Urgent Greenlight for Third Runway

Critical to Hong Kong's Future

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Summary

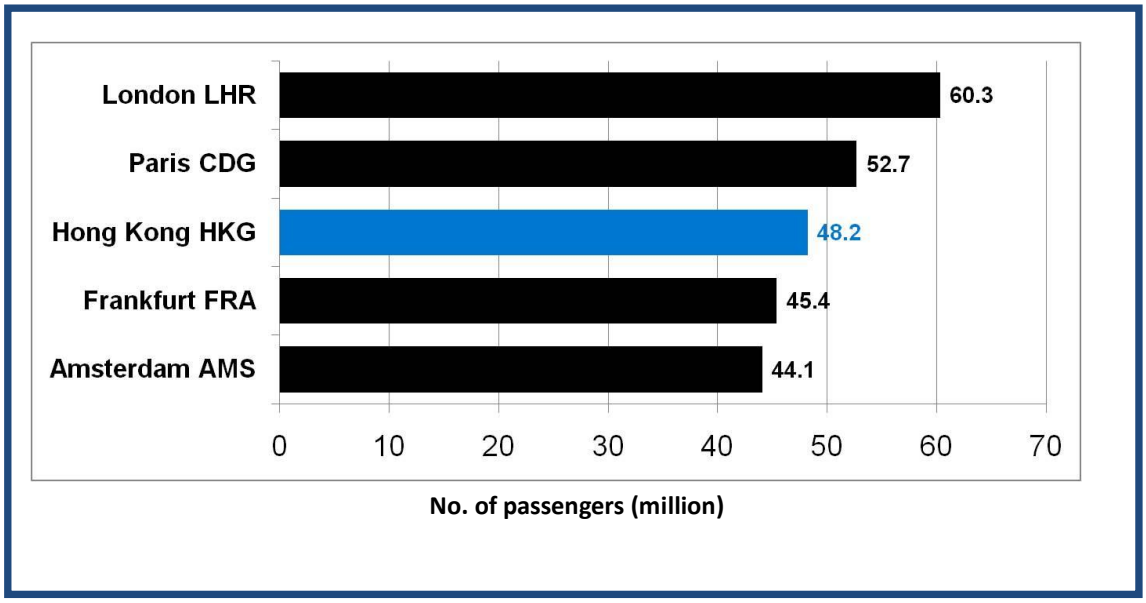
The Hong Kong Ideas Centre (HKIC) strongly believes that Hong Kong is in urgent need of building a third runway at the Hong Kong International Airport (HKIA). The timely completion of a third runway is crucial to sustaining Hong Kong's role as an international and regional aviation centre and maintaining Hong Kong's economic competitiveness, vitality, and development. In view of the rapid expanding regional market and increasingly fierce competition from neighbouring airports for international passenger and cargo traffic, we strongly urge the Government to fast-track the planning and construction of a third runway at HKIA with its completion by no later than 2017.

Introduction

1. HKIA's strategic geographical location, allowing half of the world's population to be reached within five hours, has given Hong Kong the edge as the major gateway to and from the fast growing and most populous consumer market as well as the largest manufacturing base in the world. For the past 12 months, HKIA handled 4 million tonnes of cargo and 48 million passengers, figures that make Hong Kong number one in cargo throughput and number three in international passenger traffic around the world (Charts 1 and 2), where travellers and cargo transit from the Pearl River Delta (PRD) to international destinations and vice versa. Hong Kong's commitment to providing efficient and reliable flight services has been well recognised: HKIA has been recognised as the world's best airport almost 30 times across various surveys and international magazines.

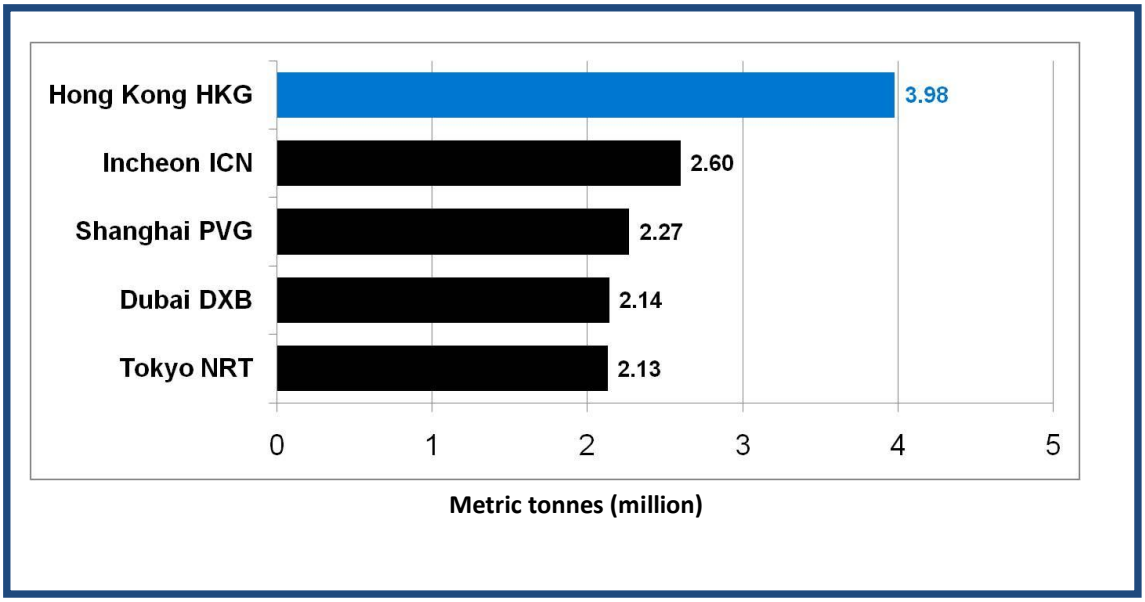
2. Hong Kong's present success as a leading international and regional aviation hub is a direct result of the timely and visionary decision in 1989 to build the new airport at Chek Lap Kok (CLK). Hong Kong's continued prosperity has depended on this forward-looking investment decision, in addition to favourable regional and macroeconomic conditions. However, as demand for flight services grows, HKIA's ability to continue to provide a first class service has been brought into question as runway capacity has become increasingly stretched. Today, we are in urgent need of another decision to invest in Hong Kong's future – by building a third runway so that we can at least compete on near-equal footing with fast-moving and rapidly-expanding competitors. The time to act is now – any later Hong Kong will risk falling behind other leading airports in the region.

Chart 1: World's busiest airports in terms of international passenger traffic for past 12 months



Source: Airports Council International.

Chart 2: World's busiest airports in terms of cargo throughput for past 12 months



Source: Airports Council International.

HKIA: a critical factor to Hong Kong's success

3. Air services are vital to Hong Kong's economy. By facilitating the flow of people and trade, our aviation industry plays a crucial and leading role in promoting growth in the productivity, efficiency, and competitiveness of the four pillars of our economy: financial services, trading and logistics, tourism and exhibition, producer and professional services. The ready availability of international and regional flight services is a major factor in attracting inward investment to and establishment of corporate regional headquarters in Hong Kong. An international study revealed that 64% of firms consider access to air transport a decisive factor in locating certain types of economic activities, especially when inward investment decisions are being made[1]. Hong Kong's comparative advantage in aviation has, to a large extent, contributed to make Hong Kong Asia's second largest and the world's fourth largest foreign direct investment recipient[2].

4. The aviation industry is a major provider of jobs. HKIA is an

[1] *The Socio-economic Benefits of Aviation* (Airbus, 2010); *The Economic Benefits of Air Transport* (ATAG, 2000)

[2] *World Investment Report 2010* (UNCTAD, 2010)

economic powerhouse and supports some 220,000 direct, indirect, and induced jobs in Hong Kong, equivalent to 8% of the total working population and contributing to 8% of the GDP[3]. With 60,000 people directly employed within HKIA's perimeter fence, it is the biggest single-site employer in Hong Kong[4]. Our airport also generates a further 160,000 jobs in other sectors including transport services, tourism, and trade.

5. Airports are gateways to the global economy, vital for business activity, family, and leisure travel. In today's highly globalised economy, Hong Kong competes on the world stage by exporting high-value products and services and maintaining a highly skilled, highly mobile and professional workforce. This would not be possible without an efficient airport that is capable of ensuring the rapid and timely flow of people and goods wherever and whenever they need to be, be it around the world or within the Mainland. Today, HKIA serves as a transit point for one third of its passengers to and from international destinations, and helps transport, in value terms, a third of Hong Kong's total imports, exports, and re-exports[5].

Fierce competition from neighbouring airports

6. Hong Kong today faces fierce competition from other rapidly developing aviation hubs in the Asia-Pacific region. Leading airports in Seoul, Kuala Lumpur, Bangkok, and Singapore are enhancing their competitiveness by increasing runway capacity so as to capitalise on the growth of demand. To this date, Seoul Inchon has three runways, with a fourth due to open by 2020. The expansion plan of Kuala Lumpur seeks to complete five runways by 2020, a substantial increase from the current two runways. Bangkok is also expanding and will double its runways to four, both Singapore Changi and Taiwan Taoyuan currently have two runways, with a proposal for a third runway in preparation already (Chart 3).

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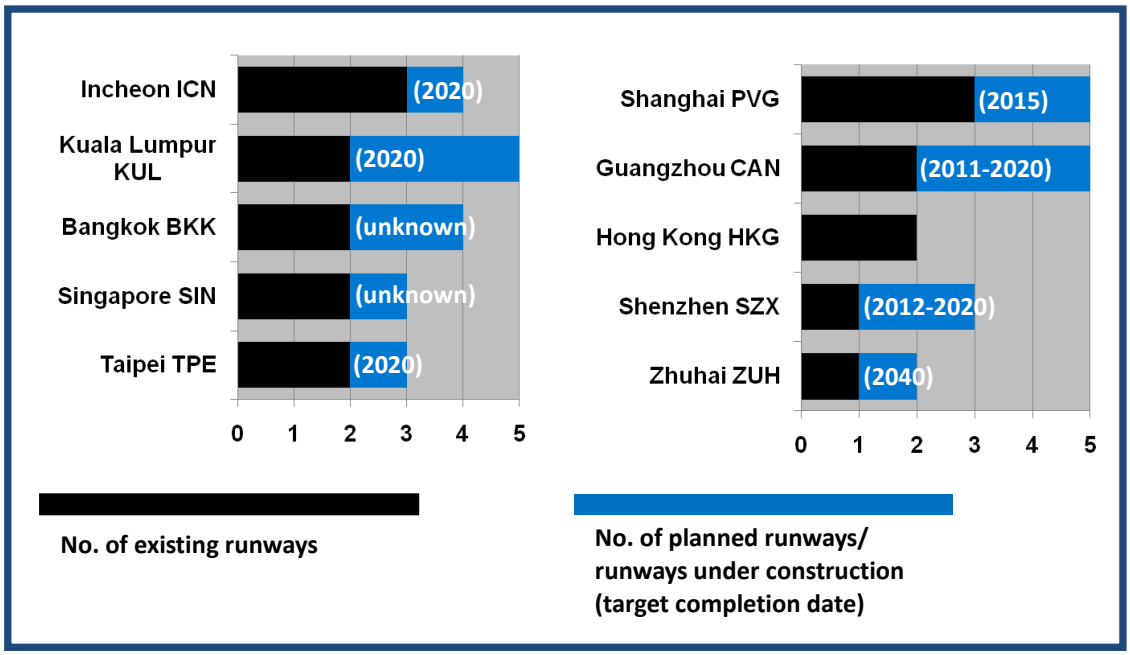
[3] *CX and the Aviation Industry's Contribution to HK* (Cathay Pacific, 2010)

[4] HKIA website (www.hongkongairport.com)

[5] Hong Kong's total imports, exports, and re-exports carried by air accounted for 39%, 34%, and 31% respectively in value terms in 2009 (Census and Statistics Department, 2010).

Chart 3: Expansion plans of competing airports



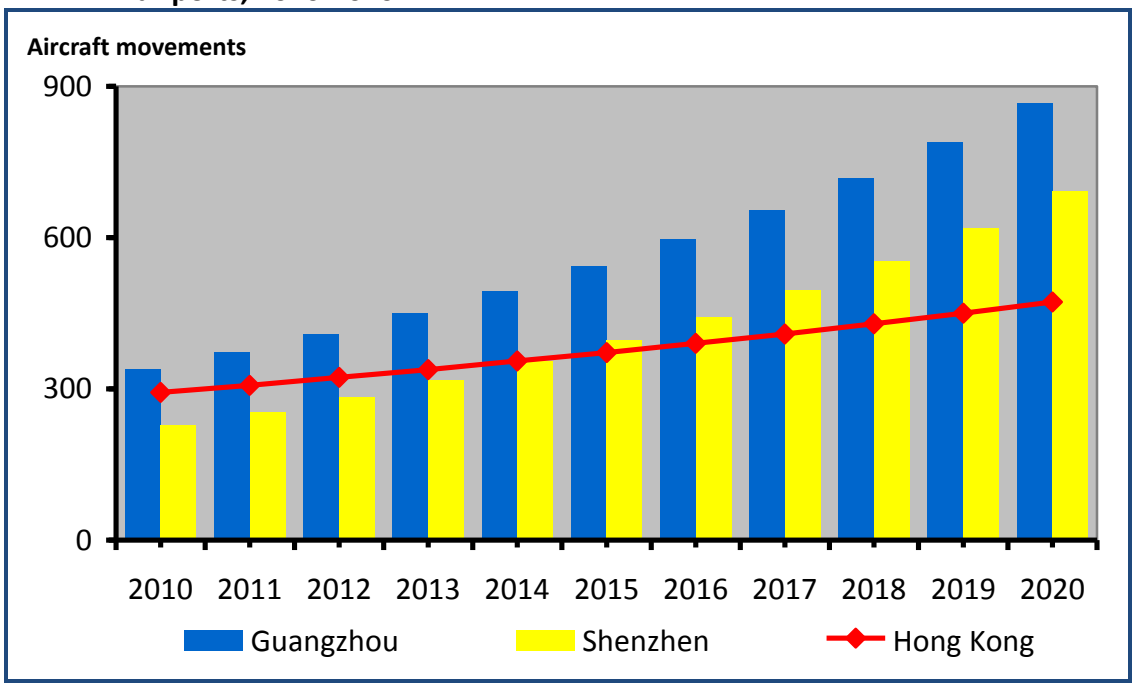
7. In the Mainland, airports have also been expanding at a phenomenal rate to cope with the fast-growing home market and a burgeoning demand for international services. The mega hubs at Beijing and Shanghai[6] have increased their runway and terminal capacities to such an extent that both airports have surpassed Hong Kong in terms of total passenger traffic and aircraft movements. Today, Beijing airport's three-runway system generates a volume of traffic movement almost 1.7 times that of the HKIA.

8. Closer to Hong Kong, Guangzhou has obviously benefited from the *National Plan for Civil Airports* of the Civil Aviation Administration of China (CAAC) to strengthen its international competitiveness by increasing its runways from two to five (Chart 3). At the same time, the expansion plan of the single-runway airport at Shenzhen includes two new runways, with its second runway due to open in 2012. Likewise, Zhuhai has proposed to build a second runway. Upon completion of all expansion projects by 2020, our PRD competitors (including Guangzhou, Shenzhen, Zhuhai, and Macao airports) will have 10 runways in total, in contrast to HKIA's two

[6] Pudong and Hongqiao airports combined

runways - if we stand still. The increased runway capacity will allow for more flight movements and passenger traffic at these airports (Charts 4 and 5). Flight movements in Guangzhou will reach 600,000 by 2016, and passenger traffic will reach 93 million in 2017, doubling Hong Kong's present figures. Meanwhile, Shenzhen is expected to overtake Hong Kong in five years in terms of flight movements, and in seven years in terms of passenger traffic.

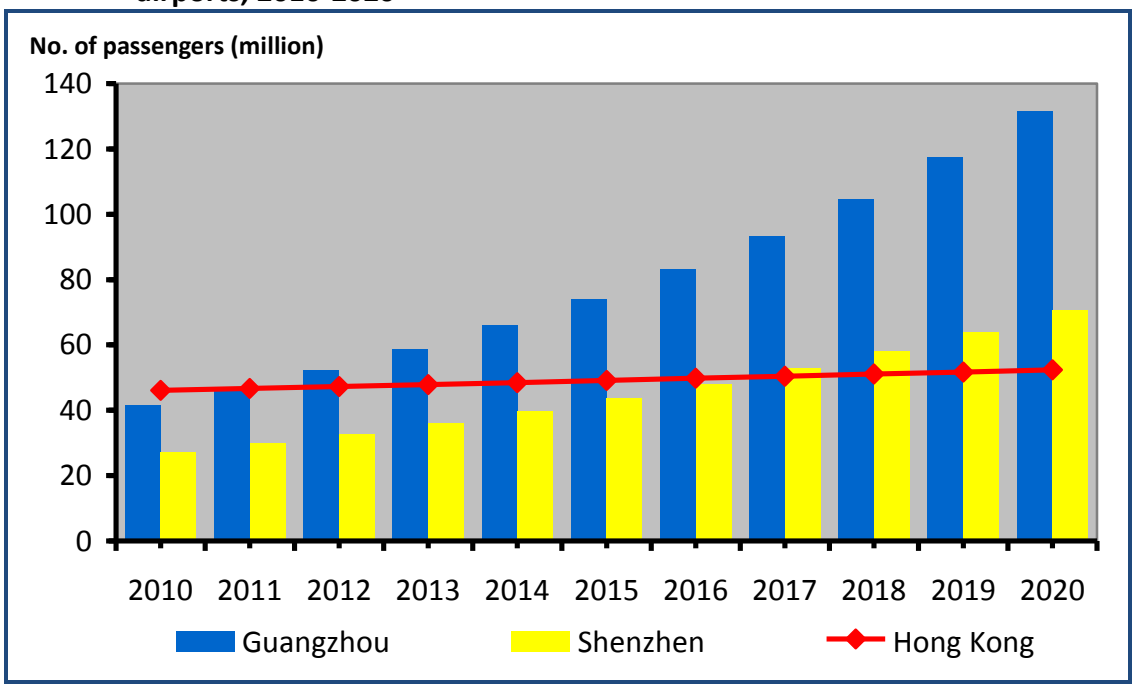
Chart 4: Forecast of aircraft movements at Guangzhou, Shenzhen, and Hong Kong airports, 2010-2020



Notes: aircraft movements = landing and takeoff of an aircraft; forecast based on average growth rate of 2000-2009: Guangzhou = 9.8%, Shenzhen = 11.8%, and Hong Kong = 4.9%.

Sources: Airport Authority Hong Kong (AAHK) and CAAC statistical data 2000-2009.

Chart 5: Forecast of passenger traffic at Guangzhou, Shenzhen, and Hong Kong airports, 2010-2020



Note: forecast based on average growth rate of 2006-2009: Guangzhou = 12.2%, Shenzhen = 10.1%, and Hong Kong = 1.3%.
Sources: AAHK and CAAC statistical data 2006-2009.

9. To keep pace with the intensifying competition, Hong Kong has to build a third runway as soon as possible; otherwise Hong Kong risks losing its role as an international and regional aviation centre. At present, HKIA is operating at 93% of permitted runway capacity[7]. The limited runway capacity at HKIA, and the expanding runway capacity by regional competitors, has led to more international flights being picked up by other airports in the PRD region, and may reduce the need for passengers to transit through Hong Kong. In 2005, Guangzhou and Shenzhen served 35 and 16 international cities respectively. Today, Guangzhou serves 47, whereas Shenzhen 32 (Table 1).

10. The same argument is valid for freight traffic, where the increased runway capacity at competing airports is one of the factors that attracted FedEx to setup its regional logistics hub in Guangzhou, and UPS to move to Shenzhen. It should be kept in mind that at present about 50% of cargo at HKIA is transported by passenger

[7] The figure is derived from HKIA's 27,195 aircraft movements in October 2010, and calculated on the assumption of 16 opening hours and 59 permitted flight movements per hour.

planes, and therefore cargo traffic and passenger traffic go in tandem.

Table 1: Number of international and Mainland destinations served by Guangzhou, Shenzhen, and Hong Kong airports, 2005 and 2010

	2005			2010		
	International cities	Mainland cities	Total	International cities	Mainland cities	Total
Guangzhou CAN	35	79	114	47 (+34%)	107 (+35%)	154 (+35%)
Shenzhen SZX	16	57	73	32 (+100%)	68 (+19%)	100 (+37%)
Hong Kong HKG	100	41	141	119 (+19%)	41 (0%)	160 (+13%)

Why the need and urgency for a third runway?

11. It would be a serious mistake if Hong Kong does not strive to maintain its strategic position in the airport network of the Asia-Pacific region. It is estimated that both passenger and cargo traffic[8] will grow by 7% every year in the Asia-Pacific region between 2010 and 2029[9]. Even stronger growth is expected in the Mainland, where air traffic is expected to enjoy an annual growth rate of 11% to 14% in the next 10 years[10]. In the Mainland, the average number of flights each person takes per year currently stands at 0.17, at 230 million passenger trips. According to the CAAC, the figure is expected to reach 0.3 by 2020, adding some 200 million passenger trips to the Mainland market.

12. Fleet size is expanding in anticipation of the projected passenger numbers. Boeing forecasts that China will need over 4,300 new commercial planes over the next 20 years. Meanwhile, the private jet market in China is poised to take off in a big way as more and more cash rich businessmen fly in swanky luxury jets for business and

[8] Cargo traffic is measured in metric tonnes
[9] *Current Market Outlook 2010-2029* (Boeing, 2010)
[10] *中國航空運輸業發展的十年展望* (CAAC, 2010)

leisure. Private aircraft in the Mainland will grow by 25% every year[11]. It is anticipated that China will surpass the US as having the world's largest number of private jet owners in 10 years[12].

13. Hong Kong certainly cannot afford to let the development of a third runway languish whilst international and regional air traffic grow phenomenally. If the third runway is not constructed quickly enough, we risk losing Hong Kong's relevance as a major aviation hub and our demotion to "just another airport" in the region. History reminds us that Venice, once a vital transport hub dominating the lucrative trade routes between Europe and Middle East for some 600 years, lost to fierce competition from neighbouring cities.

14. Set against an average annual growth of aircraft movements of 6.5% between 2000 and 2008[13], and taking into account all enhancement measures that would lift the maximum runway capacity from 59 aircrafts per hour at present to 68 aircrafts per hour by 2015[14], HKIA will be operating at full capacity by 2017[15] (Chart 6). Since the development of a new runway takes about 10 years from planning to completion[16] and barring any further delays, Hong Kong will still have to contend with several years of congested runway operations (between 2017 – 2021), with little, if any, further scope for expansion and alleviation in between. This will occur amidst the timely completion and operation of new runways across the Asia-Pacific region and within the PRD.

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[11] Asia Jet website (www.asiajet.com)

[12] *中國私人飛機「井噴」調查* (*東方早報*, 20 July 2010)

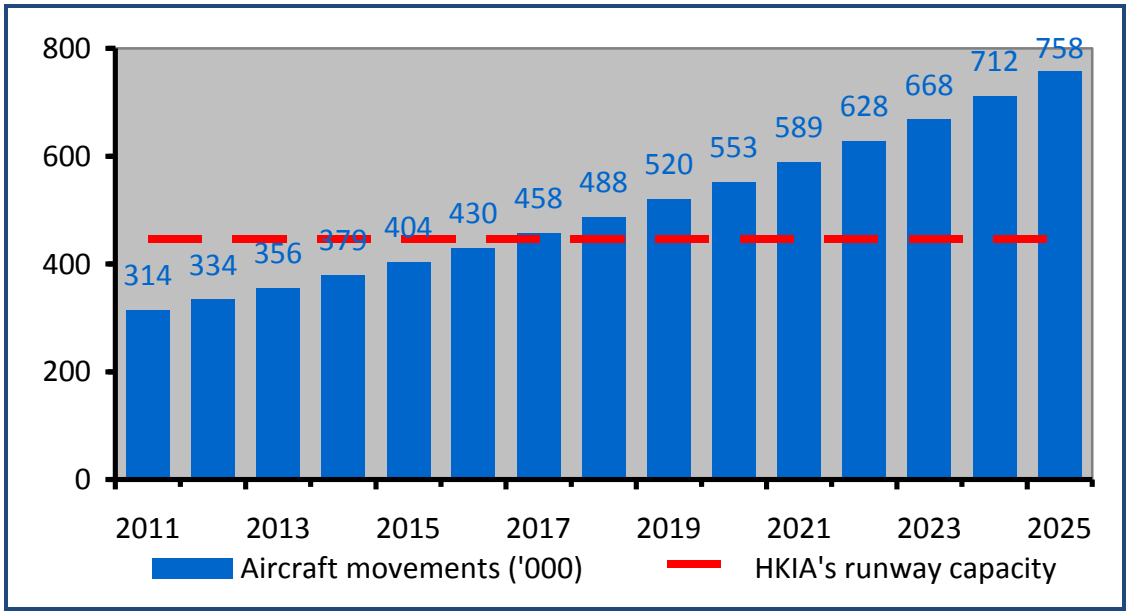
[13] AAHK statistical data 2000-2008

[14] Enhancement measures include the rationalisation of flight procedures, recruitment of additional air traffic controllers, and replacement of the air traffic control system. These measures are to gradually increase the runway capacity from 59 to 68 aircraft movements per hour by 2015.

[15] Assuming 18 opening hours and 68 flights per hour, the maximum practical annual aircraft movements of the two runways at HKIA would be 446,760.

[16] Statement made by Chief Executive of the Airport Authority Hong Kong (AAHK), Stanley Hui Hon-chung, in *Runway Study Ready This Year* (*South China Morning Post*, 3 March 2010).

Chart 6: Forecast of aircraft movements at HKIA, 2011-2025



15. Adequate runway capacity at the HKIA is of paramount importance in order to maintain and improve on Hong Kong's role as a globally recognised financial, commercial, and services hub, and is critical for Hong Kong's economy and its future competitiveness. In the interest of Hong Kong's continuous development, the community of Hong Kong has to accept this urgent need to develop a third runway, or risk the aforementioned scenario (to be just another airport and city).

Lessons from other world cities

16. Airport development in metropolitan areas has always been a controversial issue around the world. The potential impacts of such infrastructure projects on the environment have often led to prolonged disputes with parts of the local community, causing delays and even the cancellation of such projects. In Tokyo, development of the second runway of the Narita International Airport made little progress for 20 years. During its inception in 1966, Narita was originally envisioned to have five runways, but strong opposition from local residents led to a down-scaling of the airport to only three. Upon the airport's opening in 1978, only one runway was completed.

The construction of the second runway did not begin until 1986, with its completion in 2002. Even though the government initially gave Narita a monopoly on international services in the Tokyo region, that monopoly was removed given its congestion and expansion problems on the one hand, and on the other the development of new runways, and thus re-opening of international services at its main competitor, Haneda airport.

17. In London, the development of Heathrow's third runway encountered stiff opposition from environmental groups and local residents. The expansion plan began in 1998 with a six-year consultation, and was ultimately shelved in May 2010 by the new coalition government. Running at 99% permitted capacity, today's Heathrow has little, if any, room to expand its services, whilst competing hubs in Europe have expanded their runways, destinations and services[17]. To cite an example, Heathrow served 227 destinations in 1990; this dropped to 187 today.

18. These two case studies provide an important message. Putting aside the controversial issues, Narita and Heathrow, because of the protracted disputes and lost time, are both rapidly losing their leading position as aviation hubs in their respective regions. Narita currently handles just half the passenger traffic of its competing Haneda Airport[18], whilst Heathrow has now slipped from first in the 1990s to fifth amongst European airports behind Frankfurt, Amsterdam, Paris (all of which have three or more runways) and even London Gatwick with regard to the number of destinations served. The British Chambers of Commerce estimated that for every year that hub capacity expansion fails to happen, the UK economy loses up to GB£1.1 billion (equivalent to HK$14 billion)[19].

Overcoming the hurdles

19. Whilst one of the most important environmental impacts by aviation is greenhouse gas emissions, advances in aircraft engine

[17] Heathrow Airport website (www.heathrowairport.com)
[18] Airports Council International website (www.airports.org)
[19] *Economic Impacts of Hub Airports* (BCC, 2009)

technology will bring about further reductions in aircraft fuel consumption, which will directly help reduce emission of particulates and nitrogen oxide and overall greenhouse gas emissions[20]. HKIC advocates that HKIA can emulate Heathrow in providing suitable incentives to reward carriers that fly modern aircrafts with fuel-efficient engines to encourage the deployment of such aircrafts.

20. It is likely that the third runway would involve additional reclamation in waters north of the airport island, and that the development would cause disturbance to the marine ecology. As with large infrastructure projects, an environmental impact assessment obligated by law must be undertaken (which often takes at least a year for data collection and study completion, and adds to the urgency for starting discussion on a third runway). The Airport Authority Hong Kong (AAHK) will have to take appropriate measures to mitigate the negative impact to the affected areas, while at the same time enhancing the habitat of the Chinese White dolphins within and near Hong Kong waters.

21. Noise is undoubtedly a major concern for people living under a flightpath or close to the airport (for example, Tung Chung and Tsuen Wan). While aircrafts have been getting progressively quieter[21], there is no escaping the fact that the new runway will lead to increases in the noise footprint around HKIA. We call on the AAHK to take all possible measures to address the noise issues. We also insist that with additional runway capacity, more flights should be arranged in daytime such that night flights and their associated noise nuisance are kept to a minimum.

22. The current arrangements for managing air traffic flows between Hong Kong and the Mainland are not meeting present day needs. Given that the current framework was put in place in 1997/98 with the purpose of enabling the new CLK airport to enjoy optimum operation for around five to seven years after opening, new solutions should be identified and put in place in tandem with traffic growth and changes in traffic patterns as soon as possible. We encourage the Government to work closely with the Mainland authorities to

[20] For example, the new Airbus A350 could reduce fuel burn by 25% and nitrogen oxide by 35%.

[21] For example, the latest generation of aircrafts such as the A380 is rated as generating only 25% of the noise levels of a Boeing 747-400.

increase the capacity and efficiency of the PRD airspace both for short and long term benefits. This has to be conducted concurrently with planning for a third runway.

Multiple benefits at macro and micro levels - examples

23. HKIC strongly believes that a third runway at HKIA will bring benefits to Hong Kong's economy in multiple ways. For example, the addition of a third runway is bound to increase the number of destinations HKIA serves as well as the frequency of flights on popular routes. With increased passenger and cargo traffic and being the premier aviation hub of the booming PRD region, Hong Kong will become even more attractive to foreign investment. Evidence shows that a 10% rise in air connectivity (by means of adding runway capacity) will increase business investment by 1.6% and boost productivity by 1.3%, with a total increase in GDP of 1.9%[22].

24. The development of a third runway at HKIA would also be a boon for the relatively young Tung Chung community, whose major concerns include high transport costs for residents who have to travel across districts for work every day. We understand that the Government is planning to conduct feasibility studies to establish the scope of the remaining development in Tung Chung. The third runway project could synergise and reinforce the Tung Chung development by creating more jobs within the district during the runway's construction and operational periods, thus reducing the need for residents to travel afar for a living. Increased economic and commercial activities along with population growth in Tung Chung will also provide a stronger basis for further infrastructural and communal developments in the district, such as extension of the MTR line, a bigger hospital, more schools and recreational facilities, etc.

25. Construction prices have surged rapidly in the past few years. The latest estimate indicates an increase of 42% between 2006 and 2009[23]. The Government must kick-start construction of the third

[22] *The Economic Catalytic Effects of Air Transport in Europe* (2005)
[23] *LC Paper No. CB(1)2847/09-10* (Panel on Transport, Legislative Council, 20 September 2010)

runway once decision is made to avoid over-budget due to rapid inflation. We understand that a proposal to build a third runway is currently being prepared and public consultation regarding its feasibility will be launched in early 2011. We call on authorities concerned to allow for no delay in the process.

Conclusion

26. Today, despite technological advances in communication and information technology, increasing globalisation necessitates the movement of more people and goods across the world by air. A world class airport that can handle passengers and freight effectively and efficiently is critical to sustaining the development of Hong Kong as an international focal point of opportunity, growth, and innovation. As regional and global demand for air transport grows – at a phenomenal rate in the PRD and China as a whole, Hong Kong faces strong challenges from emerging competitors in the Mainland and Asia-Pacific region. If HKIA cannot capitalise on the growth in demand because of limitations in its runway capacity, it will not only lose its historical dominance as a regional and international aviation hub, but also risk losing its relevance as a major aviation hub altogether as airlines, forwarders and related businesses migrate to other airports.

27. Between 2000 and 2004, Hong Kong was the world's busiest container port, but lost its position in 2005 when it was outperformed by Singapore. In 2007, Shanghai overtook Hong Kong with a big increment in container traffic. Shenzhen is also set to overtake Hong Kong as the world's third busiest container port in 2010[24] (Table 2). Can we afford to lose our airport's competitiveness as well? The community has to reach a consensus on building the third runway now and HKIC urges the Government to establish a steering committee to kick-start the project immediately with a view to completing the third runway no later than 2017.

[24] *Containerisation International Yearbook*, various years

Table 2: Ranking of the world's busiest container ports, 2000-2010

	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000
Shanghai	1	2			3				4	5	6
Singapore	2	1					2				
Shenzhen	3	4							6	8	11
Hong Kong	4	3			2		1				

Source*: *AAPA World Port Rankings, various years.

28. The year 2011 will mark a century of flight in Hong Kong – a testament to Hong Kong's growth from a small fishing village to a major international city and importance as the gateway to the PRD. HKIC feels there is no better way to commemorate the centenary of aviation in Hong Kong than by making a compelling and long overdue decision on the building of the third runway at HKIA.