

2.1: Invest HK\$22bn in an 11m sf “Gateway to the World” commercial complex to showcase Hong Kong’s world-class services (retail, medical, hospitality, credibility, arts, NGO’s and many others) and re-plan Tung Chung as befits its potential of becoming the gateway city of the affluent Pearl River Delta, home to 70m people

Recognising the community imperatives outlined below, we propose the construction in the district of Tung Chung, two sizeable projects – one for commercial use and the other for community purposes the final names for both will be determined by the public in due course. The first one is tentatively named “Gateway to the World” (“環球薈”). It is an 11m sf commercial facility (first phase opening 2016, last phase 2020) in the existing grounds of the airport. Abbreviated as “GTTW”, the name signifies the project’s significance as the gateway to the World City of Hong Kong – by air, via the airport and by land, via the Hong Kong-Zhuhai-Macau Bridge from the west and the likely Tuen Mun-Chek Lap Kok Link from the north.

Situated at the heart of the PRD and >HK\$160bn of new infrastructure (HK\$2m per resident), the humbly named Tung Chung (a tiny brook towards the east) has a far bigger destiny -- to become the most convenient and environmentally-friendly community in the World City of Hong Kong

The second project is the residential city of Flying Dragon (“飛龍”). It comprises the existing new town of Tung Chung (a tiny brook towards the east) and will be built mostly on reclaimed land over the coming 20-30 years. The new city, which will situate at the infrastructure centre of the Pearl River Delta with a population of 70m, will have a population capacity of 700,000, similar to that of Shatin, our first new town north of Lion Rock.

With at least HK\$160bn worth of infrastructure spending completing in the area within the next ten years, all tapped into the richest region of China and approximately HK\$2m for each of the 82,000 residents there - clearly a record for Hong Kong, the location’s potential for economic and community development should far exceed that of all of our existing new towns. Just as Shanghai’s name encapsulates the city’s spirit to “take to the four seas”, Flying Dragon symbolises our World City’s cosmopolitan aspirations. Furthermore, by correcting the orientation of Tung Chung (which is actually on the west of our territory, not east (東), our city will have a rainbow (彩虹) to the east, and a flying dragon (飛龍) to our west. (東有彩虹，西有飛龍).

Flying Dragon and GTTW will provide the opportunity for us to (1) put to action all the positive lessons we have learned from and (2) correct all previous design or operating “wrongs” in the building of new towns over the past 50 years. Hence we should be confident that we can now, with the tailwinds of rich opportunities of the Golden 5 Years behind us, craft our most convenient and environmentally friendly new town for the next 50 years.

We propose two projects: (1) Gateway to the World (“GTTW”) to offer the best services of our city to our customers arriving “at the gate” and (2) Flying Dragon to be our first fully-integrated environmentally friendly new town with zero-carbon footprint travel to employment provided at its doorsteps at GTTW

Our hard-earned know-how of building new towns should ensure we “get it right first time” with our best-endowed new town yet



Having taken into consideration the below and other good reasons, we recommend the construction, under the auspices of Hong Kong Airport Authority (HKAA), a multi-use commercial complex GTTW and directly by the government, the new city of Flying Dragon:

(1) The acute undersupply situation in retail, hotel and office spaces currently and the lack of any meaningful relief in the next five to six years.

(2) The structural nature of demand growth in this sector (discussed under the concept “One-Country, One-Market” in our previous research reports).

(3) The potency of these opportunities in helping our new citizens by (a) creating new jobs and (b) retaining existing jobs within Hong Kong. We estimate that GTTW can support 36,000 jobs on site upon completion of its first phase consisting of the facilities discussed here. The land grant for the site allows another 10-11m sf of mostly logistics use. It is likely that a phase 2 can be built, depending on demand and is to be considered after phase 1 has been in operation for a decade. The construction of phase 2 or any logistic facilities should create a further 36,000 jobs, resulting in a GTTW direct workforce of 72,000. This compares with the 62,000 workers directly employed at the airport recently. Assuming a 4% servicing staff for the facilities at Flying Dragon, a further 28,000 jobs should arise when the city reaches a capacity of 700,000. Together with the current on-site workers numbering 62,000, the above should already provide jobs for 162,000. If the staffers represent the only person working in a family and assuming a household size of three, then direct employment in GTTW and Flying Dragon can already support a 486,000 population.

*16+ reasons to invest
HK\$22bn in a 11m sf multi-use commercial complex to showcase our services at the airport for first-phase opening in 2016, in time for the opening of the HK\$47bn Hong Kong-Zhuhai-Macau Bridge that year*

Acute shortage in commercial spaces to persist in the next five to six years

Demand is likely to remain robust for quite some time

An estimated 162,000 jobs may arise on site at the airport, GTTW and Flying Dragon - can already support a population of 486,000. Perhaps employment / population double that size can also be supported off site. Furthermore, the third runway will create 141,000 jobs. With such potent job creators embedded in these facilities nearby and the adoption of the best town-planning standards, Flying Dragon should be a desirable place to live for many.

The Airport Authority has estimated 141,000 jobs to arise from the construction of the third-runway and this should support a further 423,000 population even though this may not be on a permanent basis. In addition, the Airport Authority 2008 estimates show that indirect/induced employment created by airport operations amounted to 124,000 jobs, double that of direct employment. Hence, it is easy to appreciate that airport and other commercial functions at centres of infrastructure are very potent in creating both low-skilled and high-skilled jobs and GTTW and Flying Dragon should not be difficult in creating enough jobs for a busy community.

Of course, the extent of how many families that rely on the many jobs created on site and offsite will choose to live at Flying Dragon cannot be determined with certainty. That said, if all the mod-cons and environmental features are designed into crafting a most convenient and green new city, compared with the rest of the territory which contains mostly older housing stock, it should not be difficult for Flying Dragon to become a popular option for families.

(4) The importance of creating new “content” in Hong Kong in order to attract more visitors to use our airport, especially when we are about to commit HK\$86bn now or HK\$136bn “money of the day” to add a third runway. With Hong Kong residents accounting for only around 30% of the users of our airport, the potential for growth from this source is not likely to be enough to justify a third runway. Growth from the use of our airport by (1) transit and (2) other passenger sources eg. travellers using land transport to come to Hong Kong from Shenzhen and the rest of Guangdong, will be imperative to Chek Lap Kok’s growth.

Thus, Hong Kong needs to ensure that the building of further airport capacity and international routes at Guangzhou and Shenzhen will not undermine the demand for our airport. One effective way of achieving this is to ensure there are many more reasons and experiences for people to come to Hong Kong. Creating a significant hub for Hong Kong’s world-class services in credibility businesses, retail, medical care, education conveniently situated at the gates of our airport will create a “destination draw” for our runway capacity.

By conveniently putting Hong Kong world-class services at the gates of our airport we will have created a content-rich “one-stop shop” for our customers in the PRD and help ensure viability of our third runway

The Airport Authority invests HK\$136bn to build the third runway for our airport, which needs 28 years of construction in three phases. However, its future utilisation is uncertain - 70% of all users of our airport are non-Hong Kong residents, and many of them for stopovers may use the nearby new second runway of Shenzhen Bao'an International Airport (completed in 2011) and the new third runway of Guangzhou Baiyun International Airport (expected to be completed in 2015). By complementing the third runway investment for our airport with the profit of nearly HK\$3bn from GTTW rentals every year starting from its full opening in 2018, GTTW serves as a good hedge for the uncertain future profit from the third runway which opens after 2030.

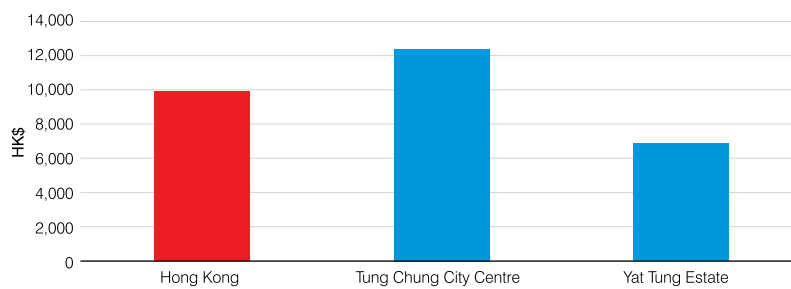
GTTW, with cHK\$3bn first annual profit from 2018, serves as a good hedge for the uncertain future profit from the third runway which opens after 2030

(5) The need to transform the “forgotten” under-sized backwater Tung Chung into a purposeful community and an desirable place to live. As things stand, the 82,000 residents fall well short of the 200,000 threshold for a public library and the 240,000 for a general hospital and other public and private amenities and job offerings for its residents are few and narrow.

There is great need to turn an “underperforming” Tung Chung into a vibrant and desirable place to live

Even though the latest available income data show that the median incomes in Tung Chung are similar to that of Hong Kong as a whole, those living in Yat Tung Estate (which comprises half of the new town's population) have a significantly lower income at only HK\$6,000-7,900. Low-income residents (defined as 50% lower than median income of Hong Kong) comprise close to 50% of Yat Tung Estate. This level of poverty is reflected by the fact that almost half of households living in Yat Tung Estate are on Comprehensive Social Security Assistance (CSSA) - the fourth highest among all housing estates in Hong Kong, after Sau Mou Ping Estate (Kwun Tong), Kwai Chung Estate (Kwai Chung) and Pak Tin Estate (Shek Kip Mei) all of which are “very old districts”. These statistics suggest that while the new and modern township of Tung Chung has managed to attract above-average income households, most likely due to the opportunities provided within Lantau, there is a large segment of under-performing families. The provision of significant non-office-based service opportunities within their neighbourhood in GTTW should not only enable this group to better their lot, but also improve the attractiveness of the district as a source of private and public housing alike.

Hong Kong Median Income (2006 Population By-census)



Source: Census and Stat. Dept.

Reports on the plight of Tung Chung residents by a multiple non-governmental organisations such as the Hong Kong Outlying Islands Women's Association and the Hong Kong Chinese Civil Servants' Association often cite the long distance and high commute expenses as problem areas. As a result, apart from a small number of Tung Chung residents who work at the nearby airport, most are stuck without much opportunity to improve their situation, effectively creating chronic low employment and thus poor living standards.

The small population in Tung Chung also results in limited retail choices, which ironically translates into high prices that cannot be afforded by the low-income residents in the community. In various price-checks conducted by CSSA Alliance, Community Development Alliance and Hong Kong Federation of Trade Unions in 2011, prices of daily food and necessities are 10%+ higher in Tung Chung when compared to that found in Hong Kong's richest district, Wan Chai.

(6) The government forecasts that the Hong Kong population will grow 1.9m (up 27% from the current 7m) to 8.9m by 2039. This suggests a 27% increase over the next 27 years or roughly 1% or 70,400 persons a year. Simplistically put, a total of at least three Shatins will have to be built in 27 years, or approximately one Shatin every nine years but there is nothing available for the production of anything remotely near the capacity of Shatin within the next nine years.

Tung Chung residents have to travel a long way to find work

Prices of daily food and necessities are 10%+ higher in Tung Chung than the richest district in Hong Kong

Hong Kong's population will grow 27% in the next 27 years, adding 1.9m over this period – this suggests we have to find space to house one Shatin's worth of residents every nine years. There is no obvious way to produce the first of our three Shatins

(7) Our citizens aspire to building a most environmentally friendly town that befits the World City of Hong Kong. We have the population and commercial needs for a new town and the means to create a most desirable environment to live, work and play in. Flying Dragon and GTTW give us the opportunity to focus all our development experience over the past decades and the latest technology and design considerations to craft a new town that is consistent with our aspiration to be the greenest World City.

Hence, we should insist that the best applicable green standards are adopted in creating Flying Dragon and GTTW. Even though all green standards (counting BEAM, LEED and China's Three-star) apply only to buildings and not high-density communities, we must still aspire to be creative in devising the highest sustainability solutions in the building of this new community. The adoption of central water-based air-conditioning system that saves significant energy and facilities that treat food wastes may be considered.

We recommend that the zoning and building plans for the North Lantau district be overhauled to reflect the new reality of it becoming the centre of the Pearl River Delta (PRD) infrastructure network and our community's desire to have the most environmentally friendly community there. This should free our town planners and professionals from the shackles of an old plan which could not have taken these new priorities into account.

In the comprehensive review on development potential of North Lantau, all pre-existing prescriptive limits including noise zoning should be re-optimised in light of new technology and other planning possibilities.

Flying Dragon and GTTW will be the world's most environmentally friendly community adopting the world's best sustainability standards

The pairing of jobs with residence saves commuting time and minimises carbon footprint. Reclamation in the shallow and already disturbed coastline at Tung Chung and north Lantau makes relatively low-impact to marine life and reparatory measures will be undertaken in other parts of our waters to more than offset the biomass affected

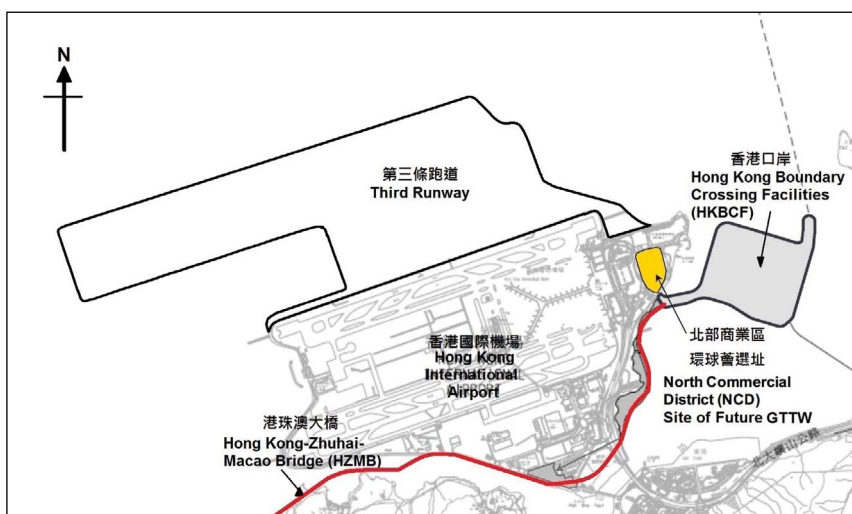
Flying Dragon should be a custom-designed town with the best environmental designs – existing Outline Zoning Plans and other planning constraints would have been superseded by the subsequent new infrastructure links and technology

The pairing of jobs with residence saves commute, leaving more time for family, leisure and exercise, and minimises carbon footprint. Reclamation in the shallow and already disturbed coastline at Tung Chung and north Lantau, fringed by an expressway and train tracks to the airport, makes relatively low-impact to marine life compared with formation of land in pristine districts. Full reparatory measures will be undertaken in other parts of our waters to offset more than the biomass affected by the reclamation.

It is inevitable that building a new town the size of Flying Dragon will take up to some two decades. If the reclamation work has to be phased, even though it is desirable to have disturbance over and done with over a short period, then such nuisance to early-phased residents should be minimised. For instance, consideration should be given to patterns of prevailing winds and ways of providing green cover on newly formed land so that dust and odours can be minimised. Studies should also be conducted to establish if there is economy of scale and impact on the environment for the reclamation to take place alongside the land formation for the third runway.

(8) The general public's desire for a home located alongside existing arteries of public transport. For instance, few would want to live in a district when rail links are pending or bus services infrequent.

If phasing of reclamation is inevitable then steps should be taken at the design stage to minimise dust and odour. There may also be economy of scale in terms of impact on the environment and cost to overlap the landfilling for the third runway and Flying Dragon



(9) The completion of the Hong Kong-Zhuhai-Macau Bridge 2016 which enters our territory near the airport, will put Tung Chung within the direct reach of 70m people who live in the affluent Pearl River Delta. GTTW will provide parking facilities initially for 10,000 vehicles (five times the capacity of that at Harbour City), with a capacity option for double that amount in future. This facility can alternatively situate in the Hong Kong Boundary Crossing Facilities (HKBCF) run by the government and which primarily handles Immigration and Customs matters.

Whether the current public concern that allowing left-hand-drive vehicles enter Hong Kong from the mainland will cause accidents on Hong Kong roads is justified is a matter to be debated. Notwithstanding, it is unlikely that our roads will have the capacity to carry thousands of vehicles from Guangdong. Hence, a facility that allows travellers to park their cars at GTTW or HKBCF and take public or private land transport to the tourist destinations (Park and Ride) in the rest of Lantau or travel to the urban areas must be useful. Of course, such a holding facility can support the usage of our airport as visitors can Park and Fly. For those visitors that simply want to patron the world-class services of Hong Kong, including watching performance/show/exhibition at the AsiaWorld-Expo, they need go no further than GTTW (Park and One-stop Shop).

(10) The fact that the site has received town planning and other land use approvals means that construction can start once the go ahead is given to GTTW.

The HK\$47bn Hong Kong-Zhuhai-Macau Bridge will open in 2016, bringing land traffic directly to Tung Chung which will become an Immigration stopover – naturally creating a hub for “Park and One-stop Shop”, “Park and Ride (to the rest of Lantau tourist spots or the urban areas)” or “Park and Fly”, adding patronage to our airport

GTTW site has received all planning approvals and requires no new land premium to be paid – thus is an effective “turn key” project which can be completed three to five years from the start of a phase

(11) There is no need for new land premium payment – thus the only new investment required for GTTW is planning and construction. In a city where 70-80% of total development cost is often attributable to land, GTTW is a very rare opportunity - effectively having done without the cost of land means a low investment hurdle. With total cost at around HK\$1,600psf, even renting of its 1m sf office spaces (two phases) at HK\$10psf a month will yield a 7.5% on investment.



With no new cost to pay for land, the only investment hurdle for GTTW to clear is the investment in construction. Such low cost allows room for charging low rents for the earlier leases which will provide greatly needed relief for rent refugees including NGO's, start-ups, SME's and artists who will otherwise need to close down as rents in traditional districts have soared

(12) Liberate the full potential of AsiaWorld-Expo by providing fully-fledged service and accommodation facilities to attract more usage of the exhibition site. Being our second convention centre, the government-owned AsiaWorld-Expo suffers from a low utilisation as users complain there is little for them, and their families if they come along, to do and nowhere to go after attending a conference or an exhibition. This convention centre is one of the best equipped in Asia and Hong Kong can greatly improve its MICE market share and its World City reputation as a conference centre/meeting place/gateway when capacity, quality, enriched user experience, convenience and competitive prices are offered in one comprehensive package at the airport under GTTW and AsiaWorld-Expo. The need to make additional investment for Wanchai's Convention Centre should be delayed until we can observe the potential of the synergies GTTW can deliver to improve utilisation of AsiaWorld-Expo.

By providing a very sizeable and interesting "habitat" for conference and exhibition goes to "keep themselves occupied" after attending their functions, GTTW will greatly improve usage of government-owned AsiaWorld-Expo next door

(13) Our public funds have tended to earn low and unstable returns and investments in US 10-year treasuries can only produce c.2% incomes, which will likely undershoot Hong Kong inflation. Against the trending demand for services and spaces in Hong Kong, and the HK\$160bn investment by the government in new infrastructure around GTTW, the project will likely generate a risk-adjusted return far superior than that of the traditional public portfolio and offers a means for our government to add diversity to its holdings.

Our workings are shown in later paragraphs and they show that GTTW should fully pay off its cost in as short a period as within six years of full operation and it carries an ultra-high ungeared Internal Rate of Return (IRR) of 13.8%. The latter suggests that an investor's cost of funds has to be as high as 13.8% in order to nullify a proposed project's Net Present Value (NPV), or the time-discounted net returns to a project. Financially, since the government is the sole owner of our airport, it does not matter if the government directly undertakes GTTW or delegates the task to the Airport Authority directly.

(14) GTTW provides huge scope for externalities. Further to the highly attractive financial returns that should arise from this project, as discussion later in this section will show that GTTW will generate a NPV of an estimated HK\$41bn, the commercial complex should open up substantial externalities and non-direct returns to Hong Kong.

In the global competition for talents and investors, it is imperative that a city projects a positive image and it is difficult to achieve that if our citizens do not think highly of our administration nor of the direction our economy is heading. GTTW and Flying Dragon are projects with a clear purpose, and they answer the demands already indicated by the market. Their acceptance by the public will rekindle the "Can-do" spirit and remind our citizens what Hong Kong stands for and what made our city great. They will show the world that Hong Kong is taking its future in its own hands again. This positive momentum will draw talents, more credibility businesses and investors from around the world and feed further to the making of Hong Kong's Golden 50 Years.

Investment in US 10-year treasuries only produces c.2% return which undershoots Hong Kong inflation (latest core rate 6%) – adding GTTW should provide far superior risk-adjusted returns to our public portfolio. We estimate GTTW to "payback" in as short as six years of full operation and carries an ultra-high ungeared Internal Rate of Return of 13.8%

In addition to producing a NPV of HK\$41bn, which should be able to offset close to 50% of the Present Value cost of building our third runway of HK\$86bn, GTTW provides huge scope for non-financial returns to society and the reputation of Hong Kong as a World City

To the world, GTTW and Flying Dragon are unmistakable signals that the community of Hong Kong has found its purpose and "Can-do" again

(15) GTTW and Flying Dragon have limited downside. Hong Kong has never invested as much in infrastructure in a single location as we are doing in Tung Chung. If GTTW fails totally, the loss of HK\$22bn will represent 14% of the other investments of HK\$160bn being made to the district and should it fail, more pertinent questions should be raised as to whether the HK\$160bn could be justified in the first place. A more reasonable way to look at GTTW should be, since we are committed to some HK\$160bn in putting up infrastructure for a better future, we should, using the same positive assumptions about our future, invest a further 14% in new commercial facilities to make it doubly sure that these preceding investments work, by attracting more users and customers to these investments. In this way, GTTW is an insurance premium to underwrite the success of the HK\$160bn preceding investments.

GTTW and Flying Dragon have limited downside. If GTTW completely fails, it would represent 14% of total preceding investments in infrastructure and would question the logic of these bigger investments. In a positive way, undertaking GTTW will underwrite the success of these preceding investments of HK\$160bn



We should also remember the second lesson learned from 50 years of developing up Hong Kong – there are no property white elephants! Somehow, when we build a property, it gets filled - perhaps not always immediately, but nothing is left vacant and rents somehow, have found their way northwards.

Remember lesson number 2 – there are no property white elephants in Hong Kong. Nestled in so much infrastructure and locational convenience, GTTW is unlikely to become the exception

Flying Dragon is an extremely low risk investment as it mostly involves reclamation which costs HK\$250-450psf and should have little trouble from the sale of development land at over HK\$2,000psf in gross floor area terms. Against the government's projection of population growth and medium-term growth expectations of Hong Kong, property demand should much more than finance the building out of Flying Dragon. Hence we have not sought to model how positive the NPV of such a process can be.

(16) The importance of re-enforcing Hong Kong's "First mover advantage" in service sector by adding scale and diversity. The robust visitor arrivals and the influx of overseas companies, talents and capital into Hong Kong in the Golden 5 Years clearly evidence the quality and attractiveness of our services. When the gap between our immediate hinterland, the PRD and our city narrows over time, Hong Kong's advantage of being the service hub for the entire region can be made unassailable when we add significantly to scale and diversity when the difference in standards is still great as is the case today. GTTW can be a powerful contributor to building up Hong Kong's first mover advantage.

Flying Dragon involves mostly reclamation which costs HK\$250-450psf.

Against population growth and medium-term economic prospects, new land should sell above HK\$2,000psf and easily justifies the project. Hence no modelling is considered necessary here.

By adding scale and diversity to the city's service provision, GTTW can re-enforce Hong Kong's "First mover advantage" in the PRD

A. What are we investing in?

- An 11m sf world-class commercial complex, roughly twice the square footage of the Harbour City complex in Tsimshatsui, to situate at the North Commercial District in the airport, to showcase Hong Kong's excellent services to the world, featuring:
 - a) A 4m sf destination mall with 600+ shops (mostly outlet format) and restaurants. These should add around 4% to Hong Kong total retail spaces.
 - b) A 1m sf medical service centre with 400+ beds and surgical facilities so that patients from around the world can fly or driven in for treatment. Visiting relatives can stay in the hotels and can occupy themselves with the many facilities within GTTW and Lantau during non-visiting hours.

- c) A 1m sf office which initially will provide low-rent spaces to tenants from outside districts and will also support the airport and providing other credibility and accreditation services that are drawn to the district's location at the heart of the PRD. The high ceilings can also cater for art studios and galleries.
- d) A 1m sf car park with 10,000 spaces.
- e) Six to eight mostly two to five-star hotels with a total of 3,000 rooms totaling 3m sf which can add around 5% to our inventory of hotel rooms.

The complex will be completed in two phases with the first section to open in 2016, in time for the operation of the Hong Kong-Zhuhai-Macau Bridge, and the second and final phase by 2020.

	Service Complex			Car Park	Hotel
	Destination Mall	Medical Service Centre	Office		
2012	First Phase construction	First Phase construction	First Phase construction	First Phase construction	First Phase construction
2013					
2014					
2015					
2016	First Phase opening of 3m sf	First Phase opening of 0.5m sf	First Phase opening of 0.5m sf	Full opening of 1m sf	First Phase opening of 3m sf (4 to 5 hotels)
2017	Second Phase construction	Second Phase construction	Second Phase construction	Second Phase construction	Second Phase construction
2018					
2019					
2020	Second Phase opening of 1m sf	Second Phase opening of 0.5m sf	Second Phase opening of 0.5m sf	To be determined	Second Phase opening of 1m sf (2 to 3 hotels)

- The financial parameters: If considered as a standalone and un-levered (ie all equity financed) project, the HK\$22bn investment should produce a Net Present Value (NPV) of HK\$41bn and achieve a full payback within six years of full operation from 2020. The latter compares with payback periods of 36+ and 40-50 years for the Hong Kong-Zhuhai-Macau Bridge and Guangzhou-Shenzhen-Hong Kong Express Rail Link, respectively.

In the project's first full-year's operation upon completion of the entire project, a net profit of some HK\$2.9bn should arise, implying a 13% return on total investment of HK\$22bn. This suggests that if the entire project is funded 60-70% by debt and the remainder by equity - a typical financing structure, the return to equity would be in the region of 40%.

- The absence of a hefty upfront cost for land has also greatly lessened the sensitivity of its time-adjusted cash value to the rate of discount. Hence, GTTW carries a very high IRR of 13.8%. In other words, the discount rate one has to adopt in order to nullify the project's NPV is 13.8%. This means that the lower one's cost of fund is, the higher will the project's NPV be. In comparison, the yield on US 10-year treasuries is around 2% and in our computation, we have adopted the discount rate of 4% as used by the government for the Guangzhou-Shenzhen-HK Express Rail Link and by the Airport Authority in its assessment of the third runway.

An Ungearred Internal Rate of Return of 13.8% is exceptional in the property world

To better appreciate the reasons for GTTW and Flying Dragon, four overlays are set out below to provide further context to the two projects:

1. The case for a showcase for Hong Kong's best service offerings
2. The geographical advantage of Hong Kong within the PRD
3. Tung Chung – a town that is stuck on drawing board for 30 years – It is high time Flying Dragon defied the gravity of bureaucracy and GTTW opened for business
4. MICE is very important to a World City – Hong Kong must re-double its efforts to re-establish its commanding lead in the region

1. The case for a showcase for Hong Kong's best service offerings

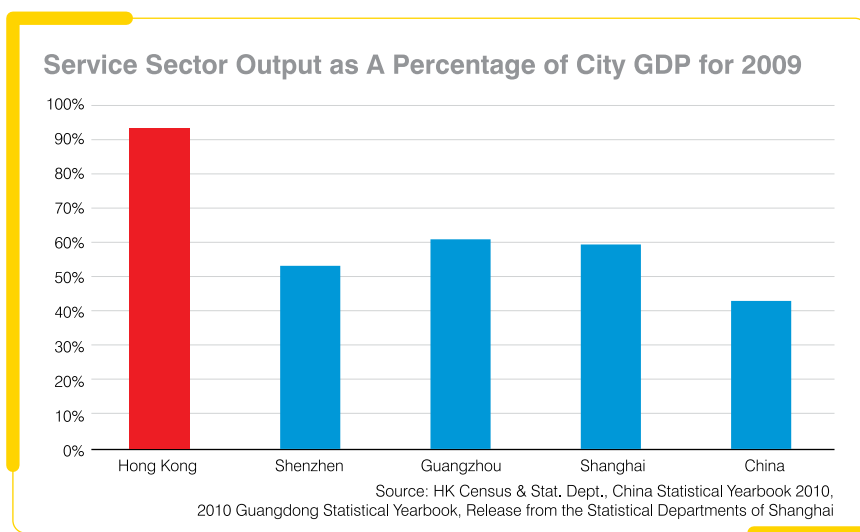
Huge demand exists for Hong Kong's services, especially from the mainland.

With services accounting for 93% of our GDP, Hong Kong is a centre of service excellence - this has been illustrated in our second report, "How to Become a World City: Lessons from London".

Hong Kong's immediate customer catchment of Guangdong Province is the most populous and richest region of China. However, it has a rather low service intensity and quality compared with Hong Kong. Less than an hour away from Central, Shenzhen, despite having the highest per-capita income in China (at RMB¥95,000 in 2010, some three times the national average), has a service sector that only accounts for 53% of its GDP. Around two hours away from Hong Kong by train, the provincial capital, Guangzhou, has a higher service intensity of 60%, similar to China's commercial powerhouse, Shanghai.

Hong Kong is a centre of service excellence with this sector accounting for 93% of our GDP; the bigger this sector becomes, the more competitive and better quality it will be

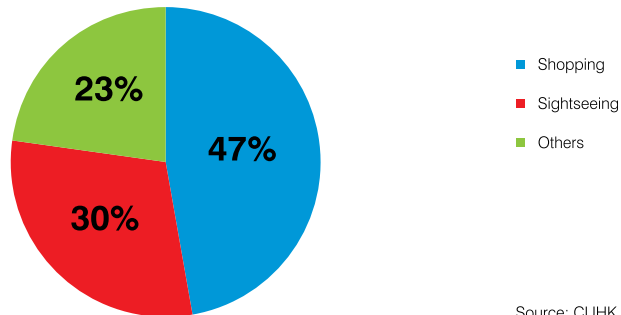
Even though Shenzhen has the highest per-capita income in China, its service sector contributes only 53% to the city's GDP



Discrepancy in service intensity and quality has meant that many mainlanders will come to Hong Kong for the world-class services they would like to enjoy. In a survey conducted by the Chinese University of Hong Kong (CUHK) in the second-half of 2011, 47% of all the mainland respondents cited shopping as the main objective of coming to Hong Kong. What is most important is that some 74% of respondents would pay a premium for quality brands sold in Hong Kong compared with the same on offer in the mainland.

Discrepancy in service intensity and reliability has meant a lot of high-income mainlanders are happy to pay a rich premium to enjoy Hong Kong's world-class services – survey suggests 30% of mainland visitors would pay >20% premium

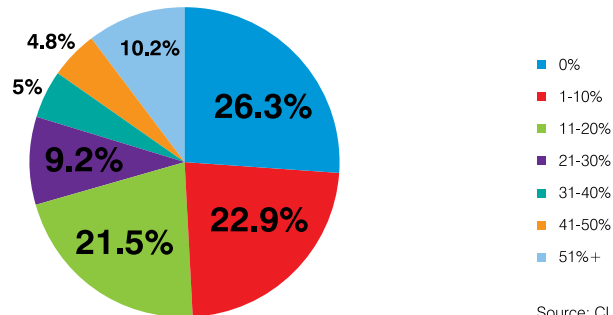
Mainland Visitors' Main Objectives of Visiting Hong Kong (2011)



Source: CUHK MSc Marketing

Furthermore and reflecting their trust in Hong Kong quality, 30% of respondents indicated that they were willing to pay more than 20% premium for quality brands sold in Hong Kong compared with the same being offered in the mainland, 20% would pay over 30% premium and a staggering 10% willing to pay over 50% premium.

Premium Mainland Visitors Willing to Pay for Quality Brands Sold in Hong Kong (2011)



Source: CUHK MSc Marketing

It stands to reason that if mainland customers are willing to pay a premium for impersonal products, they are even more willing to pay a premium for “credibility” goods and services that are likely to involve more valuable considerations eg. health and medical products, financial assets and academic qualifications etc. Take medical services, for instance, the Chinese Minister of Health, Mr Zhu Chen, in a conference in June 2011 in Hong Kong admitted widespread problems with mainland medical quality and practice. He further suggested the Chinese system should be improved through modelling on Hong Kong’s. Media have also reported that more and more mainlanders are coming to private hospitals and clinics in Hong Kong in addition to their demand for maternity services. The number of non-maternity foreign patients admitted to Hong Kong hospitals, comprising of mostly mainlanders, has increased by 50% to some 20,000 patients from 2007 to 2011, a sharp increase compared to our local growth of 24% only over the course of four years.

Mainlanders are also keen to send their children to Hong Kong to study, from kindergarten to tertiary levels. For instance, university enrollment doubled from school year 2005/06 to 2010/11 and in 2011, all four Beijing students who achieved highest scores in the 2011 mainland university entrance examination chose to come to Hong Kong despite offers from prestigious mainland universities, including Peking University and Tsinghua University.

Turning to kindergartens and primary schools, those located in North District have become favourites due to their proximity to the mainland. For instance, many kindergartens in Sheung Shui have achieved full admission a year before semester began and before the 2012 Hong Kong primary school central allocation, the Hong Kong Education Bureau had sent letters to eligible mainland children’s parents urging them to send their children to places further away from North District in order to alleviate the admission pressure of the schools there. It has been estimated that over 10,000 students cross the border every day for school.

Mainlanders trust our medical service - more and more mainlanders will come to private hospitals and clinics in Hong Kong for non-maternity services

Mainlanders trust our education service - coming to Hong Kong not only for universities, but also primary schools and even kindergartens

As the discussion above has outlined, it appears obvious that demand for Hong Kong services, from retail to education, medical, financial and other businesses where “credibility” matters, is strong and rising, as the mainland becomes more affluent and as the difficulties in coming to Hong Kong are lessened. A research conducted by the Hong Kong Tourism Board, Hong Kong Polytechnic University and Savills Research and Consultancy in 2010 projected tourist arrivals to grow at 14% per year in the next few years. In order to meet this rising trend, it makes sense to have our services lined up at the aerial and land gateways to the mainland and prevent excessive crowdedness and rental pressure in our existing facilities.

2. The rising geographical advantage of Hong Kong within Pearl River Delta (PRD)

The growth in demand for Hong Kong services can accelerate when the 70m+ population in the Greater PRD can more easily come to Hong Kong when new infrastructure comes on stream from 2016.

Work on the Hong Kong-end of the Hong Kong-Zhuhai-Macau Bridge commenced in December 2011 and the entire bridge shall be completed in 2016. Construction of the Tuen Mun-Chek Lap Kok Link has also commenced after detailed design and funding approval from the Legislative Council Financial Committee on 18th November, 2011, and it shall be complete in 2017. A further rail link to Tuen Mun is being considered and should facilitate flows to and from Shenzhen further.

Both the Hong Kong-Zhuhai-Macau Bridge and Tuen Mun-Chek Lap Kok Link will have been completed by 2017

Tung Chung, positioned at the centre of a web of new and existing infrastructure fanning out to the PRD, should benefit disproportionately from the region's growth in incomes and demand for services. Yet its offering, which comprises largely the Citygate Outlets, a shopping mall which offers mostly "outlet" type range of discounted branded goods and limited service range to residents in the district, is simply too small to meet the influx of retail and service demand. With only 0.4m sf in GFA, the Citygate Outlets has 78 shops, far fewer than other destination malls in Hong Kong such as the New Town Plaza (350+ shops) and Harbour City (700+ shops). Nevertheless, Citygate Outlets is popular with mainland visitors and local bargain hunters alike. It is busy with mainland shoppers even in non-holiday weekdays, and is full in the weekends.

Normally the outlets sell products from previous seasons, but some shops, because of robust sales, have to offer goods from the current season with little or no discount to satisfy demand. Cross border coaches travel from Huanggang, Shenzhen to Citygate Outlets from 8:30 a.m. till 10:15 p.m. with mostly half-hour frequency. Despite the direct bus service, travel time is still considerable. This goes to show that from this type of early success stories, the clear potential of Greater Tung Chung developing into a service-exporting centre, offering significantly more credibility services than mere retail and therefore creating more of a "destination" pull with consumers in PRD.

Tung Chung should benefit most from future improvement in transportation, yet its present offering is too small to meet the influx of retail and service demand

Shopping and F&B in Selected Major Shopping Malls in Hong Kong

	Shops	Restaurants	Total Area (m sf)
Harbour City	650	50	2
New Town Plaza	350+	50	1.5
Cityplaza	137	33	1.11
Pacific Place	115	18	1.1
MegaBox	108	37	1.1
Festival Walk	175	42	1
Elements	150+	70+	1
Times Square	230+	20	0.9
Citygate Outlets	78	15	0.5

Source: Harbour City, New Town Plaza, Cityplaza, Pacific Place, MegaBox, Festival Walk, Elements, Times Square, Citygate Outlets

If Hong Kong does not seize on our “first mover” advantage to add capacity and capabilities to our service sector and to Tung Chung, competing Qianhai, Hengqin and the Shenzhen Bao’an International Airport, on the other end of major infrastructure links, will eventually rise and potentially eclipse Hong Kong. When the proposed Hong Kong-Shenzhen Western Express Line is eventually built, customers and opportunities could be drained away to the Qianhai Development Zone, which is now planning to be a financial and business centre, and the Shenzhen Bao’an International Airport, which is now developing its retail sectors. Moreover, competition does not come only from Shenzhen. We should bear in mind that within the narrow airspace in PRD there are more than five other airports; each of these airports is keen to extend its flight networks and retail sectors.

If Hong Kong does not seize on our “first mover” advantage to add capacity and capabilities to our service sector and in Tung Chung, competing Qianhai and the Shenzhen Bao’an International Airport will eventually rise and potentially eclipse Hong Kong



Despite the current situation, Tung Chung is set to fly high with improved transportation connections

As the PRD rapidly develops into the economic centre of Southern China, a golden opportunity lies ahead for Tung Chung, a small new town housing only 82,000. With the aid of new transport facilities including the Hong Kong-Zhuhai-Macau Bridge and Tuen Mun-Chek Lap Kok Link, Tung Chung will no longer be “out on a limb” of Hong Kong but becoming to be the centre of the PRD. If Greater Tung Chung manages to build up significant business mass, it is likely that more customers will fly in to use this service base from further afield in Asia and enable the Hong Kong Airport to surpass its passenger flows of 54m passenger in 2011.

With the aid of new transport facilities, Tung Chung will become Hong Kong's first and foremost gateway to receive the 70m tourists coming in from PRD

3. Tung Chung – a town that is stuck on drawing board for 30 years – It is high time Flying Dragon defied the gravity of bureaucracy and Gateway to the World opened for business

When one studies the history of Tung Chung's development, one would find that the present 82,000-population Tung Chung is not what the government envisioned for Lantau. The government used to have large-scale plan for Tung Chung, but somehow revised planning and reality fall well short of the original vision, resulting in persistent “under” population in Tung Chung which has created the social and economic problems we have discussed in earlier sections.

The present 82,000-population Tung Chung is less than a third of what the government envisioned some 30 years ago

The “Port and Airport Development Strategy” (PADS) in the late 1980s planned Tung Chung to be a supporting community for the airport, housing 260,000 residents after 2011. The subsequent “Comprehensive Feasibility Study for the Remaining Development in Tung Chung and Tai Ho” (CFS) in 1999 even scaled up Tung Chung as a part of the “North Lantau New Town” (Tung Chung and Tai Ho), which could accommodate 334,000 residents.

In 1999 the government planned Tung Chung as a part of the “North Lantau New Town”, accommodating 334,000 residents

However, the “Revised Concept Plan for Lantau” in 2007, which is still in effect today, scaled down Tung Chung by a third to target only 220,000 residents, to reflect the low population level since the completion of Phase 3A in 1999.

The “Revised Concept Plan for Lantau” in 2007 revised down the scale of Tung Chung to accommodate only 220,000 residents

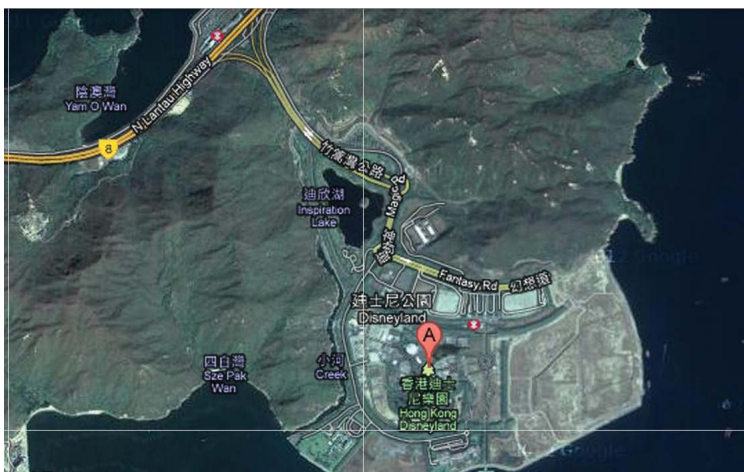
Distance to urban amenities and employment centres coupled with limited local job opportunities are the reasons behind Tung Chung's lack of popularity and there has yet been any noticeable effort to create in-town job opportunities by the government to bring the "new" town up to "critical mass". Moreover, hamstrung by the Hong Kong Planning Standards and Guidelines which prescribe users threshold to public facilities, the government made no noticeable effort to attract or retain citizens through providing basic civil facilities until 2010 - Tung Chung Municipal Services Building opened only in 2010, public swimming pool in 2011, and North Lantau Hospital in 2014.

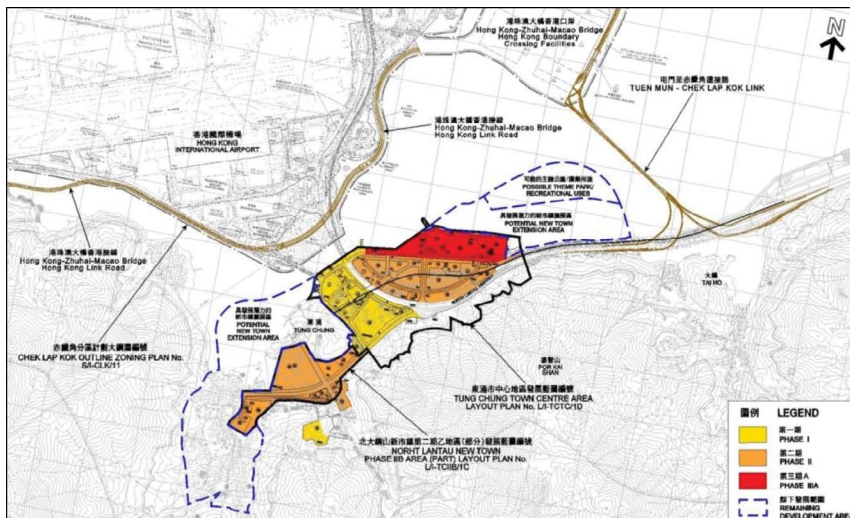
At the same time, the "Revised Concept Plan for Lantau" in 2007 initiated the project "Remaining Development in Tung Chung", investigating how Phases 3 and 4 of Tung Chung should be developed. Reclamation at Tung Chung East and Tung Chung West is one of the major areas being studied and the government's consultant, Arup, would finish the 30-month feasibility studies by 29th July, 2014, two years from now. As the district is not a greenfield site with no previous knowledge having been deposited, and existing and future infrastructure work (including additional highways to support the traffic to arrive from the Hong Kong-Zhuhai-Macau Bridge in 2016) would have created a wealth of relevant information, it really should not take 30 months to complete such a study. An important reference time frame is that it took only 2.5 years for the entire airport island to be reclaimed in open sea. We would argue that the length the government has prescribed for this study for Tung Chung reclamation is symptomatic of the "can always wait till another year / few years..." mentality with which the township has been dealt with or de-prioritised, without reflecting on the new dimensions that the HK\$160bn+ new infrastructure and the environmental and economic opportunities will bring.

Reclamation studies on Tung Chung should not take 2.5 years – it is not a greenfield site and it must have been "raked over" by work done on other infrastructure projects. For comparison, it took only 2.5 years to reclaim the vast airport island. Such a "delay" is perhaps symptomatic of the "Tung Chung can always wait" mentality that has ignored the huge potential the HK\$160bn new infrastructure and related economic linkages will bring

Since the vast majority of the northern Lantau is disturbed shoreline, we argue that a more comprehensive study be made to establish its full potential for development into the most environmentally friendly high density community in the world. In this new review, we should presume that the 40ha area allocated for possible theme park be dropped and deployed for community use. Some 300ha of land was created for Disneyland and only 22ha of that is built up theme park with another 102ha used for Inspiration Lake (30ha including surrounding grounds for leisure), parking and other facilities. There is scope for new theme parks in time but clearly these can be accommodated by tapping on the public infrastructure supporting Disneyland and new land should be formed as and when such need arises in the vicinity.

A comprehensive review should be commissioned to establish full potential of building the world's most environmentally friendly high-density community in North Lantau, completing in less than 12 months





To develop Tung Chung into a mostly-self-sufficient community reflective of the geographic-economic potential of its location at the heart of the PRD, we support reclamation significantly beyond the current plans for Tung Chung East and Tung Chung West. While the precise extent should result from the comprehensive study of Northern Lantau we discussed earlier, it is likely to encompass the areas north of existing trunk roads and railway line which represent already disturbed coastlines beyond Tai Ho and Siu Ho and the area between BCF and Tung Chung (chart above).

Turning to costing, recent reclamation benchmarks could be found from the Hong Kong-Zhuhai-Macau Bridge proceedings of 8th November, 2011 involving the Legislative Council Public Works Subcommittee of Finance Committee: reclamation of about 130ha for the artificial island (BCF) costs HK\$244psf. The report also shows that the cost for reclaiming about 0.65m sf to the east of the Airport Island for the building of connecting roads to the Airport would cost HK\$208psf. These suggest a range of HK\$300-400psf would be sufficient for the reclamation at Tung Chung for the construction of Project Flying Dragon. Referencing the price of the most recent land sales of Tung Chung Town Lot 55B at HK\$2,400psf in December 2011, reclamation costs should be easily recouped.

There is significant expanse of disturbed coastlines and areas of low wide life importance north and east of the existing reclamation districts being studied – these should provide significant potential for development

Reclamation and other development cost can be easily recouped by land sales

As the value-system of our people would demand that the World City of Hong Kong should have the most environmentally friendly high-density community in the world, we should not straightjacket the design of Flying Dragon into existing planning norms which are unlikely to satisfy our aspirations. Not only will the new township conform to the most rigorous environmentally-friendly building standards such as BEAM Plus and PNAP 152, its infrastructure design will also emphasise sustainability. Electric-based road-transport will be the norm serving its residential and commercial areas and water-cooling systems will reduce the use of electricity in air-conditioning. Central treatment of food waste and other best practice will also be adopted.

Environmentally-friendly measures will define Flying Dragon and demonstrate to the world that Hong Kong is not a concrete jungle which pays scant respect for the environment. It will be highly attractive to global talents and locals alike – combining high growth commercial district with a green and friendly neighbourhood which epitomises a value system that respects the environment and the individual. This concept was well implemented in a large-scale environmental project in Seoul a decade ago.

In designing the layout of the buildings, wind-tunnel simulations should be carried out to ensure the area's strong air flows are fully exploited so as to minimise the need for air-conditioning and maximise the field-of-view. While high rise will allow more open space and the tall hills fringing the new town can provide a to-scale backdrop to tall buildings, the average plot ratio of the district is unlikely to exceed six to seven.

In designing the most environmentally friendly high-density community in the world, we must not be encumbered by existing planning norms which will not be demanding enough to meet our people's aspirations for sustainability and a human-friendly neighbourhood

Just as the bulk of the development of Tung Chung never got off the drawing board, the majority of the commercial and logistic spaces embedded in the airport design have also been mired in seeming neglect and indifference by both the government and its wholly-owned Airport Authority. For instance, the North Commercial District (NCD) of the airport consists of some 22m sf of GFA designated roughly equally to commercial and logistic uses. This space was approved by the Town Planning Board 13 years ago.

Land premium and Environmental Impact Assessment (EIA) had been exempted and all planning and construction permissions had been granted already without much restriction. Moreover, the Airport Authority could apply to the government to swap designated GFA within different commercial usage and from logistic/freight forwarding to commercial use, at no or minimal costs in both cases. The latter happened a few years ago when freight forwarding space was swapped to commercial use to support the building of AsiaWorld-Expo convention centre. The only real planning limit is, quite naturally, height restriction of 40-50m or around 7-8-levels. As discussed in this and previous reports, Hong Kong suffers from an acute shortage of retail/hotel/office/medical/parking space. This has translated into rapid escalation of rents which have not only undermined Hong Kong's competitiveness but also spilled over to drive general inflation. The urgency to keep this problem under control and the realization of the economic and social potential of this district warrant the immediate deployment of this fortuitous land reserve. Our proposal to build 11m sf Gateway to the World assumes the application of half of this land bank.

The North Commercial District of the airport, with 22m sf GFA, is the largest ready-to-use land supply of Hong Kong – the territory-wide acute shortage of commercial space and future potential of the district must summon its immediate deployment

Gateway to the World will only tap half of this fortuitous landbank

The NCD currently consists of the SkyCity Nine Eagles Golf Course outside Terminal 2 building and a temporary car park adjacent to the golf course. The lease of both the golf course and car park shall expire in July 2013 and the land should be released for GTTW. Planning and preparation for tenders should commence immediately so that the project can be launched quickly and in time for the completion of the Hong Kong-Zhuhai-Macau Bridge in 2016.

This land reserve is currently a golf course and a temporary car park. The lease of both shall expire in July 2013. Hong Kong cannot afford anymore “waste of space” - planning and tendering for GTTW should commence immediately



This land reserve was originally designated as a potential airport city, termed “SkyCity”, in the Hong Kong International Airport Master Plan 2020 published in 2001. More details were added in the Master Plan 2025 published in 2006. Despite this clearly spelt out earlier intention, in the assessment of the economic benefits in favour of building the third runway conducted a few months ago under “Master Plan 2030”, there was no mention of the colossal employment and income potential the development of the commercial space would bring. In particular, we have argued in earlier sections that this huge commercial project can provide the “content” to justify overseas customers flying to Hong Kong and adds to the usage of our airport and supports the need for another runway. We have also estimated that GTTW should fetch a net present value of HK\$41bn which can already cover almost half the cost of building the third runway which carries a negative present value of HK\$86bn.

The once “SkyCity” has done a David Copperfield? HK\$41bn and lots of externalities are not opportunities that Hong Kong can allow to vanish

Furthermore, the construction of GTTW will not hinder the construction of the third runway under “Master Plan 2030”. The planning of the third runway stipulates an underground automated people mover (APM) depot to accommodate maintenance, storage and other future needs at the NCD and 6,500 car parking spaces for airport users due to new capacity brought about by the third runway. Since the former is underground and the latter will not come out of the existing 11m² GFA, both are consistent with the building of GTTW.

4. MICE is very important to a World City—Hong Kong must re-double its efforts to re-establish its commanding lead in the region

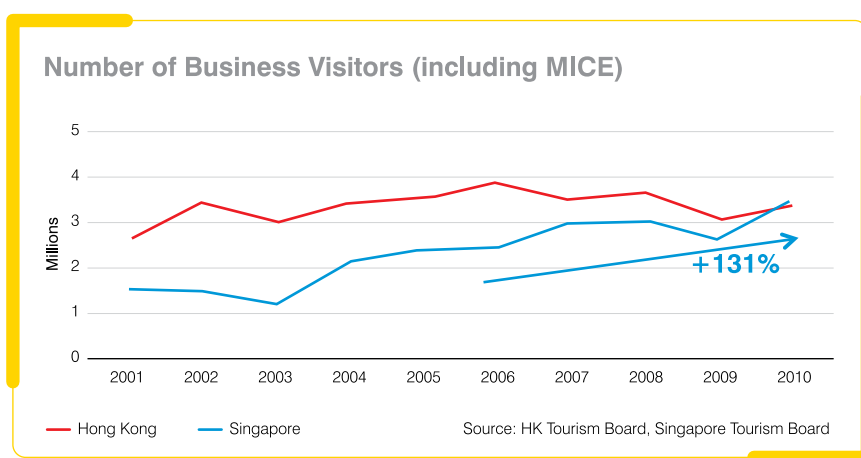
Meeting, incentives, conferencing and exhibition (MICE for short) are very important building blocks of a World City. These events bring visitors from overseas who will experience, first hand, the fun, culture and values of a place and increase the emotional and economic connections of the city with the rest of the world through these events. Many will return, bringing along their friends, family, business associates, as customers, tourists, investors and future citizens of the World City. A World City has a welcoming culture to visitors and Hong Kong should exude this openness and vibrancy of the city by hosting more events. The annual Rugby Sevens epitomizes how the spirit of our city connects deeply with the world through an event.

Convention and exhibition are two major components of the MICE industry in Hong Kong. In 2011 Hong Kong ranks third (after China and Japan) in Asia exhibition market share, higher than Singapore and Macau. However, there are signs that Singapore and Macau are overtaking Hong Kong in hosting conventions: the former through the active promotion and incentives provided by the Singapore Exhibition and Convention Bureau and the latter due to the attraction offered by its casinos and relative facilities.

World City welcomes visitors and connects with them through MICE and events

In 2011 Hong Kong ranks third (after China and Japan) in Asia exhibition market share; however, there are signs of Singapore and Macau overtaking Hong Kong in organising conventions

Singapore is very proactive in expanding the capabilities of its MICE industry and positioning itself as an Asian hub for business conventions and exhibitions. Three new exhibition centres, two of which are part of integrated resorts with large shopping and entertainment facilities, have been constructed within just five years. This has contributed to the rapid growth of business visitor arrivals in Singapore, which has increased 131% from 2001 and overtook Hong Kong in 2010.



By 2011, Singapore has topped Asia's conventions for nine years, according to the International Congress and Convention Association.

There are two main convention and exhibition venues in Hong Kong, namely the Hong Kong Convention and Exhibition Centre (HKCEC) and the AsiaWorld-Expo (AWE), currently having saleable exhibition space of 950,000 sf and 750,000 sf respectively. The three main exhibitions held in Hong Kong are electronics, gifts and jewellery - all are light industries. The advantages of Hong Kong as a venue for these events as cited by exhibitors and visitors include our airport (thus many buyers fly in from overseas), the brand of our city infers quality and the perception that our city is a two-way springboard between China and the rest of the world which is in part due to visa-free access granted by Hong Kong to the majority of countries. Mainlanders especially value and make good use of this connectivity advantage. For instance, in AWE, over 70% of all non-local exhibitors and 34% of all international visitors come from the mainland in 2010 and 2011.

Key advantages of Hong Kong as an exhibition venue are our airport, our city brand, and our city as a two-way springboard between China and the rest of the world

The main organiser of exhibitions in Hong Kong is the Hong Kong Trade Development Council (HKTDC) which commanded around 45% of total market in 2008 and 2009. In contrast, the private sector is much smaller, with some 30 organisers like Global Sources etc sharing out what is left of the market, according to CUHK and BMT Asia Pacific's "Hong Kong Trade Exhibition - An Industry Review" in October 2009 and November 2011. Although there are no accurate published figures from 2010 onwards, The Concern Group for a Competitive Exhibition Industry has stated the market share level of HKTDC was retained in 2010 and 2011.

Market share concentration in the public sector has led to two problems. First, it causes lack of variety of exhibition offerings as HKTDC does not need to venture beyond the "three main exhibitions" even though it is not entirely sure if all three light industries can remain crowd pullers in the long run. Private organisers are not in a position to enter and compete with the behemoth. For instance, Reed Exhibitions, a global leader in the industry and which organizes 500 events a year, only managed to do one or two in Hong Kong but nine to ten in Singapore. Second, HKTDC exhibitions have been concentrated in HKCEC and do not take advantage of the synergies and capacity which HKCEC and AWE together can create. This has led to public impression of exhibition space shortage at HKCEC while AWE has remained under-used. For instance, HKTDC held more than 90% of its exhibition events at HKCEC until 2010 (86% in 2011) even when AWE had become available.

The Hong Kong Trade Development Council (HKTDC) commands 45% of total exhibition market in 2008 and 2009; the private sector is much smaller in size, with about 30 organisers sharing what remains of the market

Market share concentration on the public sector leads to lack of variety of exhibition offerings and upsets the intended synergy effect of HKCEC and AWE

Both HKCEC and AWE were initiated and funded by the government. The original intention of building AWE, as expressed by the Stephen Ip, then Secretary for Economic Development and Labour, in 2003, was to foster the MICE industry in Hong Kong such that both exhibition centres should develop in parallel. The first objective was fulfilled early on: the exhibition market in Hong Kong increased by around 50% in the first year after AWE commenced operations on 21st December, 2005. Though in absolute terms AWE has fallen well behind HKCEC even though given the 22-year history of HKCEC, it should have a more matured business profile and more limited potential for growth compared with the very young and modern AWE.

For the second objective, though the market share of AWE in Hong Kong international exhibition improved to 30% from 2005 to 2011, its growth was reversed in 2009 in the wake of the government-funded HKCEC Atrium Link Extension Project. The project added 210,000 sf (42%) of space to HKCEC. According to AWE Management Limited's "Written Submission to the Legislative Council (Panel on Commerce and Industry)" in April 2010, whereas the annual rented area (measuring how much area is cumulatively rented to conventions and exhibitions in one year) of AWE decreases by 8% from 2007 to 2010, that of HKCEC increases by 109%. The two events point to unproductive competition between HKCEC and AWE which are both government assets.

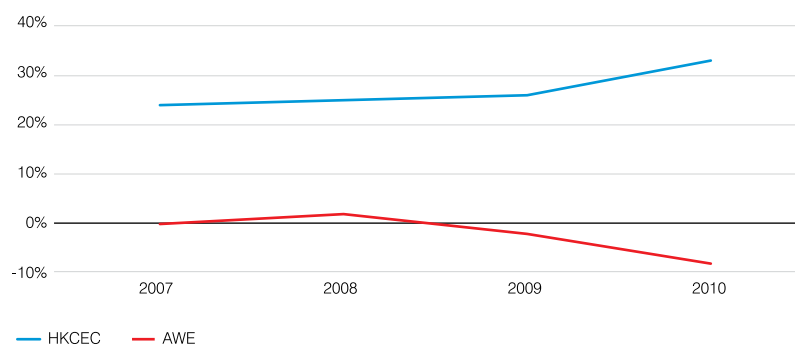
To optimize on the use of our exhibition resources and to encourage innovation, the management of the two venues should be merged and staff should be remunerated, amongst other KPI's, according to Hong Kong's (private and public sector) gain in the share in the region's exhibition market. The TDC, after all, has a mission to promote Hong Kong as whole, and not its market share therein.

The original intention of building AWE was to foster the MICE industry in Hong Kong such that both exhibition venues will develop in parallel

AWE's growth was reversed in 2009 following the opening of the HKCEC Atrium Link Extension Project, pointing to unproductive competition between the two government-owned venues. The two venues should be put under one management in future so that capacities and opportunities are optimized, to the benefit of Hong Kong

There is clear scope for the two public sector players to work, as a corporate body, to optimize not only their combined business and utilize all the synergies in their facilities, but also the market share (including private operators) of Hong Kong in the regional market

Yoy Growth of Rented Area of Hong Kong Convention Centre (HKCEC) and AsiaWorld-Expo (AWE) (2007-2010)



Source: AsiaWorld-Expo Management Limited

The skewing of usage in favour of HKCEC has created impression of shortage in HKCEC exhibition space. This has fuelled recent discussions of building a HKCEC Phase III (already suggested in the 2008 Policy Address) by taking over the sites of the Wan Chai pier bus terminus and Wan Chai Sports Ground. As the HKCEC sits in the middle of a fully developed and busy commercial district with all its facilities and roadways further overlaid with the arrival of the new government offices in 2011, any new exhibition capacity will only worsen the overcrowdedness. Since the law forbids reclamation of the Victoria Harbour, no new hotels, offices, shops and roads can be built to support the added facilities. A much more practical solution will be the upgrading of the support infrastructure at GTTW and create a top quality and fully supported exhibition capability at the gateway of Hong Kong. This can lessen the further over-burdening of already “overcrowded” facilities in the urban locations.

Such negative internal competition between the two venues creates public impression of HKCEC exhibition space shortage, in turn fueling recent discussions of HKCEC Phase III expansion

The question whether HKCEC needs to be expanded remains ambiguous. Although we could cite examples of HKCEC not having enough exhibition space, for instance, from 2008 onwards the annual Kenfair's Mega Show has to be divided into two phases because of space limitation of HKCEC, and some exhibitors of the 2011 Hong Kong International Art Fair needing to rent space for exhibitions in offices in Central, only for 26 days in 2008 and 15 days in 2009 did HKCEC managed to have 100% utilization, according to the CUHK and BMT Asia Pacific's reviews. For more recent data that are available publicly, 100% utilization happened in 22 days in October 2010.

"One Fair, Two Venues" could satisfy the supposed exhibition space shortage problem in HKCEC in the short term. The world's largest jewellery fair since 2009, The Hong Kong Jewellery and Gem Fair, became the world's largest fair of this nature since 2009. International visitors' and exhibitors' demand is greater than any one of the exhibition centre could provide by itself, and the deployment of both venues have been successful in meeting such demand since 2009. In 2011, a record 3,454 exhibitors from 46 countries attracted some 45,000 buyers from 135 countries and regions. All booths were sold out, and the fair expanded to occupy 1,400,000 sf of exhibition space.

HKCEC seemed to be able to achieve 100% utilization for less than a month each year from 2008 to 2010

"One Fair, Two Venues" is a half-way house to full rationalization of the public and private operators. Recent large scale fairs are successful examples

B. Operating Details and Financial Modelling

The world-class quality and world-topping-sized commercial complex Gateway to the World City (of Hong Kong), or GTTW, comprises GFA of 11m sf for the following uses:

Composition of GTTW

		First-phase GFA (m sf) completing 2016	Later-phase GFA (m sf)	GFA (m sf)
Service Complex	Destination Mall	3	1	4
	Medical Service Centre	0.5	0.5	1
	Office	0.5	0.5	1
Car Park		1	0	1
Hotels		3	1	4
GTTW (Total)		8	3	11

a) A 4m sf destination mall with 600+ shops and restaurants

The outlet format is a win-win for retailers, shoppers, airport usage, visitors, jobs and more

The 3m sf first-phase of the retail portion of GTTW will complete in 2016 and add around 3% to Hong Kong's total retail space – not a significant increase compared with the c.50% and c.90% surge in retail dollars over the past two and five years, respectively. Most of this new space will be in “outlet mall” format ie significantly larger shops compared with those in urban areas and which include a large storage area for ex-season stock gathered from the many outlets of a chain or a branded store all across the territory or even from across Asia. A typical shop will occupy 4,000 to 6,000sf as opposed to the 1,000 to 2,000sf stores that are typical of the usual mall in Hong Kong.

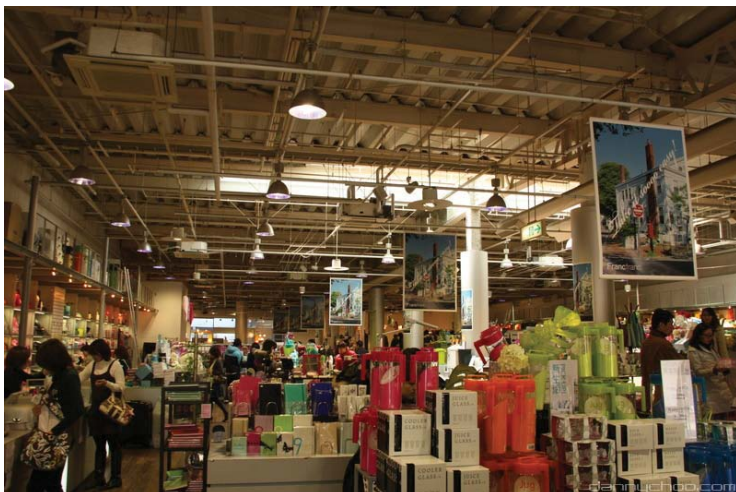
To the retailer, this low-rent (average rent at opening is HK\$20psf), large-space but off-urban location enables it to centralize all the goods and lines that have gone ex-season in high-rent urban shops (for instance, estimated rents for Times Square are no less than HK\$112psf and for Harbour City are around HK\$153psf) for sale in one location so that all the bargain-minded shoppers can have wide choice and convenience otherwise not easily arranged in a one-stop-shop format. This also allows the retailer to put to the much more expensively-rented urban shops the new season's full-price offerings quickly after the lapsing of the old season, enabling a more profitable use of high-cost spaces.



To the shoppers, the scale and diversity of offerings of GTTW will make it a destination (ie. worth a special trip just to use the facilities at this location) on first opening. The wide choice and the convenience of being able to buy so many things and enjoy so many services (eg. convention, medical, education, entertainment, hotels etc in the non-mall portions of GTTW also) at one stop will make it the best offering in Greater China, if not Asia. The minimum customer catchment is the 70m population in the PRD who will arrive by land transport and a wider customer base from beyond Guangdong Province, by air.

With a first-phase 3m, GTTW mall compares with the world's biggest destination malls such as the 2.8m sf Mall of America and 3.8m sf West Edmonton Mall and will be the largest mall in Hong Kong, topping the current leader Harbour City which stands at 2m sf with 700+ shops and restaurants.

The first-phase retail space will be rented at an average of HK\$20psf, which compares with the going rate of HK\$30psf+ at Citygate Outlets near the airport. To ensure diversity and an interesting mix which are good for drawing in crowds, higher rents will be set for better-margin brands while lower rents could be set for galleries and studios etc.



Providing ability to cater for further demand and a change of mix, some 1m sf is reserved for the second phase.

b) A 1m sf medical service centre with 400+ beds

The medical service centre provides full-fledged, world-class medical services from acute and major surgeries to medical checkups. It is comparable to the scale of Union Hospital (390 beds) in Shatin. There are many options as to the running of this facility and it can cater for medical tourism and can have components to enable the training of doctors etc. Visitors and relatives to patients who are hospitalized can be conveniently accommodated in GTTW hotels.



To cater for the likelihood of a significant pick up in demand once potential customers realize that such services have become available, some 0.5m sf is reserved for the second phase.

c) A 1m sf office for accrediting, supporting, NGO and other “credibility” services

Office space in GTTW houses offices for shops in the destination mall, education centres, accrediting services, NGO’s and other “flow” and “credibility” related businesses. Some 0.5m sf is reserved for further expansion.

a) to c) form GTTW’s “Service Complex”

d) A 1m sf car park with 10,000 parking spaces

The car park caters for GTTW users which can include visitors

from the Hong Kong-Zhuhai-Macau Bridge. Ideally this type of “holding” facility should be housed in the BCF and run by the government, leaving the valuable space in GTTW entirely for the performance of services as opposed to “storage”. As yet the design of BCF is not available so we shall assume GTTW will have to take up the provision of “transit” point for arrivals at Hong Kong by land. From this entrance point, visitors can: (1) enjoy the best services and retail facilities Hong Kong can offer, “at the gate” of Hong Kong – noting again that a survey of mainland visitors showed that 47% of respondents indicated the main objective of coming to Hong Kong was “shopping” and if this primary purpose is met “at the gate”, there is no need for further travel into the city where there is no or negligent hardware capacity left; (2) “park and ride” to urban locations or “park and fly” to other global locations.

First phase of the car park will have 10,000 spaces, roughly five times the quantity at Harbour City. We expect this figure to be exceeded quickly as the vehicular population in Southern China is huge. For instance, in Guangzhou one out of 13 persons had a car in 2008, and in Shenzhen the figure was one out of every six persons in 2010. It is likely that the land-route will bring in a lot of customers for “health and nutritional necessities” eg. formula powder, who can load up a car or “bulk buy” for themselves or relatives. Further holding capacity should be provided by the government in BCF which has a land area of 130 ha, almost the size of seven Victoria Parks.

Almost all Hong Kong services can be provided to our customers “at the gate” – possibly a world first and makes our city the most convenient service centre in the world

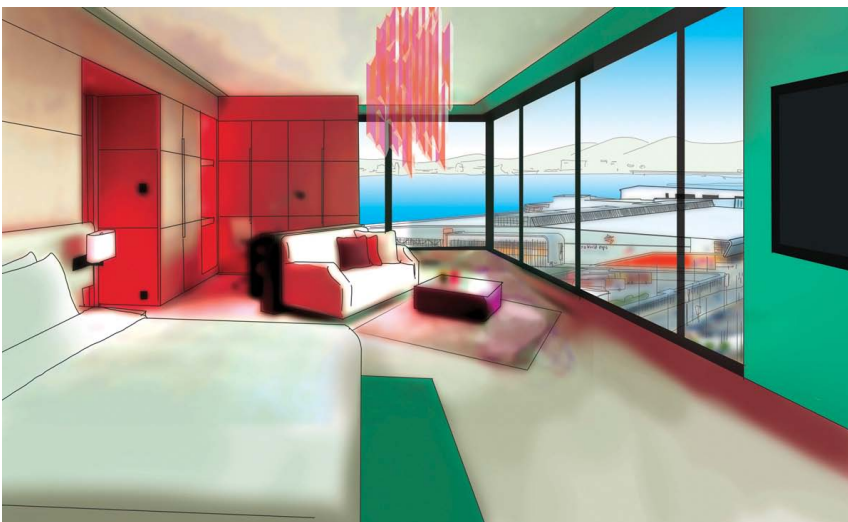
Some 47% of mainland visitors have indicated that their primary purpose for coming to Hong Kong is shopping – this could be satisfied “at the gate” and this can alleviate the “overcrowding” of our urban facilities, rent rise and inflation



e) Six to eight two- to five-star hotels with a total of 3,000 rooms

The 3m sf 3,000-roomed full price-range offerings will cater for visitors that encompass concert- and performance-goers at AWE who want to a no-frills hotel for overnight stay to full-price business and holiday people who come for meetings and tourist facilities in southern China. Together, these new hotels will add around 5% to territory-wide capacity and help alleviate the acute shortage of accommodation. The context being that while visitor number went up over 40% in the past two years, rooms only increased by 6%.

Each hotel will have 400-600 rooms, with around half of them in the format in terms of scale and quality comparable to the Regal Airport Hotel (which has won a number of prizes) and the nearby Novotel Citygate Hotel. Unlike standalone hotels in city centre, hotels in GTTW do not need to reserve large space for convention facilities since AWE is just next door. The natural synergy is clearly observed with the Grand Hyatt Hong Kong and the Renaissance Harbour View Hotel linking up with the Hong Kong Convention and Exhibition Centre Complex.



Another 1m sf is reserved for future expansion or for alternative use.

Mode of operation

We would advise that the government allocate HK\$22bn to the Airport Authority to fund the construction of the GTTW, payable in phases. The Airport Authority shall own the entire GTTW and be responsible for maintaining the entire infrastructure. Service and consultancy contracts could be tendered out to best-in-class operators at reasonable costs who will help run the components of GTTW.

Estimated construction timeframe

First Phase: Four years

Second Phase: Three years

Estimated investment

HK\$22bn (two-stage: first phase: HK\$ 14.1bn, second phase: HK\$7.6bn)

Estimated payback period

Six years (after full opening in 2020)

Net present value

HK\$41.1bn

(Timeframe: 30 years, 2012-2041; nominal discount rate: 4%)

Internal rate of return

13.8%

(Timeframe: 30 years, 2012-2041)

Financial model

1. Construction costs

Estimated GTTW Construction Costs

		Benchmark Unit Cost (HK\$psf)*	Unit Cost in Our Estimation (HK\$psf)	Phase 1 GFA (m sf)	Later phases GFA (m sf)	Total Cost for Phase 1 (HK\$ bn)*	Total Cost for Later phases (HK\$ bn)*
Service Complex	Destination Mall	1,625	1,600	3	1	5.2	2.2
	Medical Service Centre	2,600	2,600	0.5	0.5	1.4	1.8
	Office	1,625	1,600	0.5	0.5	0.9	1.1
Car Park		575-650	600	1	0	0.6	0
Hotels		2,100	1,900	3	1	6.0	2.5
GTTW (Total)				8	3	14.1	7.6

*Based on Quarterly Construction Cost Review Third Quarter 2011, Davis Langdon & Seah, except Medical Service Centre which used Union Hospital first phase,

2. Operating costs

Estimated GTTW Annual Operating Costs

	Benchmark (% of revenue)	Our Estimate (% of revenue)
Service Complex	Langham Place (2011): 21.1	20
Car Park	The Link (2011): 41.5	30
Hotel	Regal Hotels (2011): 51.5	35

Operating costs tend to fall with increasing scale of operation

3. Revenues

Estimated GTTW Annual Revenues

	Benchmark Unit Revenue (HK\$psf)	Benchmark Occupancy Rate (%)	Estimated Unit Revenue to GTTW (HK\$psf)	Estimated Occupancy Rate (%)
Service Complex	Citygate Outlets: \$30+	Citygate Outlets: 99.4	\$20	95
Car Park	Citygate (2012): \$12 AsiaWorld-Expo (2012): \$16 Hong Kong International Airport Terminal 1 (2012): \$20 Terminal 2 (2012): \$16 Terminal 4 (2012): \$20	Rumsey Street (2009): 47 City Hall (2009): 23 Murray Road (2009): 47 Star Ferry (2009): 62 Middle Road (2009): 50 The Link (2011): 75	\$9	40
Hotels	Regal Hotels (2010): \$774 (Average Daily Rate)	Regal Hotels (2010): 85.8 Regal Hotels (2009): 74.2	\$875-1,000 (Average Daily Rate)	70

*Benchmark and estimated unit revenue for car park in HK\$ph

4. Timeline

	Service Complex			Car Park	Hotel
	Destination Mall	Medical Service Centre	Office		
2012	First Phase construction	First Phase construction	First Phase construction	First Phase construction	First Phase construction
2013					
2014					
2015					
2016	First Phase opening of 3m sf	First Phase opening of 0.5m sf	First Phase opening of 0.5m sf	Full opening of 1m sf	First Phase opening of 3m sf
2017	Second Phase construction	Second Phase construction	Second Phase construction	Second Phase construction	Second Phase construction
2018					
2019					
2020	Second Phase opening of 1m sf	Second Phase opening of 0.5m sf	Second Phase opening of 0.5m sf		Second Phase opening of 1m sf

5. Assumptions

1. Nominal Discount Rate = 4%

Benchmarks: 4% (Guangzhou-Shenzhen-HK Express Rail Link)

5.3% (HK-Zhuhai-Macau Bridge)

6.1% (West Kowloon Cultural District)

2. Inflation = 5% (2012-2014), 3% (2015-2042)

Benchmarks: (HK Census & Stat. Dept.) 5% (2011)

3% (2008-2011)

2% (2004-2011)

3. Annual Escalations of Costs: 5%

4. Capital Expenditure Phasing

Capital Expenditure Phasing

	First Phase Construction	Second Phase Construction
Service Complex	2-2-3-3	3-3-4
Car Park	3-3-4	5-5
Hotel	3-3-4	5-5

Capital expenditure is phased. The phasing 2-2-2-3 of the Service Complex means that 20% of total capital expenditure of the whole project will be spent in each of the first and second years while 30% will be spent in each of the third and final years etc.

5. Financial Model Timeframe: 30 years (2012-2041)

6. Estimated Rent Growth (Yoy)

Estimated Rent Growth (Yoy)

	Benchmark Rent Growth (Yoy)	Estimated Rent Growth (Yoy)
Service Complex	6% (Savills Research & Consultancy, 1997-2011) 15% (Savills Research & Consultancy, 2004-2011)	6% (since opening)
Car Park	The Link (2007-2011): 4%	5%
Hotel	Regal Hotels: (2009-2010): 1.5% (2008-2009): -16.1% (2007-2008): 4.8% (2006-2007): 13.6%	6%

7. Practicality Assumptions

Practicality Assumptions

Service Complex	Lettable area = 70%
Hotel	Revenue distribution (Regal Hotels, 2011): 60% (room), 40% (dining, conference and others)