further explore and capture the potential of “one show, two locations” regional operation mode. It is suggested coordinated arrangement towards talent acquisition and bridge operations would resolve uncertainties towards the future development of the MICE tourism and the tourism sector as a whole.

**Key Takeaway 3: Lantau Island would be a strategic location with regard to bridgehead economy**

4.4.5 For the tourism industry in particular, Lantau Island will be in a new and important position of the PRD region in ensuring sustainable growth of the tourism industry Hong Kong. After the completion of an array of infrastructure projects, the strategic location of the Northern Lantau and the presence of the HKIA will offer ideal connections for visitors, which will be further strengthened upon the opening HZMB, HKBCF Island of HZMB, North Commercial District (NCD) and 3RS of the HKIA. It is expected that Lantau would serve as a key node in which international, regional and local visitors flow and interact. Acting as a ‘Double-Gateway’ where major regional transport linkages converge, it is foreseen that Lantau exhibits emerging opportunities at the bridgehead location in terms of developing a variety of business platforms to facilitate economic exchanges, for example, MICE facilities and other supporting facilities such as hotel and RDE facilities. In addition to the strategic location, The Southern Lantau encompasses a wide variety of natural and cultural assets, which offer great capacity to develop diverse recreational and experiential facilities that would synergise with the range of leisure, recreation and entertainment facilities to be developed at the Northern Lantau. On a territorial development level, it is expected that Lantau would be able to develop as a major recreational and leisure destination on the western part of Hong Kong to help accomplish a more balanced spatial development pattern in the city.

**Sectoral Opportunities and Challenges**

*Opportunity 1: Horizontal cooperation - Regional collaboration to create multi-stop tourism*
4.4.6 When the mainland tourism market continues to grow in Hong Kong, it will require a less monopolistic mode of tourism and the provision of more diverse and authentic tourism experiences. First, there is an opportunity for Hong Kong to diversify and enrich its tourism resources and facilities when considering to engage in horizontal collaboration with neighbouring cities in creating multi-stop tourism. For example, aligning with Macao’s gaming-related tourism and emerging cultural creative tourism and Zhuhai’s eco-agriculture tourism. The distinctions in tourism products across the cities in GBA offer opportunities to horizontally linking up the whole chain of holiday experience. Specifically, there is an opportunity to focus on the joint development of tourism resources and markets, followed by the development of tourism transportation, and collaborative tourism policy and institutions.

4.4.7 Moreover, the opening of HZMB would offer incentives for the local tourism industry’s to alter the mix of its tourism attractions and accommodation facilities targeting transit passengers and overnight visitors from the Mainland China. There is an opportunity for the local tourism to further enhance its destination appeal through re-adjusting the tourism development strategies. For example, It was announced the 2017-18 Policy Address that the government would continue to draw more high-yield overnight visitors, whose intention was echoed by Hong Kong Tourism Board’s provision of funding support to initiate tourism schemes with local culture and natural resources. It is increasingly observed that Mainland consumers are looking for niche local brands with unique stories rather than luxury foreign brands. While high rental cost in the traditional urban core may be an unfavourable condition for tourism expansion, more recreational facilities, iconic landmarks and convenient hotels on may be developed on Lantau to capitalise the potentials brought by the HZMB. In short, appropriate land use strategy on the clustering of tourist attractions with a custom mix of accommodations and RDE facilities would allow more efficient use of tourism resources.

Opportunity 2: Vertical cooperation - Further development of MICE tourist

4.4.8 A closer integration among cities in GBA would potentially help align the Mainland enterprises and exhibition organisers in Hong Kong. Exhibition organisers in Hong Kong could consider to provide a holistic solution by organising conferences and bundling associated business consulting and marketing events to supplement the exhibitions. The main purpose of which is to offer a comprehensive platform for the enterprises to have market information and business exchanges on industry developments. In 2015-2016, overnight business incentives arrivals hit 1.72 million with a per-capita spending exceeded HK$8,400, which was 16% higher than that of inbound visitors in Hong Kong (Legco, 2017). In the context of GBA, for example, Zhongshan is facing a need for industry restructuring and city upgrading with a lack of sufficient trade channels for its export-oriented economy, while Zhuhai is in need for an international business platform. Developing MICE tourism with advanced business consulting services would be offer
an opportunity for Hong Kong to complement the demand from other cities in the GBA in moving up their value chains and capture the favourable economic circumstances.

**Challenge 1: Shortage of venue space**

4.4.9 However, the opening of HZMB is expected to induce more needs for MICE facilities in Hong Kong. Nevertheless, the utilisation rate of existing MICE facilities is extremely high with limited capacity. A shortage of venue space is considered to be the hindrance to develop the MICE market in Hong Kong since there has not been any major addition of new venue space after the completion of the HKCEC Atrium Link Extension in April 2009. During the peak seasons in particular, applications for renting exhibition and convention venues have been turned down from time to time due to insufficient vacancies and openings. Under the base case scenario, about 132,000 sq. m of additional convention and exhibition space would be required to capture all unmet demand at peak periods in Hong Kong by 2028.

**Challenge 2: Declining overnight and visitors from Mainland China**

4.4.10 Another challenge facing the tourism industry is a decline in Hong Kong’s overall business arrivals. In 2017, there is a recorded decrease of 2.3% of overnight business arrivals in Hong Kong (Legco, 2017). The reason behind may be due to the developing international aviation connections between Mainland and the world. This may have promoted more business travelers to opt for direct flights to and from Mainland, which resulted in slight drop of transit and overnight stays in Hong Kong.

**4.5 Innovation & Technology Sector**

4.5.1 The Innovation and Technology industry has been one of the emerging industries in Hong Kong with a GDP contribution of 0.7 percent. It accounts for 0.9 percent of Hong Kong’s total employment. The position of I&T sector in Hong Kong is to drive re-industrialisation and enhance the city’s competitiveness, diversify economic development and create high-quality jobs. The focus includes “Internet of Things, AI, new materials and smart manufacturing processes” and complements the development of three overarching technology platforms: smart city, healthy ageing and robotics (LegCo, 2016a).

**Key takeaways from the Policy Review and Stakeholders’ Consultation Process**

**Key takeaway 1: Industry, Academia and Research Segment of I&T sector should be agglomerated for successful development (學研合一)**

4.5.2 The relationship between the research part and the product development part in the production chain is essential for assembling successful I&T development according to a local institute. The deficiency in the development of local industry section resulted in the ineffective industrialisation and the expansion of I&T sector. He suggested that proximity of land use related to industry, academia and research segment of I&T sector should try to maintain.
Recently, the Hong Kong Shenzhen Innovation & Technology Park (HSITP) have applied such principle that laboratories, educational institutes and offices in Lok Ma Chau Loop are located close to each other. In the Reindustrialization policy, the government have proposed multi-pronged measures to allow better integration of the three segments. For example, the government cooperates with Hong Kong Science and Technology Parks Corporation to “build and manage specialised multi-storey industrial buildings for rental to multi-users” and tries to attract high value-added technology industries and manufacturing process (LegCo, 2016). Apart from manufacturing, office space is equally important for I&T sector. One of the stakeholders mentioned that co-working office spaces in Grade-A office are much needed as they cater the business needs of the high-tech industry, particularly start-ups. It also creates a suitable environment for talents to exchange ideas among themselves.

**Key takeaway 2: Hong Kong and PRD cities have potential to establish regional collaboration based on complementary relationship to share benefits**

**4.5.3 The lack of technology giant in Hong Kong to serve as catalyst has hindered its development potential of I&T sector. Regional science park which integrates and cooperates with technology giants in Mainland China, especially from Shenzhen, is one of the possible solutions. They can drive and facilitate Hong Kong’s I&T industry forward. Representative from AsiaWorld-Expo stated that it is preferable to reserve large-sized land on the HKBCF island for meeting the spatial needs of such type of development and grasp the opportunities generated by the HZMB. The proximity to HKIA allows entrepreneurs to schedule business meetings and travel to West PRD within short time and adapt to fast-changing manner of the sector. On the contrary, PRD cities might take advantage of Hong Kong’s strength on research development to upgrade and strive for exposure to the international market, as Hong Kong, Macao and GBA cities have signed “Framework Agreement on Deepening Guangdong-Hong Kong-Macao Cooperation in the Development of the Bay Area” that ‘constructing an international technology and global innovation hub is the biggest mission’ (ITC, 2016).

**Key Takeaways 3: Shortage of Affordable Housing near ERLU reserved for I&T sector**

**4.5.4 Human capital is one of the most important ingredients for I&T development, while they value cities with higher living quality. Although Hong Kong has world-class research institutions and high-tech infrastructure, its extremely high living cost, especially for housing, has discourage talent to reside and make contribution to the local I&T development, according to a founder of a start-up firm. Thus, many professionals in the field pointed out that it is vital to have higher integration of science park or I&T development sites with affordable and decent housing provision for retaining talents from overseas.**

**Sectoral Opportunities and Challenges**
Opportunity 1: Regional collaboration to strengthen agglomeration of I&T Research and Production chain

4.5.5 Hong Kong and PRD cities can make use of their own advantages to complement each other for flourishing I&T development in the GBA region. According to the policy analysis conducted by OurHK Foundation (2016), Hong Kong has top world-class universities and art-of-the-state technology infrastructure which makes its basic research competitive vis-à-vis global peers. It provides a strong human resource foundation for innovation and technology advancement. Such achievements could be transferred to enterprises in mainland China and assist them to upgrade their business and add value to their production (e.g. by training labour). Hong Kong’s long-time exposure to international environment could be learnt by mainland firms and they can promote their business to the world and achieve the national “Go Out Policy”.

4.5.6 On the other hand, some PRD cities have more abundant land resource and cheap production chain. With the opening of the HZMB, the travel time between Hong Kong and the west bank of PRD region will be shortened. Part of the production could be shifted to these cities to ease Hong Kong’s pressure on land supply. From the sales market aspect, mainland China is the major source and destination of Hong Kong’s trade in high-tech products (InvestHK, 2012). It has created great market basis for cultivating the local start-up firms. The logistics sector might consider to allocate near the I&T land use to maintain a smooth flow of goods and talent.

Challenge 1: Limited capacity of Existing STN to support the eastern knowledge and technology corridor

4.5.7 Some of the proposed development sites for I&T sector are located in relatively remote area while it do not have new housing development planned nearby (e.g. Tai Po Industrial Estate). This could create job-housing imbalance problem and the possible outcome would be the increase of traffic demand from and to the development sites. Nevertheless, those identified sites mentioned in Hong Kong 2030+ are allocated along existing railway (e.g. East Rail Line) and highways (e.g. Tolo Highway) in East Kowloon and the East New Territories, while their capacity nearly reach its limit (the passenger load of East Rail Line is 100% of its capacity in 2014) (LegCo, 2016b). Given that it might be difficult to search for additional land near I&T development site, improving the connectivity of and increasing the capacity of public transportation linkage between I&T developments in the Eastern knowledge and technology corridor from and to the rest of Hong Kong can be an alternative solution.
Section 5 Making it happen - Recommendation

5.1 Updated Vision

5.1.1 Financial services, professional services, logistics and tourism constitute the four economic pillars of Hong Kong. The pillar industries should be further strengthened while opportunities should also be provided for the emerging industries, for instance, Innovation and Technology. Based on the Building Block 2 of HK2030+, here lists the updated vision on ERLU and STN for Hong Kong after the opening of HZMB.

5.1.2 "Equipping Hong Kong with land and space, supporting infrastructure and human capital for the economy to move up the value chain, strengthen the economic pillars and capitalize the opportunities brought by regional coordination, through promoting a diversity of economic sectors, innovation and technology as well as quality jobs with a range of skills."

5.1.3 With the proposed updated vision, Hong Kong can better position itself to grasp the opportunities in regional cooperation and cope with the potential challenges after the completion of the HZMB. In pursuit of the updated vision, a number of guiding principles are listed as follows:

I. Strengthening the continuous growth of four economic pillars of Hong Kong, i.e. financial services, tourism, logistics and professional services.

II. Facilitating the development of emerging industries that would capitalise on the opportunities and key trends arising from Greater Bay Area development initiative.

III. Achieving job-housing balance by a more balanced spatial distribution of employment opportunities to promote social sustainability.

5.2 Territorial Conceptual Spatial Plan

5.2.1 Based on updated vision and guiding principles, a Territorial Conceptual Spatial Plan (as shown in Figure 5.1) is purposed in the light of updated vision and the challenges identified in Section 4 in order to foster the growth of the selected industries. The conceptual spatial plan for different selected sectors forms clusters and corridors which are strategically located to cater the future needs of the sectors with regard to HZMB.

5.2.2 The proposed Territorial Conceptual Spatial Plan consists of clusters of financial and professional services, logistics, tourism as well as innovation and technology to promote the further growth of the selected sectors by creating clustering effect. These clusters are in line with the proposed visions and follow a set of guiding principles mentioned in Section 5.1. These
suggestions concur to the suggestions proposed in HK2030+ and are in line with the conceptual spatial framework set out in HK2030+.

5.3 Detailed Spatial Plan for Financial and Professional Services Sector

Background and Policy Gaps

5.3.1 Measures required to capitalise the opportunities of financial and business professional services sector identified in Section 4.2 can be translated into three key planning suggestions. First, more Grade A office space at the urban core is required to accommodate the expected demand increase after the opening of the bridge. Second, more Grade A office space at wider range of rent and spatial characteristics is needed to facilitate cooperation in the region. Third, inter-governmental policies that facilitate financial and business professional collaboration between Hong Kong and PRD cities should also be highlighted. However, current and scheduled land supply, as well as strategic plans might, sometimes, not be able to fulfill all the requirements above.

5.3.2 Regarding the first two planning suggestions about Grade A office space, CBRE (2017) reported that current supply can hardly catch up with the demand in terms of quantity and diversity. The shortage of Grade A office at the urban core is mainly due to two reasons, i.e. very limited land allocation, and low redevelopment incentive. Land resources dedicated for commercial purposes constitute as little as 0.4% of its total land area (CBRE, 2017). And apparently, the dedicated land area is not enough to cater the huge and raising demand. Apart from limited land supply, low redevelopment incentive for landlords of Grade A office in core areas has resulted in stagnant supply of spaces. Between 2007 and 2016, only 7 old buildings were redeveloped in CBD1. While the land rent of Grade A office at the urban core remains high, redevelopment option is undesirable as the opportunity cost is too expensive.

5.3.3 Moreover, homogenous supply of Grade A office space is also recognised as one of the disadvantages of Hong Kong in attracting foreign investment (ICF, 2017). Because of limited options, land rent of Grade A office in Hong Kong becomes less and less affordable to many companies. In the last 10 years, the rent in the Greater Central increased in 27 out of 40 quarters. Apart from that, it is also known that Grade A office space provided in existing CBDs are dominated by large officeplate size. CBRE (2017) reported that officeplate size over 1,858 sq. meter constitute over 34% of the total stock in CBD1. In the same report, however, CBRE highlighted that big Grade A office space demand would be reduced in the future due to a mega market trend of “split-office”. It refers to the intention of global firms in Hong Kong to operate larger offices in decentralised locations while keeping smaller front offices in core areas. In long
run, it would be difficult for Hong Kong to sustain its advantages in financial and business professional services sector with high land rent.

5.3.4 The government is also well acknowledged of the issues, and there are two spatial measures to increase supply of Grade A office space at the urban core, i.e. East Kowloon CBD2 development and East Lantau Island CBD3 development. A strategic plan to transform Kowloon East into a second-generation central business district (CBD2) of Hong Kong was announced in Policy Address 2011-12 as an alternative to CBD1. CBRE (2017) estimates that the Grade A office footprint in CBD2 will reach around 1.6 and 2.7 million sq. meter by 2021 and beyond 2026.

5.3.5 East Lantau Island, comprising of Kau Yi Chau, Hei Ling Chau and Mui Wo, is planned to be a third-generation central business district (CBD3) and designated as a “new and smart financial and producer services hub”. Kau Yi Chau would be a core development of CBD3, accommodating office, hotel and other commercial development, supported by residential township in Hei Ling Chau and Mui Wo. Since CBD3 is still undergoing planning study, the total Grade A office space to be provided remains unknown.

5.3.6 Regarding the two spatial policies, it is expected that substantial Grade A office space will be added to existing stock; however, the strategic plans are unlikely to address the issue of diversity. In terms of quantity, the scheduled land supply and redevelopment projects commenced in industrial districts, such as Wong Chuk Hang and Wan Chai, are expected to provide adequate floor space to meet the demand. Therefore, the spatial policy recommendation for financial and business professional services sector goes along with the scheduled land supply policy in 2030+. However, unclear position of the three CBDs cannot differentiate supply of diverse types of Grade A office in Hong Kong. In the light of the demand on Grade A office spaces at wider range of rent and spatial characteristics, there is a need for better positioning of the three CBDs.

5.3.7 Apart from spatial demand, inter-governmental policy that facilitate financial and business professional collaboration between Hong Kong and PRD cities should also be highlighted. In general, Hong Kong has signed collaboration agreement, or other forms of mutual agreement, to facilitate bilateral cooperation; however, the details and results are yet to be seen at this stage. After reviewing the three inter-governmental policy, it is concluded that collaboration of financial and professional services sectors were under-addressed. Therefore, in order to capitalise the opportunity brought by the bridge, there is a need to put it on current policy agenda, especially emphasising on the opportunity of horizontal cooperation between Hong Kong international financial centre and Zhuhai regional financial centre.

**Strategic Direction**
5.3.8 \textit{“To extend and diversify central business core of Hong Kong for capitalising financial and business professional services regional collaboration opportunities brought by the bridge.”}

\textbf{Key Actions}

5.3.9 In order to achieve the strategic direction of planning employment-related land use and respective strategic transport network for financial and business professional services sector, six key actions have been listed in the following.

(i) To maintain and suitably enhance current stock of Grade A office space at CBD1;
(ii) To facilitate Grade A office space supply around the urban core as alternatives to CBD1;
(iii) To offer diverse floorspace of Grade A office space around the urban core;
(iv) To integrate new and existing Grade A office space to achieve synergy effect;
(v) To improve connectivity between the HZMB and the business central districts; and
(vi) To promote regional cooperation on financial and business professional services sector, taking into account possible horizontal and vertical cooperation with PRD cities.

\textbf{Detailed Spatial Plan for Financial and Business Professional Services Sector}

5.3.10 Key actions I to V have been translated into a detailed spatial plan as shown in Figure 5.2. It constitutes of three complementary CBDs to strengthen Hong Kong’s position as an international financial centre. Taking into account that regional corporations and MNCs always aspire to anchor their offices at prime locations, they are less willing to compromise at locations outside CBDs. As such, sufficient and timely supply of CBD Grade A Offices is crucial for Hong Kong to continue to attract foreign investment. It is therefore important to schedule sufficient space for business to move up the value chain and to attract mainland companies for global exposure.
CBD1: Business Core of high value-added financial and professional services

5.3.11 CBD1 would maintain its reputation and position as Hong Kong administrative and political core, as well as business centre of traditional high valued-added financial and business professional services sectors, such as bankings and legal services. Despite high land rent in CBD1, it remains as the most desirable destination to business which tend to be locational sensitive. However, reinforcement of CBD1 as the business core of high-value added service sectors ought to be supported by maintaining and suitably enhancing current stock of Grade A office spaces. This is to be achieved through redevelopment projects. Low redevelopment incentive of landlords of these buildings should be improved by supporting policies which would be discussed in the later part of this section.

CBD2: Alternative to CBD1 and Business Hub of Supporting Offices (Solution A1)

5.3.12 CBD2 would serve as an alternative to address Grade A office space shortage in CBD1. Situated in Kowloon East, it has close proximity to CBD1. It offers cheaper alternatives to cooperates which aspire prime locations, but can hardly afford the land rent in CBD1. The supply of Grade A office space in CBD2 is expected to lower keen demand on CBD1, and subsequently, the land
rent in CBD1 can be reduced. Moreover, the trend of “split-office” is expected to generate demand on office space in CBD2 to accommodate MNCs’ supporting office. Therefore, apart from positioning as an alternative to CBD1, it is also targeted as being a business hub of supporting office.

**CBD3: New and Smart Business Hub Tied Closely to the Airport and HZMB (Solution A2)**

5.3.13 Taken into account of demand on diverse floorspace size and rental costs of Grade A office space around the urban core, CBD3 would be developed into a new and smart business hub adjacent to CBD1. Being developed on reclaimed land, CBD3 allows the greatest flexibility to apply the latest planning concepts, such as smart city and low-carbon city. It would offer smaller and cheaper Grade A office space for various scales of regional cooperates and MNCs. Moreover, located at just 4 km from the Hong Kong Island West, ELM is closely connected with existing CBD. Close proximity to the airport and HZMB would also distinguish its attractiveness to mainland corporates from western PRD which might be more sensitive to rental concerns. As a result, CBD3 would be an important spatial measures to capitalise sectoral vertical and horizontal collaboration opportunities brought by HZMB.

**Metropolitan Business Core (CBD1 + CBD2 + CBD3)**

5.3.14 The three CBDs of different characteristics and positions should be integrated to achieve synergy effect along the Victoria Harbour. In line with the conceptual spatial framework of the 2030+, a metropolitan business core would be formed at the centre of Hong Kong. Connectivity among the CBDs would determine the synergies created. Moreover, connectivity between the regional strategic infrastructure, i.e. HKIA and HZMB, and the metropolitan business core, particularly CBD3, is essential to facilitate regional and international collaboration. Therefore, strategic transport network should be arranged to capitalise the opportunities, and the details would be discussed in Section 5.7.

**Supporting Policy**

5.3.15 The detailed spatial arrangement provide solutions to Key Actions I to V; however, appropriate supporting policies are required to facilitate redevelopment process in CBD1 and promote regional cooperation with PRD cities.

**Supporting Policy 1: Incentive measures to enhance redevelopment incentive of Grade A office in CBD1**

5.3.16 Current Grade A offices at CBD1 remain as the most preferable options of many regional cooperation and MNCs. Nevertheless, the aged office buildings in deteriorated condition might fail to meet their requirements in long run. Therefore, redevelopment of old Grade A office buildings in CBD1 is indispensable. However, the attractiveness of such redevelopment would be lower due to limited economic return from redevelopment into same use, and high
opportunity costs to terminate the rental contract during the construction (refer to Section 5.3.2).

5.3.17 In this case, the government is suggested to take proactive role to facilitate the process by partnering land owner to initiate redevelopment projects in CBD1. Despite of possible heavy financial burden of the government, the expected outcome is to maintain and suitably enhance current stock of Grade A office space at CBD1 in order to facilitate growth of the financial and business professional services sector.

**Supporting Policy 2: Measures to facilitate regional corporation with PRD cities**

5.3.18 Supporting policies that promote regional cooperation in terms of financial and business professional services sector are necessary to capitalise possible horizontal and vertical cooperation opportunities with PRD cities. It is noted that Hong Kong has signed collaboration agreement, or other forms of mutual agreement, with some PRD cities to facilitate bilateral cooperation. However, there is uncertainty about the details and specific modes of implementation at this stage. Supporting policies to assure a transparent and reliable business environment is essential to facilitate regional collaboration.

5.3.19 It is recommended that the Steering Committee on Taking Forward Bay Area Development and Mainland Co-operation can create a platform to foster mutual communication between Hong Kong and GBA Corporates, and engage related GBA Corporates to encourage them to anchor their high-end services in Hong Kong. In order to maintain and enhance its reputation of international financial centre, Hong Kong should take initiatives to engage with PRD cities to draw their investment to facilitate growth of the financial and business professional service sector. Therefore, the expected outcome of the measures under the collaborative approach is the capitalisation of the possible opportunities brought by HZMB.

**Implementation Timeframe**

5.3.20 The strategic direction of the suggested spatial solutions and supporting policies is to extend and diversify central business core of Hong Kong for capitalising financial and business professional services regional collaboration opportunities brought by the bridge. However, concerns of market demand, resource availability and feasibility would schedule the spatial plans and supporting policies at different time frame.

5.3.21 Supporting policy of promoting regional cooperation, spatial solution of developing CBD2 and CBD3 are immediately required. The opening of HZMB is a timely opportunity to engage mainland corporates. Moreover, the GBA Initiatives would help enhancing political feasibility to develop relationships of regional cooperation between Hong Kong and mainland governments. Therefore, it is expected to be achieved in short term.
Moreover, maintaining and suitable enhancing current stock of Grade A office space at CBD1 is expected to be achieved in short term by facilitating redevelopment of office buildings. Market demand on redevelopment of the commercial buildings might be less critical as these Grade A office space is still the most preferable space for many business despite the fact that they are deteriorating, and office space provided in CBD2 helps addressing part of the market demand. Although the demand is less critical, it is believed that government capacity is capable and feasible to implement incentive measures to facilitate the redevelopment process in short term.

The spatial plan to develop CBD2 into an alternative to CBD1 and a business hub of supporting offices will be made available in short to medium terms. CBD1 has long been saturated and market demand on alternative to CBD1 is critical. Moreover, land resource is already available in East Kowloon and planning process of redeveloping industrial building into commercial buildings is effective and efficient. CBRE (2017) estimated that the total stock of office space in CBD2 would reach 1.6 and 2.7 million sq. meter by 2021 and beyond 2026. Therefore, spatial solution of CBD2 development will be made available in short to medium terms to address market on Grade A office space adjacent to CBD1.

Last but not least, the spatial plan to develop CBD3 into a new and smart business hub can only be made available in long term. There is a market demand on smaller and cheaper Grade A office space as CBD1 is becoming more unaffordable to many regional corporates and MNCs. However, it is a relatively new planning idea, and it would need more time to reach a public consensus. Moreover, CBD3 is going to be developed on reclaimed land which requires a longer period of time for site formation. Therefore, although there is a critical market demand, Grade A office space in CBD3 would only be available in long term.

**5.4 Detailed Spatial Plan for Logistics Sector**

**Background and Policy Gaps**

As per the discussion in the Section 4, the challenges for the logistics industry have been identified. In the light of rising competition among the cities in the region, Hong Kong would need to further upgrade its logistics facilities and supporting infrastructure in order to upkeep to its neighbouring cities. Besides, the demand for quality third party logistics services and high value added logistics are rising, which necessitates the demand for seamless connection between the different modes of transhipment for time and value critical goods. In this regard, more spatial needs are induced for warehouses, freight handling facilities, intermodal transhipment hubs and logistics parks. Furthermore, there is a need to agglomerate the logistics industries with research and development to further improve the performance of logistics industry with the aid of innovation and technology.
5.4.2 From the consolidated findings from the Stakeholders’ Consultation Process in Review Stage (Stage 2), the existing container terminal in Kwai Tsing has to be upgraded in terms of its hard and soft infrastructure to handle larger volume of goods. The operational efficiency of KTCT is undermined by the incompatibility to deal with river-borne transhipment cargoes. According to THB (2015), the river-borne transhipment for river-sea transhipment has shown a rising trend. River throughput increased from 2.0 million TEUs in 2005 to 3.1 million TEUs in 2014, accounting 18% of the total throughput of KTCT. KTCT is more preferable to River Trade Terminal (RTT) as its operational efficiency and smooth clearance process of river-sea transhipment (BMT Asia Pacific, 2014). However, the incompatible crane system and berth which are not intended for river vessels and insufficient space for the transhipment lead to inefficiency of the terminal (Information Services Department, 2014). Therefore, a more convenient container catering the needs of transhipment and facilitating multimodal transhipment should be provided for future development.

5.4.3 As per the discussion with the stakeholders, in order to maximise the profit potential in the process of supply chain, an optimised and seamless intermodal logistics process should be ensured. Therefore, a seamless intermodal transhipment would be necessary, especially for time critical and high value added logistics like cold chain. The seamless transfer could be achieved by both spatial policies and supporting policies.

5.4.4 In the light of aging and shortage of frontline workers in logistics in Hong Kong (Vocational Training Council, 2015), there is a need to upgrade and modernise the logistics industry in Hong Kong by means of automation, smarter technology and the use of big data. The industry is facing a rising demand due to larger volume of goods is anticipated, yet the frontline workers are aging. The sub-sector recorded a greatest increase in demand is warehousing and storage, which boost from 6,500 in 2012 to 6,800 in 2022 (Labour and Welfare Bureau, 2015). Therefore, Hong Kong is suggested to put resources in conducting research and development in cutting edge technologies in logistics for long term sustainability of the industry.

Strategic Direction
5.4.5 “To upgrade the logistics industries in face of rising regional competition and equip logistics industry for high value added logistics with the provision of land and supporting policies.”

Key Actions
5.4.6 In pursuit for better development of the industry in the future to achieve the strategic direction of planning employment-related land use and respective strategic transport network for logistics sector, five key actions have been listed in the following.

(i) To make space for logistics facilities for warehouses, freight handling facilities and logistics facilities targeted time critical and high value added logistics;
(ii) To create seamless transfer between various modes of logistics, including sea, land and air logistics, for smooth transhipment;

(iii) To upgrade the existing logistics facilities for upkeeping with the rising challenges in the region;

(iv) To streamline the process for clearance, inspection and quarantine procedure to facilitate the transboundary flow of goods; and

(v) To agglomerate the logistics industry with research and development for further improvement of the industry.

**Detailed Spatial Plan for Logistics**

5.4.7 Key actions (i) to (v) have been translated into a detailed spatial plan as shown in Figure 5.3.

![Figure 5.3 Detailed Spatial Plan for Logistics Sector](image)

**Intermodal Logistics Hub**

5.4.8 Tuen Mun Area 38, 40, 46 and 49 and Lung Kwu Tan reclamation, total area could provide approximately 260 hectare. The area Tuen Mun West is identified as a strategic location for logistics uses (AECOM; CEDD, 2015). The Intermodal Logistics Hub is strategically located at
Tuen Mun West (TMW) with its proximity to the estuary of Pearl River Delta. For land logistics, TMW is identified as the location for intermodal logistics hub as it is connected by the TM-CLKL, the proposed Tuen Mun Bypass and also connected to Shenzhen via Hong Kong-Shenzhen West Corridor. For river-borne logistics, the site of TMW has a proximity to the River Trade Terminal (RTT) for intermodal transhipment, especially between land, river and air-borne logistics. TMW is connected to Lantau and the air logistics handling facilities via TM-CLKL, which significantly reduce the travelling time required from TMW to the airport.

5.4.9 Though the development potential of the Intermodal Logistics Hub would be limited by the height restriction of the airport and also the availability of flat land in the area of TMW, the reclamation of shallow seabed of Lung Kwu Tan will provide approximately 220-250 hectares (CEDD; ARUP, 2015) for logistics and industrial uses in longer term.

Air Transhipment Zone

5.4.10 HKBCF has a 130 Hectare developable land for commercial activities with a potential of providing 300,000 meter and 500,000 meter. There is high potential of providing Air Transhipment Zone for handling high value added such as time critical and environmental sensitive goods for the transhipment. Provision of specialised cargo handling facilities, warehouses are proposed on HKBCF. It is expected that with strategic location of HKBCF, as connected with Intermodal Logistics Hub in TMW, logistics facilities in Hung Shui Kiu New Development Area and Yuen Long South New Development Area and also Shenzhen via TM-CLKL.

5.4.11 The seamless intermodal transhipment at the Air Transhipment Zone has to be ensured for smooth land and air transhipment process. The process of custom, inspection and quarantine has to be streamlined and optimised. The additional warehouses facilities and should be connected to the Southern Cargo Precinct of HKIA.

Logistics Parks Zone

5.4.12 Apart from Intermodal Logistics Hub, logistics centres could be provided in TMW to create synergy with Intermodal Logistics Hub. It is proposed that logistics centres could strategically located at the Area linked by a number of road links. The logistics centres could act as warehouse, freight forwarder and depot for the Intermodal Logistics Hubs in TMW and also Air Transhipment Zone at HKBCF. Government has planned a number of logistics centre in Hung Shui Kiu New Development Area and Yuen Long South New Development Area to further foster the growth of the industry, the new logistics centre is proposed to located new logistics centre cluster near the air transhipment zone at HKBCF and intermodal logistic hub in the proximity.

5.4.13 The provision of the proposed Logistics Parks Zone could provide more warehouses, freight handling facilities and specialised logistics services, like cold chain. Besides, these logistics parks
could help upgrade the logistics industries by providing an opportunity for automation and making space for implementing smarter technology.

**Upgrade of the KTCT**

5.4.14 As per the discussion in Section 5, the operational efficiency of KTCT has hindered by the inflow of river vessels, yet the crane system and also the insufficient yard space has lowered the efficiency of KTCT. It is proposed that KTCT should be expanded to the South and West of Tsing Yi. With reference to Enhancing Land Supply Strategy (CEDD; ARUP 2011), it is identified that Southwest Tsing Yi should be allocated for River Transhipment. The rising demand for river-borne logistics necessitates the need of expanding KTCT and equip the port with river transhipment facilities. Therefore, to raise efficiency of the port and specialised part of the container terminal in the river transhipment. Southwest Tsing Yi could provide at most 106 hectare for river transhipment facilities (Figure 5.4), warehouses and specialised logistics facilities. The site could potential linked by a number of strategic linkages, including Cheung Tsing Highway and Tsing Yi Road.

![Figure 5.4 Potential Area for River Transhipment Zone](image)

**Logistics Research and Development Clusters**

5.4.15 Logistics Research and Development Cluster is also suggested for improving the overall efficiency of logistics industry. The establishment of logistics research and development would be beneficial for the upgrading and modernising the industry for achieving the sustainable development of the industry by improving the software and technology of the industry. Efforts would be put on the research of cutting edge automation technology in logistic operations and
also improve the efficiency in different component in supply chain, in the light of aging and shortage of the frontline labour (Vocational Training Council, 2015). It is proposed that the Logistics Research and Development Cluster should be placed at San Tin/ Lok Ma Chau.

5.4.16 San Tin/ Lok Ma Chau Development Node is identified to be one of the potential area for development in HK2030+. With the proximity to Lok Ma Chau Loop Research centre and the proposed Science Park and Business and Technology Park in NTN. The proposed Logistics Research and Development Clusters would create synergy with the Research and Development Clusters in the proximity.

**Supporting Policy**

*Supporting Policy 1: Extending the tenancy of port backup and logistics facilities leased under short term tenancy*

5.4.17 To in line with the upgrade and modernisation of KTCT, the tenancy of the port back-up sites and logistics sites should be extended. In Kwai Tsing district, there are about 100 hectares port back-up and logistics facilities under Short-term Tenancy (STT). The term of a STT generally consists of an initial, fixed term followed by a periodic tenancy (usually quarterly). Fee-paying car park usually has a fixed term of one year; container storage/ cargo handling facilities usually has a fixed term of 3 or 5 years while multiple uses normally has a fixed term of 3 years (Transport and Housing Bureau, 2015). It is proposed that the tenancy period could be extended to provide incentives for tenants to invest and upgrade the logistics facilities to better equip the container terminal with expanded yard space and also upgraded infrastructures.

*Supporting Policy 2: Agglomerate logistics with research and development*

5.4.18 Concur with the idea of upgrading the logistics industry, it is proposed that the logistics industry has to be agglomerated with Research and Development for more sustainable development of the industry. As per the discussion in the international case of Øresund, the establishment of Research and Development facilities will further development of the sector and economy. With the vision of moving Hong Kong’s economy up the value chain under the building block 2 of HK2030+, it is proposed that Hong Kong should further improve its technology and system of logistics for enhancing Hong Kong’s position as high value added logistics hub.

*Supporting Policy 3: Streamline the custom, inspection and quarantine (CIQ)*

5.4.19 The transboundary flow of logistics should be facilitated with the streamlining of the custom, inspection and quarantine (CIQ). Intermodal Transshipment Facilitation Scheme (ITFS) was implemented in November 2010 to facilitate the flow of logistics by simplifying the clearance procedure of air land and sea land transhipment (C&ED, 2017). It is expected that the intermodal and transhipment of logistics would be more often after the completion of HZMB, in
order to achieve a seamless CIQ procedure, a streamlined measures of CIQ should be adopted in the control points for logistics.

**Implementation Timeframe**

5.4.20 The strategic direction of the suggested spatial plans and supporting policies is to upgrade the logistics in Hong Kong and move the industry up the value chain in order to position Hong Kong as a high value added logistics hub. Different priority is given to the spatial plans and supporting policies regarding concerns of market demand, resource availability and feasibility.

5.4.21 Supporting policies, like extending the tenancy and streamlining the CIQ procedures, could be used as quick wins to provide the incentives for the logistics operators to improve the logistics infrastructure and facilitate the flow of logistics. With the future completion of HZMB, the streamlined CIQ procedures would be required at HKBCF. These policies could be implemented in the short term.

5.4.22 Logistics Research and Development cluster and Logistics Park would take place where the Government has already identified for future development. In particular, the R&D cluster would likely to be built together with San Tin/ Lok Ma Chau Node. Besides, Government has identified Area 40 and 46 available for logistics purposes which could be used as logistics park. The site formation and infrastructure works of these area would take 8 to 10 years, which rendered these spatial policies to be implemented in the medium term.

5.4.23 The improvement of KTCT would be important to be implemented, collaboration between Government B/Ds and the container terminal operators would be required to expand the KTCT and introducing modernised logistics facilities. In order to maintain Hong Kong as a high value added logistics hub in the region, the expansion of KTCT to Tsing Yi Southwest and the Intermodal Logistics Hub in TMW would be required for increased regional competitions. Expanded KTCT would provide more yard space for river-borne logistics while the intermodal logistics hub in TMW would provide more space for transhipment in the light of HZMB and provide alternatives besides HKBCF. These infrastructure involves feasibility study, reclamation, relocation of the existing study and they are of huge effort to be executed. Therefore, it is anticipated that these spatial policies would be available in long term.

5.5 **Detailed Spatial Plan for Tourism Sector**

Background and Policy Gaps

5.5.1 Measures required to capitalise the opportunities of the tourism sector identified in Section 4.4 could be translated into the following key planning suggestions. First, more MICE facilities are necessary to cater for the expected increase in demand for conference and exhibition venue spaces with the increase in incoming business visitors from Mainland China. Second, the supply and variety of hotel accommodation needs to increase in order to facilitate the development of
multi-stop tourism and the diversification of tourism products in Hong Kong. Third, ancillary RDE facilities shall be developed concurrently with the expansion of the leisure tourism facilities and clusters to enhance visitor experiences and stimulate expenditure on tourism sector.

5.5.2 Regarding the first planning suggestion, MICE tourism has been the top priority on the agenda of the government to rejuvenate the local tourism industry. Yet, the declining number of overnight MICE arrivals and a lack of venue space challenged the prospect on regional coordination of Mainland enterprises and local service providers. In contrast, our neighbouring cities have been continuously expanding their MICE facilities. According to the statistics of the Global Association of the Exhibition Industry, the convention and exhibition space in the Asia-Pacific region increased from 4.8 million square metres in 2006 to 8.1 million square metres in 2017, and the new construction of the 300,000 square metre international standard C&E centre in Shenzhen, which would become Hong Kong’s potential regional competitor.

5.5.3 Major concerns were raised regarding Hong Kong’s lag in provision of MICE facilities compared to neighbouring regions and countries due to the saturation of existing venue space. For that reason, in terms of floor area, there is a critical requirement for expanding MICE facilities in Hong Kong. Yet, due to the limited availability of land supply in Hong Kong, it is important to expand the MICE facilities as well as to define a strategic position to efficiently focus on MICE events which would bring higher value-added economic benefits to Hong Kong to maintain the tourism sector’s competitive edge.

5.5.4 The government has made attempts to resolve the shortage of venue space during peak seasons by launching the ‘one show, two locations’ setting on a territory level, with free shuttle bus services arrangement between HKCEC and AWE. Nevertheless, such a transportation facilitation measure still raised public concern on the sustainability issue of commuting of exhibition participants. Long-term planning of MICE tourism is called for, which would potentially take into account future demand for convention and exhibition facilities with the opening of the bridge as well as regional cooperation of MICE facilities.

5.5.5 With regard to the second and third planning suggestions on the supply and variety of hotel and RDE facilities, while looking for suitable locations for setting up additional MICE venues, other supporting facilities linkages should be introduced. Targeting the increase in hotel supply and a robust growth of the hotel sector, the government has designated a number of ‘hotel only’ sites in different parts of Hong Kong. In responding to the continuous rise in inbound visitors from Mainland, hotel room supply also grew parallelly by 38% in 2016 compared to 2011 (HKTDC, 2017). There has been a general trend since 1996 in which a majority of the newly built hotels are located in secondary locations with specific targeted sectors of the tourist markets, in particular group visitors from the Mainland and Southeast Asia (Planning Department, n.d.).
Therefore, it is likely that locating hotel accommodation in more peripheral locations are advantageous to the hotel industry because of faster take up rate by the market mechanism. However, the supply of hotel is primarily market-driven so that it may not be planned in advance. Developers will make decision on hotel development schemes and construction speed with reference to various tourism performance indicators such as forecasts on anticipated visitor arrival growth, economic prospects and hotel sector specific business climate and expected profits.

**Strategic Direction**

5.5.7 "To create a new tourism cluster and diversify tourism experience through leveraging the locational advantages, cultural and natural assets of Lantau."

**Key Actions**

5.5.8 In order to achieve the strategic direction of planning employment-related land use and respective strategic transport network for tourism sector, five key actions have been formulated in the following.

(i) To create a combination of diverse tourist attractions by introducing new tourism resources and improving existing offerings;
(ii) To create clusters of new and existing MICE, leisure, entertainment and recreation facilities to achieve synergy effect;
(iii) To capitalise local history and cultural heritage and reinforce them as distinctive tourism experience while appreciating the needs of local community;
(iv) To elevate natural resources through means of eco-tourism while respecting conservation needs; and
(v) To develop critical mass in alternative tourism clusters and broaden the destination appeal of various tourist attractions.

**Detailed Spatial Plan for Tourism**

Key actions (i) to (v) have been translated into a detailed spatial plan as shown in Figure 5.5.
Aero-gateway

5.5.9 Aero-gateway in Lantau is the most strategic node of Hong Kong, enjoying greatest locational advantage being directly supported by HZMB, HKIA and TM-CLKL. Spatial-wise, aero-gateway consists of the North Commercial District (NCD), Topside Development on HKBCF Island, Tung Chung New Town, Tung Chung New Town Extension East (TCNTE) and Siu Ho Wan Development. Given this critical node, Aero-gateway is recommended to target high-end tourism through expanding and providing MICE facilities, RDE and hotels for developing an economic platform.

5.5.10 North Commercial District (NCD) at the Airport Island, designated by the Airport Authority to be an Airport City, includes a large retail complex, hotel, RDE (retail, dining, entertainment), and office buildings. Adjacent to NCD are the Topside Development, AsiaWorld Expo and future MICE venue expansion. As for Topside Development, with a size around 500,000sqm, it enjoys the benefits from convenient transport network, and can be the platform for people from different parts of world to converge, exchange, advertise and demonstrate their ideas, projects and products. As introduced before, MICE are in excess demand even after the expansion. Thus,
Topside Development demonstrates a great potential to capture the opportunity of building a new dedicated MICE venue. Firstly, it could clearly increase the MICE supply to cope with exceeding demand. Secondly, as MICE cannot survive alone and must have well complementary facilities, such as RDE and hotels, to attract event planners. Topside Development definitely has the capacity to provide the complementary services. Thirdly, Topside Development is only in short distance from NCD and AsiaWorld Expo; a new MICE venue in Topside Development could possibly connect with AsiaWorld Expo and its expansion, which may generate MICE agglomeration in Aero-gateway node. Apart from MICE industry, demand for hotels in NCD and Topside Development is expected to grow due to large number of regional and international incoming tourists projected after the completion of 3RS and HZMB.

5.5.11 Tung Chung East and Siu Ho Wan developments emphasize more on community and residential aspects. The development leverages the locational advantage of the landing point of TM-CLKL and future MTR station. As for Tung Chung East, the TCNTE report has earmark it for housing and commercial development. Likewise, development at Siu Ho Wan’s railway depot and land reclamation are proposed. It is expected that these two areas could create a synergy effect with NCD and Topside Development. On the other side of Siu Ho Wan development, it has high ecological value and is one of SSSIs in Lantau. It is advised this SSSI should be preserved for other more valuable usage instead of eco-tourism which might affect its ecosystem.

Northeast Lantau Leisure Tourism Hub

5.5.12 The Leisure Tourism hub is located at the northeastern tip of Lantau. It has two major components: Sunny Bay and Disneyland. To fully unleash the tourism potential of Lantau, tourism resources are coordinated accordingly. It is identified that Sunny Bay and Disneyland together have huge potential in leisure tourism in catering different needs of tourists as well as supporting business tourism in Aero-gateway, and cultural and natural tourism at South Lantau.

5.5.13 Sunny Bay possesses highly convenient transport network, connecting with Tung Chung, Disneyland and Hong Kong urban areas. To develop leisure tourism hub, Sunny Bay is suggested to build large entertaining parks and facilities for various age groups. Moreover, Sunny Bay, adjacent to harbor, could explore the potential of marine recreation activities to develop large water-sport facilities. Connecting Sunny Bay to Siu Ho Wan Development and Tung Chung East with walkable waterfront network might create a unique scenery for tourists when visiting the North Lantau. As for Disneyland, its Phase II expansion started in 2016, and the new theme areas are expected to attract more visitors, especially the repeat tourists who visited Hong Kong Disneyland before. Moreover, a larger Disneyland of more attractions could attract more overnight visitors, thus the hotel demand in Disneyland and Sunny Bay is expected to grow. Apart from entertaining facilities, it is suggested adequate hotel should be planned and provided in this leisure tourism hub. Following the opening of Phase II expansion of Disneyland,
the synergy effect with Sunny Bay is expected to strengthen the role of Northeast Lantau Leisure Tourism Hub where tourists could have the most adventure fun.

**Southeast Lantau Tourism Node**

5.5.14 Southeast Lantau Tourism Node is located at Mui Wo which is identified as a gateway to South Lantau. In the present, Mui Wo is entrance to Lantau for people in Central through ferry transport. In the future of our proposed scheme, Mui Wo would become local gateway to enter Lantau from urban core with comprehensive transport network supported by direct MTR, road network and ferry services.

5.5.15 Besides being an actual gateway with convenient transport network, Mui Wo demonstrates a diversified tourism environment. In the future of our proposed scheme (section 5.3), Mui Wo is planned to be part of CBD3. Being part of ELM, Mui Wo shows the potential for prosperous urban development. However, the urban development comes with costs that we need to balance: Mui Wo’s rich cultural and historic environment from its strong character of rural township, as well as Mui Wo’s abundant natural resources such as beach, cave and waterfall. It is acknowledged that this tourism node must be carefully planned to strike a balance among urban development, culture, nature and history.

5.5.16 The existing condition of Mui Wo’s cultural township, such as Yuen’s Mansion, is neglected by the government. It is suggested to revitalize this cultural heritage through CCI. For example, Yuen’s Mansions are currently obsolete and empty; when tourists visit Mui Wo, they will find this Mansion interesting because of its historic value. The large empty mansions could provide space for local Artists while CCI could also be related back to the culture of Mui Wo as well as Lantau; in this way, CCI and historic buildings could promote cultural tourism in Mui Wo hand in hand. At the status quo, Mui Wo’s nature is also popular for weekend getaways and hiking, and this shows promising outlook in becoming a node that provide various outdoor activities such as natural adventure and cave park. To further synergize the culture and nature of Mui Wo, local festivals and alternative tourism like wedding tourism could also be promoted to foster the blend of modernity, tradition and nature.

**Southern Lantau Coastal Recreational & Ecological Belt**

5.5.17 Southern Lantau Coastal Recreational & Ecological Belt is located along the natural coasts of South Lantau. The belt will be extending from Chi Ma Wan and Pui O along the long beaches at Cheung Sha to the Shui Hau Bay. As suggested, the belt will be consisted of three nodes. At present, this sheltered bay area has a rural setting with existing recreational facilities for water sports and hotel accommodations in the forms of campsites and short-stay accommodations. From an ecological perspective, the nodes contain rich ecological and natural resources with a diversified coastal landscape such as wetlands, mangroves, mudflats and sandy shores. Also, there are existing natural habitats which display significant conservation value.
It is suggested that the recreation and ecological belt along the southern coast of Lantau will offer a diversified tourist experience with low-impact leisure and eco-tourism activities. To relate to this theme and taking advantage of the natural coastal relief, it is recommended that the provision of a variety of water sports and the further provision of water-friendly spa and resorts at less ecologically sensitive areas. In addition, coastal marine conservation and education areas can be provided at areas with higher ecological values. On top of that, it would be promising to explore the possibility of niche tourism products and services, for example, beachside events and open-air carnival venues.

Village Culture Tourism Hub

Village Culture Tourism Hub integrates the existing water village and stilt houses culture of Tai O with the potential revival of rice farming culture of Yi O on the Southwest Lantau. At present, there is a vast amount of abandoned agricultural land after the moving out of residents of Yi O Village. A mild degree of agricultural activities have been observed in recently in the area. To act on that trend of reinvigoration of village culture, it is suggested that agriculture-themed farmstay can be provided as alternatives holiday accommodations to the more upscale and business hotels. It is recommended that the revitalisation of abandoned agricultural land could be translated into cultural tourism attractions and accommodations, where one-stop village culture tourist experience can be provided in Tai O and Yi O, such as farm-to-table harvesting, eatery and short-stay. In addition, to cater for the appreciation for local community needs, it is proposed that active contemplative activities can be introduced in place. The proposed village culture tourism hub is expected to create linkages from the extension from Tai O to Yi O. The possibility for the improvement of commuting routes between the two areas may further enrich the proposed extension of local village culture and tourist experience, which if materialized, could offer visitors with additional travel options.

Buddhist Spiritual Tourism Hub

The proposal of the Buddhist Spiritual Tourism Hub is developed on the existing Tian Tan Buddha, Ngong Ping 360, Ngong Ping Piazza and the nearby Luk Wu, Keung Shan and Infinity Pool at Ling Wui Shan. The clusters of temples and religious communities in the area referenced the early Buddhism development in Hong Kong. Proposed to be located amidst the buddhist monasteries, the hub is expected to capture the emerging niche of spiritually motivated visitors. The proposed hub echoes with the objective of diversification on local tourism attractions. At this area, it is suggested to retain the status-quo of existing buddhist culture amenities to a large extent, with the provision of meditative spiritual activities such as Zen tours to monasteries and nature walks.

Supporting Policy
5.5.21 The detailed spatial plans provide solutions to Key Actions i to v; moreover, appropriate supporting policies are required to facilitate tourism development in Lantau

**Supporting Policy 1: Reinforcing the linkages between MICE and business travel**

5.5.22 At present, Hong Kong and the mainland have entered into a supplementary agreement under the Mainland-Hong Kong Closer Economic Partnership (CEPA) framework to continue in broadening the liberalisation service trading measures in Guangdong and the rest of mainland that would be favourable to Hong Kong Service Supplier (HKSS). Under the current context, exhibition operators in Hong Kong are allowed to undertake specific operations set up in the mainland in the form of cross-boundary joint ventures. It is suggested that Hong Kong government cooperates with provincial government to submit competitive regional bids to co-host international standard events, conventions and exhibitions.

**Supporting Policy 2: Promoting Lantau tourism capacity for mainland short-haul markets**

5.5.23 Relevant policies should be implemented to attract more high-spending visitors in the creation of new short-haul markets in Lantau. In the case of creating new short-haul markets in Lantau, it is suggested that Hong Kong Tourism Board would work with local tour operators, tourist attractions owners, hotel operators in targeting transit passengers and overnight visitors. Specifically, it is suggested that the government offers funding support to promote special-themed tourism, such as eco-tourism and cultural tourism to open up new market opportunities in the local tourism industry in the peripheral locations of Hong Kong.

5.5.24 Targeting visitors from the Mainland specifically, there could be collaboration between TV broadcasting networks and public media in potential source markets in GBA to produce publicity programmes promoting the diverse leisure, entertainment, cultural and ecological assets of Lantau and highlighting the unique tourism experiences. Due to the shortened travelling time provided by the bridge, it is suggested that Hong Kong Tourism Board cooperates with regional tour operators in capturing the window for short-haul markets in the Mainland, for example, long school holidays and ‘Golden Week’ holidays.

**Supporting Policy 3: Devising cultural policy on revitalization of historic building**

5.5.25 The Government has devised “Revitalization of Old Industrial Buildings” policy to revitalize old industrial buildings involving CCI. In contrast, the Government’s existing heritage preservation policies restrict CCI development in historic buildings (Tavecchia, 2014). It is suggested have to inter-departmental cooperation for the government to formulate a clear and comprehensive cultural policy for CCI which could assist revitalizing historic buildings.

5.5.26 Implementing cultural policy on revitalization of historic building of Mui Wo could attract more tourists in the creation of cultural market. It is suggested that the Government should carefully
assess the conditions of historic buildings in Mui Wo and work closely with local artists. Specifically, it is recommended that the Government to provide incentive for creating space for local artists to promote cultural tourism and to devise schemes to integrate art with preservation.

Supporting Policy 4: Establishing regional cooperation in multi-destination travel

5.5.27 The completion of HZMA and GBA initiatives would bring the regional tourism development to the next level. Given that HKTB is received funding to promote Hong Kong’s tourism products in various oversea markets, it is suggested that HKTB should grasp opportunity brought by HZMB to launch serious of promotions in GBA as well as the rest of China. Specifically, HKTB could nurture the iconic mega-infrastructure HZMB into tourism attraction with Lantau to attract numerous tourists to appreciate and experience the bridge. In addition, HKTB is recommended to deepen the regional cooperation in tourism by co-branding GBA as a tourism region, thus to attract more overnight visitors to Hong Kong.

Implementation Timeframe

5.5.28 To forward the suggested strategic spatial solutions, various projects would be implemented in two timeframes. To determine the short-term implementation, existing actions and studies done by the government would first be examined, followed by land availability and existing facility. In other words, the short-term projects could be implemented in a faster manner with controlled adverse impact. On the other hand, the long-terms projects require more careful study, assessment and consideration to be pursued in future implementation.

5.5.29 The short-term implementation has included projects currently under construction such as NCD or completion of feasibility study and public engagement such as TCNTE. The site of Topside Development on BCF Island is also ready for construction. Thus, the major part of Aero-gate could be completed in short-term.

5.5.30 The Southern Lantau Coastal, Recreational & Ecological Belt, Village Culture Tourism Hub and Buddhist Spiritual Tourism Hub are considered as short-terms projects. The proposed tourism schemes are based on existing facility, and to take care of ecological and cultural value, the scale of tourism schemes is deemed to be relatively small.

5.5.31 The developments involved with land reclamation are subject to long-term implementation such as Siu Ho Wand and Sunny Bay developments. It is because that they require various preceding feasibility studies and impact assessments, followed by long-awaited land formation process. Meanwhile, the phase II expansion of Disneyland is estimated to complete in 2023.
for Mui Wo, the tourism node is considered as long-term project to be in line with ELM implementation.

5.6 Detailed Spatial Plan for Innovation and Technology

Background and Policy Gaps

5.6.1 Opportunities and challenges in Innovation and Technology (I&T) brought by the opening of HZMB as discussed in Section 4.5, together with Hong Kong government’s ambition to develop the industry point to several implications in terms of spatial planning. First, there is a need to reserve sufficient land for I&T development. More land and infrastructure for research and technology should be provided in Hong Kong as the increasing demand of upgrading manufacturing industries in the mainland provides new chances for Hong Kong to develop its I&T industry. Meanwhile, Hong Kong may play a significant role assisting mainland cities in pursuing their strategic goals of economic transformation and upgrading. Secondly, agglomeration of industry, academia and research of I&T sector should be provided. The agglomeration would maximize the strong fundamental research capabilities of the tertiary institutions in Hong Kong and to better apply R&D results in productions. Thirdly, the planning of I&T industry may also consider a vicinity to Shenzhen as the previous sectoral analysis has indicated that regional cooperation particularly between Hong Kong and Shenzhen will benefit the I&T development in both cities. Fourthly, supporting infrastructure such as affordable housing, co-working space and enhanced transport connectivity should also be considered to construct the right platforms and right conditions to sustain the I&T.

5.6.2 There is a need to review current strategic planning and land supply related to I&T to examine whether the spatial needs of I&T development can be fulfilled. The HK2030+ identifies promoting innovation, technology and innovation as one of the key planning aspects to embrace economic challenges and opportunities. Among the three emerging development axes, the Eastern Knowledge and Technology Corridor is dedicated to strengthen I&T development through capitalising the existing I&T related industries and the tertiary institutions and creating new development opportunities for I&T in potential sites.

5.6.3 The existing sites for I&T development in Hong Kong mainly include the Cyberport, Hong Kong Science Park and InnoCentre. Cyberport located in Pok Fu Lam consists of four office buildings, a hotel and a retail entertainment complex. It positions itself as “creative digital community” and aims to be a leading regional hub for information and communication technology (ICT). The Hong Kong Science Park (HKSP) is located in Shatin with a total area of 22 hectares. It provides R&D office space and laboratories with advanced technologies of 330,000 square meter as well as MICE facilities. The Science Park welcomes a wide range of expertise and areas of research
and application, including robotics, renewable and pharmaceuticals. While InnoCentre located in Kowloon Tong is dedicated for design industries. With provision of office space, exhibition halls and training facilities, it aims to cultivate a new generation of artists and designers meanwhile to facilitate the transition of their design to products.

5.6.4 The major sites under construction or planning for I&T development are briefly introduced as follow.

5.6.5 In the strategic growth area of New Territories North (NTN), the 87-hectare Hong Kong-Shenzhen Innovation and Technology Park is planned in the Lok Ma Chau as a key base for I&T cooperation between the two cities. The Park aims to attract worldwide top-tier enterprises, research institutions and tertiary institutions to promote high-tech, creative and cultural industries. In proximity with the future Liantang/Heung Yuen Wai Boundary Control Point (LT/HYW BCP), a science park and an industrial estate development is planned with an area of 56 hectares.

5.6.6 An Enterprise and Technology Park of 9 hectares is planned as part of the logistics, enterprise and technology quarter located in the eastern part of Hung Shui Kiu (HSK) NDA. The Park will be equipped with research centre and data centre to develop modern industries such as testing and certification services and other non-polluting industrial uses.

5.6.7 Others include a Business and Technology Park of 11.7 hectares planned at the southeastern part of Kwu Tung North (KTN) NDA for commercial, office, design, research and development uses, a Data Technology Hub and an Advanced Manufacturing Centre in Tseung Kwan O Industrial Estate with gross floor area of over 130,000 square metres and the 60-hectare Ma Liu Shui reclamation for high-tech and knowledge based industries.

5.6.8 There is room for further improvement after considering the impacts brought by the bridge and the existing government plannings. First is to increase suitable and affordable land use for I&T to better utilise the opportunities and release its development potential. Second is to strengthen the Eastern Knowledge and Technology Corridor and enhance the agglomeration among the planned I&T land uses with extensions or developments. And the third is to maximise synergy effect in I&T development with closer cooperation with mainland cities. The identified policy gaps would be further translated to spatial solutions for I&T development as explained in the following.

**Strategic Direction**
5.6.9  “To leverage knowledge spillovers and agglomeration of the I&T industry through creation of innovation cluster and establishment of horizontal linkages among industry and research sector.”

Key Actions

5.6.10 To create innovation cluster network and encourage inter-firm cooperation by nurturing an efficient business environment:

(i) To agglomerate various participants of an innovation system including industry, academia and research segments;
(ii) To develop scalable and advanced R&D infrastructure to promote technological upgrading;
(iii) To facilitate regional cooperation with mainland technology giants to build up strong networking assets; and
(iv) To provide more affordable co-working spaces for hi-tech industry, especially start-ups and small enterprises.

Detailed Spatial Plan for Innovation and Technology

5.6.11 Key actions (i) to (iv) have been translated into a detailed spatial plan as shown in Figure 5.6.
Figure 5.6 Detailed Spatial Plan for Innovation and Technology Sector.

**Northern Innovation and Technology Belt**

5.6.12 Currently, there is a planned Business & Technology Park in the KTN NDA, the Hong Kong-Shenzhen Innovation and Technology Park in the Lok Ma Chau Loop and a science park and an industrial estate near the LT/HYW BCP. The Lok Ma Chau Loop aims to promote higher education development with the support of R&D facilities and development of CCI. East to the Lok Ma Chau, the Government identified a site of around 56 hectares in LT/HYW BCP for the establishment of both science park and industrial estate to develop high value-added technology industry. Close to the two I&T land uses, there is a planned 11-hectare Business & Technology Park in KTN NDA which will act as an economic node of the area. It is designated for the mix of office and R&D uses, combining the innovative and high-tech industry and CCI.

5.6.13 To further facilitate the development of the industry, the planned Business & Technology Park in the KTN NDA would be further expanded as the Northern Innovation and Technology Belt in order to link up I&T clusters at LT/HYW and the Lok Ma Chau Loop. By connecting these I&T areas, the innovation belt would be formed in Northern New Territories to boost I&T development through enhanced agglomeration of industries, closer cooperation with the technology enterprises in the Shenzhen. The strategic location also brings convenience to the I&T enterprises in utilizing human resources and manufacturing base in Shenzhen. Moreover, the Northern Innovation and Technology Belt will provide more job opportunities in the Northern part of Hong Kong and thus alleviating the issue of job-housing imbalance.

**Logistics Park with R&D Centre**

5.6.14 According to HK2030+, the HSK NDA is positioned as the “high value-added logistics hub”. It aims to provide land for the development of modern logistics industry and other special industrial uses at the boundary location. Based on the positioning of HSK NDA, it is proposed that this area would be upgraded to a logistics park plus a R&D centre in order to connect the logistics industry with the R&D sector. With the trend of smart logistics, there is a need to produce innovation and apply advanced technologies such as ICT to enhance the handling capacity and efficiency of the industry.

5.6.15 Some of the stakeholders pointed out that clustering the industry with the academia and research segments could further boost the development of the sector and increase the flow of knowledge. The establishment of logistics park with a R&D centre can foster the collaboration between industry and research segments by combining the hands on experience from the industry with the expertise from the academia and the professional researchers. It is anticipated that a more favourable environment could be nurtured to encourage the sustainable growth in both logistics and R&D industry.
**Data Technology Hub**

5.6.16 Tseung Kwan O Industrial Estate is the biggest cluster of the data centres in Hong Kong, totalling 12 data centres such as the HSBC’s Regional Data Centre, the NTT Com Asia Limited’s Financial Data Centre as well as the new Global Network Centre of the China Mobile International serving the use of telecommunications and cloud storage. To capture its strength of existing concentration of data centres and be in line with the government policy, the area could be upgraded as a Data Technology Hub with world-class supporting infrastructure to further attract more top-tier data centres to move in.

5.6.17 To promote sustainable development of the I&T industry, this Data Technology Hub could be a showcase for smart and green technologies to reduce the carbon footprint and enhance the energy efficiency of the data centre operations. The construction of a new data hub could offer further potential of integrating the big data, cloud storage with manufacturing. Moreover, the proposed Data Technology Hub in Tseung Kwan O would be beneficial for strengthening the Eastern Knowledge and Technology Corridor together with existing Hong Kong Science Park, the planned Ma Liu Shui reclamation for high-tech industries and the above proposed Northern Innovation and Technology Belt. A linkage could be further planned to connect the Data Technology Hub with the CBD2 in Kowloon East supporting the development of I&T industry and the start-ups.

**Financial Technology Hub**

5.6.18 There is a potential of establishing a Financial Technology Hub in CBD3 in the ELM, which aims at developing into a new and smart business hub. With the emergence of the financial technology (FinTech), research centres and relevant R&D facilities could be introduced to apply the most advanced technologies in the field of automate insurance, trading, and risk management. The establishment of R&D facilities could facilitate the sector by fostering innovation and solution in addressing major issues such as data and information safety and privacy.

5.6.19 In addition, financial technology companies includes start-ups, small enterprises and large-scale financial businesses. Apart from the traditional office spaces, the CBD3 could provide alternatives of lower-cost such as co-working spaces to promote the development of new industry and start-ups. These flexible office spaces are favourable for the setup of the new I&T companies as well.

**Supporting Policy**

5.6.20 It is expected that the detailed spatial plan illustrated above would effectively supplement the existing spatial planning and together provide sufficient, suitable and affordable ERLUs for I&T to meet the needs brought by the bridge and to further release its development potential in the
long-term. To better and quicker realise the planned spatial solution for I&T, necessary supporting policies may need to be implemented and below includes some potential recommendations.

**Supporting Policy 1: Improving coordination among government departments**

5.6.21 Relevant government departments, including the Innovation and Technology Bureau, the Planning Department and the Civil Engineering and Development Department should work closely to take forward the planning initiatives. The involved departments may strengthen their collaboration by agreeing on a consistent goal and schedule and increasing transparency of the working progress. Streamlining of relevant procedure may also be applied if necessary.

**Supporting Policy 2: Strengthen science and technology collaboration with neighbouring cities**

5.6.22 Pooling together Mainland’s advantages in human resources and manufacturing base and Hong Kong’s strengths in fundamental research and international commercial platform through closer cooperation would significantly help release the development potential of the planned ERLUs. Policies such as longer operating hours of boundary control points, a more convenient clearance procedure, more quotas for cross-boundary vehicle permits and lower toll for cross-boundary travel may be beneficial for strengthening the collaboration.

**Supporting Policy 3: Nurturing and attracting technology talents**

5.6.23 Talents are vital for increasing the competitiveness of I&T that both nurturing local talents and attracting worldwide talents should be underlined. Education and training facilities should be considered in proximity with the planned I&T ERLUs. Curricula on science, technology, engineering and mathematics should be enhanced in the existing primary schools, secondary schools and universities to cultivate a favourable culture for innovation. To attract worldwide technology talents to come to Hong Kong, the overall livability of the city should be enhanced, for example, through better of public spaces. Relevant infrastructure such as affordable accommodation and international schools should be considered to fulfill various needs of the talents. Indeed, the government has begun to take forward the initiative by supporting the building of InnoCell to provide residential units, coworking spaces and other ancillary facilities to cater the needs of HKSP.

**Supporting Policy 4: Continuing to provide financial support and incentives**

5.6.24 At present, the government has established several fundings and incentives to boost I&T development and support the innovation start-ups. These include the Innovation and Technology Fund, Innovation and Technology for Better Living, and the incubation programmes set up by the Hong Kong Science and Technology Parks Corporation (HKSTP). In addition, financial incentives may be provided to attract high-tech and innovative enterprises to set up their offices in the planned I&T land uses.
Supporting Policy 5: Enhancing channels for commercialising R&D results

5.6.25 Transferring technology from R&D to production relies more than geographical proximity. Financial incentives may be proposed to encourage a stronger partnership between the research institutions and the business enterprises, for example, the Research and Development Cash Rebate Scheme already set up by the government. In addition, there is also great potential of utilizing the city’s mature experience in MICE and business professional services (such as brand building, marketing, operation and management) to facilitate the commercialisation of R&D results. Relevant industrial and service support organizations may be set up. On the other hand, events such as I&T-related expo may also be beneficial for connecting R&D and the market.

Implementation Timeframe

5.6.26 The following session attempts to provide a implementation timeframe for the suggested spatial solutions, which may be helpful in managing the realisation of the suggested spatial solutions in a more holistic manner. Key considerations include their existing land conditions, tentative implementation programmes of associated projects, feasibility and resource involved, projected outcomes etc.

5.6.27 The two proposed spatial solutions, namely the Financial Technology Hub located in the future ELM and the Northern Innovation and Technology Belt connecting the San Tin/Lok Ma Chau Development Node and New Territories North New Town should be given higher priority, taking account of their considerable future development scope, significant potential of synergizing with the key industries in the area and great opportunities of enhancing regional cooperation due to their strategic location. To be more specific, according to the HK2030+, it is estimated that the strategic growth area ELM would provide approximately 1,000 hectares of development area with around 400-700 thousand population and around 200 thousand employment opportunities. As for the other strategic growth area New Territories North (including the New Territories North New Town and the San Tin/Lok Ma Chau Development Node), it is estimated that approximately 720 hectares of development area with around 255-350 thousand population and around 215 thousand employment opportunities.

5.6.28 However, it is forecast that the Financial Technology Hub may be a long-term strategy since the development of ELM needs to start from scratch. The solution will require sizeable reclamation and provision of commercial, residential and other supporting infrastructure, which may involve various technical challenges and relatively high costs. On the other hand, the Northern Innovation and Technology Belt may be achieved in a shorter period as the government has begun to take forward the planning initiatives in the the adjacent areas such as LT/HYW BCP, KTN NDA and the Lok Ma Chau Loop.
The spatial solution of Logistics Park with R&D Centre may be realised in a similar timeframe with the Northern Innovation and Technology Belt, with reference to the development schedule of the HSK NDA and KTN NDAs. The Data Technology Hub may be achieved in short term given that supporting infrastructure has been established within or in proximity to the planned area, and the planned Data Technology Hub in Tseung Kwan O is expected to be completed in 2020.

5.7 Strategic Transport Network

Existing STN and STN under construction

5.7.1 This sections outlines the existing Strategic Transport Network (STN) and STN under construction or under the consideration of the Government. The STN could be further classified into three categories, including Trans-boundary Infrastructure and Local Transport Infrastructure, the following lists both road and rail linkages under construction and under Government’s consideration.

Figure 5.7 Locations of Roads and Rail Links under construction/ planning or Government’s consideration

Table 5.1 Roads and Rail Links under construction/ planning or Government’s consideration
<table>
<thead>
<tr>
<th>Road</th>
<th>Under Construction</th>
<th>Under Planning or Government’s Consideration</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1) Hong Kong Zhuhai Macao Bridge</td>
<td>(3) Tuen Mun Bypass</td>
</tr>
<tr>
<td></td>
<td>(2) Tuen Mun - Chek Lap Kok Link</td>
<td>(4) Route 11</td>
</tr>
<tr>
<td></td>
<td>(5) Liantang/ Heung Yuen Wai Boundary Control Point, Lung Shan Tunnel and associated highway</td>
<td>(7) Cross Bay Link at Tseung Kwan O</td>
</tr>
<tr>
<td></td>
<td>(6) Central Kowloon Route</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(8) Central and Wanchai Bypass</td>
<td></td>
</tr>
<tr>
<td>Rail Links</td>
<td>(10) Express Rail Link</td>
<td>(9) Tung Chung Line Extension</td>
</tr>
<tr>
<td></td>
<td>(12) Shatin Central Link</td>
<td>(11) Northern Link</td>
</tr>
</tbody>
</table>

**Transboundary Infrastructure**

**Lantau**

5.7.2 To increase the connectivity between Hong Kong and cities on the west of Pearl River Delta, HZMB is constructed to connect Hong Kong with Macao and Zhuhai, which is targeted to be completed in late 2018. The project had induced demand for a number of infrastructure, including (2) Tuen Mun - Chek Lap Kok Link, Topside Development on Hong Kong Boundary Crossing Facilities. HZMB reduces the travelling to the West of PRD from two hours to 45 minutes (CBRE, 2015).

**Rest of Hong Kong**

5.7.3 (5) Liantang/ Heung Yuen Wai Boundary Control Point, Lung Shan Tunnel and associated highway and (10) Express Rail Link are constructed to improve connectivity with Shenzhen. Lung Shan Tunnel increase the accessibility of Ping Che and Heung Yuen Wai, which provide another road based linkages to Shenzhen besides the existing boundary control point. The link also increase the connectivity to the area of future New Territories North (NTN) development.

**Local Transport Infrastructure**

**Lantau**

5.7.4 Apart from the transboundary infrastructure, local transport linkages are constructed, planned or under Government’s consideration. Local transport linkages are proposed to connect the HZMB and HKBCF for the sake of more connectivity to the developed area. (2) Tuen Mun Chek Lap Kok Link (TM - CLKL) is being constructed to provide more travelling options to Lantau Island apart from Tsing Ma Bridge and reduce the time and distance from New Territories to Lantau Island. (3) Tuen Mun Bypass is being planned and reviewed to provide a more direct road link to connect Shenzhen Western Highway.
5.7.5 Besides road connection, the (9) existing rail link would be extended and constructed with two more stations to echo with the development of Tung Chung New Town Extension (TCNTE). Existing Tung Chung line would be extended to Tung Chung West to connect the area of Tung Chung West and there is a new station near Tung Chung East.

**Rest of Hong Kong**

5.7.6 With the anticipation of the construction of Yuen Long New Development Area and Hung Shui Kiu New Development Area, (4) route 11 is now being reviewed its feasibility with an aim to provide alternatives from the New Territories to Lantau. With reference to HK2030+, the link could possibly be extended to East Lantau Metropolis.

5.7.7 (6) Central Kowloon Route and (7) Cross Bay Link at Tseung Kwan O are under planning for enhancing the east-west flow of traffic. In particular, these roads will connect the future CBD in Kai Tak and Kowloon East. (8) Central Wanchai Bypass is under constructed to strengthen the linkages between east and west of Hong Kong Island by providing options and avoiding congestion. Two rail links, namely (11) Northern Link and (12) Shatin Central Link were under construction and planning respectively. Shatin Central Link, together with the existing lines, will form “North South Corridor” and “East West Corridor” for better connection. Northern Link intends to connect West Rail Line and Lok Ma Chau Spur Line of East Line. This link will increase the connectivity from the Lok Ma Chau Control Point and Lo Wu Control Point to west of New Territories. Besides, the link increases the accessibility of Kwu Tung North New Development Area.

**Key Actions**

5.7.8 With consideration of the alignment proposed in Hong Kong 2030+ and sectoral clusters, our team proposes four road transport and four railway transport corridors to offer transit-free linkage and multiple choices of transport between different types of ERLU, with the aim of better untapping the potential from the bridgehead economy brought by HZMB. The possible impacts to the stakeholders concerned will also be discussed.

5.7.9 Regarding the road transport network, four strategic corridors are designated as following: The Northern Corridor (R1) will better connect I&T clusters in Hong Kong, such as Lok Ma Chau Loop and Liantang-Heung Yuen Wai area, to create synergy effect with Shenzhen’s counterparts. In addition, it constructs a direct linkage between boundary crossing facilities in the north to attracts greater interaction of human capital from Hong Kong and Shenzhen. HZMB traffic may use the Tuen Mun Bypass to access this transport corridor and reach the I&T clusters.

5.7.10 The CBD 1-2-3 Corridor (R2) aims to increase connectivity between the three CBD areas, while it helps to alleviate the existing congestion problem. This corridor is constituted by Cross Lantau Corridor, ELM-Hai Ling Chau and Mui Wo Crossing and Hong Kong Island - ELM Corridor to allow
HZMB users to arrive at CBDs faster. The Fourth Harbour Crossing Tunnel is proposed to link Kai Tak Development Area and Kwun Tong Bypass with East Hong Kong Island to relieve the pressure of the Hung Hom Harbour Crossing Tunnel. Moreover, a tourism corridor is also formed as the ecotourism resource connects with the cultural tourism resource in the urban core area directly that it can stimulate multi-day tourism.

5.7.11 The Lung Kwu Tan Corridor (R3) is proposed between Yuen Long South and Lung Kwu Tan to support the future development of new modern logistics base in these areas and the western part of Hong Kong. Incoming traffic via HZMB can use the Tuen Mun Chek Lap Kok link to reach major intermodal ports and supporting facilities like cold-chain storage, which creates incentive for cargo delivery between Hong Kong and the west PRD region.

5.7.12 The improvements on the North-South transportation corridor (R4), i.e. the Tolo Harbour, is recommended for a better linkage between the existing (e.g. Science Park) and new (e.g. ELM3, Liang-tang area) I&T industrial clusters. Besides, it connects the CBD areas and container port in Hong Kong with the south-eastern part of Shenzhen to create more convenient transhipment.

Figure 5.8 Suggested and existing road transport corridors
5.7.13 Based on the reviewed policy, our team foresees that there is a tendency for job to locate in the three CBDs while the job-housing imbalance problem may create traffic congestion issue at peak hour, if transport infrastructure is not sufficient. High-capacity public transport like railway might be considered to ease the passenger flow between the new development areas with existing developed areas. Our team proposes the following four railway linkages:

5.7.14 The Northern Link (T1) between the Kwu Tung station on East Rail Line - Lok Ma Chau Spur Line and the Kam Sheung Road Station on West Rail Line, proposed in the “Railway Development Strategy 2014”, is suggested to extend its service area to the new urban areas and I&T hubs, such as the NENT and Lok Ma Chau Loop, to flourish the I&T development in the northern part of Hong Kong. Furthermore, the existing and new boundary crossing facilities (i.e. Liantang-Heung Yuen Wai BCF and Lok Ma Chau BCF) are included in this new line to foster the intimate exchange of human capital from Hong Kong and Shenzhen.

5.7.15 The connection between ELM, West Kowloon and Shatin (T2) will link the creative cluster and the high speed railway station in West Kowloon District and I&T clusters near Science Park to create an attractive corridor for the talent. It can avoid further congestion problem in CBD 1 and 2 possibly induced by commuters from the eastern part of the New Territories, such as Sha Tin and Ma On Shan, to the new development sites in western part of Hong Kong.

5.7.16 The Southern Link (T3) will connect the three CBDs where the new job may locate. It can also shorten the travelling time between the HZMB and the urban core areas. Similar to the CBD 1-2-3 Corridor proposed in the road transport network, the Southern Link can provide alternative transport options for tourists and encourage them to stay overnight.

5.7.17 The Western link (T4) will connect the north-western part of New Territories with HZMB BCF, HKIA and ELM3 for the labour working in modern logistics industry to commute conveniently. Coupling with the Southern Link (T3), it allows better coordination of MICE tourism resources distributed in Lantau, Wan Chai and East Kowloon. Besides, it formulates a linkage between I&T developments in the north with strategic ports such as HZMB BCF and HKIA to enable the sector adapting to changes.
Figure 5.9 Suggested and Existing Rail Transport Corridors
Section 6: Conclusion

6.1 Overview of this Report

6.1.1 The main objective is to update the vision for ERLU and STN based on the identified opportunities and challenges after the opening of HZMB. Spatial strategies and supporting policies are suggested to strengthen Hong Kong’s pillar industries and equip Hong Kong to further develop the emerging industries. The territorial conceptual plan is synthesized based on the consolidated findings from policy reviews, stakeholders’ consultation process and international case study. Through the process of review, policy gaps and challenges are identified, which lies the foundation for synthesizing the spatial plans and supporting policies for further fostering the growth of key sectors identified.

6.1.2 To foster the growth of the key industries, vision, guiding principles, corresponding spatial and supporting policies are suggested for key industries in Section 4 and 5. The proposed actions concur to HK2030+, which are suggested to supplement the conceptual spatial framework of HK2030+. Taking the factor of resources constraints, the implementation schedule for each industry is proposed respectively.

6.2 Key Notes of Spatial Solutions

6.2.1 With regard to the rising regional competition and cooperation, there are opportunities and challenges for four key industries of Hong Kong based on the consolidated findings from policy review and stakeholders’ interviews. The following summarise the strategic direction and key spatial solutions for the four industries:

Financial and Business Professional Services Sector

6.2.2 Strategic direction:

“To extend and diversify central business core of Hong Kong for capitalising financial and business professional services regional collaboration opportunities brought by the bridge.”

6.2.3 Key spatial solutions:

(i) CBD1 at the centre of Hong Kong to act as a business core of high-value-added financial and business professional services sector

(ii) CBD2 at East Kowloon to serve as alternative to CBD1 and business hub of supporting offices

(iii) CBD3 at East Lantau Island to become a new and smart business hub tied closely to the Airport and HZMB

Logistics Sector
6.2.4 Strategic direction:
“To upgrade the logistics industries in face of rising regional competition and equip logistics industry for high value added logistics with the provision of land and supporting policies.”

6.2.5 Key spatial solutions:
(i) Intermodal Logistics Hub at Tuen Mun West to capitalise the opportunities brought by the bridge;
(ii) Air Transhipment Zone at HKBCF to further develop high value-added goods for transhipment;
(iii) Logistics Park Zone at Tuen Mun West to serve as warehouse, freight forwarder and depot for the Intermodal Logistics Hubs and Air Transhipment Zone;
(iv) Upgrade of the KTCT should be expanded to the South and West of Tsing Yi; and
(v) Logistics Research and Development Clusters at San Tin/ Lok ma Chau to improve the overall efficiency of logistics industry.

Tourism Sector
6.2.6 Strategic direction:
“To create a new tourism cluster and diversify tourism experience through leveraging the locational advantages, cultural and natural assets of Lantau.”

6.2.7 Key spatial solutions:
(i) Aero-gate at NCD, HKBCF Island, Tung Chung East and Siu Ho Wan to capture opportunity brought by coming infrastructure to enhance the high-valued tourism;
(ii) Northeast Lantau Leisure Tourism Hub at northeastern tip of Lantau to explore leisure tourism potential and to attract more overnight travellers;
(ii) Southeast Lantau Tourism Node at Mui Wo to integrate and synergize its development potential with rich natural and cultural resources;
(iv) Southern Lantau Coastal Recreational & Ecological Belt along the natural coasts of South Lantau to offer a diversified tourist experience with low-impact leisure and eco-tourism activities;
(v) Village Culture Tourism Hub at Tai O and Yi O to provide as alternatives holiday accommodations to the more upscale and business hotels; and
(vi) Buddhist Spiritual Tourism Hub at the existing Tian Tan Buddha, Ngong Ping 360, Ngong Ping Piazza and the nearby Luk Wu, Keung Shan and Infinity Pool at Ling Wui Shan to capture the emerging niche of spiritually motivated visitors.

Innovation and Technology Sector
6.2.8 Strategic direction:
“To leverage knowledge spillovers and agglomeration of the I&T industry through creation of
innovation cluster and establishment of horizontal linkages among industry and research sector.”

6.2.9 Key spatial solutions:
(i) **Northern Innovation and Technology Belt** at New Territories North is designated for the mix of office and R&D uses, combing the innovation and high-tech industry and CCI;
(ii) **Logistics Park with R&D Centre** at HSK NDA to produce innovation and apply advanced technologies to enhance the handling capacity and efficiency of the logistics industry;
(iii) **Data Technology Hub** at Tseung Kwan O Industrial Estate to showcase smart and green technologies employed; and
(iv) **Financial Technology Hub** at CBD3 in the ELM to facilitate the financial and business professional services sector by fostering innovative solutions.

6.3 Conclusion
6.3.1 To encourage the further development of the selected industries, it is important to upgrade and strengthen the existing comparative advantages. The emerging industries are encouraged to grow to diversify Hong Kong’s economy in the light of opportunities brought by the opening of HZMB. Taking the opportunities and challenges that the opening of HZMB may potentially bring, a set of spatial policies and supporting policies are suggested to seize the opportunities and continue to thrive in the future. However, both spatial policies and supporting policies would require collaboration between the Government, public and private parties. Resources should be allocated in a timely manner to ensure the success of policy execution. The preliminary proposed policies suggested in this final report would require further assessment and consultation before actual execution.
Section 7: Reference

Airport Authority (AA), (2011). Hong Kong International Airport Master Plan 2030. [online] Available at: https://www.threerunwaysystem.com/media/1174/mp2030_full_en.pdf [Last access: 7 March, 2018].


Baja California Office of Economic Development. Available at: http://www.bajacalifornia.gob.mx/sedeco/ [Last accessed 17 April, 2018].

Bettina Petersohn and Nicola McEwen. (2014). Insights from the border between Sweden and Denmark, Centre on Constitutional Change.


Census & Statistics Department (2017a), *The Four Key Industries and Other Selected Industries in the Hong Kong Economy*. [online] Available at: https://www.censtatd.gov.hk/hkstat/sub/sp80.jsp?productCode=FA100099 [Last access: 1 April, 2018].

Census & Statistics Department (2017b). *Statistical Tables, Charts & Datasets (Table 188 – E105)*. [online] Available at: https://www.censtatd.gov.hk/hkstat/sub/sp80.jsp [Last access: 1 April, 2018].


Democratic Alliance for the Betterment and Progress of Hong Kong (DAB), (2017). Proposal for Hong Kong Planning and Development in the Context of the Greater Bay Area”, Hong Kong: Hong Kong.


Fang, Z., (2018). Yue gang ao da wan qu he zuo ce lue yu xiang gang wei lai [The cooperation of Greater Bay Area and the future of Hong Kong]. Hong Kong: CITYU HK Press.


Guangdong-Hong-Kong-Macau-Bay-Area-and-the-Role-of-Hong-Kong [Last access: Mar 12, 2018]


Our Hong Kong Foundation (2017). The Ecosystem of Innovation and Technology in Hong Kong. [online] Available at: https://www.ourhkfoundation.org.hk/sites/default/files/media/pdf/ScTech_full_report_eng.pdf [Last access: 25 March, 2018].


PricewaterhouseCoopers (PwC), (2017). New Opportunities for the Guangdong-Hong Kong-Macau Greater Bay Area. Hong Kong: Hong Kong.


SANDAG Service Bureau (2014). California-Baja California Border Master Plan Update. USA.


