

**HKIS Annual Conference 2015**

Development for a  
**Smarter**World**City**:  
**Hong Kong**

12<sup>th</sup> September 2015 (Saturday)

Ballroom, JW Marriott Hong Kong, Pacific Place,  
88 Queensway, Hong Kong



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## Message from Guest of Honour



**Mr Paul CHAN Mo Po, MH, JP**  
*Secretary for Development, Development Bureau*  
*HKSAR Government*

I offer my warmest congratulations to the Hong Kong Institute of Surveyors for hosting its Annual Conference 2015 on the theme of “**Development for a Smarter World City: Hong Kong**”.

Given that Hong Kong is a city filled with skyscrapers, where land is extremely scarce, I cannot overstate the importance of surveyors for all the skill and professionalism they have put into improving our living environment over the past decades. Surveyors also play an important role in the development of Hong Kong by collaborating closely with other professionals, such as planners, architects and engineers, thus helping to make our city into a more sustainable and liveable place.

Land is the most precious ingredient in our continuing prosperity and, as I always emphasise, increasing land supply tops my bureau’s agenda. The Government has been striving to increase land supply in the short, medium and long terms over the past years. Nevertheless, today’s quest for better quality of life and more liveable cities requires a more vigilant attitude towards sustainable urban growth – and over a longer time horizon.

Hong Kong is small compared to many other cities, so our city planning must continue to ride on the principles of high density and high efficiency. Our vision in creating a sustainable and liveable city is to build a “smart city” which is high density, low carbon, and smart, with high mobility and comprehensive pedestrian access. Working towards this vision, we will use Kowloon East as a pilot area to spearhead initiatives in this direction.

This conference provides an excellent platform for exchanging innovative insights from stakeholders and industry experts – and to engage our brains in the development of a smarter world city. I wish the Institute continued success in the years to come.



**Paul MP CHAN**  
*Secretary for Development*  
*HKSAR Government*

## Message from the President



**Sr Vincent HO Kui Yip**  
*President*  
*The Hong Kong Institute of Surveyors*

On behalf of the Hong Kong Institute of Surveyors, I would like to extend a warm welcome to all participants. I am truly glad to see so many experts, professionals and representatives from different sectors gathering here to share and exchange their views on this year's topic "**Development for a Smarter World City: Hong Kong**"

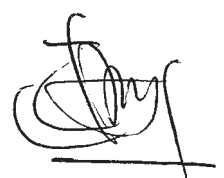
In recent years, the Hong Kong Government has placed great emphasis in shaping Hong Kong into a Smart City. To meet its vision, the Government has declared Kowloon East as a pilot area for exploring the feasibility and practical way of developing a Smart City. For example, using technology to enhance pedestrian and vehicular accessibility, manage district facilities, and disseminate information to the public in digital format with a view to making the area a better place for work and play.

A liveable and convenient "Smart City" can attract different talents to stay and live. The Smart City concept in many other cities covers diverse topics such as information gathering, green environment, transportation planning and reduction of carbon emissions etc. We, surveyors, would further aspire to see how Smart City concept be transpired in the land use, property development and long term property and facilities management perspective. Although Hong Kong is well equipped to develop itself as a Smart City, it is still in its exploratory stage. To explore this hot topic, the HKIS is pleased to provide a platform – HKIS Annual Conference 2015, for experts from various fields to exchange their views.

We have invited prominent speakers and experts to explore how railway development, effective land use, efficient green buildings, "new" business and economic development strategy can be integrated to build a Smart City. Throughout the conference, stakeholders and industry talents can take this opportunity to discuss and to explore the possibilities and solutions into the city's newest development and future.

Today, we are greatly honoured to have the presence of the Honourable Paul Chan Mo Po, MH, JP, Secretary for Development of the HKSAR Government as our Guest of Honour to deliver the opening keynote speech. We are also honoured to have so many leading speakers in the industry here today looking into the topics and sharing their distinctive and valuable perspectives with us. I hope this conference will leave you with a much deeper understanding on this great vision.

In closing, I would like to take this opportunity to thank all our guests, speakers, moderators, sponsors, supporting organisations and the organising committee led by our Vice President Sr Thomas Ho, for coming today and contributing so much to the success of this conference.



**Sr Vincent HO**  
President (2014-15)  
The Hong Kong Institute of Surveyors

# Conference Programme

Time	Program/Topic
08:30 – 09:00	Registration
09:00 – 09:10	<b>Welcome Speech</b> <b>Sr Vincent HO Kui Yip</b> President The Hong Kong Institute of Surveyors
09:10 – 09:40	<b>Opening Keynote Speech</b> <b>Mr Paul CHAN Mo Po, MH, JP</b> Secretary for Development, Development Bureau HKSAR Government
09:40 – 09:45	Group Photo with Guest-of-Honour
09:45 – 10:10	Coffee Break
10:10 – 10:40	<b>Hong Kong Smart City Challenge</b> <b>Sr Hon Tony TSE Wai Chuen, BBS</b> Member (Architectural, Surveying and Planning), Legislative Council & Past President The Hong Kong Institute of Surveyors
10:40 – 11:10	<b>Hong Kong: An Economically Smarter World City</b> <b>Sr LAU Ping Cheung, SBS</b> Past President The Hong Kong Institute of Surveyors
11:10 – 11:40	<b>Building Hong Kong as a Smarter City – The MTR Story</b> <b>Sr David TANG Chi Fai</b> Property Director MTR Corporation Limited
11:40 – 11:50	<b>Q &amp; A</b> <b>Moderator: Sr Spencer KWAN</b> Director Key Alliance Limited Project & Contract Management
11:50 – 11:55	Souvenir Presentation to Speakers and Moderator
11:55 – 12:00	Souvenir Presentation to Sponsors
12:00 – 13:00	Lunch
13:00 – 13:30	<b>Fundamentals for Planning Smart and Smart Planning</b> <b>Mr LING Kar Kan, JP</b> Director of Planning, Planning Department HKSAR Government
13:30 – 14:00	<b>The Digitisation of Business</b> <b>Mr Matthew SMITH</b> Global Head of Market Development, Internet of Things Cisco Systems Inc.

# Conference Programme

Time	Program/Topic
14:00 – 14:30	<b>Hong Kong as Asia's world city: more livable through smarter strategies?</b> <b>Prof Rebecca CHIU Lai Har, JP</b> Head of Department Department of Urban Planning and Design The University of Hong Kong
14:30 – 14:40	<b>Q &amp; A</b> <b>Moderator: Sr Jeffrey WONG</b> Deputy Senior Director, Deputy Head of Hong Kong Office Leasing Savills (Hong Kong) Limited
14:40 – 14:45	Souvenir Presentation to Speakers and Moderator
14:45 – 15:00	Coffee Break
15:00 – 15:30	<b>Experiencing a Smart West Kowloon Cultural District</b> <b>Mr Duncan PESCOD, GBS, JP</b> Chief Executive Officer West Kowloon Cultural District Authority
15:30 – 16:00	<b>Green and Smart</b> <b>Prof John NG Cheuk Yee</b> Chairperson, BEAM Society Limited & Director & Chairman of GLC, Hong Kong Green Building Council
16:00 – 16:30	<b>A Reality Check-Where does Hong Kong really rank and what should be our priorities going forward</b> <b>Sr Nicholas BROOKE, SBS, JP, PPRICS, FHKIS</b> Member, Strategic Development Commission & Chairman, Harbourfront Commission
16:30 – 16:40	<b>Q &amp; A</b> <b>Moderator: Sr Prof Eddie HUI Chi Man, MH</b> Professor Department of Building and Real Estate The Hong Kong Polytechnic University
16:40 – 16:45	Souvenir Presentation to Speakers and Moderator
16:45 – 16:50	<b>Closing Remarks</b> <b>Sr Thomas HO Kwok Kwan</b> Chairman Annual Conference Organising Committee The Hong Kong Institute of Surveyors
16:50	End of Conference

## Speakers and Papers



**Sr Hon Tony TSE Wai Chuen, BBS**  
*Member (Architectural, Surveying and Planning),  
Legislative Council & Past President  
The Hong Kong Institute of Surveyors*

### **BIOGRAPHY**

Tony is a Fellow Member of the Hong Kong Institute of Surveyors. He is currently the Legislative Council member representing Architectural, Surveying and Planning, member of the Standing Commission on Civil Service Salaries, Conditions of Service, Chairman of the Hong Kong Trade Development Council Infrastructure Development Committee and Vice-Chairman of Independent Police Complaints Council. Sr Tse received the Honour of Bronze Bauhinia Star in 2014.

After graduation from the Hong Kong Polytechnic (now Hong Kong Polytechnic University), Sr Tse joined the Hong Kong Civil Services and worked in different offices of Crown Lands & Survey Office (now is Lands Department) for 12 years. He was Senior Estate Surveyor when leaving the public sector. Thereafter, Sr Tse had been working in the private sector and holding senior position in various companies and organizations including Hongkong Land Property Company Limited, Chesterton Petty Ltd., Emperor International Holdings Limited, Urban Renewal Authority, Henderson Land Development Company Limited and Henderson Sunlight Asset Management Limited. Sr Tse is now a director of Brand Star Limited, a property development and asset management consultancy firm.

Sr Tse has over 38 years' experience in real estate business. Apart from the daily business, Sr Tse is keen in community services. He has served as a member of the Hong Kong Town Planning Board, member of the Land and Building Advisory Committee, member of Municipal Services Appeals Board, member of the Disciplinary Board Panel (Land Survey Ordinance), Chairman of the Real Estate Services Training Board of the Hong Kong Vocational Training Council, member of Disciplinary Panel of the Hong Kong Institute of Certified Public Accountants and The President of Hong Kong Professional and Senior Executives Association from 2012-2014. Sr Tse was the Chairman of the Surveyors Registration Board from 2002-2003 and the President of the Hong Kong Institute of Surveyors from 2003-2004.



## ABSTRACT

### Hong Kong Smart City Challenge

A smart city can resolve many city problems and to help the city performs better. Throughout the history of technology evolution, it is often that new tools come first before people can well master their uses. Given the reality that the use of new technology within the government is always lag behind and our laws are written usually based on the past events, they may not able to deal with new and emerging technology properly. Therefore, the laws and regulations must be designed to keep in pace and align with modern trend of technology. Otherwise, our legal system would hinder the city from realizing the full potential benefit brings about by the new technology. The revolution of mobile device and apps is the new challenge that will make profound change to the existing market, disruptive innovations could bring into market and eventually, displacing existing market.

Smart city is building on the conceptual plan of a new urbanized city. However, building a new smart city from scratch is a romantic term. It is not easy to change a conventional existing city to a smart one. It takes a tremendous amount of money and effort to accomplish such goal.

The 21st Century is a smart century and we must well master the resources in infrastructure building, create better and effective connection, and encourage enterprise to carry on to build better way of data usage, connectivity and sharing. The challenge is therefore to build an architecture and legal environment allowing the users of data to easily interact with the internet, and with common and reliable platform to facilitate the accessibility and exchange of data. Building a smart city need a long term vision and blueprint, and particularly the government has to be well prepared to technological change. Government's role is to provide financial resource, build infrastructure, create legal environment to embrace for new technology. Further, Government should encourage public and enterprises stepping forward, to create bright ideas, to make progress, and to challenge to stereotypes and status quo.



## Speakers and Papers



**Sr LAU Ping Cheung, SBS**

*Past President*

*The Hong Kong Institute of Surveyors*

### **BIOGRAPHY**

Sr Lau is a past president and a fellow of the Hong Kong Institute of Surveyors and a past chairman of the Royal Institution of Chartered Surveyors (HK Branch). Currently, he is the Chairman of HK Coalition of Professional Services; a member of the HKSAR Economic Development Commission cum Convenor of the Working Group on Professional Services; a member of the Lantau Development Advisory Committee cum Deputy Chairperson of the Planning and Conservation Subcommittee; a member of the Professional Services sub-group of the Consultative Committee on Economic and Trade Cooperation between Hong Kong and the Mainland. He also serves as a member of the Council of Hong Kong Polytechnic University. Sr Lau was a former member of the Legislative Council, a former Non-Executive Director of the Urban Renewal Authority and a former member of Long Term Housing Strategy Steering Committee. He works as a Project Director at SOCAM Asset Management (HK) Ltd of the Shui On group of companies.

### ABSTRACT

#### Hong Kong: An Economically Smarter World City

The belief Hong Kong is falling behind increasingly competitive neighbours has attracted much attention and discussions recently. Any complacency on Hong Kong's past laurels took a downturn in mid May when the Chinese Academy of Social Science CASS ranked Hong Kong behind Shenzhen in its annual competitiveness study of 294 Chinese cities.

In the mid 1990s Hong Kong and Singapore's GDP per capita were about the same at some USD 25,000, but now the former's about USD 40,000 and the latter's about USD 56,000 for 7.26 million and 5.46 million population respectively.

The results have been widely cited by community leaders alerting people to Hong Kong's falling competitiveness.

"Hong Kong's decline in competitiveness is partly due to the high rents and conflicts with the mainland," said Terence Chong Tai-leung, associate professor of economics at the Chinese University of Hong Kong.

"A competitive place should not charge too high prices," warned Law Ka-chung, chief economist and strategist of Bank of Communications (Hong Kong). "But Hong Kong is incapable of adjusting prices under the US dollar peg regime. The high levels of minimum wage and rental expenses will push costs even higher."

Hong Kong's competitiveness is being eroded by, among other things such as labour shortage, internal politics etc, the shortage of land supply. Not only has the shortage of land supply led to unaffordable housing prices, exorbitantly high business rents and ever increasingly long waiting list for public rental housing PRH, but has also suppressed new business opportunities from being developed in Hong Kong. Yet ironically, some 40% or 443 sq km of Hong Kong's territories of 1104 sq km are zoned as country parks which are untouchable for development of any kind.

Are country parks sacrosanct? Are there any international standards or definition for country parks? What are the basis and ecological bench marks for defining country park boundaries? Is the demarcation of country park boundaries scientifically & objectively calculated? Is preserving country parks untouched as they are serving the best interest of Hong Kongers? Wouldn't people working and living close to country park have a better enjoyment of the flora & fauna? What would you say if using 3% to 5% of the country parks' 443 sq km for housing development and community facilities could resolve the 280,000 family applicants on the PRH waiting list and the 85,000 households living in illegally sub-divided units? Can development and & preservation co-exist alongside each other?



## Speakers and Papers

The belief Hong Kong is falling behind increasingly competitive neighbors has attracted much attention and discussions recently. Any complacency on Hong Kong's past laurels took a downturn in mid May when the Chinese Academy of Social Science CASS ranked Hong Kong behind Shenzhen in its annual competitiveness study of 294 Chinese cities.

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## Opportunities

- ✓ FTZs in Guangdong, Shanghai, Fujian & Tianjin
- ✓ 13<sup>th</sup> 5 year plan
- ✓ One Belt One Road
- ✓ Asia Infrastructure Investment Bank
- ✓ Silk Road Fund
- ✓ FTAs with ASEAN other cities
- ✓ Etc

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## Challenges

- saturated economy (developed), growth 2-3%
- skewed economic structure, lack of diversity
- neighbouring competition, Singapore, Shanghai, Shenzhen, etc
- relationship with Mainland China
- labour shortage
- land shortage
- etc

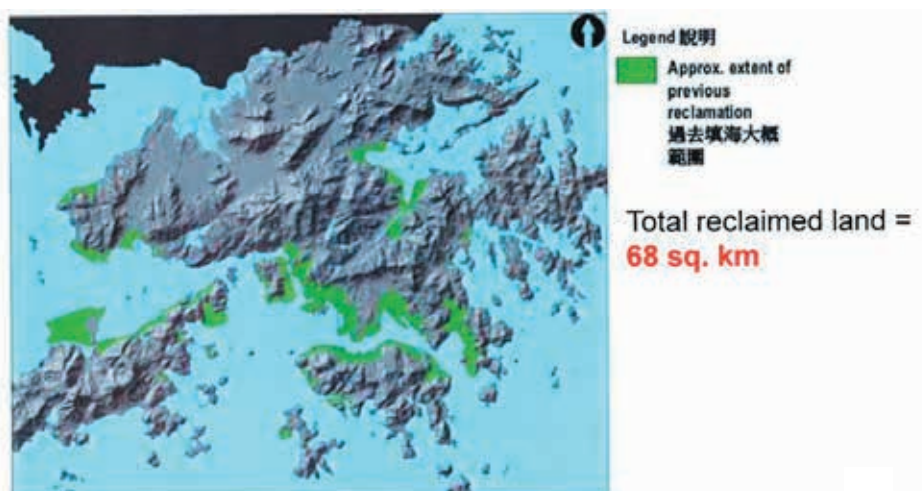
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## Reclamation

- total reclaimed land 68 sq.km or 6% of HKSAR's 1104 sq.km territory
- Singapore 718 sq.km territory including 140 sq.km or 20% reclaimed land; still going for another 100 sq.km reclamation by 2030 (or 29% in total)
- Macau 30 sq.km territory including 18 sq.km or 61% reclamation

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## Reclamation



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## Unleased or Unallocated Government Land

- The myth of Government not fully utilising its land reserve of some 952 hectares
- Government is being accused of favouring NT small house policy with land reserve of some 1201 hectare

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**Unleased or Unallocated Government Land (in hectares)**  
(Based on the data from the Lands Department's Land Information System as at June 2012)

(1) Area of unleased or unallocated government land (i.e. figures provided by the Development Bureau in its reply to the Legislative Council question on 4 July 2012)													
	Residential <sup>(1)</sup>								Commercial <sup>(2)</sup>	Industrial <sup>(3)</sup>	Government, Institution or Community <sup>(5)</sup>	Open Space <sup>(4)</sup>	Total
	2153.7												
	Residential (Group A)	Residential (Group B)	Residential (Group C)	Residential (Group D)	Residential (Group E)	Commercial / Residential	Residential (Group A) in (Group E) and Commercial / Residential	Village Type Development					
	371.8	209.3	182.4	158.6	11.0	19.4	952.5	1201.2	24.6	298.3	777.5	742.6	3996.7
(2) Types of land which are considered not suitable for development, not yet available for development, or with low development potential													
	Residential (Group A)	Residential (Group B)	Residential (Group C)	Residential (Group D)	Residential (Group E)	Commercial / Residential	Residential (Group A) in (Group E) and Commercial / Residential	Village Type Development	Commercial <sup>(2)</sup>	Industrial <sup>(3)</sup>	Government, Institution or Community <sup>(5)</sup>	Open Space <sup>(4)</sup>	Total
Road / Passageways	171.1	45.8	33.7	17.4	3.9	14.5	286.4	137.3	10.4	86.8	169.0	101.5	791.4
Man-made slopes	55.5	49.2	25.1	11.1	0.5	0.1	141.5	106.9	0.9	28.4	136.2	112.9	526.8
Simplified Temporary Land Allocation <sup>(7)</sup>	29.4	3.6	0.7	2.8	0.9	0.1	37.5	24.1	0.1	1.1	30.9	29.3	123.0
Sites which are <0.05 hectares	50.0	15.8	19.3	6.5	1.9	2.1	95.6	Not Applicable <sup>(6)</sup>	7.5	14.3	57	33.4	207.8
(3) Unleased or unallocated government land after deducting the types of land above													
Remaining land area [ = (1) - (2) ]	65.8	94.9	103.6	120.8	3.8	2.6	391.5	932.9	5.7	167.7	384.4	465.5	2347.7

**Remarks:**

- (1) "Residential" includes land zoned from "Residential (Group A)" to "Residential (Group E)", "Commercial / Residential" and "Village Type Development".
- (2) "Commercial" includes land zoned "Commercial".
- (3) "Industrial" includes land zoned "Industrial", "Industrial (Group D)" and "Open Storage".
- (4) "Government, Institution or Community" includes land zoned "Government, Institution or Community".
- (5) "Open Space" includes land zoned "Open Space".
- (6) We have not deducted the sites smaller than 0.05 hectares under the "Village Type Development" zoning.
- (7) Land allocated under the Simplified Temporary Land Allocation procedures is generally for temporary work sites of concerned departments.

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## Agricultural Land

- 5 major property developers and MTR are said to have massive land reserves (all unconfirmed and unverified):-

	Developable and Under-development GFA (M <sup>2</sup> )	Developable GFA (M <sup>2</sup> ) of Agricultural Land Outside NT NE (assume P.R. 3)	Housing Units 65 sq.m
Henderson	985,000	10,400,000	175,000
SHKP	1,272,000	7,525,000	135,000
NW	557,000	4,923,000	84,000
CK	952,000	2,276,000	50,000
Sino	376,000	Nil	5,800
MTR	1,801,000	Nil	28,000
<b>TOTAL</b>			<b><u>477,800</u></b>

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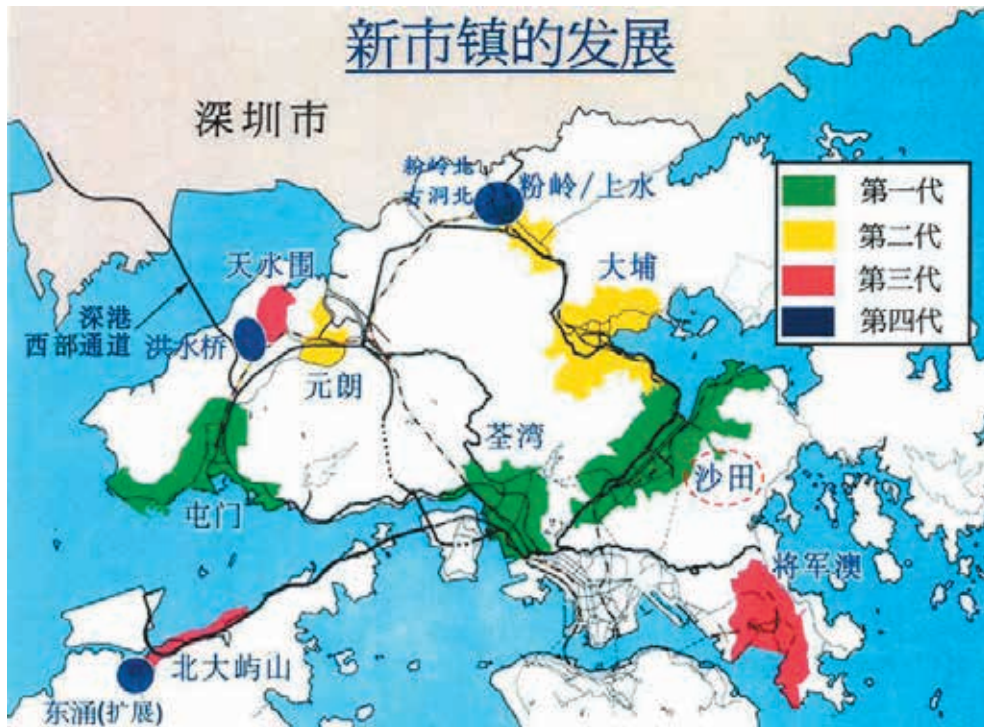
## Agricultural Land

Being hindered by:

- Planning process
- Lease modification
- Land premium
- Infrastructure
- Government bureaucracy
- Politics

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### 新市镇概况

	面积 (平方公里)	2012 人口 (万)	2021 人口 推算数字 (万)
1973 年 通过	沙田	35.9	65.2
	屯门	32.6	49.0
	荃湾 / 葵涌	32.9	80.0
1978/79 年 通过	元朗	5.6	15.1
	大埔	29.0	26.6
	粉岭 / 上水	7.7	25.6
1983-1992 年间通过	将军澳	17.4	37.4
	天水围	4.3	28.9
	东涌	1.8	8.1
第四代 新市镇	<b>新市镇</b>	<b>167</b>	<b>335.9 (约48%)</b>
	东涌(扩展)	2.3	0.1
	洪水桥	7.1	4.3
	粉岭北/古洞北	6.1	0.9
	<b>所有新市镇</b>	<b>184.3</b>	<b>341.2</b>
		<b>414.2 (约54%)</b>	

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## Speakers and Papers

### Reality

- HKSAR Territory 1104 sq. km. including 68 sq. km. from reclamation (6%)
- 24% land area developed
- 40% country park
- 36% undeveloped e.g. agricultural land, hill side, outlying islands etc.
- 7.28 million population on 77 sq. km. (7%)
- 29.3% in PRH; 16.6% in subsidized home ownership housing; 53.5% in private permanent housing; 0.6% in temporary housing
- 280,000 households on PRH waiting list plus 85,00 households in sub-divided units mostly illegal
- Housing prices and rents increasingly unaffordable, 17 years of family average income
- Office and commercial prices and rents being world's highest

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### Country Park

Hong Kong	40% of territory
South Korea	7.8%
Japan	10.8%
Singapore	10%
USA	3.4%

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## Country Park

- Chapter 208 Country Park Ordinance 1976
- 25 country parks, 22 special areas and 5 marine parks
- Country Park & Marine Park Board
- Initially for water catchment, now more for leisure and nature reserve
- S4 of CP Ord.
  - a) to make recommendation to the CE in Council for the designation of area as CP or special area
  - b) develop and manage CP and special area
- S9 of CP Ord.
  - a) draft plan to consult with the Country Park & Marine Park Board
  - b) Gazette for public inspection 60 days

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## Kam Tin South Development

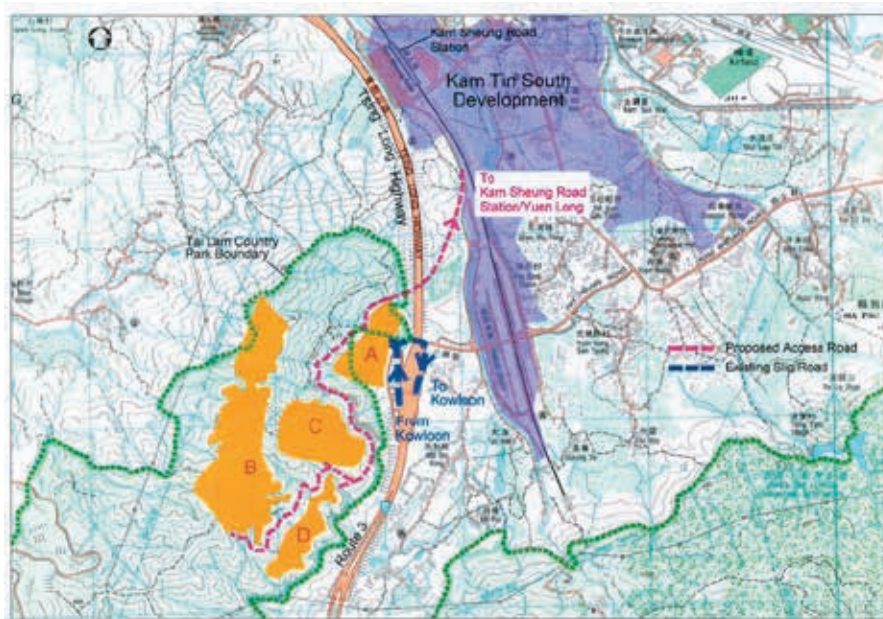
- Area 152 ha
- Station & depot 41 ha x P.R. 3 provide 8750 private flats and 40,000 m<sup>2</sup> retail space
- 40 ha for public housing x P.R. 3 provide 16,900 public flats (require land resumption, at \$800/sq. ft., cost some \$3.5 billion)
- 71 ha for other private housing P.R. 0.8 to 2.1 provide 8,500 private flats
- Total 34,150 flats for nearly 100,000 population including 9 kindergartens, 5 primary schools, 2 secondary schools, GIC facilities, etc.
- 2.65 times Taikoo Shing
- Delisted from CDA site in 2014

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## Site Selection

- Fringe of CP
- Deserted, sparsely vegetated, scientifically low valued, ecologically insensitive
- Close to existing transport facilities, relatively accessible
- Synergy with nearby developments
- Shared use of nearby amenities, GIC etc
- Relatively less time and less expensive for land formation, infrastructure provision etc
- Mostly government owned, few land resumption cost & time



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## Pilot Site

- Fringe of Tai Lam CP boundary
- Planning area about 170 ha (3% of Tai Lam CP 5400 ha) or 0.4% of all CPs in HKSAR
- Development area about 60 ha:
  - Site A with 8~10 ha platform at about 30 m PD;
  - Site B with 30~32 ha platform at about 200 m PD; and
  - Site C & D with 20~22 ha platform at about 130 & 120 m PD
- Potential 60 ha x P.R. 3 could provide about 30,000 flats for 90,000 population with public:private housing at 6:4; public at 50 sq.m. and private at 75 sq.m.
- Good connectivity to Route 3, only 1 km from MTR Kam Sheung station
- Site formation, access road, infrastructure cost about \$8-9 billion, or about \$300,000 per flat (NT NE cost about \$100 - \$150 billion for 59,900 flats or some \$2 million per flat)
- Estimated cost without land premium for public housing: about \$300,000 infrastructure + \$800,000 building construction + others  $\approx$  \$1.5 million per flat
- Constraints: amendment of CP boundary under CPO; preparation of OZP under TPO; ecological impact, environmental groups, politics etc

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### Country Parks

- Are CPs sacrosanct?
- Any international standards? Definitions?
- What basis and ecological benchmarks?
- Is CP boundary demarcation scientific, objective?
- Why enclave within CP?
- Is preserving CPs untouched as they are serving the best interest of Hong Kong people?
- Wouldn't people living close to country park have a better enjoyment of flora & fauna?
- If 0.4% of CPs could provide 30,000 flats, what would you say if 4% of CPs is used for housing?
- Could development & preservation co-exist alongside each other?

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### Purpose

- Face reality and elevate society's discussion from conceptual and subjective advocacy to objective specifics.
- Propose joint platform by stakeholders including government, scientists, environmentalists, planning and development, engineering, etc. to engage in scientific and objective dialogue and assessment to take the matter forward.

**Thank you.**



**Sr David TANG Chi Fai**  
*Property Director*  
*MTR Corporation Limited*

### BIOGRAPHY

David Tang Chi-fai 50, has been the Property Director and a Member of the Executive Directorate of MTR Corporation Ltd in Hong Kong (MTR) since 1 October 2011. Mr. Tang joined MTR in 2004. He is responsible for all of the property development projects of the Company in Hong Kong from layout planning, scheme design through to project construction completion, as well as asset and leasing management of all of the investment properties (including shopping malls and offices) and property management of office buildings and residential units. During his service with MTR, he held senior management positions in the Legal and Procurement Division, and the China and International Business Division before he was transferred to Property Division in 2009. Mr. Tang is a Chartered Surveyor and a member of the Royal Institution of Chartered Surveyors and the Hong Kong Institute of Surveyors.

### ABSTRACT

#### Building Hong Kong as a Smarter City – The MTR Story

##### What is a Smart City?

There is no universally agreed definition of a smart city. More and more people now realize that smart cities are not just cities “super connected” by advance information technology but “an intertwined tapestry of people, technology and the environment”<sup>1</sup>. Viewing from this broader perspective, a smart city, we believe, should make good use of advance information technology, be friendly to the environment and offer better quality of life to the people living in it.

##### The MTR Story

Since the opening of the first MTR line in 1979, not only has MTR constructed railways to connect people, but it also played a significant role in building communities, which becomes the Corporation’s vision. In delivering this vision, MTR has kept Hong Kong continuously moving towards a smarter city.

## Speakers and Papers

### FULL PAPER

#### 1.0 Application of Information Technology

MTR applies advanced information and communication technology to connect the community, providing safe, reliable and efficient train service, and at the same time great convenience in making payments with the Octopus Card and enhanced customer service with various mobile applications.

##### Super Operations Control Centre

Super Operations Control Centre (OCC) in Tsing Yi is the heart of MTR train operations. The 24-hour operating Super OCC monitors and controls all MTR lines except Light Rail and gives quick responses to any incidents to ensure 99.9% on-time performance. This Super OCC will also house the control of the three new rail lines being constructed including South Island Line (East), Kwun Tong Line Extension and Shatin-to-Central Link.

Figure 1 Super Operations Control Centre



##### Fully Automatic Operation Train

Following the Disneyland Resort Line, MTR will introduce Fully Automatic Operation (FAO) train service in South Island Line (East) which is scheduled to come into operation next year. FAO trains provide safer, faster and more reliable services. According to the classification of International Association of Public Transport, our FAO Trains are considered as the highest grade of automation, such that train service as well as door opening and closure would be fully automatic under the control of Super OCC.

##### Octopus Card

Octopus Card is an essential technology to Hong Kong people. Over 28 million cards are in circulation and over 99% of Hong Kong people aged 15-64 have an Octopus. Starting off as a card for travelling on public transport, usage has been expanded to payments of a wide range of services including shop purchases and leisure activities. Octopus card can be a key access card to residential and office buildings and even a library card for students. More functions such as online payment with mobile phone and Octopus Mobile SIM are introduced to cater for the needs of different users. Octopus card has become a part of Hong Kong people's daily life and the city is renowned being top of 84 cities worldwide in smart card penetration<sup>2</sup>.

##### Mobile Applications

MTR has introduced different mobile apps to leverage digital channel and better connect with people in this tech-savvy era. 'MTR Mobile' app, a handy comprehensive journey planner, provides information such as point-to-point station search and landmarks around exits. With 'Traffic News' app, passengers can receive timely alerts on special train arrangement during incidents, festive holidays and adverse weather. Other mobile apps such as 'Next Train' app and 'Intercity through Train' app specialize for passengers of particular lines.

MTR also launches apps to engage customers with brand-new shopping experience. The Elements Society, Smart Telford and PopFans are all-rounded promotion platforms to allow shoppers to



enjoy a digitized and streamlined loyalty program from earning points on their spending, redeeming rewards to receiving location-based surprise offers, all on their smartphones.

**Figure 2 MTR Mobile and MTR Malls Mobile Applications**



## 2.0 Environmental Friendly

MTR is one of the pioneers of sustainability reporting in Hong Kong when we published our first report on environmental issues in 2001. The key elements of our approach to environmental sustainability include provision of sustainable transport, waste conservation, energy management, and food waste reduction.

### Sustainable Transport

Electrically-powered mass transit railway is generally acknowledged as a more environmentally sustainable way to transport people. Same number of passengers that a MTR train would take to transport is equivalent to that 1500 cars would take. MTR therefore contributes to a cleaner and healthier environment in Hong Kong, which emits the least carbon compared with 28 Asia Pacific cities<sup>2</sup>.

The majority of Hong Kong people have access to the fast and reliable MTR service. For a population of 7 million, 5.5 million passengers are now using MTR on a normal weekday. About 90% of trips are made on public transport and MTR accounts for 48% of franchised public transport. MTR is connecting Hong Kong and keeping the city moving – in an environmentally friendly way.

### Keeping Hong Kong Green

In building new railways and property development, MTR has put major effort in keeping our projects green. Take West Island Line Extension as an example, MTR successfully developed a strong and lasting urban conservation programme for the tree walls at Forbes Street dating back more than 120 years and containing old and valuable trees.

MTR is also one of the first companies in Hong Kong to implement voluntary environment standards in a systematic way, setting the goal for our new residential property developments to achieve a minimum of Hong Kong BEAM Plus Gold certification.

### Energy Saving

Many initiatives to save energy have been implemented over the years and MTR continues to find new ways to reduce energy consumption in all areas of business. As part of the MTR's Energy Efficiency Programme, traditional light bulb in stations, advertising panels and trains are replaced by LED lamps. LED lamp lasts 2.5 times longer and saves 40% energy than traditional light bulb. 24,400 LED lamps were installed in 104 trains from 2009 – 2014 and 467 LED advertising panels were installed at 10 stations.

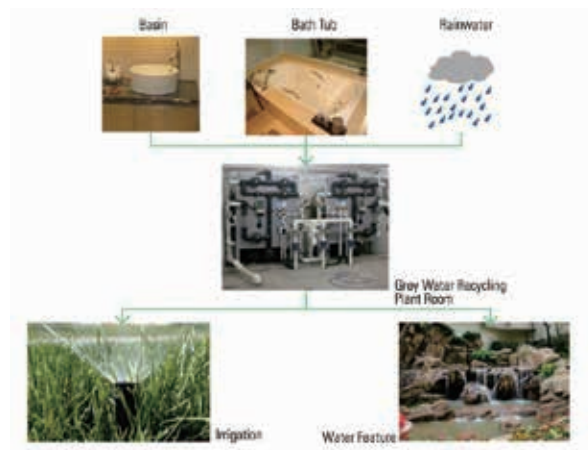
### Waste Reduction and Conservation

MTR has made major efforts to reduce and conserve resources in the properties we develop and manage. Greywater recycling is promoted in MTR's residential properties. A successful case is the greywater recycling system at LOHAS Park which collects and treats up to 440,000 litres of wastewater a day

## Speakers and Papers

enough for re-use in landscaping and cleaning of outdoor public areas. MTR has also recycled about two-third of excavation waste from our network expansion projects and find uses for demolition waste generated from our property development in the local recycling industry. For example, 60% of the waste generated during construction of Austin Station residential development was recycled into eco-friendly paving blocks.

**Figure 3 Greywater Recycling System at LOHAS Park**



### Food Waste Reduction

MTR is a signatory of the Food Waste Hong Kong Campaign and promotes food waste reduction in various ways. Under our self-initiated MTR Malls Food Waste Reduction Pledge, MTR works with food and beverage tenants to minimize potential waste at source and promote food-waste reduction practices.

Under Central Food Waste Recycling for Improving Estate Environment Initiatives, food waste recycling programmes are implemented in Heng Fa Chuen, Tierra Verde and The Capitol. Heng Fa Chuen was the first housing estate in Hong Kong to implement centralized food waste treatment. Thanks to the support of residents and the Owners' Committee, the daily average number of participants has reached 1,400 household units and more than 40,000kg of food waste was recycled in Jun 2015.

### 3.0 People Centric

Cities are built for people, and a city cannot be considered as smart if its people do not feel improvements in the quality of life. Over the years, MTR has put its focus on providing caring service to people in Hong Kong, providing high mobility and convenience, and building up livable, sustainable communities.

#### High Mobility

Mobility is cited as the most significant issue for cities when it comes to attracting investment. Cities worldwide are investing in enhancing mobility by improving the attractiveness, capacity and efficiency of public transport and system innovation.

Thanks to Hong Kong's efficient public transport service with MTR as a key provider, Hong Kong people enjoy very high mobility at affordable costs, being ranked first in terms of urban mobility among 84 cities worldwide<sup>2</sup>.

#### Seamless Connectivity

When railways are fully integrated with property developments, MTR brings unparalleled convenience to people in Hong Kong. The use of valuable railway land is optimized through vertical and horizontal integration to maximize connectivity and convenience.

Take Kowloon Station as an example, residential buildings, offices, hotels and shopping mall are closely connected to the station through a series of indoor and outdoor pedestrian corridors, providing seamless access and promoting convenience and efficiency. People can live, work, shop, and enjoy entertainment all under one roof.

# Speakers and Papers

**Figure 4 Kowloon Station Development**



### Building Communities

MTR is not just a company that builds and operates railways but also a company which grows communities. People are always placed first in our property developments to activate the community by providing highly functional public spaces, supporting facilities and pedestrian-vehicular segregation, so that people can live and socialize in an enjoyable and safe environment.

Tsing Yi Maritime Square Extension, which is scheduled to open in 2017, involves the conversion of part of the public lorry park and public transport interchange into a new focal point for the community. The project responds to the needs of the local community and provides them not only with new shopping facilities but also better connectivity and convenience, including new footbridge and re-arrangement of various uses to bring people more safely to the station and other public transport

facilities. Attractive landscaped gardens will also be provided for the enjoyment of the community.

**Figure 5 Maritime Square Extension**



MTR's Integrated Railway and Property Development In the building of some new lines, MTR is granted development rights to fill the funding gap of railway project, as a result integrated railway and property developments are built. This is known as the 'Rail + Property' (R+P) model. With this efficient value-capture mechanism, MTR is able to secure funding for railway construction as well as continuous railway improvements. In the coming few years, MTR will invest more than \$10 billion to replace the signalling system and 93 first-generation eight-car trains to maintain the railway system in tip-top conditions, thus provide safe, reliable and efficient services to passengers and sustain international recognition as one of the best run railways in the world.

Under the R+P model, a new community providing a regional shopping mall and quality housing will be built above the depot of South Island Line (East) at Wong Chuk Hang, which will act as a catalyst for the regeneration of the old Wong Chuk Hang industrial area into a modern business district.

Another line being built under this model is Kwun Tung Line Extension. A new residential community fully integrated with Ho Man Tin Station will be established to accelerate urban renewal in the nearby Hung Hom district.

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### Looking forward

The Government has set the blueprint for territory-wide railway development in Railway Development Strategy 2014, listing 7 new projects to be implemented. The Corporation anticipates that there will be opportunities for the development of communities which will be closely integrated with the railway infrastructure.

In connecting and building new communities, MTR will continue to improve our service by adopting advanced information technology, being environmentally-friendly and caring for the people we serve, making further contributions in building Hong Kong as a smarter city.

### References:

1. Spence, G. (2014). Is Europe the Smart City Super Power?, Available at: <http://blog.advaoptical.com/is-europe-the-smart-city-super-power> (Posted on 8 May 2014).
2. Arthur D. Little, and UITP. (2014). The Future of Urban Mobility 2.0: Imperatives to Shape Extended Mobility Ecosystems of Tomorrow.





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### **BIOGRAPHY**

Mr K. K. Ling is a professional town planner with extensive experience including planning for the new airport and the Tung Chung New Town, review of the Town Planning Ordinance, harbor-front planning and development, planning enforcement and prosecution, cross-boundary planning, and planning for new development areas.

Mr Ling is the Director of Planning, heading the Planning Department of the Hong Kong Special Administrative Region Government. He is also the chairman of the Metro Planning Committee and Rural & New Town Planning Committee of the Town Planning Board.

Mr Ling obtained his degree in BSSc (1st Class Honour) from the Chinese University of Hong Kong in 1980 and MSc (Urban Planning) from the University of Hong Kong in 1983. He is Fellow of the Hong Kong Institute of Planners (FHKIP), Registered Professional Planner (RPP) and with PRC Registered Urban Planner Qualification. Mr. Ling was the President of the Hong Kong Institute of Planners from 2007 to 2009.

### **ABSTRACT**

#### **Fundamentals for Planning Smart and Smart Planning**

##### **Introduction**

Town planning is an interesting profession; appraising the past, pondering the present, and contemplating the future. The future is forever uncertain and punishingly heavy. The maxim for town planners is that the only certainty about future is its uncertainty. Time can be a variable before a town planner. Since my presentation last year, there has been an obvious surge in interests on smart city. It is more encouraging this year to notice structured studies and researches which could enrich the smart city concept in Hong Kong have also taken shape.

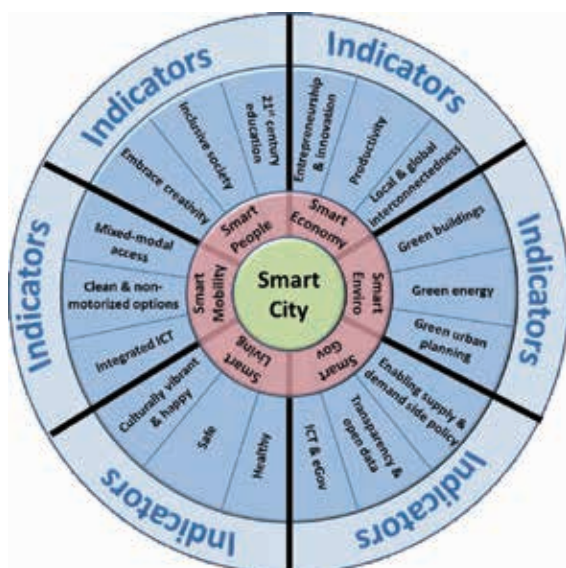
##### **Echo of the Past Year**

At the same event last year, I highlighted the 'DNA' framework (an acronym for 'Density and Diversity', 'Nexus' and 'Adaptiveness') and planning visions for Hong Kong's smart growth when introducing the 'Hong Kong 2030+: A Smart Growth Strategy for our Home'. Ambled by the legacy of pillar strategic planning initiatives over the past decades to shape a liveable Hong Kong, three fundamental aspects 'changing dynamics and aspirations', 'harmonising development with nature' and 'networking homes with workplaces' formed the prelude to the 'Smart Growth Spatial Strategy' of 2030+. Reflected upon our planning and development history, Hong Kong wisely devised a smart growth model for a compact and efficient city in meeting the needs of the community and weathered the tests over time.

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The year 2014 was a pensive time. In the 1950s, 30% of the world's population was urban and the figure has risen through the unprecedented half-way mark to 54% in 2014 and the figure will further increase to 66% by 2050. (United Nations, 2014) Along with rapid urbanisation, last year, the Intergovernmental Panel on Climate Change (IPCC) has again highlighted the importance of sustainable development in addressing climate changes, and the needs for closer co-operation between public and private sectors in applying various technologies in the process. (IPCC, 2014) New technology often appears to take the limelight, in the nutshell, it always comes back to the fundamentals of innovation and fresh acumen insofar as problem solving and improvement to livelihood are concerned.

City is similar to the human body with respiratory, circulation, assimilation and communication systems functioning through a web of feedback mechanisms to ensure wellness. The ability to comprehend timely information on the pulse and dynamic rhythm of our city would be the prerequisite of any smarter plan. We need to develop smarter cities to response to changing global as local issues, and meeting the changing needs of our citizens on environment, mobility, work or leisure fronts. The Smart Cities Council (Smart City Council, 2012) highlighted liveability, workability and sustainability as the three core values about smart city. Cohen (Cohen, 2013) has developed a more holistic framework with smart economy, smart environment, smart living, smart mobility, smart people and smart governance as the 6 key sectors



(Adapted from: Smart Cities Wheel, Boyd Cohen, 2013)

with sub-indicators. With such framework and indicators, it is apparent that town planner has a blatant and pivotal role in planning 'Smart City' as towns and cities evolve along with innovation and technology especially in the crowded and complex theatre of Hong Kong.

### Planning with Vision

Bearing no boundary nor coming in any particular forms, innovation is the embodiment or synthesis of knowledge, value or process. An innovation is the end result of the creative process. (HBP, 2010) Town planners often endure cocktails of issues requiring different levels of innovation. Planning initiative can be innovative on its own right without any specific technology affiliation.

Urban population in Hong Kong witnessed the first ever exponential growth from 2.07M in 1951 to 3.86M in 1971. (Ho, 2004) To cope with the surge, the then Governor Lord MacLehose announced in 1972 the 'Ten Year Housing Target Programme' which laid the foundation for planning new towns in Tsuen Wan, Sha Tin and Tuen Mun in Hong Kong throughout the 1970s and 1980s, housing about 1.8 million people. (Town Planning Office, 1988) New town development has since been the driver to better living environment and decentralise population from the main urban areas. With new infrastructures and facilitates, living environment in the rural areas have also significantly improved. Today, over half of our population resides in the 9 new towns built since the 1970s.

The Port and Airport Development Strategy (PADS) featuring the construction of a new airport at Chek Lap Kok as a centre piece was announced in 1989. Comprising of 10 projects and involved the formation of 1,699 hectares of land, the Airport Core Programme (ACP) covered a new airport, airport railway link, expressway connection system and associated reclamation formed the driving force for planning and development. (Ho, 2004) Other than giving birth to the Tung Chung New Town and new office centres in West Kowloon and Central, ACP also set a new standard for passenger-transport connectivity and further enshrined the rail-based planning model in our development. The designer of the Chek Lap Kok airport terminal, Lord Foster, has finely summed up, 'I still find the scale of the project and boldness of the Hong Kong Government's vision remarkable – it was one of the most ambitious construction projects of modern times.' (Foster, 2015)

Environmental issue started to draw wider public attention in the new millennium. Planners had taken the led to advocate sustainable development by preparing a vision for Hong Kong in the context of HK2030. Guiding principles for sustainability were developed to assist evaluation of development options, and a number of new development areas were identified in the New Territories to set the planning framework in meeting the future needs of Hong Kong. (DEVB/Planning Department, 2007) Regional development also became part of the long term planning and infrastructure development for Hong Kong. Planning Department has recently initiated the HK2030+ study to review, update and refine key components pertaining under HK2030.

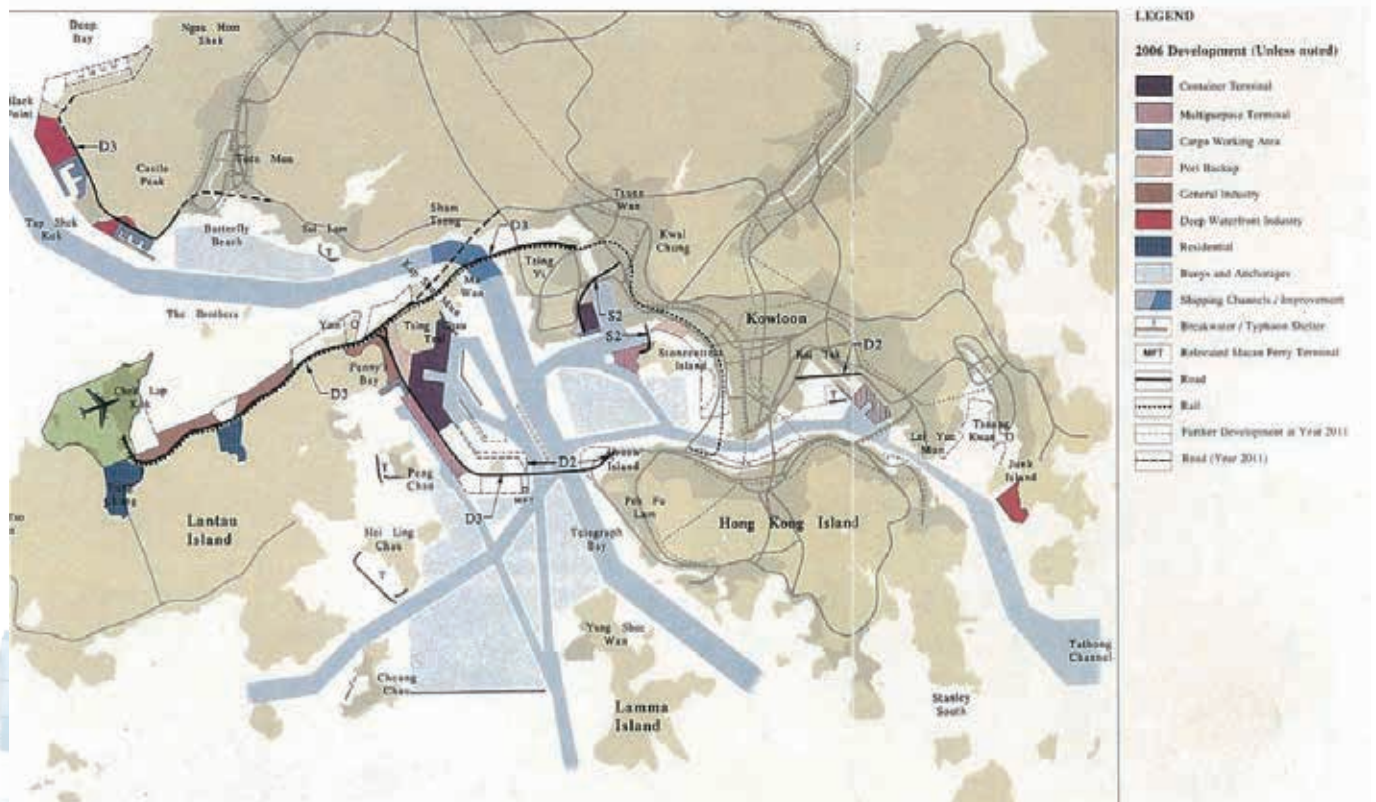
Facing with land uses and economic restructuring, the Energizing Kowloon East Office (EKEO) was established in 2012 to transform the once industrial heartland in Kowloon East into an attractive core business district. Featuring connectivity, branding, design and diversity (CBD2), new planning initiatives were introduced as catalysts. The aim is to adopt placing making planning approach to create

public spaces where people would like to work, to do business, to walk, to stay, to play and to enjoy. (EKEO, 2013) Under a wavy skyline reshaped by new commercial centres and refurbished buildings, the transformation of Kowloon East has been apparent to everyone far and wide. Briefly revisiting a few chapters of our development history, it is not hard to appreciate how planning visions ignited the engines of transformation elevating Hong Kong into another stage.

### Planning with Technology

Information technology tools are inseparable from town planning. Planning Department introduced the first digital statutory Outline Zoning Plans (OZPs) back in December 1996 laying the foundation for a new planning information age. Computer-Aided Design (CAD) and Geographic Information System (GIS) dominated the 1990s.

In 2000, integrating remote sensing and GIS technologies in land use classification, a territory-wide broad land utilization digital map was prepared. The work has since



Port and Airport Development Strategy (ADS) – 1989

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3D Graphics for Public Engagement Exercises

become an annual exercise providing vital information about Hong Kong to government departments, businesses and international agencies. Apart from classification data and maps, related satellite images captured and used for the annual analysis have also been made readily available for use by government departments.

With the availability of Internet, a dedicated Statutory Planning Portal (SPP) to disseminate integrated statutory planning information was launched in 2003. As the first web-GIS based system, coherent statutory planning information became available to public and within the government. Since then, Planning Department has been continuously providing user-oriented GIS and various information technology-based services to users within government, business sectors, academic institutes and the public free of all charges.

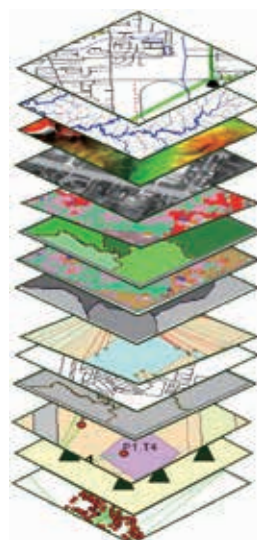
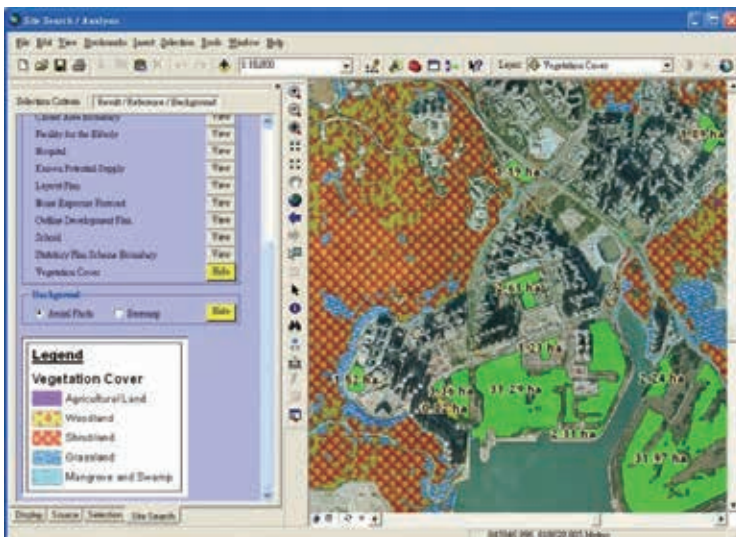
Other than dissemination of information, Planning Department utilises information technologies to continuously enhance town planning in Hong Kong. The Kai Tak Planning Review in 2006 pioneered the integrated

use of GIS, 3D graphics and multi-media technologies for public engagement, effectively setting a de-facto standard for all subsequent public engagement exercises.

In 2010, using new technology and technique, the most comprehensive, accurate and photo-realistic 3D building models ever available in Hong Kong were created. Planning Department shared all the 3D building models, aerial images and technical knowledge with other government departments including Lands Department.

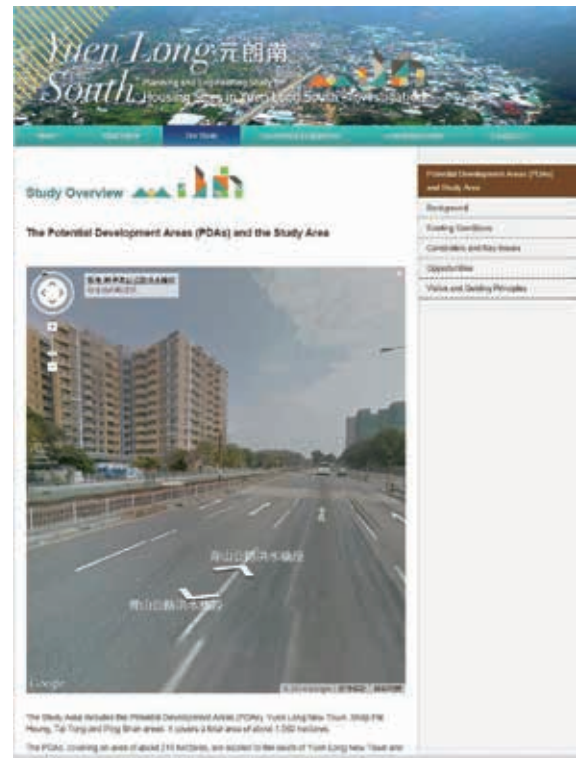
Operated on self-developed algorithms, a GIS-based multi-criteria site search tool developed in-house won the Hong Kong Information Communication Technical top awards, and the prestigious Asia Pacific Information and Communication Technology Grand Awards for Hong Kong internationally.

In 2014, a new Public Participation GIS (PPGIS) was launched to further enhance public engagement within which users can access street view and up-to-date map information provided by Google. The customer-targeted



Site Search Tool





Public Participation GIS

approached has significantly enhanced user experience and satisfactory level. As part of all public engagement programmes, dedicated web-site would be launched for all planning studies to disseminate planning information, and more importantly, to promote public participation in town planning and consensus building.

A new look SPP (SPP2) was launched last year after revamp. The system earned wide-spread recognition for its efficient, practicality and user-oriented logic from professionals, businesses and the public. SPP2 recorded more than 10M hits per month on its debut in late 2014, hit rate remains well over 20M per month for the past six months with the highest count recorded in May 2015 for over 30M hits.

Planning Department also proactively uses information technologies to support education and further public awareness. The City Gallery in Edinburgh Place, Central offers a range of interactive exhibits and conducive educational atmosphere for members of the community,

academic institutions and overseas visitors to familiarize with town planning, environmental and development matters in Hong Kong. Using a range of information technologies including indoor positioning, City Gallery App provides virtual guided tour, audio/visual link and augmented reality information through different mobile devices significantly enhancing visitors' experience.

Planning Department adopts a business driven information technology development and application strategy. An open, proactive and inclusive culture has been the pillar in exploring and developing new technologies to improve town planning work. We are always ready to collaborate, innovate, share knowledge and experience with others as seen from the few examples mentioned. Taking on new challenges fearlessly but never indulging, we seek to give rather than to take; support instead of control. Advancement in information technology would affect all sectors, we need foresight, innovation and think smart with technology. Without specifically geared towards the 3 core values of smart city, our information technology strategy

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Statutory Planning Portal 2

has nonetheless converged towards liveability, workability and sustainability for smart people as well as governance. Our approach perhaps can be reflected through the words of the former British Prime Minister, Tony Blair, 'Being humble is not the same as being passive. To be strong is not the same as being arrogant.' (Blair, 2011)

### Planning for New Challenges

Similar to other major international cities, Hong Kong is at a cross-road after a period of rapid growth against a fast changing global perspective. Once the financial and commercial gateway to China, other international cities are also functioning as financial, shipping and logistics centres similar to the roles of Hong Kong. For example, both London and Singapore have already become major off-shore RMB clearing centres after Hong Kong. Cities in the Asia-Pacific region such as Vietnam, Malaysia and Indonesia have been developing rapidly with a young and economic active labour force. Similarly, Mainland cities such as Shanghai, Shenzhen and Guangzhou

have transformed into major business gateways of China through internationalisation and commercialisation. Within the Pearl River Delta region, key infrastructures expansions including airport, port and expressways (rail and road) and new centres would re-distribute land-use and economic patterns closely related to Hong Kong.

At a local level, ranked 1st in the world back in 2004, our container port slipped to 4th place in 2014. (Marine Department, 2014) Ranking of Hong Kong's container port further slipped to 5th in the world from figures released for the first half of 2015. (SCMP, 2015) Our port has entered into a new phase of transformation following the footsteps of other port cities such as London, Amsterdam and Barcelona. Our buildings, infrastructures and urban fabric would need persistent resources for major facelift as our community aspires for quality living environment for both new and existing city areas. In 2014, there are about 6,000 buildings aged 50 years or above in Hong Kong, (Building Department, 2010) and that number is going to

increase by 500 buildings annually in the coming years. (Development Bureau, 2011)

Unlike the past decades, Hong Kong is now facing aging population and dwindling workforce. Mobile and economic active, younger generation is more concerned on sustainable environment and quality living. Based on projection, percentage of population aged 65 and above would increase significantly in the coming decades from 13% in 2011 to 19% in 2021, and from 26% in 2031 to 30% by 2041. (Census and Statistics Department, 2012) Facing with all these new trends, planners need to prepare smarter plan for a caring and quality environment especially for our youth, the aged and international visitors.

On another front, we need new planning initiatives to promote innovative and creative industries, and leverage on information technology as the new economic driver to maintain the competitiveness of Hong Kong.

Planners are now charting new developments and infrastructural links at West Kowloon, Central/Wanchai, Kai Tak and East Kowloon to create new foci to nurture emerging creative industries for art and culture economy. In the New Territories, we actively plan new development areas in Fanling North, Kwu Tung North, Hung Shui Kui, Yuen Long South and Tung Chung to provide sustainable housing, businesses and job opportunities capitalising on the rapid regional economic growth.

To enter into a dynamic information age along with various new planned developments, Planning Department have advocated the use of new information technologies to set-up a common digital platform to facilitate the planning and development of the New Development Areas in Fanling and Kwu Tung. The initiative not only would enable us to utilise information and communication technologies to plan and develop the next generation of new town, but also allow us to face new challenges and better cater the needs of our future city and its citizens. Similar concept could also be applied in Kowloon East to facilitate further transformation of the area into a new commercial centre. Planning smart would enable us to manage facilities and resources wisely, and deliver optimal and timely services. Apart from assisting planning and development tasks, the concept would also set a foundation to facilitate the

implementation of various smart city initiatives in Hong Kong – the first step to make Hong Kong smart.

### What Not to Be

Smart city is essentially a planning concept leveraging on information technologies to plan, build and manage cities against a set of social, economic, environmental and resources issues. Seizing the opportunity in the right direction can help Hong Kong to gain in-road towards strategic planning, sustainable development and knowledge based technology application. Smart City should not just be “confounded with high-tech” which is just a narrow definition often used by the information and communication technology industry which is developing remote control and monitoring devices related to “smart water”, “smart energy”, and “smart transportation”. (Ryser, 2014)

There are obviously diverging views of which a common digital platform should compose. The platform could be established in different stages and forms, however, it is blatantly clear that any future platform cannot merely centre on having:

- A collection of data, maps and images;
- A network of the latest information technology or nowadays’ buzz word cloud;
- A catalogue of data exchange standards;
- A set of rules to regulate operations; and
- A large group of people to derive a system.

There is nothing sinister about collecting various data for sharing. It must be one of the valid reasons for information system development, but is it simply more the merrier? Looking into the future, it is quality rather than quantity that would take central stage. In other words, it is grossly inadequate merely focusing on data sharing without considering the added values and direction. Telephone directories once compiled and printed by telephone companies or corporations contained lots of data, just take a moment to think why people abandoned using printed telephone directories nowadays? Hardware and state-of-the-art technology do impact on us, but technology is certainly not the magic wand. Many talk about smart city as GIS, such simplicity view is rather backward looking and does nothing to advance the real course of smart

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city development. Advances in technology just increase our ability to do things, which may be either for the better or for the worse. Our problems are unintended negative consequences of our existing technology. (Diamond, 2006) If technology alone is the solution, we would have solved our problems a long while ago, or from another angle, people simply do nothing now as there is always new technology coming to the market in the next quarter.

Conventional information system development leads people to focus on data standards and format. In the age of Internet and big data, data would be increasing unstructured, messy and non-linear correlated. (Mayer-Schonberger & Cukier, 2013) Moreover, different forms of data are collected through a vast spectrum of new information and communication devices which are fast evolving. With greater emphasis on big data analytics, increasingly, it is approximation or probability which outlines certain pattern as the potential answer instead of the historical mechanism of retrieving a precise data entry with a perfect match. Perhaps people should develop a new concept on data, and critically rethink if it is still possible, practical and beneficial to entangling with detail data standards?

Operational guidelines are often prepared as part of an information system, however, it should be the objective of a system that determines the regulatory regime. Rules and regulations are catalysts for rigid and bureaucratic culture which hinders creativity and innovation that information system may aim to foster. (Argyris, 2010) Size of a discussion group is certainly not directly proportional to the quality of decision or result. At the end of the day, a thousand poor thinkers does not itself give you good thinking. (de Bono, 2009) As smart city is to cater the needs of our city and citizens, forward planning, creative thinking and innovation would be of paramount importance.

### What To Be

We should not under-estimate the challenges in building a smart city against illusions and entrenched habits. To build intelligence and make Hong Kong smart, we can take a leaf out of the planning and development experience from our recent past. Hong Kong has been planning smart to handle population, transportation, environmental and economical issues at both local and regional levels. Walking

through history, there are overarching fundamentals that would assist planning smart city.

First and foremost, set a vision, a strategic smart city vision cherished by the community for Hong Kong. In other words, what do we want Hong Kong to achieve or position under the smart city concept regionally and globally.

Secondly, as most planners would be familiar, derive a plan; a living one. A plan that can set out ways to achieve the vision over a period of time by interlinking different sectors, such as construction, commerce, transport, health and welfare etc. Facing with uncertainty, the plan has to be robust, inclusive and evolving in order for us to review, revisit and recast to accommodate changing circumstances.

Thirdly, identify key drivers that act as the dynamos to lead and create the momentum. Smart city concept covers different sectors and aspects of our city living, there is a practical need to target certain sector to yield early benefits and build confidence. In Hong Kong, planning and development would be an obvious choice as we embark on a series of new planning and development projects.

Fourthly, establish a multilateral and collaborative mechanism. Smart city is often mistakenly seen as merely information and communication technology, in fact, the scope is obviously much wider. Government, business, education and community sectors are all rightful stakeholders and contributors, and only by engaging all these sectors that a true smart city can be built.

Lastly, often overlooked, are the benefits of liberalising public data covering standards and charges in promoting smart city as well as information technology development. Society should remove barriers by promoting multi-sources and multi-forms data flow to encourage wider application development. Some often associate the level of revenue to the quality of decision. For a case in point, consider the growth and benefits brought along after the abolition of wine duty in Hong Kong. In 2007, imports of wine amount to just HK\$1.6 billion. In 2008, the amount rose sharply to HK\$2.9 billion after the abolition of duty. The volume of import continue to expand and recorded more than 5 fold growth to HK\$8.4 billion in 2014 with re-export also saw

a dramatic increase to HK\$2.4 billion making Hong Kong a world important wine centre. (Hong Kong Government, 2014) Perhaps the arithmetic is not that simple after all.

### Path and Plan

There is no magic potion to planning and developing smart city. Hong Kong has planned smartly in the past, however, there is no room for complacency in the highly globalized arena of the 21st century. We need to take on new challenges to plan and make Hong Kong a more efficient and sustainable city. Smart city is often associated with technology, but 'smart' is more than the massive use of information and communication technology. (Werner Hess, 2015) There are other aspects of smart city such as privacy and security needing wider debate from both providers' and users' perspectives. Casting into the future, the new global order is based on the ability to store and process information and generate knowledge. (Abrahamson, 2004) Smart city initiatives also extend beyond planning and development, contributions from other sectors such as medical and transport are equally crucial. With society becoming more pluralistic, multi-lateral partnership would be the only conduit to channel talent and create synergy for the good course.

A city is judged to be smart with its vision, city planning and people. To achieve that, we need to embed the city's vision into our plan and guide planning and development with knowledge to meet the needs of our citizens. Quoting from Winston Churchill, 'It is better to have an ambitious plan than none at all.' In preparing that plan, planner is the natural navigating helmsman to work with other crews.

### Acknowledgement

The author would like to express his appreciation to his colleague, T. W. NG, for his assistance in preparing the article.

### Reference:

- Abrahamson, M., 2004 – *Global Cities*, Oxford University Press, 2004
- Argyris, C., 2010 – *Organisational Traps*, Oxford University Press, 2010
- Blair, T., 2011 – *A Journey*, Arrow Books, 2011
- Buildings Department, 2010 – *Report on the Inspection of Buildings Aged 50 or Above*, Buildings Development, Hong Kong Government, 2010
- Census and Statistics Department, 2012 – *Hong Kong Population Projections 2012-2041*, Census and Statistics Department, Hong Kong Government, 2012
- Cohen, B., 2013 – *The 10 Smartest Cities in Asia/Pacific*, UBM's *Future Cities: The Global Community for 21st Century City Decision Makers*, 2013
- De Bono, E., 2009 – *Think! Before It's Too Late*, Vermillion, 2009
- DEVB/PlanD., 2007 – *Hong Kong 2030 Planning Vision and Strategy Final Report*, Development Bureau and the Planning Department, 2007
- Development Bureau, 2011 – *Urban Renewal Strategy*, Development Bureau, Hong Kong Government, 2011
- Diamond, J., 2006 – *Collapse-How Societies Choose to Fail or Survive*, Penguin Books, 2006
- EKEO, 2013 – *The Making of Hong Kong's CBD2, Energizing Kowloon East Office*, Hong Kong Government
- Foster, N., 2015 – *Trends in High Places*, South China Morning Post, June 2015
- HBP, 2010 – *Fostering Creativity*, Harvard Business Press, 2010
- HKG, 1989 – *Gateway to New Opportunities (Hong Kong's Port & Airport Development Strategy)*, Hong Kong Government, 1989
- Ho, P.Y., 2004 – *Challenges for an Evolving City*, The Commercial Press (HK) Limited, 2004
- Hong Kong Government, 2014 – *Commence and Economic Development Bureau, Statistic of Trade in Wine in Hong Kong, 2014* ([www.cedb.gov.hk/citb/wine/en/statistics.html](http://www.cedb.gov.hk/citb/wine/en/statistics.html))

## Speakers and Papers

*IPCC, 2014 – Climate Change 2014 Synthesis Report, Summary for Policymakers, Intergovernmental Panel on Climate Change, 2014*

*Marine Department, 2014 – Ranking of Container Ports of the World, Marine Department, 2014 ([www.mardep.gov.hk/en/publication/pdf/portstat\\_2\\_y\\_b5.pdf](http://www.mardep.gov.hk/en/publication/pdf/portstat_2_y_b5.pdf))*

*Mayer-Schonberger, V. & Cukier, K., 2013 – Big Data, John Murray, 2013*

*Ryser, R 2014 Planning Smart Cities. .. Sustainable, Healthy, Liveable, Creative Cities. .. Or Just Planning Cities?*

*SCMP, 2015 – Hong Kong Port Slips Further Behind Mainland Rivals, South China Morning Post, 2015*

*Smart Cities Council, 2012 – Our Vision, Smart Cities Council, <http://smartcitiescouncil.com/article/our-vision>*

*Town Planning Office, 1988 – Town Planning In Hong Kong, Town Planning Office, Buildings and Lands Department, Hong Kong, 1988*

*United Nations, 2014 – World Urbanization Prospects, United Nations, 2014*

*Werner Hess, H., 2015 – Smart Cities in the European Union, South China Morning Post, 2015*





**Mr Matthew SMITH**

*Global Head of Market Development – Internet of Things  
Cisco Systems Inc.*

## BIOGRAPHY

Matthew leads a global team, driving the creation of disruptive market opportunities to develop the global market for Internet of Things. Matthew's charter is to work with large Multi-National and Government customers to develop robust large scale opportunities that enable digitised business outcomes and positive investment returns for all parties.

Matthew joined Cisco in 2000. He has taken varied roles throughout his Cisco career, including leading Cisco's Brand Protection initiatives throughout Asia and Europe; leading Cisco's Business Operations for the Middle East and Africa region and, based in Riyadh, heading sales and subsequently as General Manager for Cisco's Saudi Arabian business. Prior to his current role, Matthew was based in Bangalore as the Strategy and Operations lead for Cisco's Globalisation office.

Prior to joining Cisco, Matthew had a variety of roles developing his managerial experience, from that of an Officer in the Royal Navy, an Inspector in the Royal Hong Kong Police to a manager in a Big Four Accounting firm.

Matthew holds a Bachelor's degree in Accounting and Business Systems and an MBA from Edinburgh University Business School, Heriot Watt.

## ABSTRACT

### The Digitisation of Business

The world is changing and changing fast. Rapid digitisation of businesses and cities will drive unprecedented change in the next ten years. For those that innovate and adopt early there is a US\$19 trillion pot of gold to share. For those that miss the opportunity, the risks are huge. Conservatively 25% of the Fortune 500 will miss and within 10 years either cease to exist or be in a form very different from where they are today. This digital disruption will be created through the connection of people, processes, data and things and be known as the Internet of Everything. How can you avoid being one of the disrupted?

## Speakers and Papers

### FULL PAPER

The world is changing, and it's changing fast. Market transitions are taking place and will continue to take place over the coming years, fuelled by the growth in emerging economies and driven by mass urbanisation and the explosion of middle class wealth. As the world urbanises and populations surge it is going to create a huge impact on available resources. How these resources are deployed will be the most critical factor in how we address these global challenges.

As these changes take place, technology is also accelerating, and at such a pace it is going to be one of the key factors in addressing the world's resource problems. The world is becoming increasingly more connected, and increasingly everything is starting to become connected to everything else. In 2008 the world passed through a tipping point, where the number of connected devices surpassed the number of people on the planet. That nearly seven billion connections has more than doubled in the last six years to approaching sixteen billion connected devices and is very conservatively forecast to triple again in the next five years to around fifty billion connected devices, or what you may call "smart objects".

This connectivity has given rise to what we now call the Internet of Everything, the networked connection of people, processes, data and things. This Internet of Everything is the end of the "old" internet and the re-birth of the new internet with its ability to produce a broad and diverse set of what we should look at as our new e-"outcomes".

These e-"outcomes" are going to be a result of our ability to harness data. The ease of creation and capture of data sources through digitisation has produced a fundamental challenge, how we take this data, turn it into information and knowledge and through scenario planning, turning this knowledge into wisdom and from that create economic value.

The potential of this 'Economic Value' has been conservatively calculated globally over the next ten years to be US\$19 Trillion. This US\$19 Trillion is divided into \$14.4tn in the Private Sector and US\$4.6 trillion in the public sector. This is Economic Value which will be created through a myriad of routes.

Within the Private Sector, the initial innovations will be centered around digitising the processes of today. Some of these, as we look at them are; better asset utilisation (US\$2.4tn); increased efficiency in supply chain logistics (US\$2.7tn); and increased customer experiences (US\$3.7tn).

In addition to digitising processes of today, a large slice of the value from the Internet of Things is going to come through brand new innovation. This 'disruptive innovation' will likely take the form of new start-up companies, or break-out teams within large existing organisations that create technologies and applications to disrupt existing ways of doing business.

A great example of this type of disruption is the company 'Uber'. Started only a few years ago and with less than a 1,000 employees and no real physical assets, this company has grown to have a market capital of US\$40bn. This is a sum greater than the market capitalisation of United Airlines and Hertz combined. These companies have thousands of employees and billions of dollars in assets. So will the model for the future drive more disruption through the sharing economy and asset light businesses? only time will tell.

Within the Public Sector, mass urbanisation will also be the fundamental generator of Big Data. China is proposing to add a hundred cities of more than a million people in the next thirty years. India's cities will grow by a staggering four hundred million people over the same period. This will make the need to be more efficient and, to do more with less, critical. The productivity increases we have seen over the past twenty years will seem inconsequential by comparison to what is needed to deal with this rapidly changing future.

This mass urbanisation and its unprecedented demand on resources is creating a need for cities to better demonstrate how they will deal with all the new demands and use technology as a platform to create "Smart Cities". This concept of the Smart City is seen as a fundamental requirement to future proof economies.

The Cities and economies that lead the way are going to capitalise not just on the efficiencies for their own domains, but be seen as thought leaders globally with the ability to replicate and export this thought leadership and innovation.



There is also the risk of doing nothing at all. Cisco and Gartner predict that in the next ten years, 25% of Fortune 500 companies will cease to exist in the form that they are in today. This will be through either their inability to re-invent themselves; missing the technology transition to digital; or simply by being too comfortable doing the right thing for too long. Digital disruptors will be waiting in the wings and they will be looking to disrupt the profitable parts of today's business.

The full potential of the "Internet of Things" will not be realised without universal standards for discovery and communication between devices. The cities and companies that see this first will be the leaders, those that miss this conversion will risk being disrupted

In concluding, the Internet of Things is Big, it's here and it's now. The early adopters will not only be seen as thought leaders but will generate significant competitive advantages to drive business leadership for years to come.



## Speakers and Papers



**Prof Rebecca CHIU Lai Har, JP**  
*Head of Department*  
*Department of Urban Planning and Design*  
*The University of Hong Kong*

### BIOGRAPHY

Prof Rebecca L.H. Chiu is Head and Professor of the Department of Urban Planning and Design, and the Director of the Centre of Urban Studies and Urban Planning, and the Affordable Housing Research Network of the Faculty of Architecture of the University of Hong Kong. She has specialized in housing studies and housing education since 1987, and in housing and urban sustainability since 1997. Her current research projects include housing and urban sustainability issues in high-density Asian cities, comparative housing policies in Asia, housing policy transfer and housing in ageing communities.

She is the Founder Chairman of the Asia Pacific Network for Housing Research. She has been appointed to government committees and boards related to housing, planning, urban renewal, natural and heritage conservation in Hong Kong. Currently she is a member of the Country and Marine Advisory Board, the Antiquities Advisory Board, the Appeal Panel of Town Planning and the Licensing Appeal Board. She has been consultant to international, regional and local organizations on housing matters.

### ABSTRACT

#### **Hong Kong as Asia's world city: more livable through smarter strategies?**

Hong Kong claims to be Asia's world city because it is a world financial centre, an international aviation hub, a world trading centre, a meeting place of the Western and Eastern culture, home to a few world class universities, and etc. But we seldom take pride in our livability. How is our livability compared with other world cities and the rising stars in China? How satisfied are the local people with their living environment? Which aspects of livability should we prioritize to make use of the information and communication technologies to enhance the quality of life in this high density and high-rise city? The results of three research projects on livability, including large scale questionnaire surveys, will be presented for exploring the above questions.

## Speakers and Papers



**Mr Duncan PESCOD, GBS, JP**

*Chief Executive Officer of West Kowloon Cultural District Authority*

*Member (Chief Executive Officer of WKCDA) of Executive Committee*

### BIOGRAPHY

Mr Pescod joined the West Kowloon Cultural District Authority in October 2014 as Chief Operating Officer, and assumed duty as Chief Executive Officer on 3 August 2015. He has 33 years of service in Hong Kong with the Government in which he has served in various bureaux and departments, including the former Home Affairs Branch, the former Security Branch, the Lands Department, the former Urban Services Department, the former City and New Territories Administration, the former Civil Service Branch (later renamed Civil Service Bureau), the Tourism Commission, and the Efficiency Unit. He was Special Representative for Hong Kong Economic and Trade Affairs to the European Communities from March 2006 to August 2008, Permanent Secretary for Commerce and Economic Development (Communications and Technology) from August 2008 to April 2010, and Permanent Secretary for Transport and Housing (Housing) and Director of Housing from May 2010 to April 2014.

### ABSTRACT

#### Experiencing a 'smart' West Kowloon Cultural District

The West Kowloon Cultural District offers a unique opportunity to test out the Smart City concept. The cultural district will be a city within a city, covering 40 hectares, offering a rich variety of cultural venues, 23 hectares of park and open space. In addition, there will be housing, shops, restaurants, hotels and offices, all on a magnificent harbour-front location.

For the public the true measure of a smart city's success should be its ability seamlessly to integrate into everyday life. The visitor experience at the West Kowloon Cultural District will be defined by smart concepts that increase engagement, accessibility and efficiency presented in a form that ultimately demands less, not more effort from the public. Our vision is to present visitors, residents, tenants and artists with a complete experience, driven by technology, which will make being in the district an experience that is not only pleasurable and convenient but also culturally enriching.

With the smart phone sitting at the core of the visitor experience the presentation of real time information and rich content provides huge opportunities to reach out to the public in exciting new ways. At the same time the exchange of information will be a key element in managing our resources to create efficiencies and reduce waste.

Prepared by Mr Duncan Pescod, GBS, JP

## Speakers and Papers

The West Kowloon Cultural District offers a unique opportunity to test out the Smart City concept. The cultural district will be a town within a city, covering 40 hectares, offering a rich variety of cultural venues, 23 hectares of park and open space. In addition, there will be housing, shops, restaurants, hotels and offices, all on a magnificent harbour-front location.

There is no doubt that constructing a new district like this is a hugely ambitious enterprise. A project of this scale is unique. And creating from scratch something that elsewhere might have evolved over decades or perhaps over more than a century is a very tough challenge.

Certainly a cultural district like West Kowloon cannot thrive without putting the public at its centre. And we believe arts and culture have a lifelong role to play in people's lives. The growing emphasis placed on learning and interpretation related to arts and culture is a very positive sign. We have seen time and again that interest in arts and culture develops when we are young.

While construction has been going on we have been running many workshops and educational projects aimed at engaging the public, and we have also been presenting a wide variety of events and exhibitions. In late July around 100 young people took part in a Summer School run by M+ where they explored creativity – for many it really was a life changing event.

In August our first Freespace Happening attracted 10,000 people to West Kowloon to picnic, do workshops, skateboard, learn about trees, listen to music and simply enjoy themselves in the open space. The plan for West Kowloon has always been to develop the artistic content, audiences and the venues in parallel. While the venues have been the major topic of debate, the reality is they are nothing without users and purpose. Each venue is a tool, not an end in itself.

While it is neither helpful nor sensible to talk about cultural buildings without talking about audiences and content, as tools their functionality – their fitness for purpose, is key. For the district as a whole, linking each element together is critical and we believe the concept of creating a smart district is the way to go.

The true measure of a smart city's success should be its ability to seamlessly integrate into everyday life. The visitor experience at the West Kowloon Cultural District will be defined by smart concepts that increase engagement, accessibility and efficiency presented in a form that ultimately requires less effort from the public to enjoy the art and culture on offer.

Our vision is to present visitors, residents, tenants and artists with a complete experience, driven by technology, which will make being in the district an experience that is not only pleasurable and convenient but also culturally enriching.

That experience will start well before their visit to West Kowloon. An online visitor to West Kowloon should have a personalized experience; their online interaction defined by factors like their geographical location and language preferences – whether it be in Hong Kong, the mainland, Europe or beyond. This means tailoring the online experience and the information to the user. After all the information we provide on a Cantonese Opera cannot be the same for a local fan as it is for a tourist from Australia.

One instantly recognisable aspect of Hong Kong is its relationship with technology and in particular the mobile phone. In Hong Kong the mobile acts as the primary digital device and when it comes to mobile penetration we are far ahead of the west. But while Hong Kong has excellent infrastructure the application of technology, in particular in the area of customer relationship management is under exploited. In Hong Kong your mobile phone is your constant companion and your most valuable source of information. Your own device should lie at the heart of a personalized experience giving you access to more of what you want, and less of what you don't.

More importantly we want to reverse the process so that rather than your phone being something that pulls you away from engaging with the world around you, it is instead the key to engaging more with your immediate surroundings.

At the same time we need to recognise that people lead complex lives and their consumption of theatre or art cannot exist in isolation – they need to work, to eat, to

# Speakers and Papers

shop; they may have children or elderly parents, they may have a disability. They need to find car parking, an ATM, a quick snack or the time of the next ferry. Visitors do not magically come into existence when they enter a venue or gallery, and we surely cannot afford to let them disappear forever when they leave.

Our starting point is to view everyone who passes through the district is a valued customer, no matter if they simply walk in the park, eat a meal, ride a bike or watch a show. The consumption of culture should fit seamlessly within their whole visitor experience, and their visitor experience should drive them towards engaging with the rich cultural offering that lies at the heart of the district.

Already in Hong Kong booking a theatre seat online is common-place. But how about adding a parking space, a meal, or an interval drink? This too can be easily done. And we can go much further and be far smarter; using technology to direct you to your theatre seat saves staff costs, directing you to your parking space eases congestion. Offering real-time availability for bike hire, restaurant tables, tours, talks or seminars further increases our efficiency while offering the public better service. And mapping these visitors through their activity helps us in other ways too: staff rotas, waste collection, cooling and lighting all can be better managed through the use of big data.

For example, your phone can guide you to the M+ museum and as you enter become your museum guide, providing you with potentially limitless information – detailed interactive views, associated works, curator insights.

By allowing you to save images of your favourite artworks you can create your own collection to study in detail later, you can share works with friends and even order a print for your living room wall. Meanwhile behind the scenes the mapping of public movement through the museum can help us better plan our exhibitions and manage the flow of patrons so they can enjoy the best possible experience. This same information can also be used to improve security and safety in the museum.

All of this activity increases engagement while creating efficiency by helping to centrally manage resources and reduce waste, but most importantly it serves the core vision of the district. To create a place where everyone can be exposed to culture, where boundaries are not defined by the walls of the institutions and the possibilities are endless.

Some of this may sound far-fetched but as I mentioned before much is already happening. We already are seeing the impact – digital now acts as our primary marketing platform. It allows us to segment and target specific audiences and reach out to them with images and messages that reflect their own needs and interests. We have over 90,000 people on our e-list and 55,000 Facebook Friends; our website had over 21/2 million page views last year and we expect to see that number climb significantly as we get closer to opening our venues.

This interaction through email, social media or the web is the first stage in a digital journey taking you from first contact to purchase, to your seat in the theatre and beyond to a meal and the journey home.

We created an App for Freespace Fest which was downloaded by over 30,000 people and provided people with a handy up to date guide with live updates to everything happening at the event. This simple action allowed us to cut down on paper information guides, provide up to the minute updates and empowered the market stall holders and performers who could add and update their own information

And this use of digital widens audiences and allows them to participate directly. The online NEONSIGNS.HK project received over 4000 images from the public, creating an online map of Hong Kong's fast disappearing neon signs. This project received worldwide acclaim and international media coverage. It recently became part of the Google Global Art Project further increasing its visibility, won a webby award and is currently nominated for two major international museum awards.

## Speakers and Papers

Meanwhile while all this activity goes on construction continues and we are ensuring that smart technology is integrated within the buildings. The Xiqu Centre main superstructure will be raised at the end of the year. This will be the first major venue to open in the district and provide a space for the development and preservation of traditional Chinese Opera. The venue will include an 1100 seat main theatre and a 250 seat tea house theatre where you can enjoy traditional tea and snacks while enjoying a performance.

This tea house theatre concept was trialed earlier this year to huge acclaim and we see it as a powerful way to introduce new audiences to the artform. Yet behind this rather traditional facade will sit one of our data centres which will enable the delivery of the types of services discussed earlier.

M+ foundations have been completed with the main contract due to be awarded soon. The M+ is already drawing huge interest due to its striking but simple design by one of the world's best architectural firms, Herzog & de Meuron. They were responsible for the Tate Modern in London, a building that transformed the public's attitude to contemporary art and broke all attendance records. Again, we will have significant data handling capability within the museum, also fully integrated with other parts of the district.

The park will start construction in December with completion due in 2017. We are currently growing trees in our own Nursery Park that will be later transplanted to the park. Our vision is to create a new kind of urban park for Hong Kong. A place where nature co-exists with art, a buzzing vibrant event space and also a place for quiet contemplation. Even in this space we envisage a comprehensive wifi network to allow us to communicate with visitors.

The park construction will take place alongside another new venue. The Freespace, an exciting new black box venue that lies at the centre of the park that can accommodate 900 people. This new space will also be able to service the large scale events we will hold on the park's great lawn which will be able to accommodate up to 10,000 people at festival events.

Finally, and very excitingly design is almost complete for the Lyric Complex. A new venue located next to M+ which will offer 1450, 600 and 250 seat venues along with extensive rehearsal facilities that will allow it to become a centre for the creation of new artistic work.

As I have indicated all of these venues will take advantage of modern design and technology innovations. We will ensure they are energy efficient and feature green and sustainable features, like rain water collection, solar water heating, energy saving glazing and facades and benefit from a district cooling system.

I can confidently say that in the next few years the district will really start to take shape. This transformation of the site goes will go hand in hand with exploring new methods of working, creating and managing the venues and public space.

Elsewhere in the world the cultural sector has transformed itself in recent decades. It has recognised the value of attracting audiences, focused on excellence rather than elitism, access rather than exclusivity. More importantly it has become more business orientated, creating financial value out of its creative assets. Harnessing the power of technology to drive engagement and sales to put the public at its centre. The result? A healthier, more nimble, creative cultural sector that can add to the international standing of a city, attract investment and diversify its economy. We hope we can bring some of this attitude to the district. The idea that we are creating a place for everyone is not just a slogan, it also not just public duty, it is a necessity if we are to create the vibrant cultural district Hong Kong deserves.

## Speakers and Papers



**Prof John NG Cheuk Yee**

*Chairperson, BEAM Society Limited &  
Director & Chairman of GLC, Hong Kong Green Building Council*

### BIOGRAPHY

Professor John NG is a professional Architect, Town Planner and Urban Designer. He has more than 30 years' experience in the planning, design, construction and project management of high-density housing and redevelopment projects. Awards of excellence were won by many of these projects covering Architecture, Planning, Urban Design, Research and Green Building Design. Ng has presented extensively in international and local conferences on sustainable communities, microclimate, high-density housing and community development.

He is currently a Director of the Hong Kong Green Building Council, Chairman of its Green Labelling Committee, Chairperson of BEAM Society Limited, Honorary Secretary and Director of the Professional Green Building Council, and Founding Member of the Hong Kong Institute of Urban Design. He is Honorary Professor of the University of Hong Kong, and Adjunct Professor of Chinese University of Hong Kong (2010-2013). He is advisor and member of a number of government committees and NGOs, and an active volunteer in sustainable built environment, green building and post-quake reconstruction.

### ABSTRACT

#### **Green and Smart**

Hong Kong is renowned for its compact urban typology. Its high-density and mixed-use development contributes to convenience and efficiency, yet it is falling behind in liveability. The local living environment faces multiple challenges: lack of living space, high energy consumption, worsening air quality, urban heat island, etc. How can the city meet ongoing demand for new developments on one hand and the need for wellbeing of its citizens on the other? The presentation will share some endeavours to develop green buildings and beyond to green neighbourhoods, aiming to create places that are green, smart, and liveable. What can surveyors contribute to this irrevocable trend?

# Speakers and Papers

## HONG KONG GREEN BUILDING COUNCIL (HKGBC)

### Our Vision

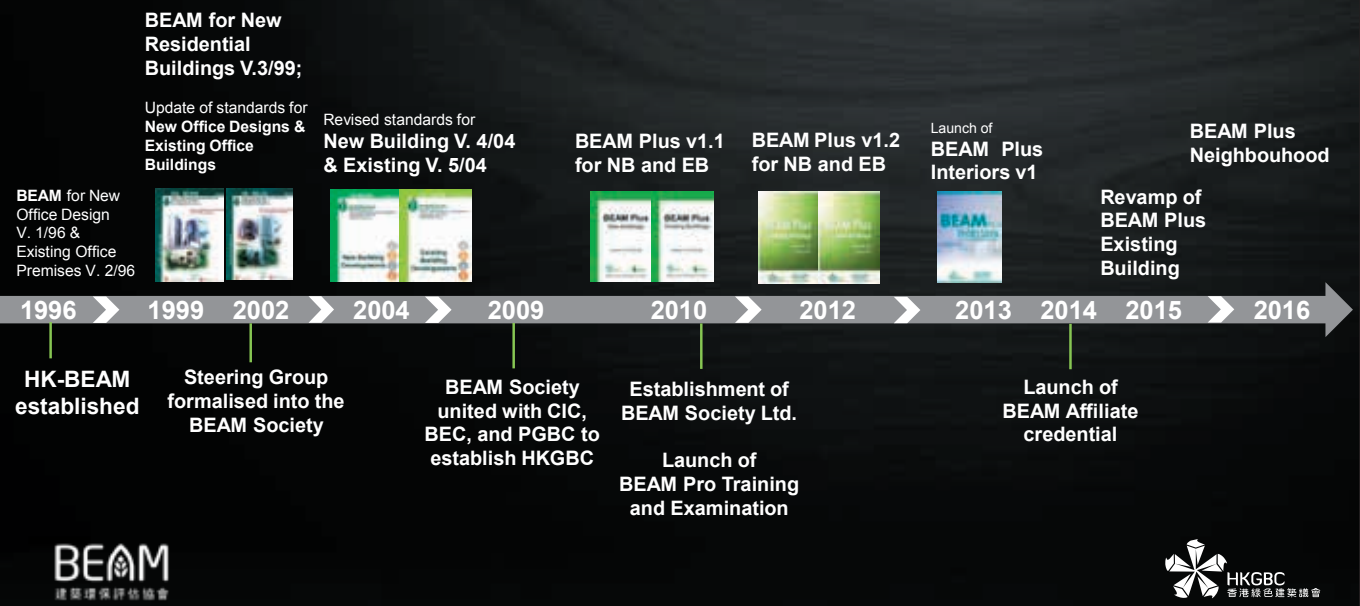
To help save the planet and improve the wellbeing of the people of Hong Kong by transforming the city into a greener built environment.

### Our Mission

To lead market transformation by advocating green policies to the Government; introducing green building practices to all stakeholders; setting design, construction and management standards for the building profession; and promoting green living to the people of Hong Kong.



## Evolution of the BEAM Assessment Tools





## Assessment Aspects



**BEAM Plus NB/EB v1.2**



**BEAM Plus Interiors v1.0**



## Assessment Ratings



**BEAM Plus NB/EB v1.2**

- Provisional Assessment (PA)
- Final Assessment (FA)

**PLATINUM**  
 鉑金級  
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 HKGBC  
 BEAM Plus  
 綠建築評

**GOLD**  
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 BEAM Plus  
 綠建築評

**SILVER**  
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**BRONZE**  
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**BEAM Plus Interiors v1.0**

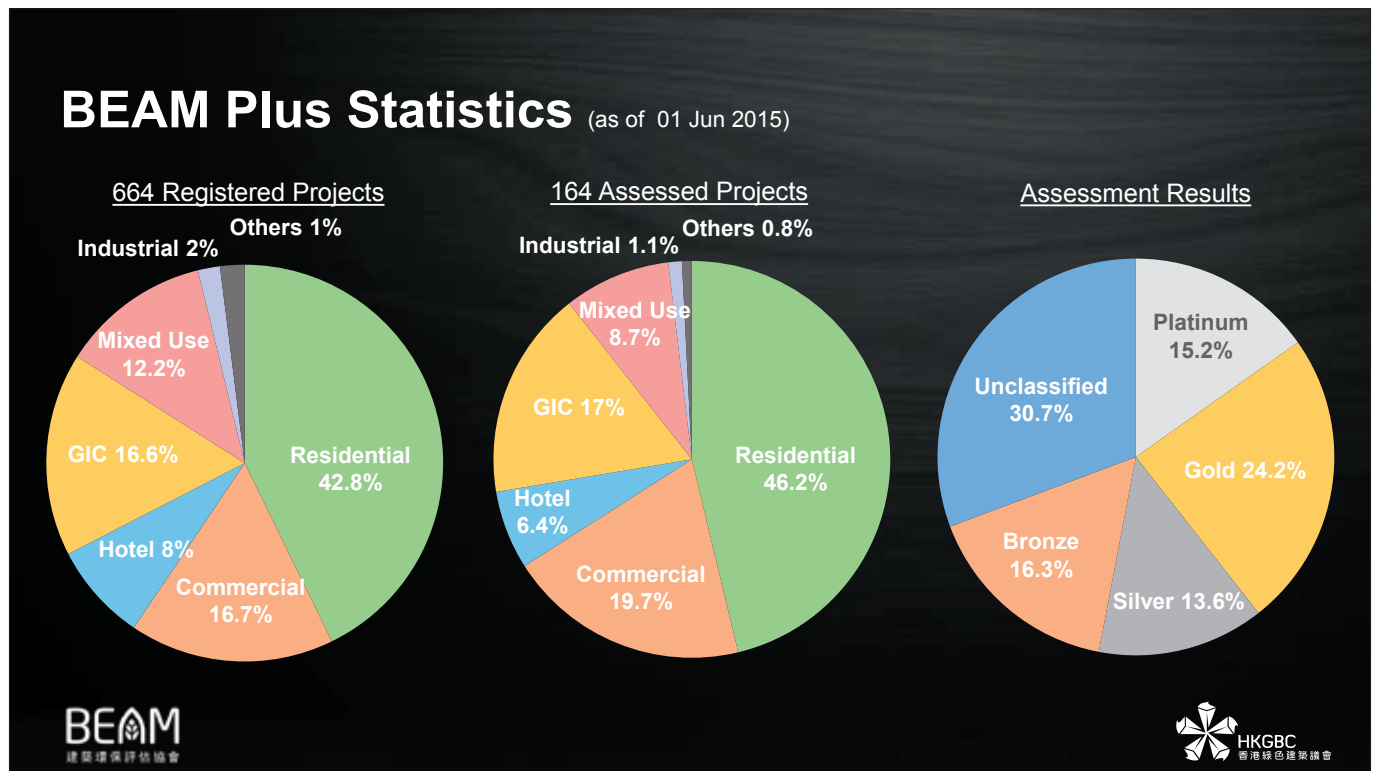
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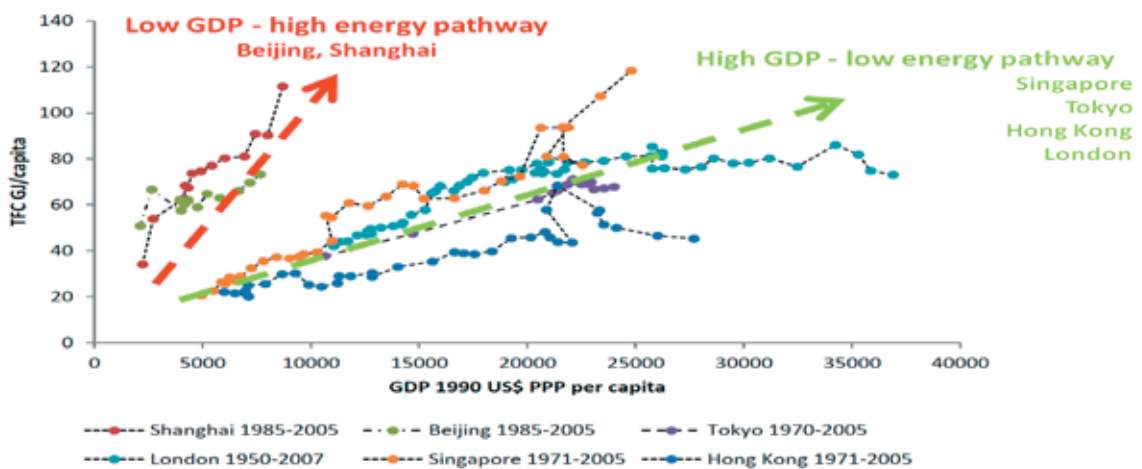
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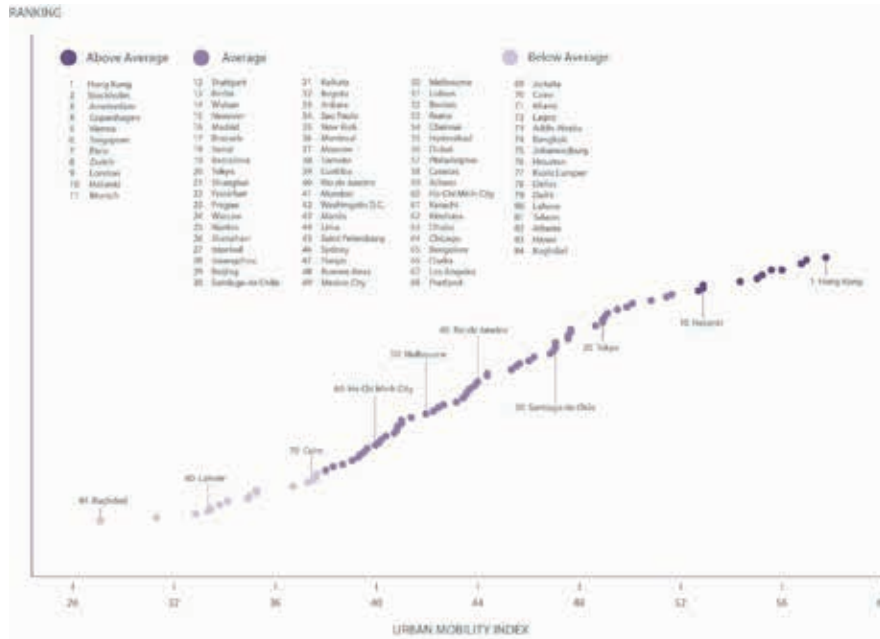


## Benefits of Compact City

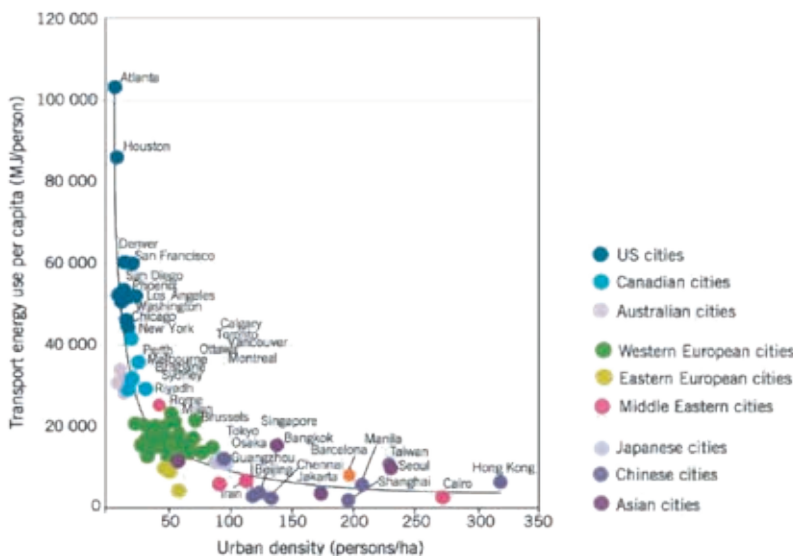


Courtesy to Dr. Serge Salat

## Efficient + Cost Effective Public Transport

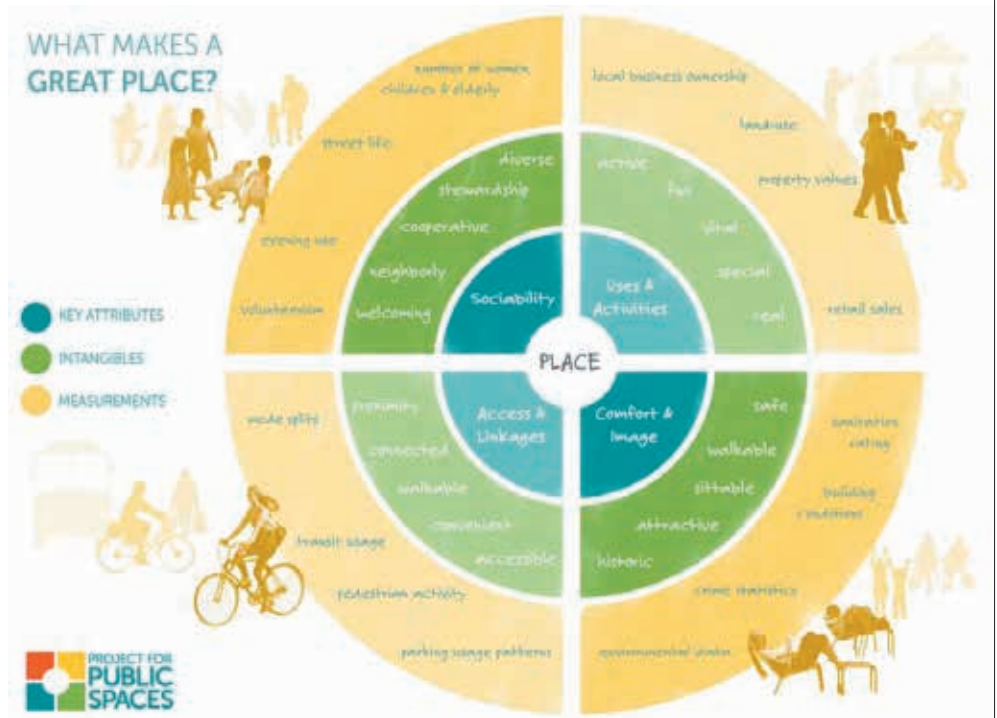


## Efficient + Cost Effective Public Transport



# Speakers and Papers

## Place-Making



## Kowloon East – a smart city



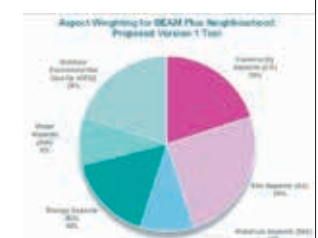
**NB Case 3 - Hysan Place**



**BEAM Plus NEIGHBOURHOOD Assessment Tool**

for sustainable communities & green neighbourhood

- COMMUNITY ASPECTS
- SITE ASPECTS
- MATERIAL ASPECTS
- ENERGY ASPECTS
- WATER ASPECTS
- OUTDOOR ENVIRONMENTAL QUALITY



# Speakers and Papers

## COMMUNITY ASPECTS

- community engagement
- provisions to promote sustainable lifestyles
- existing communities
- conservation of cultural assets



## MATERIEALS ASPECTS

- Adaptive Re-use encourages the reduction of demolition / construction waste
  - Permeable / porous paving materials to manage surface water

Construction Waste accounts for 25% of waste disposed at landfills in 2011 (data from EPD)



Energising Kowloon East Office built from recycled containers



## Speakers and Papers



**Sr Nicholas BROOKE, SBS, JP, PPRICS, FHKIS**  
*Member, Strategic Development Commission &  
Chairman, Harbourfront Commission*

### BIOGRAPHY

Nicholas Brooke is the Chairman of Professional Property Services Limited which is a specialist real estate consultancy, based in Hong Kong, providing a selected range of advisory services across the Asia Pacific Region and he is a recognised authority on land administration and planning matters.

Sr Brooke is the Chairman of the Hong Kong Harbourfront Commission, the role of which is to co-ordinate the planning, design, implementation and management of the various initiatives around Victoria Harbour and he is a member of the Commission on Strategic Development, the Steering Committee on the Promotion of Electric Vehicles and the Task Force on External Lighting in Hong Kong.

Sr Brooke is also involved in sustainability initiatives in Hong Kong and the Pearl River Delta and until he stepped down last July was Chairman of the Hong Kong Science and Technology Parks Corporation and led the development of the latest phase of Hong Kong Science Park as a showcase for “clean and green” technologies.

Sr Brooke is a Trustee of the International Valuation Standards Council (IVSC) which is responsible for the setting and policing of valuation practices and standards worldwide. He is a founding member of the Hong Kong Institute of Surveyors, a past President of the Royal Institution of Chartered Surveyors (RICS) and a former member of the Hong Kong Housing Authority and the Hong Kong Town Planning Board.

Sr Brooke sits on the Boards of VinaLand Limited, the first Vietnam property fund listed on the AIM Board of the London Stock Exchange and of Top Spring International Holdings Limited, one of the leading developers of urban communities in Mainland China.

Sr Brooke was awarded the Silver Bauhinia Star (SBS) on 30 June 2012 in recognition of his distinguished public and community service, particularly his significant contribution in promoting innovation and technology development in Hong Kong.

## Speakers and Papers

### ABSTRACT

#### **A Reality Check-Where does Hong Kong really rank and what should be our priorities going forward**

What is clearly noticeably lacking is the adoption of a holistic and focused approach to Hong Kong's Liveable City Agenda.

Green, Smart, Healthy – all sound objectives but should be taken as read as future city targets and none of these alone can ensure a city's sustainable long term success and survival.

Something more is needed to maintain a harmonious society, capable of necessary change in order to grow or adjust so as to remain relevant and to prosper, no matter what the future may bring.

Ultimate objective must be to improve the quality of life for all members of the community.

#### **What attributes are required within the ecosystem to create a “Liveable City”?**

Stability, healthcare, education, safe quality of environment, appropriate and adequate infrastructure and utilities, decent and affordable housing for all types of resident, a range of public transport types to ensure easy connectivity in and around the city, comfortable quality of life for all.

Clearly climate, location, economic capability/planning, demographics, politics, culture, population and size all have an impact.

#### **But other factors are also essential:**

Effective, ethical mechanisms to ensure engagement with the community, to inform and to consult in as efficient and informative manner as possible and the governance/structure to deliver agreed policies and programmes.

Well thought out and efficiently planned and delivered public services, using the latest developments in new technology – together with a society structure that is responsive to inhabitants needs and has the wish and ability to make them feel respected and welcome.

- Social and urban mobility, inclusion and connectivity
- Innovative and creative community supported by appropriate facilities, knowledge and mindset
- A caring, sharing community, willing to assist those in need
- Diversity of human capital which can attract a wide range of businesses and different levels/types of employment, culture, entertainment and lifestyle
- An appreciation of the city's history and heritage and a commitment to its conservation
- Mixed communities capable of creating and stimulating differing types of economic activity and wealth creation
- A mix of good quality (but accessible and affordable) education and training institutions of various types and levels and an appreciation/recognition and respect for talent and the benefits talented people can bring to a city
- Quality and attractive public realm with easy access for all and diverse public programming to encourage all members of the community to become involved
- Cultural assets and anchors reflective of the community's diverse nature
- Quality environmental standards – air, water, biodiversity, waste management, energy generation and distribution
- Long term approach to resilience and the likely effects of climate change
- Ability and confidence to change, re-invent and transform as and when required
- Physical security and social safety



## Speakers and Papers

### **How to measure city-scale benefits/weaknesses to assist with current/future planning**

Clearly not all of the above are equal, nor can all be totally achieved for everyone at any one time as expectations/aspirations are dependent on stage of life, individual preferences and current status.

Need new blueprint for successful urban growth and regeneration – change of mindset and greater mutual trust required of both governments and the governed.

Continuous monitoring of performance requires access to the right data, using old and new technologies for collection and management.

- Does “liveability” equal “happiness” – part of the story but individuals have different preferences and ambitions
- Definition of “happiness” – how to address envy/comparison with possessions/advantages of others
- Targets should focus on “median” standards and aspirations of specific society, not wealthy high end

### **Ranking Hong Kong**

How does Hong Kong rank as a Liveable City in terms of attributes that have been identified and what are the areas that should receive priority attention as Hong Kong’s seeks to move forward and to deliver its Liveable city Agenda.





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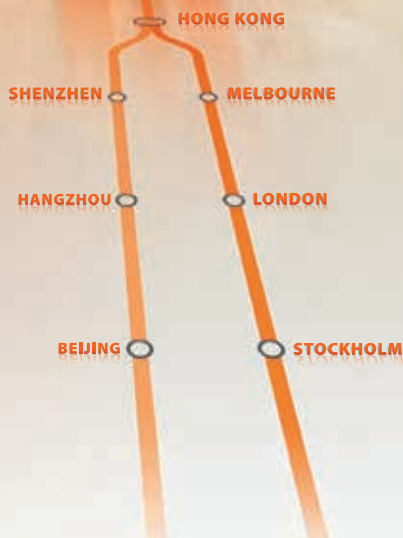


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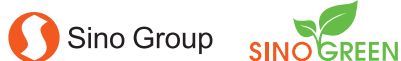


Citywalk & Citywalk 2 received the Gold Award at the Inaugural Skyrise Greenery Awards by the Development Bureau. The project is also rated Platinum by HK-BEAM Society

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## SUPPORTING ORGANISATIONS:



# Introduction of HKIS

The Hong Kong Institute of Surveyors ('HKIS' or 'the Institute') was founded in April 1984 and had 85 founder members. The Institute was statutorily incorporated by virtue of the Hong Kong Institute of Surveyors Ordinance in January 1990 (Cap. 1148). In July 1991, there was also passed the Surveyors Registration Ordinance (Cap. 417) to set up a Registration Board to administer the registration of surveyors.

The Hong Kong Institute of Surveyors is the only professional organisation representing the surveying profession in Hong Kong. The Institute strives to maintain a high professional standard and requirements amongst members including setting standards for professional services and performance, establishing codes of ethics, and determining requirements for admission as professional surveyors. The Institute imposes a mandatory requirement for all members to upgrade skills through continuing professional development.

As a reputable and responsible professional body of surveyors, the Institute has always maintained vigorous assessment standards for entry to the profession and has also maintained high professional and ethical standards of member surveyors, through the various codes of professional practices, the code of ethics, and continuing professional development. The Institute has taken on an important and responsive consultative role in government policy making particularly on issues affecting land, property and construction. The Institute plays an important role from time to time in giving advice to the Government on issues such as unauthorised building works, building safety campaign, problems of property management, town planning and development strategies, construction quality and housing problems.

The HKIS membership has now grown to over 9,000. As at 31 August 2015, the number of members reached 9,208, there are 6,100 Corporate Members consisting of Fellows and Members – distinguished by the initials FHKIS and MHKIS; 74 Associate Members – distinguished by the initials AMHKIS; and 3,034 training grade members.

To qualify as a corporate member of the Institute, surveyors must possess a recognised academic degree or similar qualification, followed by a minimum of 2 years supervised professional experience within strict guidelines, followed by an Assessment of Professional Competence (APC).

The title "Surveyor" embraces a number of disciplines involved with land and its development with land and buildings, covering an extremely wide scope. Some surveyors work in private practices and others may work for a landowner, developer, building contractor or government departments and related bodies.

The Institute consists of six divisions:

1. Building Surveying Division
2. General Practice Division
3. Planning and Development Division
4. Quantity Surveying Division
5. Land Surveying Division
6. Property and Facility Management Division

A **land surveyor** measures and records the shape and position of the land, defines the boundary and sets out the legal boundaries of the sites. A **general practice surveyor** advises on the best use of the land, assesses the feasibility and viability of the proposed development project as well as the valuation, marketing, sale, leasing and management of completed developments. A **planning and development surveyor** further advises on the possible change of zoning, the likely environmental impacts and makes suggestions on preliminary development contents. A **quantity surveyor** is concerned with the building contractual arrangements and cost control, and will evaluate the likely cost of the development project and advise on the most suitable kind of contract for the project. A **building surveyor** is involved in the project management of building development proposal, holistic maintenance management of building and overall control of private buildings under relevant legislation. A **property and facility management surveyor** provides a comprehensive range of services in real estate management.



# Introduction of HKIS

Internationally, the Institute has established and continues to expand its presence in the international scene through participation in various international platforms. Over the years, the Institute has shown its international importance and leading position by playing an important role in participating and joining different international organisations and committees included the World Organisation of Valuation Associations (WAVO), World Organisation of Building Officials (WOBO), Pacific Association of Quantity Surveyors (PAQS), International Federation of Surveyors (FIG), South East Asian Surveyors Congress (SEASC), International Valuation Standard Council (IVSC) etc. In May 2001, Past Chairman of the Quantity Surveying Division, Sr TT Cheung was elected as Chairman of the PAQS for the term 2001 to 2003 at the 5<sup>th</sup> PAQS Board Meeting. In January 2003, Past President (Council Year 1997/98) Sr WONG Thien Nyen was elected as the Vice President of the FIG Council 2003 – 2006. The status and reputation of the Institute have been much upgraded through the active participation in these international organisations and events.

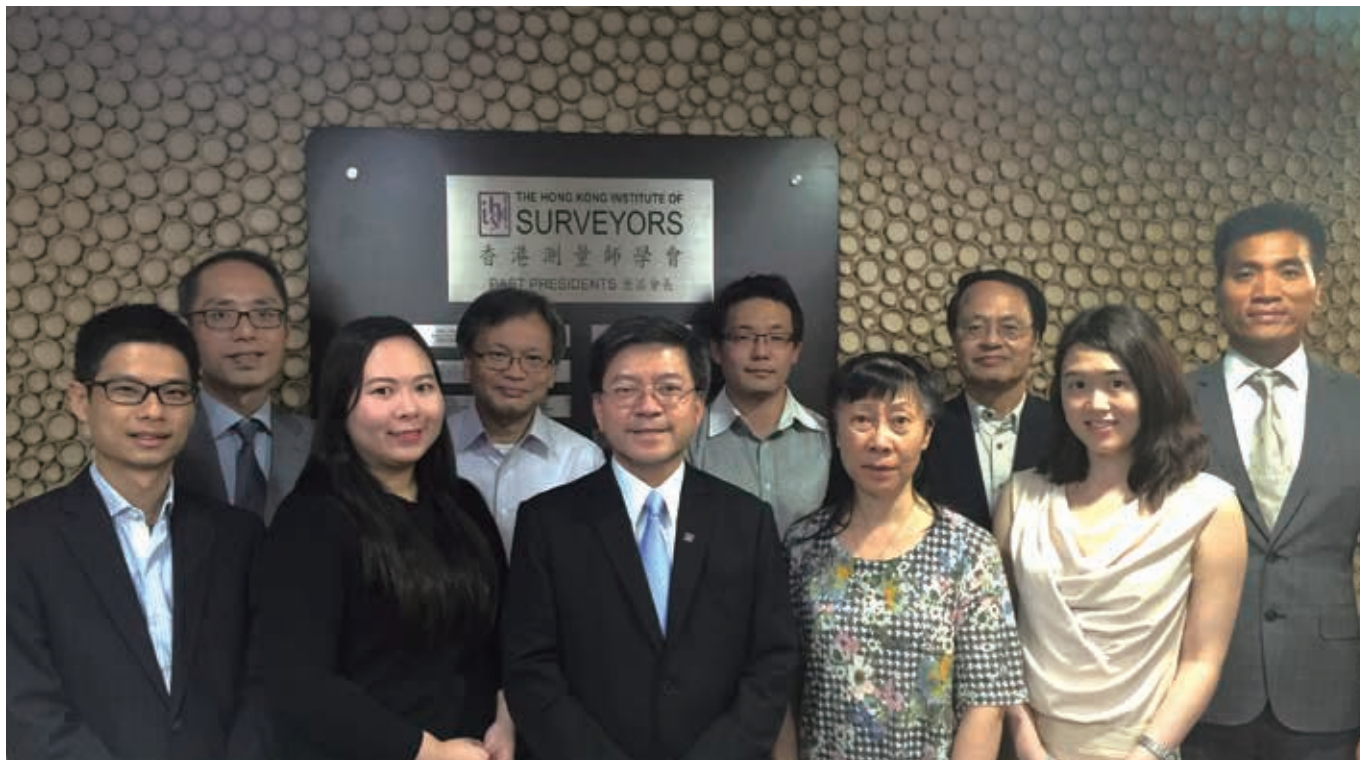
Over the years, the Institute had also successfully organised a number of international events in Hong Kong or other countries. Few examples are: in 2000 HKIS co-organised the “Year 2000 Mainland and Hong Kong Conference on Urban Construction and the Environment” in Chongqing; in 2003 HKIS successfully hosted the 7<sup>th</sup> SEASC Congress in Hong Kong; in 2007 HKIS hosted the FIG Working Week 2007 in Hong Kong. The FIG Working Week was the biggest congress event ever organised by the Institute. The Institute also regularly hosts the Cross Strait Land Conference (兩岸四地土地學術研討會) and the Cross Strait Geometric Conference (海峽兩岸測繪發展研討會).

Besides international participation, the Institute has established reciprocity relationships with other national surveying bodies and through membership in relevant world bodies and international organisations in order to maintain its professional edge at international level. The Institute is one of the 3 founding members, apart from the Singapore Institute of Surveyors and Valuers and the Institution of Surveyors, Malaysia, of the Surveyors’ Alliance Asia which was inaugurated in November 2004. The Institute has reciprocal agreements with:

- The Australian Property Institute (API)
- New Zealand Property Institute (NZPI)
- Singapore Institute of Surveyors and Valuers (SISV)
- The Australian Institute of Quantity Surveyors (AIQS)
- New Zealand Institute of Quantity Surveyors Incorporated (NZIQS)
- China Institute of Real Estate Appraisers (CIREA)
- China Engineering Cost Association (CECA)
- China Association of Engineering Consultants (CAEC)
- The Building Surveyor’s Institute of Japan (BSIJ)
- Canadian Institute of Quantity Surveyors (CIQS)
- Chartered Institution of Civil Engineering Surveyors (ICES)

The Institute continues to increase its importance and standing both locally and internationally. Through maintaining both a high professional standard of the institute and the members locally, and keeping in pace with the professional levels internationally, the Institute is marching towards another step ahead of the summit.

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