Consolidated Economic Development Strategy for Lantau and Preliminary Market Positioning Study for Commercial Land Uses in Major Developments of Lantau

Consultancy Report

January 2017
Consolidated Economic Development Strategy for Lantau and Preliminary Market Positioning Study for Commercial Land Uses in Major Developments of Lantau

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A report submitted by ICF Consulting Services Hong Kong Limited
in association with
Urbis Limited
Knight Frank Petty Limited

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<td>Job No.</td>
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Abbreviations

AWE              AsiaWorld-Expo
BN                Billion(s)
CBD               Central Business District
ELM               East Lantau Metropolis
GFA               Gross Floor Area
HK                Hong Kong
HKBCF             Hong Kong Boundary Crossing Facilities
HKCEC             Hong Kong Convention and Exhibition Centre
HKIA              Hong Kong International Airport
HZMB              Hong Kong - Zhuhai - Macao Bridge
IFA               Internal Floor Area
LanDAC            The Lantau Development Advisory Committee
MDs               Major Development Areas
MICE              Meetings, Incentive travels, Conventions & Exhibitions
MN                Million(s)
NCD               North Commercial District (at Hong Kong International Airport)
NLH               North Lantau Highway
NWNT              North Western New Territories
OU(B) zone        Other Specified Uses (Business) zone
PRD               Pearl River Delta
RDE               Retail, Dining and Entertainment
TC                Tung Chung
TCNTE             Tung Chung New Town Extension
TM-CLKL           Tuen Mun – Chek Lap Kok Link
3RS               Three-Runway System
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1. Introduction

1.1. Objectives

In February 2015, the Planning Department of the Hong Kong SAR Government commissioned the “Provision of Services for a Consolidated Economic Development Strategy for Lantau and Preliminary Market Positioning Study for Commercial Land Uses in Major Development Areas of Lantau” (“the Service” hereafter). ICF Consulting Services Hong Kong Limited (ICF), the Main Contractor, was commissioned to provide this Service with the support of two sub-contractors, Urbis Limited and Knight Frank Petty Limited, collectively referred as “the Contracting Team”.

The objectives of the Service are twofold: first is to map out a consolidated economic development strategy for Lantau to optimise the use of valuable land; second is to determine the preliminary market positioning of the four Major Development Areas (MDs) so as to bring about complementary and synergy effects among proposed commercial land uses\(^1\). Subject to further studies, the Contracting Team has also suggested the development scopes of the possible land uses in individual MDs. Notwithstanding that, the overall economic development strategy should not be construed as the only possible land use proposed for the MDs.

1.2. Background

Lantau Island plays a pivotal role in ensuring sustainable economic growth of Hong Kong. Its strategic location and the presence of the HKIA provide good connectivity, which will be enhanced upon completion of Hong Kong - Zhuhai - Macao Bridge (HZMB) and the HKIA Three-Runway System (3RS). In addition, it has the potential of supplying land and employment opportunities.

In 2014, the Government established the LanDAC to advise on the development of Lantau. The planning vision for Lantau agreed by LanDAC is:

“Balancing and enhancing development and conservation, with a view to developing Lantau into a smart and low-carbon community for living, work, business, leisure and study.”

Four MDs, namely Topside Development at Hong Kong Boundary Crossing Facilities (HKBCF) Island of HZMB, TCNTE, Siu Ho Wan Development and Sunny Bay Reclamation have been identified with potential land supply for commercial uses across the territory (see Figure 1).

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\(^1\) “Commercial Land” refers to Office, Retail, Dining and Entertainment (RDE), Logistics, Meetings, Incentive Travels, Conventions and Exhibitions (MICE) and Hotels in this report.
Topside Development at Hong Kong Boundary Crossing Facilities Island of HZMB (HKBCF Topside Development)

As part of the HZMB, the HKBCF will be located on a 150ha artificial island\(^2\) at the eastern end of HKIA. The HKBCF Topside Development will have the potential to accommodate about 500,000m\(^2\) for commercial development and the development of other economic activities. The land use will be optimised and the feasibility of the proposed HKBCF Topside Development will be ascertained under the “Planning, Engineering and Architectural Study for Topside Development at Hong Kong Boundary Crossing Facilities Island of Hong Kong - Zhuhai - Macao Bridge — Feasibility Study” in progress.

Tung Chung New Town Extension (TCNTE)

According to the Recommended Outline Development Plan (RODP) proposed under the TCNTE Study, involving Tung Chung East (TCE) and Tung Chung West (TCW) next to the existing Tung Chung Town Centre (TCTC), approximately 120ha of land will be reclaimed in TCE for strategic housing and economic developments, while TCW is planned for low-density development in order to preserve its rural character.

\(^2\) The area includes 20ha of land for the TM-CLKL
Siu Ho Wan Development

This area comprises a possible reclamation of about 80ha, the existing Siu Ho Wan Depot and landside development. It lies adjacent to the North Lantau Highway (NLH), near the landing of the Tuen Mun – Chek Lap Kok Link (TM-CLKL). The planning feasibility and extent of reclamation and landside development is being reviewed under the “Technical Study on Developments at Siu Ho Wan and the Associated Transport Infrastructures – Feasibility Study” commissioned by Civil Engineering and Development Department.

Sunny Bay Reclamation

Sunny Bay is a proposed reclamation of about 80ha alongside the NLH, envisioned as a tourism, recreation and entertainment node of regional significance, focusing on recreational or tourism-related facilities. A planning and engineering study for Sunny Bay Reclamation is expected to be conducted in the future.

In addition to four MDs, there are other important infrastructures and developments in the near future are pivotal to the long term development of Lantau and the territory:

- **HZMB**: A strategic link which will meet the demand of passenger and freight land transport between Hong Kong and Zhuhai / Macao, establish a new land transport link between the east and west banks of the Pearl River, and enhance the economic and sustainable development of the three places.

- **TM-CLKL**: This link will provide the most direct route between the developments in North Lantau (including HKIA, HKBCF Island and Tung Chung) and developments in North West New Territories (NWNT), and significantly reduce the travelling distance and time for people and goods between the areas.

- **North Commercial District (NCD)**: The NCD has an area of 25ha, and is located in the north-eastern part of the Airport Island. With a vision to create a unique new destination for Hong Kong and further strengthen the HKIA as an international aviation hub, AAHK has planned the NCD for the provision of major RDE uses, hotels and offices in two or more phases. Phase 1 will comprise a unique destination of 195,000m² total area for providing RDE facilities and a hotel with 450 to 750 rooms.

- **HKIA Three-Runway System (3RS)**: The 3RS project comprises reclamation of some 650 hectares of land north of the existing airport island, the construction of a third runway, a Third Runway Passenger Building, a new automated people mover system, a new baggage handling system, as well as modification and expansion of the existing Terminal 2 into a full service processing terminal.

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3 The extent of reclamation at Siu Ho Wan is severely constrained by the Brothers Marine Park located to its north and is therefore likely to be substantially reduced.

2. Regional Context of Hong Kong and Potential for Economic Development in Lantau

2.1. Overview of the Region

Hong Kong lies within the Greater PRD region, an area consisting of nine cities within the Guangdong Province (Guangzhou, Shenzhen, Zhuhai, Foshan, Huizhou, Dongguan, Zhongshan, Jiangmen and Zhaoqing) as well as Hong Kong and Macao Special Administrative Regions (SARs) (Figure 2).

Figure 2 Major Cities in the Greater PRD

5 Source: Hong Kong Trade Development Council
2.2. Regional Economic Context

The PRD region has become one of the world’s most important manufacturing and industrial regions over the last 30 years, and the area has played a leading role in China’s economic reform over this time period. Since 2000, the Guangdong Government has pushed forward policies to accelerate the economic restructuring of PRD. Since then, PRD has undergone significant shift from traditional light manufacturing-based to high-technology manufacturing activities. The output of high technology products had increased from 17.2% in 2000 to nearly 35% in 2011. The Guangdong Government has also emphasized the importance of tertiary sector, particularly financial services, in the long term economic transformation of the PRD.

2.3. Regional Planning Context

The overarching regional planning context reflects ongoing integration of the cities in the PRD region in terms of spatial planning and infrastructure development. A balanced approach for ensuring the sustainability development has been adopted in the PRD region. The improved connectivity within the PRD and other parts of the Guangdong Province will facilitate movement of goods and people within the PRD. And the streamlining cross-boundary links between the PRD and Hong Kong and Macao with a view to reduce traveling time between the two SARs and the different parts of the PRD. For example, the HZMB (to be completed), will connect Hong Kong with the western PRD (Figure 3). Upon completion, the travelling time between Hong Kong and Zhuhai will be reduced from 4 hours to about 45 minute driving time.

Figure 3 Connectivity of HZMB to Major Cities at Pearl River West

Source: HZMB Project Website [http://www.hzmb.hk/eng/img/overview/about_overview06_p02_d.jpg]
2.4. Hong Kong’s Economic Ties with the Mainland

Economic ties between Hong Kong and Mainland have grown significantly and are expected to continue. A dedicated chapter for Hong Kong and Macao (Dedicated Chapter) in the "Outline of the 13th Five-Year Plan for the National Economic and Social Development of the People’s Republic of China" has expressed support for Hong Kong in leveraging the unique advantages and functions in the country’s economic development and opening up to other countries.7 Moreover, the Belt and Road Initiative (BRI) will open a new frontier of closer economic cooperation between China and Europe, Asia and Africa in areas such as commodity trade, natural resources, finance, infrastructure and technology.

In addition, leveraging the unique role of Hong Kong as a “super connector” between the Mainland and the world, the establishment of the Asia Infrastructure Investment Bank (AIIB) could potentially bring business opportunities to Hong Kong in financial services and investment facilitation.

2.5. Business Opportunities for Specified Industries and Sectors in Lantau

With its locational advantages, along with the recent developments of the PRD, there are ample opportunities that Lantau can capture, especially for the following industries and sectors:

- **Transport and Logistics**: With the HKIA, both 3RS and the HZMB under construction, Lantau could potentially be a key location for multi-modal transport or export/import businesses, such as third party logistics, agents and freight forwarding; Lantau can capitalise on the growing affluence in the PRD and Asia Pacific, and the proliferation of e-commerce and online shopping, to provide modern logistics services.

- **Tourism**: Lantau possesses rich assets for recreation and tourism. With the further development of Hong Kong Disneyland Resort and provision of potential diversified tourist facilities and attractions, Lantau could be shaped as a kaleidoscopic recreation and tourism destination in the medium to long term.

- **Hotel**: With the expansion of HKIA into a 3RS and the potential recreational and tourism developments, demand for hotels is expected to grow. The current provision of hotel may not be sufficient in the long run and more hotels would be needed.

- **Conventions and Exhibitions**: Lantau could generate a cosmopolitan vibe that attracts international conventions and exhibitions. As AWE would be better connected to the Mainland with the completion of HZMB, it would be well-positioned to attract patrons from the western PRD and become more attractive as a MICE destination.

- **Certification**: Lantau, given the enhanced connectivity to the PRD region, may have an edge in attracting certification service providers that serve the PRD region; this is dependent on the availability of facilities (e.g. laboratories) that can accommodate testing needs.

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• **Professional services**: Hong Kong is very advanced in trade and investment facilitations, legal and financial advisory. Local service providers could embrace the business opportunities arising from the BRI and AIIB.

• **Educational / Training Services for pillar industries**: Seizing the locational advantages and proximity to the existing and planned strategic infrastructures (including HKIA and HZMB), Lantau has potential to provide educational / training services and facilities in particular to support the development of pillar industries, such as tourism and trade and logistics industries, which are important economic activities for Lantau.

### 2.6. Major Development Constraints in Lantau

Nevertheless, there are also **constraints** on economic development in Lantau that should be considered:

• **Socio-economic Constraints**: There may be a mismatch between local skill sets / job preferences and local employment opportunities; limitation on connectivity to the main urban area and intra-Lantau transportation in terms of capacity and accessibility; and the need of the required supporting infrastructure and services for the potential developments. Moreover, there are various cultural heritage sites located on Lantau, whilst these heritages enrich the cultural aspect, they might also be development constraints.

• **Physical Constraints**: The topography of Lantau is mostly hilly with limited flat land. The terrain is generally not suitable for large scale development, and flat land that is ready for development is limited; besides, the building height along many parts of North Lantau is subject to the Airport Height Restriction (AHR). These have implications on the scale and density of the developments.

• **Ecological and Environmental Constraints**: Notwithstanding the above, the presence of country parks, major conservation zones and natural landscape have implications on the extent, scale and locations of developments; noise impacts along or near flight paths, and the air and noise pollutions caused by the railway and major trunk roads, as well as some potentially hazardous installations in Lantau such as water treatment works would limit the development potential of the surrounding areas.

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8 A majority (77%) of the working population in Lantau commute to work outside the Islands District, and less than 10% (about 3,600) of the local working population work locally in Tung Chung or on the Airport Island; based on 2011 Census
3. Review of Demand and Supply of Commercial Land Uses and Implications for Lantau

Demand and supply of commercial land uses in the short, medium and long term (up to 2023, 2033 and 2041 respectively) are estimated in order to identify territory-wide need for different land uses. However, due to the limitations, the demand and supply analysis should be regarded as ballpark estimates instead of precise projections and should be used only for indicating the broad direction of current trends. Hence, the supply and demand estimates for any individual facility should be assessed on a case-by-case basis, paying attention to the market positioning of the facility and its target catchment. It should also be noted when proposing new developments, land use compatibility and impacts including environmental and traffic impacts should be carefully considered.

The following table summarises the findings and implications for Lantau. In short, the estimated future supply gap is largest in modern logistics, followed by hotel, MICE and RDE land uses. While demand and supply of Grade A Offices would be in balance, the analysis forecasts a surplus of General Business Use office space.

Table 1 Demand and Supply of Commercial Land Uses and Implications for Lantau

<table>
<thead>
<tr>
<th>Commercial Land Use</th>
<th>Territory-wide Demand and Supply Analysis</th>
<th>Implications for Lantau</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade A Offices (Both Grade A CBD and Grade A non-CBD Offices)</td>
<td><img src="image" alt="Graph" /></td>
<td>The additional Grade A office (including both CBD and non-CBD Grade A offices) has comparatively minor development potential in the long run, provided that the development projects under planning (i.e. commercial / business uses suggested in TCNTE, NCD and the HKBCF Topside Development) are delivered timely to support the industry;</td>
</tr>
</tbody>
</table>

The projected supply of Grade A offices (excluding the potential supply from ELM), will be able to meet the overall demand in the short, medium and long term.

Remarks: Additional supply from the implementation of CBD2 is unlikely to meet the increasing demand for CBD Grade A offices. If the traditional CBDs are not expanded further (e.g. by implementing the proposed ELM), part of the demand for CBD Grade A office might have to be met by Grade A office in non-CBD areas given the likely interchangeable nature of the CBD and non-CBD Grade A Offices. It is considered that steady supply of CBD Grade A Office should be provided.
### Commercial Land Use

<table>
<thead>
<tr>
<th>Territory-wide Demand and Supply Analysis</th>
<th>Implications for Lantau</th>
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</thead>
<tbody>
<tr>
<td><img src="image" alt="Graph" /></td>
<td>Development potential for the additional General Business Use in the long run is likely to be influenced by the redevelopment projects.</td>
</tr>
</tbody>
</table>

The market is currently in equilibrium. Having said that, following the trend of redeveloping industrial buildings for General Business use, a surplus of General Business is likely to appear in the long term.

**Remarks:** It should be noted that the redevelopment of industrial buildings is subject to market conditions. If the demand for industrial buildings is high and the demand for General Business use is low, the rate of redeveloping industrial buildings to General Business is likely to slow down.

<table>
<thead>
<tr>
<th>Modern Logistics&lt;sup&gt;9&lt;/sup&gt;</th>
<th>Given the strategic positioning of Lantau for the logistics industry (i.e. proximity to the HKIA and the supportive future transport infrastructures), there is development potential for modern logistics.</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Graph" /></td>
<td>The current shortfall in supply of modern logistics space is expected to continue to the long term.</td>
</tr>
</tbody>
</table>

**Remarks:** Forecasting demand for aggregate categories such as industrial use in the economy with general characteristics is generally used as reference. Having said that, indicative estimates are provided under this study for reference only. It should be noted that specific sub-categories such as modern logistics within the industrial use are generally too small and volatile to produce required forecasting data for medium to long term demand forecasts, hence, only short term forecasts are provided for reference.

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<sup>9</sup> Not assessed specifically but subsumed in the larger segment of “Special Industries”
Commercial Land Use

<table>
<thead>
<tr>
<th>Territory-wide Demand and Supply Analysis</th>
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<tbody>
<tr>
<td><img src="image" alt="Graph: Hotel Room Demand and Supply Analysis" /></td>
</tr>
</tbody>
</table>

### Implications for Lantau

Lantau is enriched with cultural and natural resources. Different types of hotel facilities could furnish and enhance Lantau’s position as a tourist destination, and could create synergy with the existing tourism facilities and encourage visitors to stay or even stay longer in Lantau.

Based on current forecast in the base scenario, there may be a considerable shortfall in hotel rooms in the long term. It is likely due to the fact that any new hotel project with completion date beyond 2033 is unlikely to have emerged by now and taken into consideration by this report.

**Remarks:** Factors such as the current economic downturn, the depreciation of the RMB, and particular incidents involving mainland tourists in Hong Kong, would have negative effects on the number of overnight visitors. That being said, observed past travel patterns will also change due to easier connection between Western PRD and Hong Kong by HZMB. The Contracting Team assumes the positive and negative factors are of similar size and will balance out in the future. The linear trend model is hence deemed appropriate for strategic overview.

### RDE

Based on projections, a small supply gap is expected to emerge in the medium and long term.

**Remarks:** Considering RDE is a market-driven use, the demand of RDE is very volatile and unpredictable. Having said that, demand forecast has been conducted by the Contracting Team for identifying the broad trend under this study only.

Development potential for the additional RDE in the long run is recommended to focus on supporting the housing and tourism developments.
### Commercial Land Use

<table>
<thead>
<tr>
<th>MICE facilities</th>
<th>Territory-wide Demand and Supply Analysis</th>
<th>Implications for Lantau</th>
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<tbody>
<tr>
<td></td>
<td>The supply of convention and exhibition facilities at HKCEC and AWE is tight during the major purchasing seasons in recent years. According to the feedback from interviews with non-Hong Kong convention and exhibition organisers, the lack of venue space has hindered their consideration of Hong Kong as a venue for hosting an event.</td>
<td>There is potential for further development of MICE facilities considering the estimated unmet demand for MICE facilities in Hong Kong.</td>
</tr>
</tbody>
</table>

**Remarks:** It is important to note that there is always uncertainty around forecasting over long term horizons. As Hong Kong is facing strong competition from neighbouring cities, the relationship between demand for MICE facilities and demand drivers (economic growth) might change in the long term future.
4. Economic Development Principles, Direction, and Concepts

4.1. Economic Development Principles

With regards to the development opportunities and constraints, the Contracting Team has formulated three broad Economic Development Principles.

- **Destination Development**: Destination refers to ‘a place worthy of travel or an extended visit’. Lantau should establish a critical mass of various uses to enhance its unique attractiveness as a destination. Without spreading resources thinly on Lantau, each destination should be well-defined with a clear and well-articulated market positioning.

- **Sustainable Development**: Economic development should not compromise the conservation objectives for environmental sustainability; at the same time, commercial uses should be attractive to inhabitants, visitors, tenants, users and investors, with balance of jobs and labour supply, in order to create a sustainable community.

- **Holistic Approach**: A holistic view is needed to integrate planned developments on Lantau as well as Hong Kong as a whole, such that destinations / uses would be complementary rather than competing, and synergy would be created where practical.

4.2. Economic Development Direction

The Contracting Team’s proposed Economic Development Direction for Lantau is:

“To capitalise on the anticipated economic growth and tourist growth in the PRD Region and increase in flows of international and regional visitors and goods in Lantau by building on existing strengths of Lantau, specifically its strategic infrastructure and tourism assets, and capturing the opportunities arising from airport expansion and new transport infrastructure, and the synergy and potential competition with destinations / uses in Hong Kong and the PRD Region faced by Lantau.”

The driving forces of growth and the three elements of the Contracting Team’s proposed economic development direction for Lantau are presented in the Figure 4. The direction will spell out the type, scale and distribution of economic activities on Lantau.
4.3. A Twin Strategy

The Contracting Team has conceptualised the Economic Development Strategy (EDS) into two distinct components:

- A **Sectoral strategy**: which draws on the demand and supply analysis to describe the activities and uses which Hong Kong needs and which Lantau can help to provide, and
- A **Spatial strategy**: which defines how Lantau and the four MDs will be developed, and spatially integrate with each other with the wider setting.

Each of the components is outlined below.
4.4. The Sectoral Strategy

Three distinct Economic Development Concepts (EDCs) for Lantau are proposed:

**A New Platform for the Pillars**: The concept is to provide a platform for the continued growth and development of the established pillar industries in Hong Kong enabling to embrace the opportunities brought by greater integration with the PRD expected to be facilitated by recent initiatives including China (Guangdong) Pilot Free Trade Zone and BRI and the cooperation between Hong Kong and the Mainland / Guangdong Province on the financial services;

**A Thriving Community**: The concept is to develop healthy, sustainable, diverse and vibrant communities supported by successful commercial development and excellent ancillary services, so that current and incoming population will see Lantau not just a place to live, but also a place for work, business, leisure and study; and

**A Bridge to Tomorrow**: The concept is to promote Lantau as an event space to showcase Hong Kong and its innovative potential to the world, giving priority to knowledge-based industries, smart living and businesses and innovative tourism product.

The three Economic Development Concepts are interconnected, they reinforce each other and form synergies.

Each of the three EDCs needs to be supported by appropriate commercial land uses:

<table>
<thead>
<tr>
<th>Table 2</th>
<th>Relationship between the EDCs and Commercial Land Uses</th>
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<tbody>
<tr>
<td></td>
<td>Grade A Offices</td>
</tr>
<tr>
<td>A New Platform for the Pillars</td>
<td>✓</td>
</tr>
<tr>
<td>A Thriving Community</td>
<td>✓</td>
</tr>
<tr>
<td>A Bridge to Tomorrow</td>
<td>✓</td>
</tr>
</tbody>
</table>
4.5. The Spatial Strategy

The Spatial strategy defines how Lantau and its four MDs will be developed by considering how they relate to the regional and territory-wide context, as well as their spatial integration with each other.

Regional and territory wide context: North Lantau is located in the centre of the PRD region, and serves as a major regional transport intersection with North Lantau Highway/Airport Express/MTR to the east, HZMB to the west, TM-CLKL to the north, and HKIA connecting to other parts of the world.

HKBCF Topside Development: Spatially connected with the HZMB, the TM-CLKL, and the North Lantau Highway, HKBCF Topside Development will have a strong link with HKIA by supporting global and international business activities due to its proximity to the HKIA; with TCNTE and the western New Territories that will provide labour force and back-up services; and with the Mainland.

Tung Chung New Town and its Extension: Spatially, TC locates in close proximity to the HKIA, HKBCF Topside Development and Siu Ho Wan; economically, TC is envisioned as an “Airport City”, providing a 24/7 labour force; it will continue to play a role as commuter residential area, and will benefit from retail and supporting services and education and training opportunities of Siu Ho Wan.

Siu Ho Wan Development: Siu Ho Wan will be a predominantly residential new community that lies in the proximity of HKBCF Topside Development and TC. It can provide space for education / training / retraining facilities. It may also serve as a supporting role to the modern logistics industries by providing space for state-of-the-art logistics facilities.

Sunny Bay Reclamation: Spatially further away from the other MDs, Sunny Bay could be considered a destination in its own right and a tourism gateway of Hong Kong. It can offer tourist attractions with latest technology, combined with themed hotels that complement those at the Hong Kong Disneyland Resort.
5. Proposed Economic Development Themes for MDs

The Economic Development Themes designed for the MDs are aimed to resolve the overlapping or competing roles among the four MDs and other development areas in Lantau and ensure that the proposed commercial uses in the MDs will be compatible and complementary.

5.1. HKBCF Topside Development

Given that the location of HKBCF is comparatively remote from the central urban areas\(^{10}\), it would have to be distinctively themed to attract purposed visits for both domestic and non-domestic visitors. As international businesses, meetings/conferences and logistics all draw on this gateway location adjoining the HKIA and HZMB, HKBCF Topside Development would be a “Business Launchpad and Logistics Support” for the provision of offices, logistics facilities and other spaces to capture business opportunities and foster business growth in Hong Kong and the PRD Region. Besides, for “Experiencing Hong Kong and the World”, HKBCF Topside Development would be focused on the provision of multi-functional hybrid spaces for showcase/event space to gather with ample amount of retail, dining, leisure and entertainment facilities.

5.2. TCNTE

TCNTE is planned as a diverse community with mixed uses. With larger population and a new station, it is anticipated that there would be potential for offices and small businesses in the TCE. It is suggested that TCE could be turned into a “Smart Business Node” providing both higher-grade business space / hotels and affordable accommodation for general business use. Hence, TCNTE could become a “Balanced and Vibrant Community” which will enable its current and incoming population to experience Lantau as a place for living, working, business and leisure, as well as addressing the skillset / job preference mismatch problem. It also gives a “Smart Urban Experience” piloting new technologies through developing new and smart office buildings.

5.3. Siu Ho Wan Development

Siu Ho Wan is close to the HKIA and major roads leading to the NWNT, which makes the area suitable for supporting economic activities that relate to airport activities or services. In order to improve the quality and competitiveness of our human capital, as well as promoting social mobility, it is recommended Siu Ho Wan would be a “Supporter of Economic Growth” and a “Quality Living cum Knowledge Zone” for providing education and vocational training facilities with accommodation to enhance the productivity of the labour force and young professionals in different industries, e.g. the hospitality sector and aviation business.

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\(^{10}\) However, the HKBCF is relatively close to Tung Chung and would be made more accessible to people of NWNT upon completion of the TM-CLKL.
5.4. Sunny Bay Reclamation

Additional land resources will be provided by the proposed reclamation at Sunny Bay. Considering the existing Sunny Bay MTR Station provides good accessibility to the area, the potential reclamation site of Sunny Bay has potential for tourism or entertainment related developments with a view to create clustering effects with other tourism infrastructures in the nearby areas, including the Hong Kong Disneyland Resort. With the provisions of new attractions and accommodations, the tourism offer of Sunny Bay would be raised and developing this area as a “Northern Lantau Tourism Gateway”, hence, the Hong Kong’s overall attractiveness to the visitors would be further improved. Moreover, by combining the concept of smart travel and innovative technology, allies the concept of Bridge to Tomorrow, a new tourism market positioning of Sunny Bay could be established while visitors could enjoy “Experiencing the Future”.

Relevant stakeholders were consulted on the economic development concepts for Lantau and Development Themes for the four MDs. Based on the Contracting Team’s and stakeholders’ views, the following industries are suggested as viable development options:

- Tourism industry;
- Aviation-related education services;
- Private education/ training services to support the pillar industries;
- Development of incubation/innovation facilities;
- Modern logistics services and trading business; and
- One-stop service centre for PRD enterprises.
6. Market Positioning for Lantau’s Major Developments

The economic development themes in Table 3 are applied when devising the market positioning for the four MDs. The market positions, described below by type of commercial land use, are specialised and differentiated so as to achieve synergies and avoid competition between MDs and other developments of Lantau that are currently existing or under planning.

<table>
<thead>
<tr>
<th>Commercial Land Use</th>
<th>Market Positioning</th>
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</table>
| Medium to high-tier Offices | • Quality offices would be provided in HKBCF Topside Development to serve multinational and regional corporations wishing to explore business opportunities in Hong Kong. These offices may provide large floor plates which is comparatively scarce in the prime areas of Hong Kong (i.e. traditional CBDs);  
  • Current provision of the medium to high-tier offices in the surrounding of HKIA are expected to continuously serve the aviation businesses or airport-related businesses;  
  • The “Metro Core Area” in the TCE will be supported by the proposed railway station, and it would become the landmark of TCNTE and serve as a major office node on Lantau complementary with the commercial uses to be provided in the adjacent areas;  
  • Offices for supporting the management and operations of the education / training / retraining facilities (in particular those for tourism, aviation-related businesses, hospitality, business management and administration, and logistics sectors) could be offered in Siu Ho Wan; and  
  • Operation and management offices for supporting the promotion of smart / innovative tourism / entertainment, for examples, a Virtual Reality (VR) tour of Hong Kong and VR / Augmented Reality (AR) Game Park etc., would be provided in Sunny Bay for the visitors to experience the future.  
  • HKBCF and Siu Ho Wan are appropriate locations for modern logistics facilities due to the proximity to HKIA and the HZMB.  
  • In Siu Ho Wan, apart from the possible reclamation and landside development, there is potential to provide logistics in cavern or relocating existing infrastructure facilities to cavern in order to release land for modern logistics uses. |
### Commercial Land Use

#### Market Positioning

<table>
<thead>
<tr>
<th>Hotels</th>
</tr>
</thead>
</table>
| - Business hotels could be provided at HKIA, HKBCF Topside Development, TC and TCNTE to serve transit visitors, aviation related businesses, MICE visitors and multinationals and other large corporations.  
- Budget hotels could be provided in Siu Ho Wan to serve SMEs as well as students and teachers at the education and training facilities.  
- Resort/themed hotels for leisure visitors and Hong Kong residents could be provided at Sunny Bay. |

<table>
<thead>
<tr>
<th>RDE</th>
</tr>
</thead>
</table>
| - Existing RDE facilities at HKIA Terminals will continue to serve mainly visitors arriving / departing by air and offering a cluster of brand name shops;  
- The RDE offer will be complemented by NCD targeting both land based and air based visitors with retail facilities;  
- HKBCF Topside Development could capture a mix of visitors and Hong Kong residents by including showcasing element in the commercial/ retail facilities under planning;  
- The existing outlet mall (i.e. Citygate) in Tung Chung will continue to serve mainly visitors by building on the existing reputation;  
- Regional and local retail uses would be provided at TCNTE to serve both future visitors and residents to Hong Kong by providing a mix of RDE facilities; as an neighbouring community of TCNTE, RDE developments in Siu Ho Wan would mainly serve the local community, and support the proposed education and training facilities; and  
- To complement the new tourism attractions, themed RDE facilities (e.g. VR / AR game park) with hotel developments would be provided at Sunny Bay. |

<table>
<thead>
<tr>
<th>MICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Apart from the possible expansion at AWE, conference / meeting facilities at hotels at HKBCF Topside Development, TCNTE and Sunny Bay MDs could help to fill in some supply gap.</td>
</tr>
</tbody>
</table>
7. Proposed Scale of Potential Commercial Land Use

Table 4 summarises the scope of the proposed commercial land use developments in the four MDs, about 1,627,000m$^2$ GFA is proposed for commercial land development based on the latest plans for the respective MDs.

About 41% of the proposed commercial land use is for office development (660,000m$^2$ GFA), 38% for RDE facilities (617,000m$^2$ GFA) and 18% for Hotel with conference / meeting facilities (300,000m$^2$ GFA) and 3% for modern logistics facilities.

Table 4 Proposed Scope of Commercial Land Use Developments (m$^2$ GFA, otherwise stated)

<table>
<thead>
<tr>
<th></th>
<th>Medium to High-tier Offices</th>
<th>Hotels (with or without conference / meeting facilities)</th>
<th>RDE</th>
<th>Modern Logistics</th>
<th>Other Tourism Facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>HKBCF Topside Development$^1$</td>
<td>100,000</td>
<td>100,000</td>
<td>250,000</td>
<td>50,000</td>
<td></td>
</tr>
<tr>
<td>TCNTE</td>
<td></td>
<td>50,000</td>
<td>327,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metro Core Area and the adjacent “Commercial” zones$^2$</td>
<td>500,000 (PR: 8.8 to 9.5)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Siu Ho Wan$^1$</td>
<td>&lt;30,000</td>
<td>&lt;50,000</td>
<td>&lt;25,000</td>
<td>To be determined</td>
<td></td>
</tr>
<tr>
<td>Sunny Bay$^1$</td>
<td>&lt;30,000</td>
<td>&lt;100,000</td>
<td>&lt;15,000</td>
<td>To be determined</td>
<td></td>
</tr>
<tr>
<td>Total MDs</td>
<td>&lt;660,000</td>
<td>&lt;300,000</td>
<td>&lt;617,000</td>
<td>To be determined</td>
<td></td>
</tr>
</tbody>
</table>

Notes: Light blue shaded areas present commercial land developments under planning.

1 As the scale and land use mix of some developments (i.e. HKBCF Topside Development, Siu Ho Wan Development & Sunny Bay Reclamation) are still being studied or will be studied and are subject to changes, assumptions of these developments are used for the purpose of this study only. In particular, the extent of reclamation at Siu Ho Wan is severely constrained by the Brothers Marine Park located to its north.

2 According to the TPB Paper No. 10045, three sites in Areas 57, 129 and 130 are zoned “C(1)” and “C(2)” which are restricted to maximum PRs of 9.5 and 9 respectively and these sites together with the commercial uses to be provided within the “Metro Core Area” are intended to form a commercial belt along NLH.
In proposing the scale of developments, the following are used as benchmarking references:

- **Offices**: 200,000m$^2$ at Science Park Phase 1 and 2; 97,000m$^2$ at Lippo Centre I and II.
- **Hotels with meeting and convention facilities**: 40,000m$^2$ at Sky City Marriott Hotel.
- **RDE**: 187,500m$^2$ at Harbour City.
- **Modern Logistics**: 33,000m$^2$ at Tradeport.

**Figure 6** Proposed Commercial Land Use Development Mix in four MDs
8. Synergy Created by the MDs

The market positioning developed for the four MDs in the previous chapter are specialised and differentiated. Also, the different commercial land uses proposed in the four MDs are essentially complementary in nature, therefore minimizing the potential competition.

8.1. HKBCF Topside Development

There is potential to develop a business node on HKBCF, with its connectivity to PRD via the HZMB, and with worldwide connectivity via HKIA. With its proximity to the supporting facilities and infrastructures including hotels with conference / meeting facilities, together with AWE and RDE facilities on HKBCF Island, the image of North Lantau as a location with potential Bridgehead Economy could be strengthened. It will also accommodate the Mainland, local and multinational businesses, as well as logistics services.

Furthermore, HKBCF will support the “RDE Core” in Lantau, with distinctive RDE provisions gearing towards needs of the business sector, with spaces for showcasing new technologies and products. Together with the provisions at NCD and TC, there will be a good mix of RDE facilities to suit different needs.

Finally, modern logistics support will create synergy with the existing facilities at HKIA, and capitalise on the opportunities generated by the commissioning of HZMB.

8.2. TCNTE

TCNTE will be envisioned as an Airport City that could provide labour support to HKIA. Notwithstanding this, TCNTE will create synergies with other MDs. Other than serving the aviation industry in HKIA, it is foreseen that the increased population in TCNTE will be a source of labour supply for multinational and the Mainland corporations in HKBCF, as well as SMEs and innovative businesses within TCNTE.

The population of TCNTE can also take advantage of vocational training and education in Siu Ho Wan and employment opportunities in hotels and tourist attractions at Sunny Bay.

8.3. Siu Ho Wan Development

Siu Ho Wan has the potential to be developed as a supporting centre with education and training / retraining services for different pillar industries. Education and training are important for increasing productivity and for coping with the demands of new modes of productions and services. To maintain its competitiveness, Hong Kong needs to provide an environment conducive to nurturing talents. To this end, Siu Ho Wan offers an excellent opportunity to supplement the overall provision of professional training and educational facilities. It is anticipated that these facilities could provide skilled labour force for the aviation industry in HKIA and hospitality industry in Lantau and the territory.

Modern logistics facilities proposed for Siu Ho Wan would complement those at HKIA and HKBCF to enhance Hong Kong’s position as a logistics hub.
8.4. Sunny Bay Reclamation

With the potentials for the establishment of new tourist attractions, themed hotels, recreational and leisure activities, a marina, and supporting facilities, Sunny Bay will be developed as a destination in its own right. Subject to further studies, Sunny Bay may also support other MDs on the provision of commercial land use(s) on Lantau.

Sunny Bay could attract both business and leisure travellers to spend additional time on the island or to stay overnight in Lantau versus simply taking day trips to visit the Hong Kong Disneyland Resort or Tian Tan Buddha.

Sunny Bay could also enhance the position of Lantau as a tourist destination and support tourism in other MDs (i.e. provide facilities to showcase the tourism offer in Lantau or Hong Kong as well as to experience / appreciate the latest technology in entertainment), but it should not compete with attractions offered in HKBCF, TCNTE, or Siu Ho Wan. Sunny Bay’s development should also have a positive impact on the Hong Kong Disneyland Resort by creating a strong network with the resort and other leisure facilities.
9. Key Implementation Issues

The development of North Lantau, its MDs and the associated infrastructure will be a complex web of activity that will involve many agencies and actors. The table below suggests what the nature of that involvement is likely to be.

Engagement of stakeholders is critical to success and should go beyond investors and developers but consider users and final beneficiaries of the developments (e.g. public consultations). And the stakeholders’ engagement should be coupled with good communication of the Economic Development Strategy for Lantau and proposed developments to ensure strong stakeholder buy-in and mobilisation.

<table>
<thead>
<tr>
<th>Agency</th>
<th>Key roles</th>
</tr>
</thead>
<tbody>
<tr>
<td>LanDAC</td>
<td>Advisory body; Formulating the Sustainable Lantau Blueprint</td>
</tr>
<tr>
<td>Government</td>
<td>Formulating planning strategy, spell out planning intention and target</td>
</tr>
<tr>
<td>Department / Bureau</td>
<td>uses, conduct planning and engineering feasibility studies, prepare</td>
</tr>
<tr>
<td></td>
<td>statutory plans and complete engineering works; Coordinating the development</td>
</tr>
<tr>
<td></td>
<td>of Lantau; Site Disposing with relevant lease conditions; Studying of NLH</td>
</tr>
<tr>
<td></td>
<td>capacity constraints and possible relief; and Complete HZMB and TM-CLKL</td>
</tr>
<tr>
<td>AAHK</td>
<td>3RS and other major development projects at the airport island</td>
</tr>
<tr>
<td>MTRC</td>
<td>Tung Chung West Extension and Tung Chung East Station and consider Siu Ho</td>
</tr>
<tr>
<td></td>
<td>Wan Station (including its topside development)</td>
</tr>
<tr>
<td>Private Sector</td>
<td>Informed investment, in step with phasing of schemes</td>
</tr>
</tbody>
</table>

9.1. Possible Implementation Issues for Four MDs

HKBCF

The HKBCF Topside Development area is subject to the AHR and will be affected by the aircraft noise of HKIA. The noise impacts are being assessed in detail and mitigation measures will be recommended as appropriate.

The internal and external connectivity of HKBCF Topside Development are being reviewed with a view to enhancing the transport connectivity among HKBCF Island, Airport Island and North Lantau.

TCNTE

The TCNTE development area is subject to AHR. Moreover, the AAHK has committed to mitigate the potential noise impact as set out in the 3RS Environmental Impact Assessment Report and in the related Environmental Permit conditions.

Siu Ho Wan Development

In light of the need to conserve the marine ecology, particularly the Chinese White Dolphin, a compensatory marine park has been gazetted at the Brother Islands close to the proposed reclamation limit. The size of the marine park constrains the scale and extent of reclamation at Siu Ho Wan.
Sunny Bay Reclamation

The land use and building height within the proposed reclamation area is constrained by the Deed of Restrictive Covenant for the Hong Kong Disneyland Resort.

Noise impacts along / near flight paths (particularly within the NEF 25 contours), the air pollution and noise impacts from major trunk roads nearby and the railway would also impose constraints to the developments of the areas; the actual magnitude of development that can be accommodated on the MD is subject to further studies.

9.2. Indicative Timeline of Developments

Key transport infrastructure essential for the development of Lantau, namely HZMB and TM-CLKL, will be completed in the short term (within about 5 years). Subject to the provision of the supporting transport infrastructures (i.e. new station(s) along Tung Chung Line (TCL) supporting developments in North Lantau), Siu Ho Wan Development, TCNTE and Sunny Bay Reclamation are expected in the medium to long term (within about 15 years). Notwithstanding the above, careful review of the phasing of the developments from time to time is recommended.

Table 6: Emergence of various projects in North Lantau

<table>
<thead>
<tr>
<th>Development Project</th>
<th>Short-Term (Within 5 Years)</th>
<th>Medium-Term (Within 15 Years)</th>
<th>Long-Term (After 2030)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NCD on Airport Island</td>
<td></td>
<td>Siu Ho Wan Development</td>
<td>East Lantau Metropolis</td>
</tr>
<tr>
<td>TCNTE</td>
<td></td>
<td>Sunny Bay Reclamation</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>HKBCF Topside Development</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Further Development of Hong Kong Disneyland Resort</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Future Expansion of AWE</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Land Development after Consolidation of Correctional Facilities</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other Major Tourism and Recreation Facilities</td>
<td></td>
</tr>
<tr>
<td>Transport Infrastructure</td>
<td>HZMB</td>
<td>Road P1*</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tung Chung West Extension and Tung Chung East Station</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TM-CLKL</td>
<td>3RS</td>
<td>Strategic Rail / Road Corridor Linking NWNT, Lantau and Metro Core Area</td>
</tr>
</tbody>
</table>

*To be explored under future studies.*