The Story of Hong Kong –
Review of her Infrastructure Developments
and Strategies to meet a Sustainable Future

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Background information of Hong Kong

- Size: 1050 sq km
- Population: 6.8 million
- Topographical Condition: Island and Peninsula city with 200+ outlying islands, hilly
- GDP (2003): US$155 billion
- GDP per Capita: US$22900
- Major Economy: Financial, International Trades, Services and Logistic Centre, Tourism Industry
Aerial view of the Victoria Harbour

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Densely populated districts within the Metro area
Geological Diversity
Diversity in Living Environment

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Diversity in Living Environment

Middle cost private housing estate in late 1990s’

Resettlement estate in mid 1950s’
Diversity in Living Environment

Medium density housing zone

Diversity in Living Environment

Low density houses
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Diversity in Living Environment
Cultural Diversity
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Cultural Diversity
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Cultural Diversity
Blue Print in shaping Hong Kong

- Planning studies and Consultation at various stages and levels (e.g. Sub-region, rural, Metro Plan, Ports & Airport Development Plan etc.)
- Statutory Development Plans
- Territorial Development Strategy approved and reviewed by the Town planning Board from time to time.
Objectives of the Territorial Development Strategy

1. Enhance the role of HK as an international city and a regional centre for business, finance, information, tourism, entrepot & manufacturing.

2. Ensure adequate provision to satisfy the land use and infrastructure needs arising from sectoral policies on industry, housing, commercial, rural, recreation and other major socio-economic activities.

3. Conserve and enhance significant landscape and ecological attributes, and important heritage features.
Objectives of the Territorial Development Strategy

4. Enhance and protect the quality of the environment by minimizing net environmental impacts on the community.

5. Provide a framework to develop a multi-choice, high capacity transport system that is financially and economically viable, environmentally acceptable, energy efficient and convenient movement for people and goods.

6. Formulate strategy that can be carried out both by the public and private sectors with respect to the availability of resources and significant changes of demand.
HK’s Recent Infrastructure Developments

- Airport
- Port Facilities
- Railway
- Highway
- New Town Development
- Strategic Development Projects
- Housing
- Developments from private Sectors
- Urban Renewal
The New HK International Airport

The new airport was constructed in Mid-90s’ (from 1994 to 1994). The project cost about US$20 billion which was sub-divided into 10 core projects including the construction of the linking railway and roadwork into the metro area (such as the Airport Railway, Tsing Ma Bridge, Lantau Expressway). Some of the core projects also formed part of the strategic development of the territory (such as the West Kowloon Reclamation).
Airport Core Programme

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Construction of the New Hong Kong International Airport at Chek Lap Kok
Airport Core Projects:
Tsing Ma Bridge (right) &
West Kowloon Expressway
Airport Core Project:
Central Reclamation where the Airport Railway Terminus located (left)

West Kowloon Reclamation (part of Urban strategic development)
Port Development

Hong Kong is now ranked the first in container shipment with a handling capacity of 12 million standard container units per annum (in 2003). Totally 25 berths are provided in the container terminals situated in the Kwai Chung basin with convenient road network linking to China border.
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The construction of the Container Terminal No. 9 to be put into full operation in late 2004.
West Rail opened by the end of 2003 served the northwestern part of the New Territory.
New Railway line to the new town of Ma On Shan (to be opened by end of 2004)
New Railway Work at Metro Centre – Tsim Sha Tsui Extension

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New Railway Work at Border

- Lok Ma Chau
  Cross Boundary Spur Line
Strategic Highway Network

Metro Area

Container Terminals

Border area

Main China where manufacturing and industry based

Airport

Strategic Highway Network
Hong Kong has very efficient highway network throughout the territory
Example of some major strategic highway projects:

Route 8 linking NW New Territory via Container Terminal to Central New Territory (above)

Route 3 linking NW New Territory with Metro Area (left)
Recent highway priority – Cross Boundary connection, the Hong Kong Shenzhen Western Corridor
New Town Development

Hong Kong has developed 9 new towns since 1960s’. These new towns can be classified into 3 generation, namely:

1\textsuperscript{st} generation: Tsuen Wan, Shatin & Tuen Mun
2\textsuperscript{nd} generation: Tai Po, Fan Ling & Yuen Long
3\textsuperscript{rd} generation: Tseung Kwan O, Tin Shui Wai & Tung Chung

Current population in these new towns is about 3.4 million
Tuen Mun New Town in the 1980s’

Tai Po New Town developed along the East Rail Corridor

New Town Developments
Tsuen Wan (First New Town in HK) in the early 2000s'

New Town Developments

Shatin New Town in late 1990s'

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The forming of the Tseung Kwan O New Town by reclamation in the mid 1990s'
Strategic Development Projects

Strategic developments often refer to projects that serve to develop or enhance specific strategic functions of a city. Examples of these in Hong Kong include:

- Cyberport
- Science and Technology Park
- Disney Land Theme Park
- West Kowloon Cultural District
- Sky City, and Expo Centre
Cyberport – a Private Finance Initiative project for the fostering of IT Industry
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Hong Kong Convention and Exhibition Centre
Land for the Disney Land Theme Park formed by reclamation at a site on the Eastern side of the Lantau Island.
Facilities for the Disney Land Theme Park are being installed for opening in 2005.
Hong Kong Housing

The government of HK is the largest house owner which provides public houses for more than 2.3 million (33% of total population).

The private sectors act on a free market basis, also play an important role in meeting the housing needs of the community.

The maintenance of a fair and stable operating environment for the private property market by ensuring adequate supply of land is thus important.
The first and second generations of Public Houses built in mid 1950s’ (right) and 1960s’ (bottom)
Low-cost houses in the form of House Ownership Scheme (above) and rental flat (left) in East Kowloon
Development from Private Sectors

Private sectors in particular the property developers have very strong market vision. They will seek for the best investment opportunity according to the market, government policy or other development environment and help to fulfill the development of Hong Kong.
The International Finance Centre, one of the largest private commercial projects comprising office premises, retail and hotel development in the 2004
Festival Walk – A private commercial and recreation complex located in a major metro transit railway nod in Kolwoon Tong
Urban Renewal

Some old districts in the metro areas are in poor conditions where are:

- Aged and lack of urban facilities and support
- Building in dilapidated condition
- Complicated ownership
- Loose condition in land and property uses

The Urban Renewal Authority was set up in 2000 (precious the Land Development Council) for the redevelopment of potential projects on behalf of the government.
Recent projects carried out by the Urban Renewal Authority in downtown areas

- Wanchai redevelopment (right)

-- Tsim Sha Tsui Redevelopment (bottom)
Developments by government for the enhancement of overall community and territorial environment

• Community facilities projects
• Essential urban services
• Projects enhancing tourism or city images
• Environmental upgrading facilities
Representing community facilities
- The central Library (right)
- Cultural Centre and coastal promenade (below)
Leisure, Sport and Recreation Facilities

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Landscaping provision and waterfront promenade proposed in the Central-Wanchai Reclamation
Environmental upgrading – Cleansing up and rectify mis-use of land
Environmental upgrading – Flood control, Rehabilitation of rural environment, drainage and sewage treatment
Procurement and Operation of the Infrastructure Systems

Usual arrangements adopted in Hong Kong

- Wholly government owned projects (new town formation, highways, drainage, water supply etc)
- Franchised projects with government capital (railway operated by Mass Transit Railway and Kowloon Canton Railway)
- Private Franchised projects (power supply)
- Projects operated by statutory bodies (Science Park, Convention Centre)
- Public-Private Partnership projects
- Private-own projects operate on a market-driven basis
Sustainable Development

Broad sense of sustainable development:

Developments able to balance social, economical and environmental needs, both for the present and future generation. They should also be planned accurately fulfilling predetermined targets, economically viable, socially affordable and environmentally acceptable.
Sustainable Development-HK’s specific conditions

• Development to provide good quality living environment: this covers strategies and projects to regenerate the old urban areas, thinning out of highly congested districts, adequacy in the provision of urban facilities, harmonization in the zoning planning and utilization of land resources, creation of more job opportunity as a consequence of good planning, meeting housing and community needs by providing adequate land and infrastructure for the upgrading of the overall living quality.
Sustainable Development-HK’s specific conditions

- Development to enhance Hong Kong’s functions as a regional centre: this includes the provision of sufficient land reserves to meet the changing needs of commerce and industry, strengthen the role of Hong Kong as a global and regional financial, business, tourism, transportation and logistics centre, and the development of closer physical, economical and social link with mainland China.
Sustainable Development-HK’s specific conditions

- Development to conserve environment: this includes the conservation of natural landscape and ecology system, preservation of natural or cultural heritage of significance, ensure development with due regard to the environmental carrying capacity, development of an efficient, economical and environmentally friendly transport system, and the strengthening of a sound legal framework and statutory control system to ensure high quality and environmentally acceptable development. Other concerns such as the continual improvement of environmental quality in particular to air and water, is also a major issue.
Example of Sustainable Practice introduced by the Government

In 2002, government has introduced a Joint Practice Note providing a incentive element for developers to use prefabricated method in construction. By doing this, developers can gain extra gross floor areas in the project.

As a result of this, almost all the major residential developments in Hong Kong are now using prefabrication (precast) techniques as a trend to construct buildings.
Residential buildings using large portion of precast elements
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Conclusion – Hong Kong Experience

• Government policy and attitude play an important role
• Planning must be carried out accurately but with flexibility to cater for unexpected changes
• Prediction of future is difficult (population, economy and political possibility)
• Reliable means of projects delivery systems is important
• Planning and developments creates great conflicts of interest. This should be well taken care of
• Need of coping with a rapidly blooming China
End of Presentation
Thank You

Should more information about the speaker is required, please visit his personal homepage at City University of Hong Kong at http://personal.cityu.edu.hk/~bswmwong/